

Agenda
Reef Fish Management Committee

Gulf of Mexico Fishery Management Council

Golden Nugget Casino Hotel
Grand Ballroom A,B,C
Biloxi, Mississippi

Tuesday, March 31, 2015
8:30 a.m. – 11:30 a.m.
1:00 p.m. – 5:00 p.m.

- I. Adoption of Agenda (**Tab B, No. 1**) – Greene
- II. Approval of Minutes (**Tab B, No. 2**) – Greene
- III. Action Guide and Next Steps (**Tab B, No. 3**) - Atran
- IV. Recreational Red Snapper Season Projection (**Tab B, No. 4**) – Strelcheck
- V. Headboat Collaborative Report (**Tab B, No. 5**) – Abbot/Strelcheck
- VI. Options Paper – Framework Action to Adjust Gag ACL and Season (**Tab B, No. 6**) – Atran
- VII. Final Action – Framework Action for Modifications to Greater Amberjack Allowable Harvest and Management
 - a. Review of framework action (**Tab B, No. 7a**) – Froeschke
 - b. Written comments received (**Tab B, No. 7b**) - Muehlstein
 - c. Draft Codified regulations (**Tab B, No. 7c**) - NMFS
 - d. Committee recommendations – Greene
- VIII. Scoping Summaries – Amendment 36 – Red Snapper IFQ Modifications
 - a. Review of scoping document (**Tab B, No. 8a**) – Lasseter
 - b. Scoping summaries (**Tab B, No. 8b**) - Lasseter
 - c. Committee recommendations – Greene
- IX. Revised Draft - Amendment 28 – Red Snapper Allocation (**Tab B, No. 9**) – Diagne
- X. Revised Draft – Amendment 39 – Regional Management of Recreational Red Snapper
 - a. Proposed process for reviewing state mgmt plans (**Tab B, No. 10a**) – NMFS
 - b. Review of draft amendment (**Tab B, No. 10b**) - Lasseter
- XI. Options Paper – Joint South Florida management (**Tab B, No. 11**) – Rindone
- XII. Charge to the Reef Fish Headboat AP (**Tab B, No. 12**) – Diagne

- XIII. Other SSC Business (**Tab B, No. 13**) – SSC Representative
 - a. FWC mutton snapper update assessment
 - b. Discussion of MSST options
 - c. Other

- XIV. Other Business - Greene

Members:

John Greene, Chair
Camp Matens, V. Chair
Doug Boyd
Roy Crabtree/Steve Branstetter
Jamie Miller/Dale Diaz
Randy Pausina/Myron Fischer
Robin Riechers/Lance Robinson
David Walker
Nick Wiley/Martha Bademan
Roy Williams

Staff: Steven Atran/Carrie Simmons

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

REEF FISH MANAGEMENT COMMITTEE

Grand Hotel Marriott Point Clear, Alabama

JANUARY 26-27, 2015

January 26, 2015

VOTING MEMBERS

- John Greene.....Alabama
- Martha Bademan (designee for Nick Wiley).....Florida
- Doug Boyd.....Texas
- Roy Crabtree.....NMFS, SERO, St. Petersburg, Florida
- Myron Fischer (designee for Randy Pausina).....Louisiana
- Kelly Lucas (designee for Jamie Miller).....Mississippi
- Campo Matens.....Louisiana
- Robin Riechers.....Texas
- David Walker.....Alabama
- Roy Williams.....Florida

NON-VOTING MEMBERS

- Kevin Anson.....Alabama
- Leann Bosarge.....Mississippi
- Jason Brand.....USCG
- Glenn Constant.....USFWS
- Dave Donaldson.....GSMFC
- Harlon Pearce.....Louisiana
- Corky Perret.....Mississippi
- John Sanchez.....Florida
- Greg Stunz.....Texas

STAFF

- Stephen Atran.....Senior Fishery Biologist
- Assane Diagne.....Economist
- John Froeschke.....Fishery Biologist
- Doug Gregory.....Executive Director
- Karen Hoak.....Administrative and Financial Assistant
- Ava Lasseter.....Anthropologist
- Mara Levy.....NOAA General Counsel
- Charlene Ponce.....Public Information Officer
- Ryan Rindone.....Fishery Biologist/SEDAR Liaison
- Bernadine Roy.....Office Manager
- Charlotte Schiaffo.....Research & Human Resource Librarian

1 **OTHER PARTICIPANTS**

2 Pam Anderson.....Panama City, FL
3 Billy Archer.....Seminole Wind, Panama City, FL
4 Tom Ard.....Orange Beach, AL
5 Jeff Barger.....Ocean Conservancy, Austin, TX
6 Chris Blankenship.....AL
7 Randy Boggs.....Orange Beach, AL
8 Zack Bowen.....SAFMC
9 Steve Branstetter.....NMFS
10 Gregg Bray.....GSMFC
11 JP Brooker.....Ocean Conservancy, St. Petersburg, FL
12 James Bruce.....Cutoff, LA
13 Gary Bryant.....Fort Morgan, AL
14 Shane Cantrell.....Galveston, TX
15 Shannon Cass-Calay.....SEFSC
16 Jim Clements.....Carrabelle, FL
17 Kiley Dancy.....MAFMC
18 Jason Delacruz.....Reef Fish Shareholder's Alliance/Gulf Wild
19 Beth Denicola.....USCG
20 Michael Drexler.....St. Petersburg, FL
21 F.J. Eicher.....Ocean Springs, MS
22 Blakely Ellis.....Gulf Shores, AL
23 Cynthia Fenyk.....NOAA
24 Troy Frady.....Orange Beach, AL
25 Jim Green.....Ad Hoc For-Hire Red Snapper AP Chairman
26 Buddy Guindon.....Galveston, TX
27 Ken Haddad.....American Sportfishing Association
28 Chad Hanson.....Pew Environmental Group
29 Ben Hartig.....SAFMC
30 Jenny Herbig.....MDMR, Ocean Springs, MS
31 Captain Hester.....USCG
32 Scott Hickman.....Galveston, TX
33 Darrell Hingle.....Galveston, TX
34 Peter Hood.....NMFS
35 Larry Huntley.....Pensacola, FL
36 Gary Jarvis.....DCBA, Destin, FL
37 Joe Jewell.....MS
38 Bill Kelly.....FKCFA, Marathon, FL
39 Sharon McBreen.....Pew Environmental Group
40 Kristen McConnell.....EDF, Austin, TX
41 Paul Mickle.....MDMR
42 Bart Niquet.....Panama City, FL
43 Chris Niquet.....Panama City, FL
44 Mike Nugent.....Aransas Pass, TX
45 Will Patterson.....GMFMC SSC
46 Randy Pausina.....LA
47 Todd Phillips.....
48 Bonnie Ponwith.....SEFSC

1 Sean Powers.....AL
 2 Tracy Redding.....AL
 3 Lance Robinson.....TX
 4 Mike Schirripa.....NMFS SEFSC
 5 Matt Seymour.....Foley, AL
 6 Bob Spaeth.....SOFA, Madeira Beach, FL
 7 Andy Strelcheck.....NMFS
 8 Bill Tucker.....Dunedin, FL
 9 Robert Turpin.....
 10 Russell Underwood.....Panama City, FL
 11 Will Ward.....Palmetto, FL
 12 Wayne Werner.....Alachua, FL
 13 Bob Zales.....Panama City, FL

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15
 16 The Reef Fish Management Committee of the Gulf of Mexico Fishery
 17 Management Council convened at the Grand Hotel Marriott, Point
 18 Clear, Alabama, Monday afternoon, January 26, 2015, and was
 19 called to order at 1:30 p.m. by Chairman Johnny Greene.

20
 21

22 **ADOPTION OF AGENDA**

23 **CHAIRMAN JOHNNY GREENE:** We will start off with Agenda Item
 24 Number I, Adoption of the Agenda. Are there any changes or
 25 additions or deletions?

26
 27 **MS. MARTHA BADEMAN:** I would like to ask if we can push the
 28 regional management discussion to tomorrow, assuming we go fast
 29 this afternoon. I think some of the states wanted to get
 30 together and chat on some things first, if that's okay.

31
 32 **CHAIRMAN GREENE:** Okay and move it to tomorrow. Okay. I was
 33 thinking that it was going to be moved until after the
 34 presentation, but you're asking for it to be moved until
 35 tomorrow. Any other --

36
 37 **LCDR JASON BRAND:** I just wanted to add we will be having our
 38 LEAP at the next commission meeting and so anything that you
 39 want to charge to our Law Enforcement Advisory Panel, please go
 40 ahead and let us know, maybe in Other Business or as we go.

41
 42 **CHAIRMAN GREENE:** Okay. That sounds good. Anything else? Not
 43 seeing any more, we will take those two and do that as well.
 44 Lieutenant Brand had also asked that we do the presentation on
 45 red snapper poaching by Mexican lanchas tomorrow morning first
 46 thing, or as soon as we complete whatever agenda item we're on,
 47 as he's going to have some individuals here to help with that as
 48 well. Without seeing anything else, I'm looking for adoption of

1 the agenda.

2 **MR. ROY WILLIAMS:** So moved.

3

4 **CHAIRMAN GREENE:** It's moved by Roy Williams and is there a
5 second?

6

7 **MR. DOUG BOYD:** I will second.

8

9 **CHAIRMAN GREENE:** Second by Doug Boyd and thank you. Going into
10 Approval of the Minutes, any changes or additions or corrections
11 to the minutes?

12

13

APPROVAL OF MINUTES

14

15 **MS. MARA LEVY:** I had two things. Line 3, page 49, it says
16 "apportion" and I think it's supposed to say "apportionment of"
17 and then page 73, line 26, it says "Mr. Action" and I assume
18 that's "Anson", but I'm not entirely sure, or did we have a Mr.
19 Action? If we did, then don't change it.

20

21 **CHAIRMAN GREENE:** Those changes will be noted as well. Any
22 opposition to the changes in the minutes that she requested?
23 Seeing none, we will move on to Agenda Item III, Action Guide
24 and Next Steps, Tab B, Number 3. You guys should have that in
25 your briefing books and so, with that, we'll go on into Agenda
26 Item Number IV, Red Snapper Update Assessment, Tab B, Number 14.
27 There was an updated version of that that was emailed to you
28 guys at 8:02 A.M. this morning and so if you want to follow
29 along with that, if our presenter is here and ready, we'll go
30 ahead with that agenda item.

31

32

RED SNAPPER UPDATE ASSESSMENT

33

34 **DR. SHANNON CALAY:** Hi and thank you very much. My name is
35 Shannon Calay and I am from the Southeast Fisheries Science
36 Center and I will present the results of the 2014 Update of the
37 Gulf of Mexico Red Snapper Assessment.

38

39 To familiarize you with the terms of reference for this
40 assessment, the Center was directed to update the SEDAR-31 Gulf
41 of Mexico red snapper assessment using data through 2013 and to
42 document any changes or corrections that were made to the model
43 or the inputs.

44

45 We were also directed to use methods from the 2014 MRIP
46 calibration workshop, if possible, and those estimates were made
47 available to us in December and so they were incorporated in
48 this assessment. Those are the MRIP calibrations that Andy

1 Strelcheck introduced.
2
3 We were also to update estimates of stock status and management
4 benchmarks and provide the probability of overfishing occurring
5 at specified future harvest and exploitation levels and to
6 develop an update assessment report to address these terms of
7 reference.
8
9 To quickly review the model itself, it is the same model as was
10 applied during SEDAR-31, which was completed in 2012. The model
11 actually goes through 1872 to 2013 and it's divided into two
12 regions, the eastern and western Gulf of Mexico, and divided at
13 the Mississippi River.
14
15 It uses Stock Synthesis, which employs a flexible structure and
16 allows key parameters to change through time and so we were able
17 to model recruitment of young fish to the population to
18 accommodate an apparent increase in productivity after 1984.
19
20 We were able to modify selectivity, to account for the
21 implementation of IFQ programs and circle hooks, and retention,
22 to account for changes in size limits and IFQ, and time varied
23 discard mortality, to accommodate changes in venting
24 requirements.
25
26 The data is the same model structure as employed during SEDAR-
27 31. All the inputs have been updated through 2013. We had a
28 variety of fishery-dependent data, including catch, discards,
29 effort, catch per unit effort, and age and length composition
30 from commercial hand line, longline, recreational private boat,
31 charter boat, and headboat modes, as well as commercial closed
32 season discards, recreational closed season discards, and shrimp
33 bycatch.
34
35 We had also a variety of fishery-independent datasets, including
36 catch per unit effort indices and age compositions from SEAMAP
37 video, SEAMAP plankton surveys, SEAMAP summer trawl groundfish
38 surveys, and fall groundfish surveys, the NMFS bottom longline,
39 and artificial reef ROVs.
40
41 There were two key changes to this assessment. First, we did
42 use the recalibrated MRIP estimates and, second, we estimated an
43 additional selectivity block in the most recent years, 2011
44 through 2013, to accommodate recent changes in fishing behavior
45 of the recreational fleet that appear to have led to a larger
46 than average size in this sector.
47
48 In case selectivity is jargon, on the bottom I put a definition

1 that selectivity functions are used to model both the
2 vulnerability of fish to the gear as well as the availability of
3 fish and the availability can be related to the spatial
4 distribution by size or by age.

5
6 Andy did go over this in more detail. Essentially, the MRIP
7 recalibration workshop examined the effects of a change in
8 sampling design in 2013, which has led to changes in the
9 proportions of angler trips by time of day and so this example
10 is the Alabama private boat mode and you can see that in 2013,
11 which is the brown here, you have a larger than expected number
12 of trips that occurred late in the day. This required re-
13 estimation to adjust for possible under sampling previously of
14 afternoon and evening trips.

15
16 When this recalibration was done, the result has been that for
17 red snapper the landings are slightly larger now than they had
18 been estimated before and so this figure shows you the effect in
19 the western Gulf of Mexico for total recreational landings and
20 in the eastern Gulf of Mexico.

21
22 The effect on the discards, as Andy showed you, is larger than
23 this and so what has happened is it's led to an increase in the
24 total removals that are input into this model for the
25 recreational landings and discards.

26
27 The next set of slides show model results and I am going to
28 compare here the results of SEDAR-31 and the 2014 update
29 assessment on the right and so these are regional trends in
30 spawning stock biomass and, as you can see, if you compare the
31 two panels, that for both the western and eastern Gulf of Mexico
32 the trends are virtually identical.

33
34 On the left-hand side is SEDAR-31 and the right-hand side is the
35 2014 update. We get a similar result for recruitment, but there
36 is one difference that I did want to point out to you.

37
38 SEDAR-31, you may recall, estimated very low recruitments in
39 both 2010 and 2011. The 2014 update model contains more
40 information in age composition for these years and therefore, we
41 think that these estimates are slightly more reliable in 2010
42 and 2011. Those estimates are now higher and so you will see,
43 if you look carefully, that in 2010 and 2011, rather than having
44 extremely low estimates, you now have something that is lower
45 than average, but not as low as the SEDAR-31 2013 assessment
46 indicated.

47
48 These plots actually compared now overlaid, the SEDAR-31 result

1 in blue and in red, the 2014 update. You can see that if you
2 look at the trend of SSB over the minimum stock size threshold,
3 MSST, that the results are in fact virtually identical
4 throughout the time series and so on your left-hand side here,
5 you see the entire time series on the right, just the most
6 recent years, from 2001 forward. These results are very
7 consistent with the SEDAR-31 model.

8
9 This is one of the figures that we've showed the Gulf Council in
10 the past. It's the fraction of red snapper removed by fishing
11 and in this case, we have -- I am showing you by numbers removed
12 in the Gulf age three-plus and in red here is the update
13 assessment and in blue is the SEDAR-31 assessment and the
14 results are quite consistent, but I do want to point out that in
15 the years from about 2000 to 2006, we were removing about 30
16 percent of the fish age three-plus each year.

17
18 After 2007, that has declined substantially, to about 10 to 14
19 percent. That's the effect of regulations, including the IFQ.
20 Likewise, the fraction of age three-plus fish has increased
21 since then and so it averaged about 3 percent from 2000 to 2006
22 and has since increased to about 6 to 8 percent after 2007 and
23 so the stock is rebuilding, both in terms of magnitude and
24 rebuilding and age structure as well.

25
26 For projections, the projection methods to estimate OFL and ABC
27 are identical to those used during SEDAR-31, except that the SSC
28 chose to base their management advice this time on the base
29 model alone. In the past, it had been based on a joint
30 distribution of low and high mortality plus base, but then we
31 did a new set of constant catch projections, which I believe
32 only use base. In this case, what I am showing you is base
33 model alone.

34
35 We retained a catch allocation between the commercial and
36 recreational fisheries at 51 percent commercial and 49 percent
37 recreational during the projections. At the time of this update
38 assessment, 2014 directed landings were not yet available and
39 therefore, the series of projections that I will show you, we
40 assumed that the 2014 landings would be identical to 2013.

41
42 The SSC did request that updated projections be done as soon as
43 possible and I was able to do some of those and I will present
44 those to you during this presentation.

45
46 This shows you -- This is a projection of F rebuild and so in
47 this projection, we will be rebuilding to 26 percent SPR by
48 2032, which is what is currently on the books. This just shows

1 you the effect of the rebuilding program on the spawning
2 potential ratio, which is essentially the -- Well, spawning
3 potential ratio is at SPR 26, you would essentially have the
4 reproductive capability of 26 percent of the unfished population
5 and so currently, between 2000 and 2006, we were running an
6 average of about 4.5 percent, which is quite low.

7
8 Then, following 2007, with the changes in regulations, it began
9 to improve and by 2015, the estimate now is 15.8 percent. We
10 project out now the rebuild plan, it will rebuild to 26 percent,
11 by definition, in 2032.

12
13 This is a comparison of the SEDAR-31 projection results and the
14 update assessment. In this case, SEDAR-31 is in blue and the
15 dotted lines show you the realized yield to the fishery,
16 retained yield, and the solid line is the projected yield. What
17 you will notice is that this update assessment does predict
18 higher retained yields in the future and so, in this case, both
19 MSY and the retained yield are higher for this update assessment
20 and so why did this happen?

21
22 There is two reasons that we have demonstrated. One is the
23 increase in total removals due to the MRIP recalibration and so
24 recall that both landings and discard estimates increased for
25 this update assessment and that has led to a fraction of this
26 increase in yield. The other part is this new selectivity plot
27 that was estimated for the recreational fleets.

28
29 We had evidence that the recreational fleets in the most recent
30 years had shifted towards older, heavier individuals. We did
31 allow the model to estimate a new selectivity function for that
32 time period and the result is in this very back wedge of this
33 three-dimensional plot, you can see the selectivity function has
34 shifted to the right and that shift is towards the larger,
35 heavier animals and so in combination with the increase in
36 removals from MRIP, this selectivity increase has now allowed us
37 to predict both higher MSY and higher yields in the future.

38
39 The council in October requested that we provide four proxies
40 for FMSY and so we did and they were F SPR 26, which is
41 currently on the books, F SPR 24, 22, and Fmax. In this case,
42 like during SEDAR-31, Fmax is approximately equal to F SPR 20
43 and the results of that analysis are here, in a graphical form,
44 and so on the left you see the results from 1980 to 2032 and on
45 the right, just the recent, the projection period from 2014 to
46 2032.

47
48 As is not surprising, the lower your FSPR proxy, the higher the

1 projected yield. That same result appears in the tables that
2 follow and so here is your OFL at the specified F SPR reference
3 point and so on the left, F SPR 26 and then declining towards
4 Fmax. I have also provided the SEDAR-31 base case, F SPR 26.

5
6 If you look at 2015, for example, at F SPR 26, OFL is 14.73
7 million pounds. As you go to a lower F SPR proxy, that yield
8 increases. At Fmax, in 2015, it is 18.94 million pounds. On
9 the bottom of this figure, you can also see the equilibrium
10 yields that correspond to these various proxies.

11
12 Now the SSC, through their control rule, specified a P^* of .427
13 to estimate ABC and this table shows you those ABC estimates
14 and, again, you see the same behavior, where as you move to a
15 lower proxy, the yield that you can achieve does increase and so
16 at F SPR 26 in 2015, the ABC is thirteen-million pounds and at
17 Fmax, it's 17.92 million pounds.

18
19 The equilibrium values also appear on this table for ABC and now
20 the bottom row in this table is the recovery year and so there
21 was some discussion at the SSC meeting that moving to a
22 different F SPR or FMSY proxy would require reanalysis of the
23 recovery plan, because it might change the year that you would
24 have to recover to.

25
26 What I've done is I have calculated the year that the stock
27 would recover if F was zero and so that includes -- That is F
28 zero for all fleets, including discard and bycatch fleets. At F
29 equals zero, the stock would recover to F SPR 26 in 2018 and to
30 Fmax in 2017. Now, that is not actually the recovery year,
31 because you must add one generation time as well to that
32 equation, but it gives you an idea and I'm sure Roy can
33 elaborate, if needed.

34
35 At the SSC meeting, there was much interest in the effect of
36 provisional 2014 landings estimates and in particular, because
37 the recreational provisional 2014 landings are substantially
38 lower than what was estimated in 2013 and so 2014, the
39 provisional landings are 588,000 fish and in 2013, it was over
40 one-million fish.

41
42 The commercial landings in 2014 are estimated to be similar to
43 2013 and so in the sensitivity run, I did use the provisional
44 2014 landings estimate, but I did assume that discards would
45 continue at the 2013 levels, because we have no information
46 about that at this time and so I projected the F rebuild
47 scenario to achieve SPR 26 in 2032 and that is this table here.

48

1 In the center column, you see the ABC if you assume that 2014
2 will be identical to 2013, which is what was shown at the SSC
3 meeting. It goes from thirteen-million pounds to 12.33 with an
4 equilibrium value of 12.51. With the provisional 2014 landings,
5 because the recreational fishery did not catch as much in 2013
6 as had been expected, those landings do increase and so you see
7 in 2015 the provisional estimate is 13.92 million pounds. The
8 equilibrium value, however, does not change as much and so the
9 equilibrium values here increase from 12.51 million pounds to
10 12.65.

11
12 As far as the choice of the FMSY proxy, proxies are generally
13 used when FMSY cannot be estimated. If there truly is no
14 relationship between spawners and recruits, we call that
15 steepness equals one and then F_{max} equals FMSY and F_{max} is in
16 fact equivalent.

17
18 However, we believe that some stock size recruitment is likely
19 to diminish with decreasing stock size, because if there are no
20 spawners, then clearly there are no recruits and so many
21 scientists and some SSC members have proposed biologically-based
22 F SPR proxies.

23
24 In a review of the literature, the literature suggests that the
25 red snapper life history characteristics are most consistent
26 with F SPR 30 to 40 percent and F SPR 26 is essentially a
27 compromise which was adopted by the SSC.

28
29 It's important to note that lower F SPR proxies do produce
30 higher yield. However, they also lower the bar for recovery and
31 an F SPR proxy that is too low will not rebuild the stock to the
32 level that produces MSY in the long term. Also, it is important
33 to realize that changing a proxy may require a rebuilding plan
34 to be revised to compensate for that lower F SPR benchmark.

35
36 In summary, this model did use the new, improved estimates from
37 the MRIP recalibration, both landings and discards. The 2014
38 update and the SEDAR-31 base model results are very similar.
39 The main differences are due to the recreational selectivity,
40 which in recent years has shifted towards larger fish, and the
41 higher recreational removals caused by the MRIP recalibration.
42 That's basically the summary. I did want to just quickly
43 acknowledge the analytical team, which included Clay Porch, Jake
44 Tetzloff, and John Walter. Thank you very much.

45
46 **CHAIRMAN GREENE:** Thank you very much. Any questions?

47
48 **MR. PERRET:** Thank you very much, Shannon. Can you put the

1 slide up there that shows the removals prior to 2006, I think it
2 was, which was around 30 percent, and then, after that, I think
3 it's down to 12 or 14 percent?
4

5 **DR. CALAY:** Yes, but I will have to do it with this.
6

7 **MR. PERRET:** Okay and so currently, after 2007, the removal is
8 10 to 14 percent and previously, it was in the 30 percent range
9 and the numbers were going down and now it's showing some slight
10 increase. If indeed in 2032 the stock is rebuilt, what is your
11 best guesstimate or estimate or what will the directed fishery
12 and bycatch -- What range should they be removing?
13

14 **DR. CALAY:** That's a question that I don't have the answer to
15 right offhand. I could easily look at what fraction of removals
16 would result after achieving the F rebuild, but it's probably
17 going to be something less than 10 to 14 percent, because as the
18 stock continues to increase, the number of animals age three-
19 plus will increase and so although our yields will also increase
20 at the same time, the fraction should not increase, I wouldn't
21 think, but it's something I could very easily find for you.
22

23 **MR. PERRET:** If I may, it seems to me if we're going to rebuild
24 to that magic number in 2032, we ought to be able to take more
25 fish. I mean what are we trying to do if we're going to rebuild
26 and we're going to go under 10 or 14 percent, which is where we
27 are now in 2014?
28

29 **DR. CALAY:** This is just the fraction removed and so you will in
30 fact take more fish, but the population will also grow and so
31 the fraction you take may not increase, but the absolute number
32 you take will.
33

34 **MR. PERRET:** 10 percent of a million pounds versus 10 percent of
35 ten-million pounds.
36

37 **DR. CALAY:** Right.
38

39 **MR. PERRET:** Okay and I have one more, if I may. In one of your
40 ending slides, which you did not show us, you have a slide on
41 fishery-independent indices of abundance larval survey. Can you
42 get that one up, please?
43

44 Now, we all know a lot can happen between larval numbers and
45 harvestable-sized fish, but explain to me, please, how updating
46 the larval survey information, and I really like the slope of
47 the line. It looks like it's almost vertical going up and not
48 down and that's good, but why is there a difference over the

1 past years of the larval survey numbers when all you did was
2 update with more recent information between SEDAR and your --

3
4 **DR. CALAY:** This slide is confusing for a few reasons. One is
5 that these are all relativized and so they're all scaled to a
6 mean of one. If I had put the absolute values of the
7 observations, they might overlie each other, but because they
8 are scaled independently, they look like they differ and so one
9 thing to do would just be to plot the absolute values for the
10 observed and predicted.

11
12 It's going to cause another misperception though, because then
13 the lines that I'm plotting aren't directly comparable, but I
14 think that those numbers are actually not different. It's the
15 scaling. It's a feature of the way this graph has been scaled.

16
17 **MR. PERRET:** The good news is the direction that the lines are
18 going since about 2006.

19
20 **DR. CALAY:** Yes and we do re-estimate these series and so there
21 is a possibility that they are slightly different, but they
22 shouldn't be as different as they appear. That is an effect of
23 the scaling that I've done to make the trends comparable.

24
25 **MR. KEVIN ANSON:** I am not on your committee, but, Dr. Calay,
26 thank you for coming today and giving the presentation and so I
27 wonder if you could go to Slide 23 and that's the one of choice
28 of MSY proxy.

29
30 **DR. CALAY:** You will have to tell me when I get there, because I
31 can't read the number on the bottom.

32
33 **MR. ANSON:** Keep going. Right there. The fourth bulleted point
34 there, I was here during the last time we discussed SPR and
35 which SPR do we select and certainly there will probably be some
36 debate again this meeting, based on the 2014 update assessment,
37 and so you have the statement here that many scientists and some
38 SSC members have proposed a biologically-based F SPR proxy and a
39 review of the literature suggests that red snapper life history
40 characteristics are most consistent with F SPR 30 to 40 percent.

41
42 I can understand the biological reasons or rationale, looking at
43 the reproductive length of the fish or the age of the fish and
44 certain other characteristics, density-dependent and such, but I
45 guess I come back to when you try to relate that biological
46 setting, which are trying to capture all the environmental
47 characteristics of the fish in its setting, with F SPR 30 to 40
48 percent, because F SPR 30 to 40 percent is a management number

1 and it's based on fishing and it's based on activity.

2
3 I guess, looking at red snapper relative to all of the snappers,
4 which this has been lumped into, my point of view is that red
5 snapper in the Gulf of Mexico is a different animal entirely of
6 all the other red snappers, of which this might be generalized,
7 this statement, and look at the productivity of the northern
8 Gulf of Mexico, the fertile crescent, and certainly the
9 artificial reefs seem to be playing quite a significant role in
10 its rebuilding, and so I just wonder if you can provide, since
11 you're on the SSC and there was some of that discussion again at
12 this last SSC meeting, as to maybe help to clarify that for me
13 in my mind, because, again, I can certainly see the biological
14 SPR value and how it's determined, but F SPR is really taking it
15 back to a management and so it should be accounting for some of
16 the things that we know, management-wise, of a particular fish.

17
18 **DR. CALAY:** My attempt with this slide was to lay some
19 groundwork for the choice of proxy and to make sure that the
20 council understood that in addition to a higher yield that
21 you're also setting the bar lower for rebuilding the stock and
22 so you would essentially, by choosing F_{max} , be assuming that
23 FMSY occurs at about 20 percent of the unfished condition.

24
25 Now, frankly, if we had strong and conclusive evidence that that
26 was inappropriate, I would present that evidence. At this time,
27 we don't have strong, compelling evidence to inform this
28 decision and so my intention is just to lay out some of the
29 groundwork for the basis for this decision, but I think that as
30 far as what the SSC conversations were, Will Patterson, the
31 Chair of the SSC, is here.

32
33 As far as conversations within our Center, I would say that we
34 basically do feel that this decision carries a certain risk and
35 that the risk ought to be understood, but that in fact we don't,
36 at this time, possess any compelling persuasive evidence to
37 support one proxy or another.

38
39 **MR. ANSON:** Thank you and I have one more question. On Slide 4,
40 and you don't have to necessarily bring it up unless you would
41 like, but you talked about the various sources of data that were
42 used in the update and just so I understand, this is reliant
43 pretty heavily upon age information of the population and so we
44 have two different sources, fishery-dependent and fisheries-
45 independent, data sources that provide that picture.

46
47 Can you give a sense, Dr. Calay, as to how much the fishery-
48 dependent age data is playing into the model? I will just throw

1 out there that let's say if 75 percent of the age data for the
2 recreational side went away, would that have a major impact or
3 how would you resolve that, as a stock assessment scientist, to
4 try to fill in the gap?

5
6 **DR. CALAY:** Well, if it went away -- The real thing that we need
7 is representative age sampling and so if you were to reduce the
8 amount of samples that we get, but retain their representative
9 nature across the fisheries, then in fact you would not
10 anticipate a large effect on this model, but if you were to
11 reduce the number of samples you collect from certain fisheries
12 and certain areas, for example, or certain fishing modes, that
13 could have an effect on the model.

14
15 We are aware that one of the sensitive aspects of these SS
16 models tends to be the age composition information and one of
17 the things we try to carefully evaluate is how to correct that
18 data to ensure that it is as representative as possible and also
19 how to weight it within the model, so that it doesn't -- If you
20 were to use the raw sample sizes, for example, that we receive,
21 the model would fit very well to the age composition, but it
22 would not fit well to the indices of abundance and so there's a
23 careful balancing to achieve an appropriate fit to the age
24 composition, but not to allow the model to fit only the age
25 composition.

26
27 What you've asked is a complex question. We could use far less
28 age composition information if it were truly representative and
29 the best way to achieve that is through fishery-independent
30 sampling.

31
32 **MR. ANSON:** Thank you and I have one more question that the
33 Chairman has allowed me and I appreciate all of the thought into
34 the answers, Dr. Calay.

35
36 The last comment or question I have is it was briefly touched
37 upon at the SSC meeting when we were talking about the update,
38 and it had probably been talked about at previous SSC meetings,
39 as to the frequency of update assessments and red snapper, I
40 hope one day not too very far down the road, we can get to a
41 point where red snapper is an afterthought and we can kind of
42 push it to the side, but in terms of all the other species that
43 the Science Center has to create assessments for and the council
44 needs, and, Dr. Ponwith, we've talked about this too, my take-
45 away from this 2014 assessment is kind of similar to the last
46 one, but it's just a reinforcement of this trend line, where we
47 have the latest information and the model is using that
48 information and it is a positive trend and so we get positive

1 results in the yields, but looking at the resources of the
2 Science Center and how much at least a typical red snapper
3 assessment takes for resources and using those, is there any way
4 or have you all been thinking about a quick methodology or a
5 fast way that you might be able to produce a very good or a very
6 rough estimate of where the stock is without really devoting two
7 assessment scientists and such?

8
9 I don't know if it's you or Dr. Ponwith, but I still foresee us
10 having to go down the road of every couple of years at least
11 doing an update assessment, if not more, and we see some very
12 good benefits and we can realize those sooner rather than later
13 is all I'm trying to get at.

14
15 Maybe if we get with maybe eight or nine of those datasets that
16 are most important and inform the model the most, using those in
17 - Not using all the available resources each time we go through
18 an assessment.

19
20 **DR. BONNIE PONWITH:** I certainly appreciate that question,
21 because it shows some really good strategic thinking in terms of
22 priorities and I will speak in general terms and then shift back
23 to Dr. Calay, if she wishes to speak to it more specifically to
24 red snapper.

25
26 During the peer review for stock assessments that happened at
27 the Southeast Fisheries Science Center, one of the things that
28 came up over and over and over again was how the demand for
29 these assessments really outstrips the number of hands we've got
30 to do them and that begs for solutions.

31
32 One of the solutions that we talked about was, first of all, to
33 take a more methodical approach to prioritizing those stock
34 assessments in a way that looks at the volatility of the fishery
35 and the volatility of the ecosystem and the population itself
36 and some other quantitative parameters to come up with sort of a
37 modeled approach of how frequently should we be doing each of
38 these assessments and how do you set priorities, given the fact
39 that the assessment scientists are a scarce resource.

40
41 The work on that tool continues and one of the recommendations
42 that came out of the peer review was to either adapt or adopt
43 that tool when it's ready, to help the council make its
44 decisions about the frequency, the periodicity, of those
45 assessments.

46
47 That's one part of the equation and that is how do you set your
48 priorities and then the other part of it is what level of

1 sophistication is enough and it is something that we've talked
2 about, should you be going for a gold standard for all of these
3 assessments or should you try and get more assessments done and
4 be comfortable with pretty darned good?

5
6 I think that if we get to a stage where we can quantify what is
7 pretty darned good with respect to each of these stocks and
8 understand what that is statistically and describe that
9 statistically with all of its uncertainties, I think that it
10 puts us in a better position to be comfortable with making a
11 decision where we would do more assessments and do assessments
12 more frequently, but at a level that has higher uncertainty
13 associated with it.

14
15 It's all a matter of tradeoffs and so that's the general answer
16 and I will look to Dr. Calay and see if she has anything to add
17 specific to red snapper.

18
19 **DR. CALAY:** I think specific to stock assessments in the Gulf
20 and Caribbean group, it would be easy enough to triage which
21 update models you might want to do by just monitoring catch and
22 CPUE. However, that won't give you the ability to reevaluate
23 ABC or OFL.

24
25 All it would let you do is say we have evidence that this stock
26 is of concern and we're going to ask for an update or a
27 benchmark of that stock, but there are fast assessment
28 methodologies that at least allow you to prioritize which
29 assessments you think are of most importance and so that's all I
30 think I will add at this time.

31
32 **EXECUTIVE DIRECTOR DOUG GREGORY:** Thank you and we certainly
33 appreciate all that you and the Center have done for us and you
34 serving on the SSC. Following up on what Chairman Anson was
35 asking and your response, I was involved in developing SPR as a
36 management tool early on and the idea was that 26 percent SPR
37 was equivalent, in concept, to our current minimum stock size
38 threshold and 30 to 40 percent is more equivalent to MSY.

39
40 What throws me off is the estimate from the stock assessment
41 that says F at 26 percent is approximately equivalent to Fmax, I
42 guess current selectivity in the fishery. In the slide where
43 you say that an SPR proxy that's too low will not rebuild the
44 stock to MSY is a truism. It's precautionary, but does it
45 really apply here when the stock assessment shows that the
46 equilibrium yield at 20 percent is higher than the equilibrium
47 yield at any of the higher SPRs and so that seems to indicate,
48 to me, that 20 percent may be MSY and that's my confusion.

1
2 **DR. CALAY:** If you're looking for conclusive and compelling
3 biological evidence to support one of these proxies -- As I
4 said, this assessment is not capable of producing that
5 information, because with the data that we possess, over the
6 period of time where we have both indices and catch and there is
7 a brief period of time from about the 1980s forward, the stock
8 size during that time has been just a fraction of the total
9 dynamic from 1872 forward.

10
11 This model essentially, if we allow steepness to be estimated,
12 will estimate steepness near one and so it is possible that that
13 is nearly -- That that is an appropriate estimate and then, in
14 that case, Fmax would be similar to F SPR 20, but clearly at
15 some level of depletion you will have reduced recruitment as
16 well.

17
18 Fundamentally, there is a spawner/recruit relationship with red
19 snapper, but you may not see evidence of that except at very low
20 stock sizes, which we are not at currently. We are at about
21 15.8 percent SPR and so I don't want to tell you what proxy you
22 should choose and I don't particularly feel that I have ample
23 evidence to support any of these proxies in particular and so in
24 this case, I think that caution is warranted, but that the
25 discussions of the SSC and of your council -- It is essentially
26 your decision.

27
28 I just want to be sure that it is understood that you always
29 will get higher yields as you lower the bar for recovery and at
30 some level, it could become an absurdity, where you essentially
31 choose higher and higher yields and the selectivity shifts and
32 we re-estimate and that supports an even lower estimate and at
33 some point, you could get down to SPR values that clearly cannot
34 be an appropriate proxy for FMSY.

35
36 We don't know whether we're in that situation now or not and so
37 I don't have any evidence that I feel is conclusive enough to
38 bring to this committee to support any one of these proxies and
39 that's what I'm saying.

40
41 **CHAIRMAN GREENE:** Thank you. Any other questions?

42
43 **MR. WILLIAMS:** Shannon, would you say then that 20 percent, 22
44 percent, 24 percent, 26 percent are all equally likely or am I
45 putting words in your mouth?

46
47 **DR. CALAY:** What I would say is that there is only one true
48 FMSY, but we can't estimate it with the data that we have at

1 this time and these values are not all equally likely, but we
2 can't know what the true probabilities are from the output of
3 this model or any other evidence that we possess and that's what
4 I'm saying. They are not equally likely and only one of them is
5 most representative of FMSY, but we don't know at this time
6 which one that is.

7
8 **CHAIRMAN GREENE:** Okay and any other comments? Thank you, Dr.
9 Calay, for your presentation and comments. Camp, did you have
10 something?

11
12 **MR. CAMPO MATENS:** Yes and, Shannon, you know I find this
13 fascinating and do I understand, as a layman then, that all of
14 these numbers, 26, 22, 24, are possible, but the lower they go,
15 the more risk they entail? It's that simple, isn't it?

16
17 **DR. CALAY:** Yes and that's a truism, I think.

18
19 **CHAIRMAN GREENE:** Okay and last call. Anybody else? Thank you,
20 Dr. Calay. Next up on the agenda is the SSC Recommendations,
21 which is Tab B, Number 4. However, a PowerPoint was emailed to
22 you all at 1:05. Dr. Patterson.

23
24 **SSC RECOMMENDATIONS**

25
26 **DR. WILL PATTERSON:** We met in Tampa earlier this month to
27 review, among other things, the red snapper update. Shannon
28 indicated the terms of reference included some analysis or
29 consideration of new parameters, one of which was the MRIP
30 recalibration information.

31
32 We actually spent quite a bit of time talking about selectivity
33 and the new selectivity estimates, but MRIP, in particular,
34 caught our attention and these plots that you see on the screen
35 now are for the western Gulf and the eastern Gulf and so these
36 are the recreational landings estimates.

37
38 This is what Shannon had indicated just a moment ago, that when
39 you use the more recent MRIP recalibration and go back in time,
40 the correction is for higher estimates of catch historically.
41 This results in one component of the increased productivity
42 estimate combined with selectivity, but this basically indicates
43 that the stock was producing more catch back in time, based on
44 that recalibration.

45
46 **DR. PONWITH:** It looks, to me, like you have western Gulf
47 landings and eastern Gulf discards. I could be wrong, but --
48

1 **DR. PATTERSON:** Let me show you the next slide. This is the
2 discard slide and the key here is the difference -- Yes, you're
3 correct and I'm sorry, Bonnie. The bottom here is actually the
4 landings from the eastern Gulf and the top is the discards from
5 the western Gulf and so I did transpose the eastern Gulf ones
6 incorrectly, but the point to make is really this top panel
7 here, which is the correct discard panel for the western Gulf,
8 and this was the issue that really caught the SSC's attention
9 and which we spent quite a bit of time on.

10
11 If you go back to the mid-2000s, the estimated discards
12 obviously were much higher with the recalibration and then
13 farther back in time, that disappears. There was some
14 discussion about why this would occur and why you would see
15 different patterns between the landings estimates and the
16 discard estimates.

17
18 What we were told is that there were different equations used to
19 make these corrections and we didn't have any other information
20 to go on and so this is where that conversation ended, but it is
21 a source of uncertainty and one that we need to explore moving
22 forward.

23
24 Next, when examining the output from the assessment, looking at
25 F to MFMT, and, again, this is based on the council's current
26 proxy for MSY of 26 percent SPR, the more recent estimates and
27 the last fishing year in the model are that F to FMSY is below
28 MFMT and then the bottom plot shows the biomass estimates, where
29 the stock biomass has been increasing, estimated to be
30 increasing in recent years, but remains below that threshold.

31
32 After review of the assessment, the SSC passed this motion with
33 one abstention, that the red snapper update base assessment
34 model is the best scientific information available and is
35 acceptable for management purposes. The stock is estimated to
36 remain overfished, but is not undergoing overfishing. Again,
37 this passed with one abstention.

38
39 Then we moved into projections, which Shannon has just talked
40 about, and so this figure shows the projections information that
41 Shannon had just presented and we have here the different
42 proxies that the council asked the Science Center to run and the
43 current proxy, and the one that's currently on the books, is the
44 26 percent SPR and so that's where we evaluated the stock,
45 relative to that benchmark, and the FMSY based on F 26 percent
46 SPR, on that benchmark.

47
48 In examining these projections, we also used the F 26 percent

1 SPR projections in evaluating OFL and ABC and so the table that
2 you see here, this is the same information that appears in the
3 SSC's report. The caveat to this being that Shannon -- We knew
4 or we had information at the SSC meeting that perhaps the
5 provisional 2014 landings estimates would be available sometime
6 before the next fishing season and Shannon has indicated that to
7 the be case.

8
9 This OFL, again, here is based on F 26 percent SPR and the ABC
10 is based on a P* of 0.427, which, again, we used the council's
11 control rule, the ABC control rule, and we applied that to the F
12 rebuild probability density function.

13
14 We did differ in one instance, or in one regard, from what was
15 done after the last assessment, in that instead of using the
16 high and low mortality weighting to go along with a base model
17 weighting of 50 percent, in this case we just weighted the base
18 model and made the projections relative to F rebuild and using
19 this P* of 0.427 and so that was the recommendation and where it
20 came from for OFL and ABC. Johnny, that sums up this portion of
21 the SSC's report.

22
23 **CHAIRMAN GREENE:** Thank you. Any questions for Dr. Patterson?
24 Any questions? All right. I guess with that, we will move into
25 Committee Recommendations on the Red Snapper Update Assessment
26 and SSC Recommendations.

27
28 **MR. STEVEN ATRAN:** Want me to do my stuff?

29
30 **CHAIRMAN GREENE:** Sure, Mr. Atran. The next item will be the
31 ACL/ACT Control Rule Recommendations, Tab B, Number 5(a) and (b)
32 and Mr. Atran will lead us through that.

33
34 **ACL/ACT CONTROL RULE RECOMMENDATIONS**

35
36 **MR. ATRAN:** Thank you, Mr. Chairman. I am not going to be very
37 long on this. Whenever we get new ABC recommendations, I work
38 through the ACL/ACT buffer spreadsheet and this is an ACT
39 control rule that was adopted in our Generic ACL/Accountability
40 Measures Amendment in order to try to look at various sources of
41 management uncertainty and develop a recommendation. Not a
42 binding recommendation, but just some guidance as to what might
43 be an appropriate buffer to set between the ACL and the ACT or
44 between ABC and the ACT.

45
46 You already have adopted a 20 percent buffer for the
47 recreational fishery for red snapper last year and so you don't
48 need to change it if you don't want to and when I ran the

1 numbers through this spreadsheet and what it looks at is whether
2 or not you're trying to manage a single species or a
3 multispecies assemblage, the past four years' success rate in
4 maintaining catch within your ACL and if it has been exceeded,
5 what's the highest magnitude, what is the type of data
6 collection used.

7
8 A survey, such as MRIP, is less precise than an IFQ system and
9 so it gets more points and then whether or not in-season
10 accountability measures are used or just between-season
11 accountability measures, and, finally, a factor as to what the
12 status of the stock is with respect to its overfished status.

13
14 All of these get some points and there is no probability
15 associated with these. It's just the more points that are
16 accumulated, the wider the buffer should be and when I ran this
17 through for red snapper recreational, it came up with a
18 recommendation for a 19 percent buffer, which is practically the
19 same thing as the 20 percent buffer that you already recommended
20 and so basically it's suggesting no change in the buffer that
21 you previously decided upon.

22
23 On the commercial side, with an IFQ fishery, the IFQ has been
24 very successful at maintaining commercial catches within their
25 catch limits and that is reflected in the spreadsheet, which
26 recommends no buffer between ABC and ACT. If you would like, I
27 can go into more detail on these spreadsheets, but I've gone
28 over that in the past and so I will leave it up to you.

29
30 **CHAIRMAN GREENE:** Any questions for Steven? I am not seeing any
31 and now I guess we'll pick back up where I thought we were under
32 Committee Recommendations and any thoughts by you guys?

33

34 **COMMITTEE RECOMMENDATIONS**

35

36 **DR. CRABTREE:** You've got a new ABC that's quite a bit higher
37 than the current TAC and if you want to raise the TAC, you are
38 going to have to go through a framework amendment and do that
39 and so we need to talk about do you want to raise the TAC and
40 the timing of all this. It seems, to me, unless, Johnny, we're
41 going to come back to that somewhere later or what's the plan on
42 that?

43

44 **CHAIRMAN GREENE:** I don't believe so. I think now is the time.

45

46 **MS. BADEMAN:** I will just start with a question and maybe I will
47 kick it back to Roy, but what would be the timing? If we
48 started something today, when would we expect this to go into

1 place? I am guessing not before June, but -

2
3 **DR. CRABTREE:** Assuming we -- Our next meeting is in April,
4 Steve, or the end of March? If staff could put together a
5 regulatory amendment that we could vote up at the end of March,
6 we could go through a rulemaking and probably get it done in
7 July sometimes, but I think we are looking at, depending on how
8 long this year's season works out, a potential reopening and we
9 probably ought to have some discussion about if we're going to
10 reopen, what would we do?

11
12 I think we can come back, once we are working on a framework
13 action, we can come back with some estimates of season lengths
14 and how many days all of this would come to.

15
16 **MR. ANSON:** So, Roy, is there any way to speed that process up
17 to try to realize the maximum number of days starting June 1 or
18 is it July is when you would have it in place and therefore we
19 would have to look at a fall season?

20
21 **DR. CRABTREE:** We don't have another meeting until the end of
22 March and we would have to come back and get a proposed rule
23 published and that's going to put us well into April and then a
24 public comment period and then a final rule and so it's
25 difficult to see how we would get there outside of having an
26 additional council meeting or something like that. Then it's
27 going to depend on how quickly staff could pull all of this
28 together.

29
30 **MR. ANSON:** Those were going to be my comments or questions, I
31 guess, and we can have some discussion if we have a phone
32 meeting and we have done those or at least talked about having
33 them before and whether or not staff could get the documentation
34 together in order to have the phone meeting in time to put it
35 through or start the process on your end, Roy, to have it
36 available for June 1. That's one of the things I would like to
37 potentially discuss and see if that's of interest to the rest of
38 the council members.

39
40 **MR. ATRAN:** What we were originally thinking is that if you gave
41 us guidance to begin a framework action to change the ACL and
42 the ACT that we were going to come back at the March/April
43 meeting with a document you could take final action on.

44
45 As Shannon had indicated, we are expecting to get final results
46 on the 2014 catch landings estimates and I believe the numbers
47 would be rerun, since 2014 apparently is -- The landings are
48 lower than they were in 2013 and they are lower than what was

1 used in the model and we're anticipating that that would result
2 in higher ACLs and ACTs.

3
4 My thought was that if you gave us guidance now, based upon the
5 numbers you have right now, by March, when we have the final
6 numbers, we could just substitute whatever the equivalent ACLs
7 and ACTs would be with the final 2014 landings incorporated.

8
9 If you want to hold a special meeting prior to that, I am not
10 sure if we would have the 2014 numbers at that time. I'm not
11 sure how long it will take to get those numbers in place.

12
13 **CHAIRMAN GREENE:** Go ahead, Harlon.

14
15 **MR. HARLON PEARCE:** I am not on your committee, but thanks for
16 recognizing me, Mr. Chairman. I am in the same boat as Kevin.
17 I mean this is important to us to get started June 1 and I am
18 hearing Steven say that we may not have the 2014 numbers in time
19 even for a special meeting, but at some point, I think, Kevin, a
20 special meeting should be of primary importance to us to make
21 this happen and so whatever it takes to get this thing for June
22 1, I would like to see that done. If it's a special meeting or
23 whatever it is, a phone call, and I don't care what you do, but
24 I think we need to try and really push this up, so we can get
25 this finished for June 1.

26
27 **MR. WILLIAMS:** What do we need to do today, Dr. Crabtree? If we
28 just approve -- We've got an SSC recommendation for ABC and if
29 we approve that, do ACL and ACT follow right from that? Is that
30 all we really need to do?

31
32 **DR. CRABTREE:** I think that's right, that we just have to ask
33 staff to put together a framework that looks at raising the ACL
34 and the ACT based on these new ABC recommendations. We do have
35 the runs Shannon showed us with the provisional 2014 landings
36 and so I think we just need to give Steve and staff the guidance
37 to do that.

38
39 Now, in terms of getting it done by June 1, we would have to
40 have a final rule by May 1, which means we would have to have a
41 proposed rule in March sometime. It's difficult to see how you
42 would get the days to getting this done by June.

43
44 **MR. WILLIAMS:** Can I follow up? If we didn't have that done in
45 time, we still have -- We already have quotas and ACLs and ACTs
46 that exist, right, and so even if this came in late, would it be
47 -- Since we're raising the limit, it wouldn't be a problem,
48 would it?

1
2 **DR. CRABTREE:** It would mean the fishery would close and then it
3 would reopen. We have done this before when we were in a
4 similar situation and now I don't know -- We don't know what the
5 season lengths are going to be this year, but the season would
6 open and we would fish on the current eleven-million-pound
7 quotas and then once a final rule became effective and increased
8 the quotas, we would reopen the fishery for whatever number of
9 days it would take to catch the remainder of it.

10
11 I am not prepared to say there is no way in the world to get
12 this done by June 1, but staff would have to do some back
13 calculating on how long the rulemaking would take and then see
14 when would we have to vote it up by and is it possible to get a
15 document put together by that. I think it would be very
16 difficult, but I don't know that it's impossible or not.

17
18 **MR. WILLIAMS:** Johnny, just following up. Steve, if the
19 committee and then the council approve a new ABC, is that -- Do
20 you agree with Dr. Crabtree that that's essentially what you
21 would need for the ACL/ACT recommendations? I mean they would
22 just come right off of that, right?

23
24 **MR. ATRAN:** Well, that's something you might want to consider.
25 If we could put Will's presentation back up on Slide 6, I wanted
26 to point something out that may be a concern. While that's
27 coming up, the SSC made ABC recommendations for three years out,
28 2015, 2016, and 2017.

29
30 If you look at the ABC projected yields for going out even
31 further than that, while they've been going up for those three
32 years, they start going down again and that's because we've got
33 some strong year classes right now that are working their way
34 through the fishery.

35
36 In the future, we don't know if we're going to get strong year
37 classes or weak year classes and so the projections assume an
38 average year class and that's going to drive us down in the
39 future.

40
41 Now, the SSC did not recommend ABCs that far out, because there
42 is a lot of imprecision with those years as you go further out
43 and so anything could happen after that, but you might want to
44 be concerned a little bit about the prospect that in the future
45 you might have to face some declining yields again and that
46 brings up the question of do you want to try to fix it at some
47 constant catch ACL over the next few years or do you just want
48 to get the most you can out for these three years and see what

1 the next stock assessment says?
2
3 If you want to get the most out of it, then yes, ACL would be
4 equal to ABC and the ACT for the recreational side would be 20
5 percent below for their ACT buffer.
6
7 **MR. WILLIAMS:** When would the next assessment be, two years or
8 three years?
9
10 **MR. ATRAN:** I believe the SSC has recommended a new assessment
11 in 2017, but I'm not sure what, if anything, is on the schedule
12 right now.
13
14 **MS. BADEMAN:** I was just going to say if we add in this new 2014
15 data, we need to get the SSC back together before we can do
16 anything as well, so we can get a new ABC. Do we have a meeting
17 on the books at this point?
18
19 **MR. ATRAN:** The SSC is tentatively scheduled to meet three weeks
20 before each council meeting. Now, we can always convene a
21 special SSC meeting if we have to.
22
23 **MR. WILLIAMS:** Martha, I didn't understand your question. We
24 have an ABC recommendation from the SSC and what are you saying?
25
26 **MS. BADEMAN:** We do, but if this group wants to incorporate the
27 2014 landings and we want to adjust up, then we would need to
28 get a new ABC, right, or maybe Roy is going to correct me.
29
30 **DR. CRABTREE:** I am not so sure that we do. I mean I think the
31 SSC was aware that the 2014 landings were going to be lower and
32 that when it was rerun that it would follow all of the methods
33 and the way they calculated it and so I am not sure that there
34 is any reason to go back to them and ask them to look at this
35 again, but I guess I would want to hear comments from -- I
36 suppose from Will about that.
37
38 **MR. WILLIAMS:** How far under are they likely to be? I mean is
39 it likely to make a significant difference so that instead of
40 the thirteen-million-pound ABC we would have 13.5 or something
41 like that?
42
43 **DR. CRABTREE:** What Shannon showed us was 13.9 for 2015 and
44 13.77 in 2016 and 13.66 in 2017. Now, the numbers decline.
45 There is more of a decline in the yields in the reruns she did,
46 but there is a table in that presentation she showed you that
47 has the ABCs without the provisional landings and the ABCs with
48 it and it's a 900,000-pound difference for this year, but I

1 think the issue of do you want to set a constant value for the
2 catch and some of those kinds of things are things you may want
3 to look at.

4
5 **CHAIRMAN GREENE:** Okay. Dr. Patterson, would you like to
6 comment on that, please?

7
8 **DR. PATTERSON:** Certainly when we met, as I indicated earlier,
9 we knew that there was a likelihood that there would be at least
10 provisional landings for 2014 and we discussed that.
11 Historically, when the council has asked us to present a
12 constant catch type of scenario for ABC, we have gone back and
13 had to reapprove it and so I don't know about the logistics of
14 all that and what has to happen, but historically, when there's
15 been a change in the ABC, it's been kicked back to the SSC.

16
17 **MR. ATRAN:** First of all, with the information you've got right
18 now, if you wanted to set a constant catch ABC, it would
19 probably have to be at the lowest ABC level of that three-year
20 period, but I am looking at the motion that the SSC actually
21 made for recommending ABC for red snapper.

22
23 It says the SSC recommends that ABC for red snapper be set using
24 a PDF of yield applying from the base model projected at F
25 rebuild to SSB at 26 percent SPR in 2032 and applying a P* of
26 0.427 and never mind what all of that means, but they
27 recommended a formula for calculating ABC and just included what
28 those ABCs currently are and so if it was the intent of the SSC
29 to apply whatever yield comes out of that formula, then it seems
30 to me that we would be able to modify the ABC number without
31 having to go back to the SSC. If they were specifically
32 recommending the number, then we would have to go back to the
33 SSC.

34
35 **CHAIRMAN GREENE:** Okay. It got awful quiet and has anybody got
36 any comments relative to that? Okay. We are through with red
37 snapper and ready to pick up -- I hear hold on.

38
39 **MR. WILLIAMS:** I am sorry, but, Will, do you have a feeling
40 about the question Steve posed and could -- Your recommendations
41 were real specific, but --

42
43 **DR. PATTERSON:** Again, I don't know about the rules and so I
44 can't really speak to what has to happen or not happen. I told
45 you that the SSC considered in their discussion that this may
46 occur and historically, whenever there's been a change in the
47 number we gave you, it has come back to us, but we were aware of
48 this and Steve pointed out that there is a method put in place

1 and it follows the control rule.

2
3 That said, we have never been allowed to just put the rationale
4 for a decision in our motion. We then give you the numbers and
5 so I don't really know how that works, but historically, there
6 has always been numbers that went with it and I don't know if
7 you can just separate the two.

8
9 **MS. LEVY:** In looking at the SSC report, you know it has both
10 the method and the resulting numbers and it also has a
11 recommendation on the OFL, which is what the ABC is then based
12 on, and so, in my opinion, they have given you number ABC
13 recommendations and that if you want to increase them, that's
14 fine, but it should probably go back to the SSC so that they can
15 then give you the higher recommendations.

16
17 **CHAIRMAN GREENE:** Okay. I thought it was fairly specific.

18
19 **MR. DOUG BOYD:** In the presentation by Shannon, we saw a
20 variance in the different SPR numbers, from 20 all the way up to
21 26. This recommendation uses an SPR of 26 and should this
22 council consider using a different SPR at this point?

23
24 **DR. CRABTREE:** That's up to you if you want to look at that.
25 Now, that would require a plan amendment, because you're
26 changing the rebuilding plan. So if you want to do that, that's
27 going to take quite a bit more time and would be a separate
28 action than what we're talking about now, which is a regulatory
29 amendment just to address the TAC.

30
31 We would have to do a plan amendment and look at alternative
32 reference points and I have talked to Mara and the attorneys
33 about whether we would need to look at the rebuilding timeline
34 and revise that as well or can we continue to take all the way
35 out to 2032 and just say we're going to rebuild to a lower bar
36 or, if we decide we're going to rebuild to a lower bar, do we
37 then have to change the timeline of rebuilding to something
38 shorter? I don't know what the answer to that is yet, but that
39 would be a separate issue that wouldn't be finished in time for
40 this year's season. That would be down the road more.

41
42 **MR. BOYD:** To that point, could those go concurrently?

43
44 **DR. CRABTREE:** No, the framework would go much more quickly and
45 the reference points would go more slowly, because they are two
46 different processes.

47
48 **MR. BOYD:** What I mean though is they could be ongoing at the

1 same time.

2
3 **DR. CRABTREE:** You can work on them at the same time, yes, and
4 have the discussions.

5
6 **MR. ANSON:** I don't vote on the committee, but that sounds like
7 a good idea, Doug, about trying to do something about framework
8 action for changing the SPR, but going back to the issue Steven
9 said in the motion from the SSC, there wasn't -- I know Mara
10 just read some of the report, but I see the report kind of as
11 helping to explain some of the discussion, unless I am not
12 reading everything, but I see that the motion was use a certain
13 framework or a certain formula to get a number.

14
15 What you just said, Mara, was that it seems like you're linking
16 the two, but the motion, if it was in fact as Steven read it,
17 didn't have any reference to a number, but it just had a -- It
18 does? Okay. I apologize.

19
20 **DR. PATTERSON:** I am sorry to interject here, but could a way
21 forward be to do kind of like what was talked earlier about what
22 the council might do and have a phone meeting of the SSC and get
23 the new numbers from the Center and then at least convene the
24 SSC before March? That way, we could cross all the T's and dot
25 the I's the right way.

26
27 **CHAIRMAN GREENE:** It sounds plausible to me.

28
29 **MR. WILLIAMS:** That sounds good to me, too. I have another
30 question, as long as we're talking about these SPR levels.
31 Since Will is here, I want to make sure I understand. Will, you
32 have a table labeled "Red Snapper Update Assessment Projections"
33 and it shows yields at 20, 22, 24, and 26 percent.

34
35 It looks, to me, like if we say jumped or we lowered our
36 standard from 26 down to 20, it would provide us a lot more
37 yield in the next year. It looks like it would jump from maybe
38 thirteen-million up to nineteen-million, but then it goes down
39 the year after that and those projections begin to converge
40 after a few years and so it looks like we get a couple of years
41 of fun out of it and then we are back to about a million pounds
42 difference or so after four or five years. Am I reading that
43 correctly?

44
45 **DR. PATTERSON:** Those are the current projections. What we
46 have to keep in mind is that the way those are being produced is
47 taking recent recruitment, an average of recent recruitment, and
48 projecting that forward.

1
2 In the eastern Gulf, even though the recruitment from 2010 to
3 2014 is higher than that 2010 value that we estimated last time,
4 it's still much lower than what the trend had been and it
5 doesn't follow the same trend as what we see in the west, but by
6 projecting forward with those lower recruitments, that is
7 informing those equilibrium values.

8
9 To the point that Doug Gregory made earlier, at the bottom of
10 that table, you can see what the equilibrium estimates are and
11 his point was that at the F 20 percent SPR, you have a higher
12 equilibrium value than you do at the F 26 percent SPR. That was
13 the point he was making about what really is a better
14 approximation of MSY.

15
16 That is also tied into recruitment and what's going to happen
17 with recruitment and so those are difficult things when you're
18 projecting out to equilibrium. How much faith do you put in
19 those numbers, but that's where they come from.

20
21 **MR. WILLIAMS:** I am sorry and I am still correct that we would
22 get much bigger yields in the first couple of years, but we
23 would rapidly lose those or am I just reading that totally
24 wrong?

25
26 **DR. PATTERSON:** In that table, that's the way it's presented.

27
28 **MR. WILLIAMS:** It's a Figure. It's not a Table here, but it's a
29 Figure. I am talking about "Red Snapper Update Assessment
30 Projections".

31
32 **DR. PATTERSON:** Later on, there is a table that has those same
33 numbers and I'm sorry, but yes, either way, it's the same
34 information. We were asked to review this by the council and we
35 spent a bit of time talking about it.

36
37 One of the issues, and it's not straightforward how this would
38 actually work out, is something Shannon mentioned when she
39 indicated that the rebuilding schedules may change if you change
40 your proxy.

41
42 These are all based on a rebuilding to 2032 and if the
43 rebuilding schedule changes, then your idea about you can take a
44 bunch right now, but it's going to be fished down and your yield
45 becomes lower, that's going to be altered. It seems realistic
46 that you would have a higher yield under whatever scenario today
47 than if you fished at F 26 percent SPR, but these values would
48 likely change.

1
2 One, you have this landings issue to deal with, but on top of
3 that, if the rebuilding schedule changes, that's going to change
4 the time horizon and therefore change when catch can actually be
5 made over that time horizon.

6
7 **DR. CRABTREE:** Right now, Roy, we're harvesting -- The estimate
8 of MSY in the assessment is 12.9 million pounds and we have an
9 ABC of roughly thirteen and so we've had big recruitment classes
10 that are still in the fishery and that's why we're getting these
11 good yields.

12
13 If you go to the Fmax reference point, that is a higher fishing
14 mortality rate and if you start fishing at that higher rate,
15 you're going to fish those year classes down faster than if you
16 fish at F 26 percent, which is a lower rate, and that's why you
17 see those yields fall off more rapidly, because these
18 projections are all assuming some average level of recruitment
19 for the remainder of the projection period.

20
21 You just fish these year classes down more quickly and then at
22 the end of the day, if you rebuild to 20 percent SPR, you are
23 going to have a smaller population with fewer old, big fish out
24 there that you fish harder and so you're not going to have -- If
25 you think of the quality of the fishery, meaning catch per unit
26 effort and the size of the fish out there, you are not going to
27 have as high a quality a fishery, because you're not going to
28 have as many big fish and many old fish and the catch rates are
29 probably going to be a little lower, because you are fishing
30 harder.

31
32 Those are kind of the tradeoffs with it and bear in mind too
33 that Fmax, F 20 percent, only works if you really believe the
34 steepness is one and there is no relationship between spawning
35 stock biomass and recruitment.

36
37 If it turns out that's wrong and steepness is less than one,
38 then, in all likelihood, as the stock rebuilds to these higher
39 SPRs, you are going to get more recruitment in the future and
40 that means MSY is probably going to turn out to be higher than
41 we thought, but if we don't rebuild the stock to those higher
42 SPR levels, we are never going to know that, because we are
43 never going to get there to see if those recruitments are there.

44
45 It's possible that if you go to the lower SPR reference point
46 that you're giving up yields that might be attainable down the
47 road, from here forward, but the problem is we really don't know
48 if those yields would ever occur or wouldn't occur. Probably

1 the only way to know is to rebuild to the higher SPR and see
2 what the recruitments are like.

3

4 **MR. ATRAN:** A little earlier, Dr. Crabtree had mentioned that if
5 you wanted to go to a different SPR proxy that the time to
6 rebuild would have to be recalculated. I was just looking at
7 one of Shannon's slides, where she looks at what recovery would
8 be at F equals zero.

9

10 All of them have recovery within two to three years. Now, the
11 way the guidelines are set up, if recovery is possible in ten
12 years or less, then we have to recover it within ten years.
13 Otherwise, it's the formula of the time in the absence of
14 fishing plus a generation time.

15

16 I realize these are all preliminary estimates, but they are so
17 short that I think it's a safe bet that if you go to a different
18 proxy and we recalculate the time to rebuild that you're going
19 to have to rebuild in ten years or less, which means by 2026,
20 instead of 2032.

21

22 **CHAIRMAN GREENE:** Okay. Anybody else? All right. I guess we
23 will leave red snapper now and --

24

25 **MR. WILLIAMS:** May I? We need to do something with these future
26 ABCs and we have a recommendation from the SSC and we had
27 Steve's discussion that they actually had a verbal formula as to
28 how they get to those three numbers and we had the discussion
29 from Will that said maybe you could use the verbal formula and
30 then have the SSC convened by telephone to affirm them or not
31 and before we leave red snapper, I would like us to do that.

32

33 I don't have anything written down here as to how I would do
34 that in the form of a motion, but I think we should accept the
35 SSC recommendation for ABC for 2015, 2016, and 2017, but we
36 should -- Let's see. I don't know how to put this in the form
37 of a motion without -- Can we come back to it and I will try to
38 -- Unless somebody else has an idea.

39

40 What we want to do is use these 2014 landings estimates to
41 update the estimated yield, right, and so we just have to figure
42 out how to put that in words and then have a follow-up meeting
43 by the SSC to affirm or deny it.

44

45 **MS. LEVY:** Do you want by the next meeting to have the 2014
46 landings incorporated? I believe Steven said that the SSC is
47 scheduled to meet before every council meeting anyway and look
48 at that and have a document, a framework document, for you to

1 review at the next meeting or are you still looking at trying to
2 do some sort of special meeting?

3
4 **MR. WILLIAMS:** That's another aspect, yes. Probably a special
5 telephone meeting of the council too to affirm that, because if
6 we wait until the next meeting, then we don't have enough time
7 to put them in place or it's unlikely we would have enough time.

8
9 **DR. CRABTREE:** I don't think we could have a rule effective by
10 June 1 if we wait until the next council meeting. It seems to
11 me if you want to try and do that -- Steve has just back-of-the-
12 enveloped something here that we probably would have to do
13 something by around March 1.

14
15 Now, whether that gives staff time to pull all of this together
16 and get that ready or not is a whole other issue and that's
17 still pushing it.

18
19 Now, if we wait until the regular council meeting and all, then
20 we probably could have a rule finalized sometime in July and
21 then you could decide when you want the fishery to reopen and do
22 it that way, but it's really up to you how you want to try it.
23 If you want to try to do something more quickly and you're
24 willing to have an extra council meeting, we can do the best we
25 can.

26
27 **Mr. WILLIAMS:** If we did it that way, if we let the fishery go
28 ahead and close and then reopen, when we would be likely to be
29 reopening the fishery? When would we have a final rule with the
30 new ABC?

31
32 **DR. CRABTREE:** I think probably mid-July sometime. We would
33 have a better estimate of that probably at the next council
34 meeting, but I don't see why we couldn't have it by mid-July and
35 then we would have to look at how many days are we likely to get
36 when we reopen and then you would need to figure out when would
37 you want to reopen. Reopen as soon as possible when the rule
38 becomes final or do you want to give fishermen some sort of
39 notice or some people liked the fall season last year and so
40 there is just a lot of things to figure out.

41
42 **MR. WILLIAMS:** I think it's going to work better if we leave
43 this committee with some kind of a motion and then people can
44 tell us what's wrong with it or right with it and what the dates
45 are that work for them in the next two days and so I understand
46 that this is -- Is this what I was trying to say? I don't know
47 where this came from, but if that's what I -- Do I still have
48 the floor here?

1
2 This motion that was put up here says to affirm the SSC
3 recommendations that ABC for red snapper be set using a PDF of
4 yield from -- Yes, that's the SSC motion, right, but what we
5 want is to -- I guess that could be a separate motion, to
6 convene them by telephone, if necessary, and then maybe do a
7 telephone meeting of the council as well.

8
9 **DR. CRABTREE:** I don't think you need to affirm the SSC stuff.
10 You've got an ABC from them now. Now, if you want to go to
11 these new values with the presumed landings for 2014
12 incorporated into them, your attorney is advising you that needs
13 to go back to the SSC and so you need to make provisions to do
14 that.

15
16 Then you need to make a motion to ask staff to bring you a
17 framework action to raise the quotas and then you need to decide
18 how the timing of all this works, but I don't think you need to
19 affirm the SSC's recommendations. I mean those are the ABCs for
20 now.

21
22 **MR. WILLIAMS:** If one of the committee members wanted to make a
23 motion, how would we fix this motion here to do that?

24
25 **MR. CORKY PERRET:** The ABC for red snapper be such and such in
26 2015, 2016, and 2017.

27
28 **MR. WILLIAMS:** With the understanding that the -- We want to use
29 this formula for calculating yield from the unharvested --

30
31 **DR. CRABTREE:** I think you just need to ask staff to bring you a
32 framework action to reset the total allowable catch based on the
33 new ABC. Right now, you've got the TAC is set equal to the ABC,
34 right, Steve?

35
36 **MR. ATRAN:** ACL, or the equivalent of ACL, is set equal to the
37 ABC.

38
39 **DR. CRABTREE:** Right and so assuming that you want to do it like
40 you have done, you would ask them to bring you a framework
41 action back in to reset the total allowable catch, the ACL,
42 equal to the ABC and adjust the catch targets accordingly.

43
44 Then you've got these timing issues and then you need -- I
45 assume you're going to want the SSC to relook at this and give
46 you the ABC based on the actual landings and so you're going to
47 need to do that, but the motion you need to make is to ask staff
48 to bring you a framework action ready for final action for you

1 to select preferreds and take final action and tell them when
2 you want it by.

3
4 **EXECUTIVE DIRECTOR GREGORY:** All of that is based on when we can
5 get the 2014 data and I haven't heard a time. I mean March 1 is
6 only four weeks away and that's not much time to develop
7 documents, much less have two phone meetings and advertise them.
8 We've got to have three weeks to advertise the meetings in the
9 Federal Register Notice, but it all means when do we get the
10 data? That's the starting point.

11
12 **DR. CRABTREE:** That you will have to ask I guess Bonnie or
13 Shannon when they can finish these projections and have them to
14 you and then you're right that there's not much time to do all
15 of this and I don't know if it's realistic to be able to do it
16 or not. That's just something you are going to have to sit down
17 and figure out the timing of it.

18
19 I mean the real question for the council is do you want to try
20 and have an earlier meeting of some sort to make this move
21 faster and then you're going to have to ask staff to get with
22 the Center and time all of this out and tell you when is it
23 possible to do it.

24
25 **MS. BADEMAN:** That was going to be basically what I asked and
26 when are these data going to be final for 2014? That's driving
27 a big part of the decision, in my mind. Do we want the season
28 to open June 1 with this higher quota or do you want to
29 incorporate 2014? It doesn't seem like they're necessarily
30 going together, but it looks like Bonnie is going to start to
31 answer the question.

32
33 **DR. PONWITH:** The provisional data from 2014 that you saw in Dr.
34 Calay's presentation, those are the data that we have right now.
35 Those data typically don't go final until late in the spring,
36 like June or something like that. Waiting for them to go final
37 isn't going to create options for you. It's June, right, Andy?
38 March/April? Okay.

39
40 **MS. BADEMAN:** They would need to be finalized before we change
41 the ABC based on them, yes? It seems --

42
43 **DR. CRABTREE:** I would say no. We know that there are better
44 estimates of what was caught than the assumption, which was just
45 that it's the same as 2013. Generally, those landings don't
46 change that much, but, to me, those provisional landings -- I am
47 not the Center Director, but, to me, they're the best available
48 estimates we have for 2014 catches at this moment and that's

1 what we are required to use.

2
3 **CHAIRMAN GREENE:** I know in the past we've talked about a
4 constant catch as well and so I guess that will be one more
5 thing. We need to put a motion together here to try to move
6 forward.

7
8 **MR. WILLIAMS:** Would the motion be then to ask staff to bring us
9 a framework action to -- I am just asking here and let's work on
10 it a little bit before I put it up there, but ask staff to bring
11 us a framework action to increase ABC to the levels recommended
12 by the SSC and increase the TAC? Their recommendations were for
13 ABC and so I am just using those words, that acronym.

14
15 **DR. CRABTREE:** Okay, but the SSC sets the ABC and you're setting
16 the ACLs and the TAC.

17
18 **EXECUTIVE DIRECTOR GREGORY:** If I may, Mr. Chairman, the SSC
19 recommended the ABC based on the 2014 being equal to 2013. They
20 did not recommend an ABC based on provisional 2014 data and so
21 if you want to bounce that back to them, we can do an FRN this
22 week and then they would have a telephone call three weeks from
23 whenever we get it published and that's the second or third week
24 in February.

25
26 That's the way forward, but then we would have to probably
27 schedule a phone meeting for the council the day after that or -
28 - It's doable, but that puts us into the latter half of
29 February, where we have a Council Coordinating Committee meeting
30 in D.C. and we have staff going, supposedly, to a National SSC
31 Meeting the fourth week in February, but I don't think we can
32 cancel the CCC meeting.

33
34 We are kind of running it and we have to go and so I mean maybe
35 it is doable to get all of this done by phone meetings by the
36 end of February, because all we're asking is the SSC to change
37 their recommendation from the ABC to using the provisional data,
38 which is there, and it looks like projections are already in the
39 document. Is there anything else that needs to be done then
40 just them rubber stamping the provisional data as being the best
41 available?

42
43 **DR. PATTERSON:** I would just add to what Doug was saying. In
44 the past, when you've wanted a constant ABC, you have asked us
45 for that and so if we're revisiting this, you may ask us for
46 that as well.

47
48 **MR. WILLIAMS:** Can I try again?

1
2 **CHAIRMAN GREENE:** Sure, Mr. Williams, go ahead.
3
4 **MR. WILLIAMS:** If we can get something down here, then we can
5 modify it as we need to. **My motion would be to ask staff to**
6 **bring us a framework action to increase the ACL for red snapper**
7 **to the level recommended by the SSC using the 2014 revised**
8 **estimates.** Is that right?
9
10 **DR. PONWITH:** I might suggest, instead of "revised", the
11 "provisional 2014 landings estimates".
12
13 **MR. WILLIAMS:** **Using the provisional 2014 estimates.** Thank you.
14
15 **MS. LEVY:** A suggestion. The ACL for red snapper -- Based on
16 the ABC recommendations by the SSC and so it would be to
17 increase the ACL for red snapper based on the ABC
18 recommendations by the SSC using the provisional --
19
20 **CHAIRMAN GREENE:** Okay, Mr. Williams, and is that your --
21
22 **MR. WILLIAMS:** **My motion is to ask staff to bring us a framework**
23 **action to increase the ACL for red snapper based on the ABC**
24 **recommendations by the SSC using the provisional 2014 estimates.**
25
26 **DR. CRABTREE:** So then I guess, Mr. Gregory, what staff would do
27 would just be to presume that the SSC will bless these
28 provisional numbers and proceed on putting together a document.
29 Now, are we setting the TAC for three years and so we've got
30 13.9, 13.77, and 13.66 and those would be the three TACs that we
31 would be setting in this and is that kind of how you're looking
32 at it?
33
34 We would generally set it for three years. If you want to set
35 it constant, you could set it at 13.66 for all three years, but
36 otherwise, it takes a little bit more asking from the SSC or you
37 could just use the numbers that Shannon showed us in the table.
38
39 **MR. WILLIAMS:** Does that need to be in this motion, do you
40 think?
41
42 **DR. CRABTREE:** Staff is going to want to know what exactly
43 you're asking them to do, so they can write this up. We don't
44 have time for them to flounder around and argue about what we
45 meant.
46
47 **MR. WILLIAMS:** I personally prefer the constant catch, but I
48 don't know how other people feel about it.

1
2 **MR. ATRAN:** We have to put in a range of alternatives anyway and
3 so we could have an alternative for annual ACL or we could have
4 an alternative for a constant catch ACL.
5

6 **MR. DAVID WALKER:** I like the constant catch. That's what I
7 like, for three years.
8

9 **CHAIRMAN GREENE:** Okay. We've got a motion on the board we've
10 been working on and is there a second to this motion? There is
11 a second by Camp. I know we've been kind of doing this as a
12 work-in-progress thing here, but you said something about adding
13 constant catch to this and is there a change you want to make?
14

15 **MS. LEVY:** I think what Steven said is correct. We're going to
16 have to have alternatives and one alternative could be to have
17 what the ABC exact recommendations are, the ACL equal to those,
18 and another alternative could take the lowest of those three and
19 have it constant for those three years. You can have both
20 alternatives in the document.
21

22 Now, if you want the SSC to actually recommend a constant catch
23 scenario, like ABC over a number of years that would sort of
24 average that out, then that would be something you would have to
25 ask the SSC to do, but in terms of what we could put in the
26 document now, we could put both scenarios.
27

28 I also want to point out that part of this document is going to
29 then be also doing the ACTs for the recreational sector and so
30 we're going to have to adjust those the same way that we're
31 going to adjust the ACLs or the quotas.
32

33 **CHAIRMAN GREENE:** Okay. We've got a motion on the board and is
34 there any further discussion?
35

36 **MR. ATRAN:** Just for clarification, if this motion passes, I am
37 assuming we still need to have a special SSC meeting, probably
38 by conference call, to approve the provisional ABC numbers.
39

40 **CHAIRMAN GREENE:** That's a good point. Anybody else?
41

42 **DR. CRABTREE:** The other thing is if we try to do this quickly
43 and get it done, the other part of this is we're going to need
44 the states to all agree to pay attention to their CZMA programs
45 and expedite all of that, because there are more things that
46 happen to get a rule through than just what you see and
47 everybody is going to have to work ahead to grease the skids and
48 make this happen.

1
2 **CHAIRMAN GREENE:** Okay. Good point. Is everybody ready to vote
3 and you're comfortable that you know what you're voting on? All
4 right. **All those in favor raise your hand, seven; anybody**
5 **opposed raise your hand. Seeing no one opposed, the motion**
6 **passed.** There was some discussion about a motion to go to the
7 SSC and that would need to be brought forth as well.

8
9 **MR. WILLIAMS:** Under the normal course of things, the SSC always
10 reviews these things, do they not? The only thing we would be
11 asking for would be that they review it by telephone in order to
12 expedite it. I would offer a motion that the SSC review our
13 recommended ACL by a telephone conference.

14
15 **EXECUTIVE DIRECTOR GREGORY:** I don't think you have to make a
16 motion for that. If we don't do it, the consequences are going
17 to be dire for me. I get the message, but the only concern I
18 have is if you're asking the SSC to do a constant catch, that
19 means NMFS has to do more projections. If we just go with the
20 provisional numbers as they are, there is no more analysis that
21 needs to be done and so I am concerned. Can NMFS give us the
22 additional analyses quickly, say within the next two weeks?

23
24 **MS. LEVY:** I haven't heard a request to have the SSC evaluate a
25 constant catch. All I said is that you could put in different
26 alternatives where the constant catch is the lowest ABC
27 recommendation for those three years, but that's different than
28 getting a constant catch ABC recommendation and if you want to
29 do that, yes I agree that would take more work.

30
31 **EXECUTIVE DIRECTOR GREGORY:** That's what Roy was asking earlier
32 and I think Roy probably thought we were going to do that. He
33 said he preferred a constant catch and the way we did it before
34 was to have the Science Center estimate what the constant catch
35 was, rather than us just take the lowest number or the average.
36 That will take more time and how much more time, I don't know.
37 I would hate for that to be a monkey wrench.

38
39 **MR. WILLIAMS:** If that's going to be a monkey wrench and if that
40 is going to slow the process down, then I don't want a constant
41 catch and so go with the three numbers they gave us.

42
43 **CHAIRMAN GREENE:** Go ahead, Mr. Boyd.

44
45 **MR. BOYD:** My question was answered by Mr. Gregory of what
46 number -- If we went to a constant catch and didn't have to go
47 back to the SSC, what would that number be and you said it would
48 be the lowest of the ABC numbers that were given to us. Thank

1 you.

2
3 **MR. ATRAN:** I think everybody is assuming that the SSC will
4 bless these provisional ABC numbers and we never know what's
5 going to happen when the SSC convenes and so if they don't
6 approve the numbers, do you want us to come back with a
7 framework action based upon the numbers they did approve
8 already?

9
10 **DR. CRABTREE:** Yes, we want to move forward with a framework
11 action that sets the ACL equal to the ABC and we want them to
12 review the provisional catches and if they're comfortable with
13 that, then they can give us these higher estimates here, but if
14 for whatever reason that gets gummed up and they don't do it,
15 then I say we go with what we've got and sort this out after the
16 fact.

17
18 I guess what I would ask, Mr. Gregory, is if you and Mr. Atran
19 and Dr. Branstetter, between this discussion and when we get
20 back to it at full council, can think out all these pieces and
21 the timing of it all, so we have a sense of what's workable when
22 we get to full council.

23
24 **EXECUTIVE DIRECTOR GREGORY:** It seems to me that we need to get
25 our staff that's back at the office in Tampa to do a Federal
26 Register Notice tomorrow and try to have the phone conference
27 calls on February 11 and 12, which is shorter than the three-
28 week period that NMFS or NOAA wants us to submit FRNs, but the
29 Federal Register Notice requirement is fourteen days and so I
30 think we can probably speed things up a little bit there, but we
31 have to try to shoot for that week of the 11th, 12th, or 13th.

32
33 **MS. LEVY:** Then do you anticipate having a, if you're going to
34 speed up the SSC process, a special council meeting, either by
35 phone or webinar or something, to then -- Okay.

36
37 **MR. ANSON:** It sounds like we've kind of moved off of that topic
38 and just to bring it up while we're in Reef Fish and while it's
39 still in everyone's mind regarding red snapper, if there is
40 anybody that is interested in bringing forward a motion to look
41 at development of a framework amendment to change the F SPR
42 level of 26. A plan amendment. I'm sorry.

43
44 **MR. ATRAN:** Just to that point, the status determination
45 criteria amendment that's been moving at the pace of molasses
46 does have some alternatives to do that and so what you would
47 really like to do, if the committee wants to do it, is to remove
48 that from the status determination criteria amendment and do it

1 as a separate plan amendment.

2
3 **CHAIRMAN GREENE:** Okay. Any more comments before we leave red
4 snapper? Anything else? With that, we will just jump on into
5 the Reevaluation of Gag OFL and ABC for 2015 and 2016 and SSC
6 Recommendations, Tab B, Number 4, but that was the document that
7 was emailed to you earlier that you had up and he stopped me in
8 it earlier and it would start on about Slide 8. Dr. Patterson,
9 if you're ready.

10
11 **REEVALUATION OF GAG OFL AND ABC FOR 2015-2016**
12 **SSC RECOMMENDATIONS**
13

14 **DR. PATTERSON:** After the last gag SEDAR assessment, we provided
15 OFL estimates and our ABC based on some assumptions about red
16 tide. We were told during the review process that there was a
17 significant red tide event on the West Florida Shelf, but we
18 didn't have estimates of mortality or even preliminary
19 estimates, really, on what the distribution of the event was.

20
21 We got information from FWRI and their best estimates were that
22 the spatial extent of the red tide event was about 75 percent of
23 the 2005 event, which subsequently was estimated to have a
24 substantial impact on gag spawning stock biomass.

25
26 The recommendation that came out of the SSC was actually to
27 assume the 2014 event was of similar magnitude as the 2005 event
28 and when that came before the council, the council rejected our
29 conservatism and kicked it back to us to reconsider.

30
31 In the process of that reconsidering, Dave Chagaris at FWRI
32 computed an ecosystem model called Ecopath with Ecosim and his
33 objectives were to evaluate the estimated impact on gag
34 mortality for a series of years and not just 2014, but a time
35 series from the mid-2000s to 2014, relative to the 2005 event.
36 It wasn't just to look at snapshot for 2014, but also to try to
37 put 2014 into a larger context and not just relative to 2005.

38
39 His approach, again, was Ecopath with Ecosim and he looked at
40 the spatial extent of the red tide from satellite imagery and he
41 had cell counts that were provided by Dr. Alina Corcoran at FWRI
42 and he had estimates of the spatial extent of gag biomass across
43 the shelf and then he estimated mortality based on those values
44 relative to 2005.

45
46 This schematic is taken from Dave's presentation and, again, the
47 top left is just to remind me to indicate again that this is
48 Ecopath with Ecosim and so this was a much more formal analysis

1 than the preliminary analysis that we originally had from FWRI's
2 Harmful Algal Bloom, or HAB, Program when we originally made our
3 recommendation.

4
5 The take-home is when Dave examined this information in a very
6 elegant approach, mortality estimated from red tide in 2014 was
7 very low and it was a very small percentage relative to the 2005
8 event and, in fact, over the time series he looked at, a little
9 better than a decade worth of information, 2014 was actually one
10 of the lower red tide events.

11
12 The only caveat to this analysis is that, one, we don't have
13 estimates of actually numbers of animals killed through various
14 programs to intercept dead animals, nor do we have estimates of
15 what the toxicity of the cells, the dinoflagellates in the water
16 column, and just with this organism in particular, *Karenia*
17 *brevis*, you can't estimate total toxicity just from an estimate
18 of the cells.

19
20 You can have a low abundance or density of cells that can be
21 quite toxic and cause quite a bit of mortality and you can have
22 very high densities that aren't as lethal, but using cell
23 concentrations as a proxy for mortality impacts relative to
24 2005, the estimate was that the impact was minor.

25
26 When we then reassessed, based on the information from Dave
27 Chagaris, we came up with new OFL estimates, which are in the
28 document from the SEDAR report, and then also ABC and so ABC --
29 The approach taken for ABC was to use OY and OY is computed --
30 For gag, the MSY proxy was computed at Fmax and then we took the
31 OY is then 25 percent of FMSY or its proxy. That's where the
32 ABC came from here. We had quite a bit of discussion on this
33 and this was what the SSC passed. That's it, Mr. Greene.

34
35 **CHAIRMAN GREENE:** Okay. Any questions for Dr. Patterson? I
36 guess we need to talk about some type of a framework action here
37 to move forward or how do you all want to proceed? What are
38 your thoughts? Do you want to go on through the next agenda
39 item, which is the ACT/ACL Control Rule Recommendations, or do
40 you all want to pick it up here? Seeing no preference, then I
41 guess we'll just shift to Mr. Atran and let him go through the
42 ACL/ACT Control Rule Recommendations.

43
44 **ACL/ACT CONTROL RULE RECOMMENDATIONS**

45
46 **MR. ATRAN:** Thank you. The spreadsheets are Tab B, 6(a) and
47 6(b). They look very much like the red snapper ACL/ACT
48 recommendations and I won't go through all the details, but I

1 would just say that for the recreational sector, the buffer
2 recommendation that came out of the control rule was an 8
3 percent buffer. Then on the commercial side, because gag are an
4 IFQ species, there would be no buffer between ACL and ACT, but 8
5 percent for the recreational. Again, that is not a binding
6 recommendation, but that's just a suggestion from the control
7 rule for the committee to consider.

8
9 **CHAIRMAN GREENE:** Is that it for that? Okay. Any
10 recommendations to the council through the action of this
11 committee on framework for adjusting for the gag ACL/ACT?

12
13 **COMMITTEE RECOMMENDATIONS**

14
15 **MS. BADEMAN:** Before we go there, I have a question. It seems,
16 if I'm remembering this right, when we talked about this at the
17 last meeting, we decided that it would be too late to adjust the
18 2015 at least ACL. I guess we could change the ABC and is that
19 right, because shares have already been --

20
21 **DR. CRABTREE:** That was when we were concerned of going
22 downward. If we're going upward, we can do it. Now, whether
23 the commercial fishery or, for that matter, the recreational
24 will be able to actually take advantage of it and catch it or
25 not is a different issue.

26
27 **CHAIRMAN GREENE:** All right and that being said and seeing
28 nobody raise their hands, I don't assume there is going to be
29 any action on that at this particular point.

30
31 **MR. ATRAN:** If you take no action or if the council takes no
32 action, the current ABC for 2015 is 3.12 million pounds and
33 those ABC values that Will put up just a second ago, the
34 smallest number is 4.57 and so that's a substantial difference.
35 You might want to consider requesting a framework action to
36 revise the ACLs. Remember that we've got a declining ABC here
37 and so we might want to give more consideration to a constant
38 catch approach.

39
40 **MS. BADEMAN:** I think that's definitely warranted here. If
41 you're looking for a motion to start a framework amendment to
42 adjust the ACLs and ACTs for gag, I would certainly make that
43 and I am interested in having the SSC recalculate a constant
44 catch scenario with the ABCs.

45
46 **CHAIRMAN GREENE:** Okay and I am sure we can entertain a motion
47 at this point. Martha, would you restate your motion for staff
48 to get it on the board, please?

1
2 **MS. BADEMAN:** To recommend that the SSC recalculate OFL and ABC
3 under a constant catch scenario would be part of it and also
4 direct staff to begin a framework amendment to adjust ACLs and
5 ACTs for gag.
6
7 **CHAIRMAN GREENE:** Is that correct, Martha?
8
9 **MS. BADEMAN:** I think that covers it. **ACL/ACT instead of --**
10 **Delete that "OFL" right there and make that, instead of "OFL and**
11 **ABC", "ACL and ACT".**
12
13 **CHAIRMAN GREENE:** The motion is correct on the board, Martha?
14 Okay. Is there a second for this motion?
15
16 **MR. WILLIAMS:** Second.
17
18 **CHAIRMAN GREENE:** Second by Mr. Williams. Any more discussion?
19 I think it's pretty well laid out what we're trying to do.
20
21 **DR. CRABTREE:** I don't know how high you are going to want to go
22 on the catch levels for gag, but I guess with what the SSC has
23 given us, it could go up a fair amount, although I wouldn't be
24 comfortable with that, because I think there are a lot of
25 questions about where gag really is.
26
27 I think this year, and, Mr. Atran, correct me if I'm wrong, but
28 I think the fishery opened July 1, which is the opening date,
29 and closed December 3.
30
31 **MR. ATRAN:** That's correct.
32
33 **DR. CRABTREE:** If you raise the TAC much on the recreational
34 side, they're not going to be able to fish much longer and so I
35 wonder if you want to revisit the start date of July 1, because
36 depending on how much you go out, we may be beyond a six-month
37 season, which means you would need to take another look at the
38 start date to accommodate more fishing.
39
40 **MS. BADEMAN:** Yes, I think that's definitely warranted and
41 especially if we're looking beyond this year. Even if we can't
42 take advantage of it next year, that's not to say we wouldn't be
43 able to in 2016 or 2017. We would be adjusting the ACL and ACT
44 and looking at season options for gag and does that work,
45 Steven, for the motion?
46
47 **MR. ATRAN:** It can work as the motion. I would have to check
48 with some of the analytical people to see if we have information

1 to actually calculate what would be an appropriate start date,
2 but you can certainly make that motion and we'll see what we can
3 do.

4
5 **MS. BADEMAN:** Just insert, right before "for gag" "and season
6 options" or something like that.

7
8 **CHAIRMAN GREENE:** Mr. Williams, I believe you seconded it and
9 you're okay with that motion? Okay. Any other comments about
10 this?

11
12 **MR. WILLIAMS:** Directed at Dr. Crabtree, you mentioned that you
13 have some trepidation, I guess, or uncertainty about some of the
14 numbers, the 4.57 million pounds to 5.2 million pounds, for the
15 ABC recommendation from the SSC.

16
17 I guess you think these are -- You might think they're high and
18 we did hear some public testimony last time, I thought, that gag
19 is not as -- The fishermen didn't seem to be as optimistic as
20 the assessment indicates and is that what you were talking
21 about?

22
23 **DR. CRABTREE:** I have had a number of fishermen tell me that
24 they are not seeing things as good as the assessment reflects
25 and if you remember that stock assessment showed this remarkably
26 sharp rise in spawning stock biomass and maybe that's real, but
27 I would be reluctant to go that high.

28
29 I don't think they can catch all those gag. I mean they're not
30 catching them now and so we're raising -- I think some
31 adjustment and some raise might be fine, but I would not
32 probably be comfortable going on up to like five or five-and-a-
33 half million pounds. I don't think the commercial fishery would
34 even catch their share of that.

35
36 I think this is just a case where the assessment says things got
37 really good really fast and I'm having a lot of fishermen tell
38 me that they don't believe things really got that good that fast
39 and so I think that's a case where a little bit of caution would
40 be wise.

41
42 **MR. WILLIAMS:** The ABC recommendation from the SSC is 4.57 to
43 5.2 million pounds and we could choose towards the lower end of
44 that or we could choose lower than that if we want, right?

45
46 **DR. CRABTREE:** Yes, you can choose anything as long as you do
47 not exceed their ABC recommendations. You can definitely go
48 lower.

1
2 **CHAIRMAN GREENE:** Dr. Crabtree, I have a question. If the
3 fishermen aren't catching the fish now, we can do something as
4 simple as leave it where it is and just extend the season and
5 how close did the -- I don't have the numbers off the top of my
6 head and I don't know that you would know either, but how close
7 were they to catching that quota? Were they even close or in
8 the ballpark or I mean just some idea?
9

10 **DR. CRABTREE:** I am trying to pull up what the commercial
11 landings are and it's coming up slowly and so here it is. Gag,
12 I don't have the numbers for you, Johnny, but staff could look
13 and see what they caught, what the commercial fishery caught in
14 the IFQ program last year, in 2014, relative to what their quota
15 is, but I don't think they came even close to catching all of it
16 up, but I could be wrong.
17

18 **CHAIRMAN GREENE:** I don't either.
19

20 **MR. WILLIAMS:** I am starting to have some second thoughts about
21 recalculating the OFL and ABC. We have recommendations from the
22 SSC to 5.2 million pounds, but I am not comfortable with that
23 and I think we ought to -- Their lower estimate, I think we
24 ought to choose their lower estimate as the upper end of ABC
25 here and I would recommend that we set 4.57 million pounds as
26 the highest --
27

28 **DR. CRABTREE:** I think you're getting ahead of yourself now.
29 You have asked staff to do an analysis and bring you
30 alternatives and so I don't think you need to choose a preferred
31 now.
32

33 Now, I guess you could remove the part about asking the SSC to
34 calculate a constant catch scenario if you don't want to do that
35 and you're comfortable with the numbers you have, but I don't
36 think we need to decide what level we're going to set it at
37 until we have the analysis in front of us.
38

39 **EXECUTIVE DIRECTOR GREGORY:** Maybe I am confused, but I did
40 request the SSC to provide constant catch analysis or we did,
41 the staff did, before the meeting and we're doing that with all
42 assessments now, because of the council's desire, seemingly, to
43 have constant catch.
44

45 I think the response of the SSC was the council can always
46 choose the lowest of the three years and go constant catch with
47 that and given what you've just said, why go through the trouble
48 of doing the analysis to see what the constant catch would be

1 that's equivalent to those three years? You could save that
2 step by just deciding to go forward with the 2017 projection for
3 a constant three-year period and be done with it and not have to
4 go to the SSC and not have to do those other analyses and move
5 forward.

6
7 **DR. CRABTREE:** I agree with that and I think you're right.

8
9 **MR. ATRAN:** Another possibility, since you notice that the ABC
10 is in a declining mode, even though it was based on optimum
11 yield -- Right now, according to the stock assessment, biomass
12 levels are above the optimum yield level and so you would be
13 fishing it down.

14
15 One possibility would be to just set your ACL at the long-term
16 optimum yield, which is 4.46 million pounds. Theoretically, you
17 would never have to alter that again, theoretically.

18
19 **CHAIRMAN GREENE:** That's an interesting point.

20
21 **MR. WILLIAMS:** I think I would like to do that. Martha, you may
22 not be able to agree to that, but would you consider modifying
23 your motion to set 4.57 million pounds as the constant catch for
24 the next three years?

25
26 **MS. BADEMAN:** No, because we'll be looking at a range of
27 options, but if you are asking if I will take out the part about
28 asking the SSC to run the constant catch scenario, then I can do
29 that, but I mean I think, like what Roy was just saying, in the
30 framework action we're going to look at all of those options.
31 That would be an option that we look at. I am not ready to
32 commit to an option right now in terms of what the ACL or ACT
33 would be, but I am willing to start a framework.

34
35 **DR. CRABTREE:** I think what you're talking about, Roy, is all
36 you would have to do is remove that language that says "ask the
37 SSC to recalculate under a constant catch" and just direct staff
38 to being a framework amendment and then you pick where you want
39 to set it.

40
41 **MS. BADEMAN:** I'm okay with that.

42
43 **MR. WILLIAMS:** I'm okay with that.

44
45 **CHAIRMAN GREENE:** Okay. We're going to remove that language and
46 so the motion is to direct staff to begin a framework amendment
47 to adjust ACL/ACT and the season options for gag. That motion
48 is on the floor and any more discussion? **All those in favor**

1 please raise your hand; all those opposed same sign. Seeing no
2 one opposed, the motion passes. I think we're going to take a
3 break for about ten minutes here and so if you all could be back
4 about 3:25, we will get started and try to get on through the
5 rest of it as best we can.

6
7 (Whereupon, a brief recess was taken.)

8
9 **CHAIRMAN GREENE:** Let's get back to work here. Before we get
10 into amberjack, we have one thing Mr. Gregory is going to go
11 over and then we'll get back on schedule.

12
13 **EXECUTIVE DIRECTOR GREGORY:** I just wanted the council to know
14 that we have the privilege of having Mr. Sam Rauch from National
15 Marine Fisheries Service in the audience and so we have nothing
16 but kind words for National Marine Fisheries Service.

17
18 **CHAIRMAN GREENE:** Anything else? With that, we will go on into
19 Draft Framework Action for Greater Amberjack and that will be
20 Dr. Patterson and his presentation, which we had up and I guess
21 we'll pick back up on page 14 of the presentation. Dr.
22 Patterson, whenever you're ready.

23
24 **DRAFT FRAMEWORK ACTION - GREATER AMBERJACK**
25 **SSC RECOMMENDATIONS**

26
27 **DR. PATTERSON:** We were presented with some projections that
28 were conducted by Nancie Cummings from the Southeast Fisheries
29 Science Center and the scope of work was -- This component of
30 the scope was for the SSC to examine the projections and provide
31 the council feedback and so the motion that you see here
32 followed our discussion and basically we concluded that all of
33 this information is suitable for management advice and that all
34 of the projections are estimated or projected to achieve
35 recovery and so as far as building your recovery plan or your
36 rebuilding plan, all of these appear to be sufficient and the
37 rest of it is a decision that you will make. That concludes the
38 SSC comments on this, Johnny.

39
40 **CHAIRMAN GREENE:** Okay. Any questions for Will about the SSC
41 comments on the greater amberjack rebuilding?

42
43 **DR. JOHN FROESCHKE:** If you want, I can just refresh the council
44 why that came about, since it was all the way in October.

45
46 **CHAIRMAN GREENE:** Yes, please.

47
48 **DR. FROESCHKE:** At the October meeting, you all reviewed several

1 management options and one of which was the SSC recommendation
2 which essentially builds in fairly significant increases each
3 year after 2015 and so 2016 through 2018.

4
5 There was some concern about how appropriate that might be,
6 given that this stock has not been rebuilt, despite a long
7 rebuilding plan and things, and so the council requested that we
8 estimate how long it would take to rebuild under each of the
9 management options under consideration and one of the options
10 was no harvest and that was really more of a sensitivity run, to
11 see what was the fastest time that could be rebuilt for the
12 stock.

13
14 The results that Will just showed is that all of the options
15 under consideration were fairly similar and that the stock is
16 expected to rebuild fairly fast and so what we're asking now is
17 really, given the analyses that have been provided -- I guess I
18 would ask are the options that you have before you in the
19 document sufficient for us to complete it?

20 21 **COMMITTEE RECOMMENDATIONS**

22
23 **CHAIRMAN GREENE:** With that being said, then I guess it would
24 probably be a good idea, since it's been a while, just to kind
25 of look at the options in Tab B, Number 7 and make sure, because
26 it was back in October. Dr. Froeschke, would you like to lead
27 us through that quickly, Tab B, Number 7? If you could lead us
28 through it.

29
30 **DR. FROESCHKE:** Yes and so a quick update. Since you've seen
31 the document last time, it's gotten thicker and so we've
32 finished the Chapter 3, the effects, and we still have Chapter 4
33 to complete that and we will do that once we've narrowed in at
34 least to make sure we've captured the range of alternatives that
35 is appropriate.

36
37 Our plan is that we would, based on your input at this meeting,
38 finish a draft of the document and bring it back to you in April
39 and you can select preferred alternatives and we can take final
40 action as soon as that was appropriate.

41
42 The management alternatives are in Chapter 2, beginning on page
43 9 of the document. The first action is to modify the annual
44 catch limit and the reason for this, and it's one thing that we
45 should perhaps talk about, is the current ABC recommendation for
46 this stock in 2015 is 1.72 million pounds and the current ABC on
47 the book is 1.78 million pounds and so we're over a little bit
48 and so we have four options with some suboptions for the ACT.

1
2 Option 2 is the schedule recommended by the SSC and, again, this
3 has a minor decrease in 2015 and then fairly large increases
4 2016 through 2018 and then the suboptions include various
5 buffers for the ACL and the ACT that are in place for this
6 stock.

7
8 Option 3 is a constant ABC set at the 1.72 million pounds that's
9 recommended for this year and then we would just carry that
10 forward until the stock is reassessed, with the idea that our
11 past investigations in this stock have overestimated the
12 productivity of the stock and it hasn't rebuilt and so this may
13 provide some additional safeguards to ensure that the stock
14 rebuilds in a reasonably fast time.

15
16 Again, there are two suboptions for the buffer between the ACL
17 and ACT. Actually, there are three: no buffer, the control
18 rule, and then a 20 percent buffer for consideration, given that
19 the ACL has been exceeded a number of times in recent years.

20
21 Then this last Option 4 is just set the ACL at zero and, really,
22 this was an option to allow us to investigate how fast the stock
23 would rebuild in the absence of fishing and to complete the
24 range of alternatives, rather than perhaps to close the fishery.
25 I will stop there, in case there are any questions on this.

26
27 **CHAIRMAN GREENE:** Any questions for Dr. Froeschke in regards to
28 Tab B, Number 7?

29
30 **DR. FROESCHKE:** If not, I have a question for you all.

31
32 **CHAIRMAN GREENE:** Okay. Go ahead.

33
34 **DR. FROESCHKE:** My question is that, given the range of results
35 presented by Will, the differences between we're at now, 1.78
36 million pounds, and what the SSC has recommended, 1.72, given
37 the size of the fishery and things, are quite similar and given
38 that it's already 2015, if we were to choose that, could we stay
39 at 1.78 million pounds and go with no action on this, instead of
40 going through a lot of paperwork for a relatively minor
41 reduction, if that was the action that you felt was most
42 appropriate?

43
44 **CHAIRMAN GREENE:** What is the pleasure of the committee?

45
46 **MS. LEVY:** I would advise that you do need to take some action.
47 You can't have your catch limit higher than your ABC
48 recommendation and so it may not seem like that much, but it is

1 now above the ABC recommendation and also, you have the issue of
2 being past the rebuilding time and the guidelines saying fishing
3 at 75 percent of the fishing mortality rate and that would not
4 be 1.78 and so I think you do need to take some action here.

5
6 **CHAIRMAN GREENE:** Counsel has advised us we probably need to
7 take some type of action and I'm looking for somebody to help us
8 or lead us through this on amberjack. All right. I guess we're
9 going to start doing jumping-jacks or something here. Everybody
10 is asleep on me.

11
12 **MR. WILLIAMS:** Do we need to do anything different than what
13 John has in the amendment?

14
15 **DR. FROESCHKE:** At this point, I don't think any action is
16 required. Really what I'm asking is the options that we have in
17 document, is this sufficient to allow you to make a decision at
18 some point in the future or are there other options that you
19 would like us to consider? At this point, I just want to get
20 the bookends in place, such that when we finish the document and
21 complete the analysis, it's less likely that you might not be
22 satisfied with the range of options before you.

23
24 **MR. FISCHER:** I am going to slowly try to weed, but, John, is
25 there any NEPA regulation and is there any reason we need an
26 Option 4?

27
28 **DR. FROESCHKE:** I don't think that there is.

29
30 **MR. FISCHER:** Maybe you're wrong.

31
32 **MS. LEVY:** I think you do need an Option 4. It is a reasonable
33 alternative, given what the status of the stock is and what's
34 happened with the rebuilding plan.

35
36 **MR. FISCHER:** I will not weed.

37
38 **CHAIRMAN GREENE:** Okay and so I guess that's a discussion about
39 Option 4 and all right, guys, how do you all want to push on
40 through here? Do you all think this is sufficient?

41
42 **DR. FROESCHKE:** One question I had on the suboptions for the
43 reduction between ACL and ACT is one of the options is Suboption
44 a, which would be no ACL buffer. This is different than what
45 we've done in the past for amberjack and so if we were to do
46 that, I think it would require a restructuring of how we would -
47 - Have the accountability measures for this would probably
48 require an extra action in the document.

1
2 To me, it doesn't seem as reasonable perhaps as some of the
3 others, given that we have exceeded the ACL in a number of
4 years. If that's something that you're not particularly
5 interested in, perhaps we could remove that as at least a
6 suboption and save ourselves some work.

7
8 **MR. PERRET:** I am not on your committee, but you all have heard
9 me before quote purpose and need of the document we're working
10 with and the purpose and need is the amberjack stock has been
11 exceeded -- The take has been exceeded twice in the last four
12 years and therefore, we must do something to improve
13 effectiveness of the stock and benefits to the greater amberjack
14 in the Gulf.

15
16 John, are there sufficient measures in here, whichever this
17 committee and council choose, to meet that purpose and need to
18 reduce our take, so we don't exceed this take again like we've
19 done two out of the last four years?

20
21 **DR. FROESCHKE:** One way that you could reduce the probability of
22 exceeding the ACL is to create a larger buffer than you
23 currently have and so Option c would create a 20 percent buffer
24 instead of the current 15 and 13 that we have and so at least
25 that's an option.

26
27 **MR. PERRET:** So we do have suitable options that would do that.
28 Thank you.

29
30 **CHAIRMAN GREENE:** I don't see anybody raising their hands and so
31 I've got a question and I don't know who is going to answer it,
32 but as Corky led to a minute ago, we went over the quota twice
33 in four years or five years and the first time we went over, we
34 made an action changed and we went to a closed season in June
35 and July and seemed to be on track.

36
37 Then the final year, I guess when MRIP came in, it showed it
38 being over quota again and through the MRIP analysis, have the
39 years prior to the MRIP year, which I think was 2013, have those
40 numbers been calibrated as well?

41
42 **DR. FROESCHKE:** I'll take a stab at it. It's my understanding
43 that the numbers have been calibrated, such that the quotas and
44 the measurements are converted and so they are measured in
45 apples to apples, if you will.

46
47 **CHAIRMAN GREENE:** Okay.
48

1 **DR. PONWITH:** I see Andy coming up and he is sitting on the
2 committee, but my understanding is that no, the calibration
3 hasn't been kind of retrofitted into the earlier years. They
4 have created the calibration factor and the 2014 numbers have
5 been calibrated, but I will defer to him.

6
7 **MR. ANDY STRELCHECK:** Bonnie is correct and, in fact, we've been
8 monitoring greater amberjack by back calculating all the way
9 back to MRFSS up to this point and now, with the new assessment,
10 it incorporates MRIP, but not the latest calibration.

11
12 **DR. FROESCHKE:** I guess the point is though that the numbers and
13 the quotas are attempting to be made as similar as possible so
14 it's fair and that was what I was trying to say.

15
16 **CHAIRMAN GREENE:** Okay and my question was about the calibration
17 and I think you've kind of covered it. I just didn't know if
18 with MRIP being such a big change compared to what MRFSS was if
19 that calibration was consistent, I mean if you count it the same
20 way as if it had been done under an existing program like MRFSS
21 and hitting something twice in five years. That was basically
22 all I had and, Mr. Fischer, did you have a comment?

23
24 **MR. FISCHER:** Our speed is going to be that at the next meeting
25 we're going to choose these options or is that something we're
26 planning on doing at this meeting?

27
28 **CHAIRMAN GREENE:** I don't see anything here for picking
29 preferreds in my notes.

30
31 **MR. FISCHER:** If that's the case, I think the various buffers we
32 have are suitable for the document as is, unless Mara has some
33 objection, and I think we could just move on to other parts.
34 That's my recommendation.

35
36 **CHAIRMAN GREENE:** All right. John, do you want to move on?

37
38 **DR. FROESCHKE:** Sure, I'll move on. One point before we leave
39 there though. In this one, the commercial landings also have
40 exceeded in recent years, which should be unaffected by the
41 calibrations and things. It's one of the few that we've had
42 that problem with relative to other stocks.

43
44 Action 2 considers recreational management measures and Action
45 2.1 considers modifying the recreational size limit for greater
46 amberjack. If you recall, we've considered this in Amendment 35
47 and in here again and the reason is that the amberjack don't
48 achieve reproductive maturity until thirty-four inches or so and

1 so the minimum size limit is thirty inches and there is concern
2 that we're harvesting too many immature individuals.

3
4 **MS. LEANN BOSARGE:** I am not on your committee and I had my hand
5 raised before we moved on to this, but I just didn't get it
6 raised in time, I guess. One thing that staff had asked was
7 that due to where amberjack is right now if we would not
8 consider using no buffer, no ACL buffer.

9
10 If that's something that we're not going to consider, because of
11 the status of amberjack and what's happened in the past, if we
12 could remove that and not adding anything new to the document,
13 but removing something if we're not going to consider it, to
14 save them some time and effort. I didn't know -- We kind of
15 skimmed over that and I'm not on your committee and so that's up
16 to your committee, but did we want to talk about that?

17
18 **MR. WILLIAMS:** Is that the question you were asking earlier,
19 John, and which alternative is that?

20
21 **DR. FROESCHKE:** It's a suboption in Alternatives 2 and 3,
22 Suboption a.

23
24 **MR. WILLIAMS:** I think Leann is right that we're not going to
25 use that and we might as well take it out. Do you need a
26 motion? We probably ought to have a motion, I suppose, to keep
27 it --

28
29 **DR. FROESCHKE:** It would be helpful and it would save a lot of
30 work.

31
32 **MR. WILLIAMS:** Then I would offer a motion to remove the
33 suboptions -- Move to considered but rejected the suboptions
34 that specify no ACT buffer.

35
36 **CHAIRMAN GREENE:** Let's get the motion on the board. Is the
37 motion on the board correct?

38
39 **MR. WILLIAMS:** Will that do it, John?

40
41 **CHAIRMAN GREENE:** In Action 1.

42
43 **DR. FROESCHKE:** It works for me, but I'm not sure if there are
44 others at the table that have concerns.

45
46 **MS. BADEMAN:** That would be 2a and 3a? Is that right, Roy,
47 Suboptions 2a and 3a?

48

1 **DR. FROESCHKE:** Yes, that's correct.

2
3 **CHAIRMAN GREENE:** We have a motion on the board that I believe
4 is correct to remove Suboptions 2a and 3a to the considered but
5 rejected. Suboption a is no ACT buffer. Note this option would
6 require a modification of the accountability measures. Do we
7 have a second for it? Mr. Walker seconds it. **Any opposition to**
8 **this motion? Seeing no opposition, the motion carries.**

9
10 **DR. FROESCHKE:** Returning back to Action 2.1, Modifying
11 Recreational Minimum Size Limit, again this was discussed or
12 considered in recently-implemented Reef Fish Amendment 35 and
13 the council chose no action at that time.

14
15 As I indicated, there is some concern that our best estimate now
16 is females -- About half of them have achieved reproductive
17 maturity by thirty-two or thirty-three inches and so at thirty
18 inches, we are harvesting mostly immature individuals. On the
19 flip side, the concern was that discard mortality of these
20 larger animals is quite high and so we may not be achieving the
21 reductions in total removals that are desired.

22
23 The stock assessment estimates of discard mortality are quite
24 low and so perhaps that's -- Our data wouldn't indicate that
25 that's the case right now and so I wanted to see if, one, the
26 range in two-inch stepped increments between thirty, which is no
27 action, and thirty-six is an appropriate range or if there's
28 something else that you want and if there are any other
29 questions regarding this one.

30
31 **CHAIRMAN GREENE:** We have Action 2 before us and there are four
32 options, thirty to thirty-six inches in length. Mr. Fischer,
33 did you have a comment or a question?

34
35 **MR. FISCHER:** Thank you, Mr. Chairman. John, could you quantify
36 -- When you say discard mortality quite high on the large
37 animals, remember the large ones are the ones they're keeping
38 and it's the small ones they would be releasing.

39
40 **DR. FROESCHKE:** Yes and what we had heard anecdotally the last
41 time is at one time we were talking thirty-six inches, to be
42 equivalent to the commercial. We had a number of anglers report
43 that those thirty-four or thirty-five-inch animals were dead at
44 the boat.

45
46 However, as I stated, the discard mortality in the stock
47 assessment, I think it's 20 percent. It's quite low and so if
48 that number is accurate, then the effect on total removals by

1 increasing the size limit would be a pretty good bang for the
2 buck.

3
4 **CHAIRMAN GREENE:** Okay and anything else about the size limit?

5
6 **MR. WILLIAMS:** I am curious. Has there ever been any
7 misidentification study to find out whether a lot of greater
8 amberjack are actually being landed as banded rudderfish or
9 lesser amberjack?

10
11 **DR. FROESCHKE:** I don't know. There certainly is some potential
12 for misidentification, especially on the smaller ones, with the
13 lesser amberjack.

14
15 As you go back farther in the landings, I think there is
16 probably more concern for that and when we were moving back in
17 some of these amendments, when we set catch limits based on
18 landings and things, that was one of the reasons that I think
19 the SSC ultimately chose the season that they did. At this
20 point, I don't know. The other side of that is if there is
21 problems with this, I have no reason to think that that bias,
22 whatever it is, is not constant through time.

23
24 **MR. WALKER:** I was just going to mention that I was actually on
25 the Reef Fish AP last year and there was a lot of discussion
26 about size limit and a lot of people on the AP were interested
27 or favorable more to a thirty-five or a thirty-six-inch fish or
28 something to give them a longer fishing season. I think that's
29 what a lot of them were considering.

30
31 Thirty-six inches, if it was thirty-six inches, it would be
32 easier for enforcement, because they had the same size fish and
33 the sexual maturity. There was a lot of people who were
34 interested in raising the size limit for a longer season.

35
36 **CHAIRMAN GREENE:** Anybody else about the size limit?

37
38 **MR. WILLIAMS:** I would like to ask David then. What's your
39 opinion, David, of release mortality in thirty-two to thirty-
40 five-inch amberjack?

41
42 **MR. WALKER:** The bigger the fish, the less chance he has for
43 survival and a lot of the bigger fish that you turn loose when
44 it's closed just don't do as well. If you get a fish in the
45 thirty-four inches or thirty-five inches, it seems to do a
46 little bit better, but anything over thirty-six, a lot of them
47 just kind of float off and you watch them and you try to return
48 them back, but my experience is the bigger the fish, the higher

1 the mortality, as far as when you get above thirty-six.

2
3 **MR. FISCHER:** I mean I know we're not debating preferred options
4 at this time, at this meeting, but I think it's around page 15
5 of the document and there's a histogram, a bar graph, showing
6 the -- It's updated showing the current sizes and the mode today
7 is a thirty-four-inch fish and so without -- If we just change
8 the regulations just to what the mode is, it wouldn't change
9 that catch drastically.

10
11 On the earlier discussion, I wasn't advocating we go to thirty-
12 six, but I was just saying raise the size limit to mature fish.
13 I believe a thirty-four-inch is 85 percent of the population is
14 mature and is that close, John?

15
16 **DR. FROESCHKE:** Yes, that's exactly, based on the data that we
17 have right now.

18
19 **MR. FISCHER:** That is the mode. That's the fish we're catching
20 the largest size of and so it's something we could think about
21 for the next meeting.

22
23 **CHAIRMAN GREENE:** Okay and I guess that's it on the size limit
24 and any other discussion about it before we move on?

25
26 **DR. FROESCHKE:** Yes and the discard mortality and things, there
27 are some researchers at UF that are working on this and so it
28 may be possible that we could reach out to them and ask for a
29 presentation or something at some point, if that was of
30 interest. I know it's an ongoing research interest.

31
32 Action 2.2 is another one that you all considered in Reef Fish
33 Amendment 35 and it's to modify the recreational closed season
34 for amberjack. We currently have a June 1 to July 31 closed
35 season. At the time, I think the rationale was based on the red
36 snapper season, when this was implemented. It gave a longer
37 season where either red snapper or amberjack was open. This
38 also coincides with the period of the year where the rate of
39 removals is highest and so by this closed season, you extend the
40 fishing season into longer parts of the year.

41
42 We have three other options. Option 2 would just eliminate the
43 closed season and open January 1 and leave it open until the ACT
44 is harvested and Option 3 is the March 1 through May 31 closure,
45 which coincides with the commercial closure, and Option 4 would
46 be a January 1 to May 31 and November 1 to December 31 closure.
47 The idea is to extend the season for the remainder of the year.

1 While I have the mic, I will just remind you that there are a
2 couple of tables or there is Table 2.2.2, which is based on work
3 from the Regional Office and the decision tools that I think
4 they're going to update with the most recent data, but, anyway,
5 it puts together the various management options and so the ACT,
6 the closed season, and the size limits. In the boxes, it gives
7 you an estimate of how long the season is projected to be open.

8
9 The green number is obviously the longer season and it's a
10 relative tool. The numbers may not be exact and they may change
11 as we get more recent landings data, but certainly the
12 comparative value should be there to guide your decisions if you
13 choose to use it.

14
15 **CHAIRMAN GREENE:** Any changes we want to make here?

16
17 **MR. FISCHER:** On Action 2.2, I highly agree with Option 3, which
18 is to match the closure with the commercial season, because
19 that's the spawning season, but on the chart below on page 20, I
20 would like to see some other alternatives around specifying this
21 March 1 to May 31 closure and then whatever it takes to satisfy
22 the needs of the recreational component to extend the amount of
23 days that they feel are satisfactory.

24
25 It might take a little more figuring, but I will argue the
26 closure being the spawning season, but that may not get us
27 enough days and so we might be looking at additional days and
28 what they are, I don't know until we deliberate it.

29
30 **CHAIRMAN GREENE:** Fair enough. Dr. Froeschke, I guess you got
31 that and are you ready to move on?

32
33 **DR. FROESCHKE:** Yes, I am happy to move on and we certainly
34 could work those numbers out. It's a little bit tricky, in that
35 you have to know what your ACT value is that you're wanting and
36 if you want to do any of the size limit and those kinds of
37 things, but the nice thing about the decision tools that the
38 Regional Office has prepared is that those sorts of questions
39 can be investigated on the fly right at your fingertips and so
40 those are very handy tools.

41
42 Action 3 is the commercial management measures and if you recall
43 in Amendment 35, we implemented a 2,000-pound whole weight trip
44 limit for amberjack and the reason was to, one, reduce the rate
45 of harvest to extend the season, but also there were -- A few
46 vessels were harvesting large proportions of the total quota per
47 trip and then if they're not reported timely, it leads to
48 overruns.

1
2 The 2,000-pound trip limit was implemented. It only affected a
3 small proportion of the total trips, but we think it had a
4 meaningful reduction in eliminating those very large trips that
5 can lead to rapid overruns and so the question before you in the
6 options is would you consider further reducing the trip limit to
7 -- We have Options 2 through 5 in 500-pound stepped increments,
8 ranging from 2,000 to 500 pounds. If this is something you feel
9 is necessary or if you're satisfied with where we're at.

10
11 **CHAIRMAN GREENE:** Okay and a question by staff in regards to the
12 commercial season and the trip limits. Does anybody want to
13 weigh in on that? Are you comfortable with it?

14
15 **MR. WALKER:** You heard a lot of discussion and fishermen want
16 anywhere from 1,500 to 1,000-pound trip limits and one thing we
17 -- It was during the Reef Fish AP meeting last year and a lot of
18 people were landing their fish in gutted weight and then we came
19 to the conclusion that it was whole weight and so I think most
20 every fish that we catch commercially is gutted weight, except
21 for maybe triggerfish. I think some consideration of changing
22 that to gutted weight and most all of the landings, historically
23 for years, have been gutted weight and so I would like to see
24 some consideration of changing these whole weights to gutted
25 weight.

26
27 **CHAIRMAN GREENE:** I see on the graph here where it talks about
28 whole weight.

29
30 **DR. FROESCHKE:** Thank you for that comment and it actually came
31 up, as he identified, in the Reef Fish AP and I think there was
32 a bulletin to clarify that and it turns out for a 2,000-pound
33 that the gutted weight equivalent I think is about 1,920 pounds
34 or something.

35
36 We talked about that at the IPT and we could get those numbers
37 and if it is helpful, we could try to cross-translate those. We
38 put them in whole weight because everything else is in whole
39 weights and they're convertible, but if it's helpful, we can try
40 to put those in parentheses or something so everyone is clear
41 what we're talking about.

42
43 **MR. WILLIAMS:** I am confused. Does the present regulation
44 actually specify a 2,000-pound whole weight trip limit?

45
46 **DR. FROESCHKE:** I think that it does. I am not a reg writer,
47 but when we had the meeting and there was actually a blue paper
48 or something that -- I can try and track that down, but I think

1 that's what it is and it's converted, which is not ideal.

2
3 **MR. WILLIAMS:** Don't we need to fix that then somehow? I mean
4 if the fishermen land them as gutted weight, why would we
5 specify in the regulations, or in our plan and in the
6 regulations, in whole weight? We need to fix that at some
7 point.

8
9 **DR. STEVE BRANSTETTER:** The assessment is done in whole weights
10 and so our ABCs come out in whole weights and so our ACLs are in
11 whole weights. Now, we can set your trip limits at whatever you
12 want them to be at and, in fact, we did put out a Fishery
13 Bulletin last year describing what that was. It's about a 7
14 percent difference.

15
16 **MR. WILLIAMS:** But fish are routinely landed and then they are
17 later converted for the assessment to whole weight and I know
18 that, but it just seems to me that we've got to do something
19 different here and that we ought to change every one of these
20 whole weights to gutted weights. If that's the way the fishery
21 operates, then let's conform to the way it operates. They are
22 not going to bring those fish in whole, right?

23
24 **DR. FROESCHKE:** We can try to add some more clarity in the
25 documents. I guess one thing is we change that, what could
26 happen, if you look at the allocation, the commercial allocation
27 would be in a different unit and it's going to be in a reduced
28 poundage and the 73/27 wouldn't match up exactly, unless you
29 back-calculated those. The potential for confusion, however we
30 do it, is there.

31
32 I think what I was thinking is just to put the gutted weight
33 equivalent in parentheses in the appropriate tables and so
34 people could easily identify whatever metric they wanted.

35
36 **MR. WILLIAMS:** I guess maybe it's not my problem what is
37 specified in the regulations, but eventually it needs to be
38 specified in the regulations. If we have a 2,000-pound whole
39 weight trip limit, then the regulations might need to specify
40 1,850 or something like that, but my impression is that's
41 probably not the way it's done right now.

42
43 I understand your problem and it's always easy to -- It's not
44 difficult to convert gutted weight to whole weight for analysis,
45 whether comparing recreational to commercial or doing a stock
46 assessment. That's easy, but it is -- It seems to me that it
47 would be confusing, at the very least, for commercial fishermen
48 and fish houses to have to be dealing in whole weight if no one

1 lands the fish that way.

2

3 **DR. FROESCHKE:** Agreed.

4

5 **MR. WALKER:** I was just going -- Like I said, triggerfish is the
6 only fish that I know of that's not gutted. All the reef fish
7 species are we bring them in gutted, gutted weight.

8

9 **MR. FISCHER:** I am certain we have conversions from whole weight
10 to gutted weight and they are through time, because those
11 conversions could have changed somewhat, but would it help in
12 the document if staff indicates the whole weight and then
13 indicates what the gutted weight would be, to make it more
14 recognizable to the commercial fishery, just to show them, but
15 the assessments will be done in whole weight, but at least it
16 will give in people's minds what the gutted weight per trip is,
17 if that's what you were asking.

18

19 **MR. WILLIAMS:** If I may, but it just seems to me, Myron, that
20 the fishermen in the fish house need to know what the trip
21 limits are in gutted weight. If that's 1,850, then let's put
22 1,850 in these or 1,350 or whatever they are, because it's just
23 too confusing otherwise.

24

25 **MR. FISCHER:** I understand, but I know we do need whole weight
26 when it comes to the assessments and they have to convert. I am
27 asking, but they may have to convert it back to whole weight.

28

29 **MR. WILLIAMS:** They always convert that stuff. I mean they
30 convert king mackerel and they convert all the groupers. With
31 stone crab, we used to multiply by two, as I recall. I mean
32 it's always been done.

33

34 **I think I am going to make a motion and maybe I won't get a**
35 **second for it, but I would move that all of these whole weights**
36 **be specified as gutted weights.**

37

38 **CHAIRMAN GREENE:** We have a motion on the board and does it read
39 as you wish?

40

41 **DR. CRABTREE:** You're just talking about the trip limits,
42 correct?

43

44 **MR. WILLIAMS:** I'm sorry. Yes. Trip limits in Action 3.

45

46 **DR. CRABTREE:** I can see how changing the ACLs and all of those
47 have issues in terms of the allocation and everything, but in
48 terms of the trip limit, it seems to me you can put that in

1 gutted weight and I don't see why that's a problem.
2
3 **MR. WILLIAMS:** All the whole weights in Action 3, trip limits in
4 Action 3, be specified as gutted weight.
5
6 **DR. BRANSTETTER:** Just for the IPT's clarification, do you want
7 those rounded numbers in gutted weight or do you want -- Instead
8 of 2,000 pounds, do you want 1,923? It seems, to me, that we
9 ought to have a rounded number.
10
11 **MR. WILLIAMS:** Rounded.
12
13 **DR. BRANSTETTER:** Then we'll convert that back to whole weights
14 to track the ACLs.
15
16 **MR. WILLIAMS:** Yes, a rounded number that people can remember.
17
18 **CHAIRMAN GREENE:** Mr. Walker, I believe you seconded the motion?
19
20 **MR. WALKER:** Yes, I second it.
21
22 **CHAIRMAN GREENE:** We have a motion on the board and is there any
23 more discussion? Anybody have any opposition to this motion?
24 All right. Do you want to vote on it? **All those in favor raise**
25 **your hand.**
26
27 **MR. ATRAN:** Seven.
28
29 **CHAIRMAN GREENE:** Those opposed raised your hand.
30
31 **MR. ATRAN:** We've only been getting seven votes all along and so
32 somebody --
33
34 **MR. FISCHER:** Would putting both weights would have been that
35 difficult?
36
37 **MS. LEVY:** You can decide the trip limits in rounded gutted
38 weights and when we do the regulations, we can put both weights
39 in the regulations, so that you have the rounded whatever gutted
40 weight trip limit you want and we could put the equivalent whole
41 in there, just so everyone knows what it equals. You can have
42 both, but if you want to make your decision on the trip limit as
43 a round gutted weight, then that's what this would do.
44
45 **MR. WILLIAMS:** I wish you had said that earlier and maybe I
46 would have had a different perspective on this. I mean my
47 impression is it's very confusing for the fishermen and the fish
48 house to have it specified one way that's different than the way

1 they actually conduct their fishing. Are there precedents for
2 this as specifying both gutted weight and whole weight in the
3 regulations?
4

5 **MS. LEVY:** From what I understand, the South Atlantic
6 regulations have, at least some of them, both. I can double
7 check real quick, but both gutted and the whole weight
8 equivalency. Either you don't change it as it is the document
9 and when you pick one, the regulations tell you what both are,
10 but then your gutted weight isn't going to be an even number,
11 right, because you're going to pick a 1,500-pound trip limit and
12 we're going to covert that to gutted weight and so it's going to
13 be some odd number or you choose the trip limit in the gutted
14 weight and so it's 1,500 pounds gutted weight and we just say
15 whatever that whole weight equivalency is.
16

17 I think that it's probably right that it's easier to have the
18 trip limit in the gutted weight, how they're going to land it,
19 as a round number and so that motion will do that.
20

21 **MR. PERRET:** I am not on your committee, but I can assure you
22 that if you don't put both weights in -- Because instead of it
23 being 2,000, it's going to be 2,000 minus whatever, 1,923
24 pounds, and we're going to catch all sorts of hell for reducing
25 the trip limit and so we need to make sure both weights are
26 given and that we're not changing anything, but we're only
27 putting gutted as well as whole weight.
28

29 **MR. WILLIAMS:** Honest to God, I am really trying to simplify
30 this and I know it seems like I'm not. **I am going to move to**
31 **reconsider. Given what Mara said, I am going to move to**
32 **reconsider the motion that I made.**
33

34 **MR. FISCHER:** I second that.
35

36 **CHAIRMAN GREENE:** We need to vote on it. **All those in favor of**
37 **the motion to reconsider the prior motion please raise your**
38 **hand, seven; any opposition please raise your hand. Seeing no**
39 **opposition, the motion carried.** Now the motion is being
40 reconsidered.
41

42 **MR. FISCHER:** So this motion is off the board?
43

44 **MR. WILLIAMS:** Can he make a substitute motion at this point?
45

46 **MR. FISCHER:** I will make a substitute motion that we leave the
47 pounds in whole weight, as written, and in parentheses, right
48 after the weight, we indicate what the gutted weight would be

1 per option.

2
3 **CHAIRMAN GREENE:** Mr. Williams seconded.

4
5 **MS. BOSARGE:** I am not on your committee, but sometimes I would
6 rather get it done in committee than have to do it again in full
7 council. Based on the conversation that I just heard, I like
8 this motion, except I would switch it around. For the
9 fishermen's sake, have this document and our decision made on
10 gutted weight, which is what they are landed in and what they
11 are used to.

12
13 For the sake of Corky's argument though, in each of the options,
14 put in parentheses -- Convert up and put in parentheses the
15 whole weight, so that now everything is based on gutted weight
16 and when a fisherman looks at it, he knows, okay, they decided
17 to do this and that in whole weight is this, but gutted weight
18 is what they use and put the whole weight in parentheses.

19
20 **MR. WALKER:** I like what Leann had to say. That was the problem
21 and there was a bulletin sent out after the Reef Fish AP that
22 converted it to the gutted weight, but I think it's better
23 served and I think a lot of fishermen are going to want the --
24 They would be interested in the 1,500-pound trip limit anyway
25 and so when you correct it, the 1,500 pounds is going to give
26 them a longer season and it's going to address some of the
27 bycatch issues on mortality and so I like that. I like what
28 Leann added.

29
30 **MR. FISCHER:** This is something David could answer. Is there
31 any situation, any condition, from I'm sure rough weather to
32 injury on the boat, that these fish just don't get gutted on the
33 occasional trip? If that's the case, maybe we have to have that
34 in whole weight.

35
36 **MR. WALKER:** From what I know of, it's a gutted weight fishery.
37 I mean there may be some people out there that go out for the
38 day and keep some fish that aren't gutted, but we have never
39 brought them in whole weight like that and it's always been
40 gutted, every fish, snapper and grouper and everything except
41 for triggerfish.

42
43 **CHAIRMAN GREENE:** Roy Williams I believe seconded the motion,
44 and is that correct, that's on the board?

45
46 **MR. WILLIAMS:** I seconded Myron's motion, which is above this
47 one, I think.

1 **MR. FISCHER:** I said I would take Leann's as a friendly and that
2 we wouldn't have to vote on it. I didn't care what the order
3 was and I agree with what Corky said. It would look as though
4 we took away 7 percent or whatever it is from the commercial
5 fishery and they're going to wonder where their percent went,
6 but that way is good enough to --
7
8 **MR. WILLIAMS:** The second motion is your motion then, the second
9 one down there, to reverse the --
10
11 **MR. PERRET:** That was Leann's modification.
12
13 **MR. WILLIAMS:** I am all right with that.
14
15 **CHAIRMAN GREENE:** The motion on the board is to reverse the
16 order of weights and put the gutted weight and convert to whole
17 weight in parentheses.
18
19 **MR. ATRAN:** If that was a friendly amendment, then you need to
20 get the exact wording of the motion you're voting on, because
21 this doesn't make sense by itself. It doesn't refer to what
22 you're talking about and so let's get the actual wording of the
23 motion and the intent that you're voting on.
24
25 **MR. WILLIAMS:** Would you consider putting -- In Action 3,
26 specify the trip limit pounds in gutted weight and add the whole
27 weight in parentheses?
28
29 **MR. FISCHER:** Yes, Mau.
30
31 **MR. WILLIAMS:** Cite the trip limit in pounds.
32
33 **MR. ATRAN:** How about if you said in Action 3 to -- It says cite
34 and specify, because I don't know what the word "cite" means in
35 here, the trip limit in pounds gutted weight and include whole
36 weight in parentheses.
37
38 **EXECUTIVE DIRECTOR GREGORY:** Now take the parentheses away from
39 gutted weight, because that's confusing.
40
41 **CHAIRMAN GREENE:** Mr. Fischer, is that your motion on the board?
42 The substitute motion is in Action 3 to specify trip limit in
43 pounds gutted weight and include whole weight in parentheses for
44 each option. Mr. Fischer, is that your motion and does the
45 seconder agree? Okay.
46
47 All right. A show of hands. **All those in favor of this please**
48 **raise your hand; all those opposed same sign. No opposition.**

1 Moving on. Dr. Froeschke, does that complete your --
2
3 **DR. FROESCHKE:** Not quite. I guess my question was now, since
4 we've got that currency issue addressed, do you actually want to
5 talk about the options? Do you want to change the trip limit or
6 are you satisfied with what you have, minus all the conversion
7 stuff?
8
9 **MS. BADEMAN:** I definitely want to hear from the public about
10 this before I go and change anything, but that's just me and if
11 other people have ideas, throw them out there.
12
13 **CHAIRMAN GREENE:** Anybody else have any thoughts?
14
15 **MR. WALKER:** I agree with Martha and I would like to hear from
16 the public, too.
17
18 **DR. FROESCHKE:** One other thing for your consideration, again,
19 just like for the recreational, the Regional Office did make a
20 decision tool and some results are based in 2.3.2, that table.
21 It essentially gives you a number of days for the various trips
22 limits under consideration and the ACT options in Action 1 and
23 so it's a relative scale. The darker the green, the longer the
24 season, but it may help inform your and the public's decision.
25
26 **CHAIRMAN GREENE:** Okay. Anything else? Does that wrap up this
27 portion of the --
28
29 **DR. FROESCHKE:** One last thing and maybe the Regional Office,
30 Steve Branstetter or someone, can weigh in on the timing of
31 this. I guess my vision was that we would take -- Select
32 preferred alternatives at the next meeting and take final action
33 in June and I don't know if that works with the powers that be
34 though and so I would like to get some feedback on that.
35
36 **DR. BRANSTETTER:** If you take final action in June, you would be
37 submitting a document to us in July and we would be putting that
38 regulation into effect somewhere in October and, at least based
39 on recent history, both the recreational and commercial sectors
40 will already be closed.
41
42 **CHAIRMAN GREENE:** Okay.
43
44 **DR. FROESCHKE:** I guess let's go full circle now and the
45 earliest we could say, if we took final action in April, maybe
46 the earliest it could be implemented or something is August and
47 one of the things that we talked about in Action 1 was if this
48 1.78 million pounds could be adequate.

1
2 If we can't get it implemented in 2015 anyways, the ABC in 2016
3 and beyond is above that and so I guess if we don't have
4 anything implemented in 2015, could we just not stay with the
5 1.78 and save ourselves some trouble? I mean it's basically
6 statistical noise at that point.

7
8 **CHAIRMAN GREENE:** Okay. Interesting comment and anybody,
9 committee members, want to weigh in on that as far as moving
10 forward on the document? I know we have a stock assessment
11 coming up sometime soon, but --

12
13 **MS. LEVY:** Are you saying that if that were possible that you
14 wouldn't want to do anything else with this document, meaning
15 you wouldn't be considering revising or taking any of the other
16 actions into consideration here or would you still be planning
17 on moving forward with the other actions?

18
19 **DR. FROESCHKE:** I guess my vision would be that if we were to do
20 that, Action 1 could go to -- Just select the no action and the
21 recreational management measures would still be on the table as
22 well as the commercial and I don't have any idea what you all
23 will select in those.

24
25 **MS. LEVY:** I don't really know why you need to decide what you
26 want to do with Action 1 right now and so my suggestion is to
27 keep it as is and move forward with it to get it implemented as
28 soon as we can decide what you want to do in terms of the ACLs
29 and ACTs in this document.

30
31 I mean you don't have to pick Option 1. There are other
32 reasonable alternatives in there and so I wouldn't want to be
33 like take it out at this point.

34
35 **DR. FROESCHKE:** My reason for doing this is if -- That's why I
36 wanted to get some feedback on the timeline. If we knew there
37 was no way to implement this in 2015, I mean it's a lot of work
38 on a number of people's part to produce a whole chapter and the
39 related analyses and so if that doesn't matter, then we could
40 reduce the document and perhaps save ourselves some work, at no
41 cost, ultimately, to the fishery.

42
43 **MR. WILLIAMS:** John, are you asking should we just -- We have to
44 take some action here. I mean we could strike 2015, I guess,
45 out of these if we don't think it's possible to implement it,
46 but we've still got to have the specifications for future years,
47 right, and there's a chance we may choose 1.72 across the board,
48 too.

1
2 **DR. FROESCHKE:** Yes and I was just asking for the timeline and I
3 wasn't recommending any course of action or deleting it, but I
4 was just trying to work backwards from when we hoped to get this
5 done and just to try to see if we needed to take final action in
6 April or June. That was really my only issue and at least to
7 give the IPT guidance.

8
9 If we were to take final action at April, then we would have to
10 bring a document and select preferred alternatives and take
11 final action and so I wasn't sure if you were comfortable with
12 doing something like that.

13
14 **MR. WILLIAMS:** Are you just saying that this isn't necessarily a
15 big rush and if we move it back another meeting that it will be
16 inconsequential and is that --

17
18 **DR. FROESCHKE:** I don't know and that's what I am trying to
19 figure out.

20
21 **MR. WILLIAMS:** It does seem to me like it's inconsequential.
22 It's not much of a change.

23
24 **CHAIRMAN GREENE:** I think the point was made that if, under the
25 normal process, that if they don't take final action until June,
26 it's going to not be available for the fishery to be used this
27 year and it would already be after the season had closed. At
28 least that was my understanding of it. I don't know which way
29 to lead you here, guys. I am trying to come up with something,
30 but I don't know what to tell you. I think John is asking for
31 us to consider for 2015 the 1.72 and am I correct?

32
33 **DR. FROESCHKE:** I really wasn't -- I was just trying to get the
34 discussion out and I don't know what the best thing to do and I
35 don't even know if it matters and I was unsure on the process,
36 if we were going to take an action to change the ABC for 2015 on
37 December 20th or something, which wouldn't make a lot of sense.
38 I was just trying to streamline the work flow.

39
40 **CHAIRMAN GREENE:** I understand and I don't know which way to
41 lead us through here and so --

42
43 **MR. WILLIAMS:** We don't know which one of these options we're
44 going to choose. I mean if we choose 1.72 for 2015, it's pretty
45 much inconsequential, but what if we choose something else?
46 What if we choose Option 4, set the ACL at zero? It's still not
47 going to have any effect on 2015, but it's going to have an
48 effect on 2016, 2017, and 2018.

1
2 **MR. FISCHER:** Are we restricted from choosing alternatives today
3 to accelerate the process?

4
5 **DR. FROESCHKE:** I can't answer that. Someone else.

6
7 **MR. ATRAN:** You can't take final action today, but you can do
8 almost anything else. If you feel you have enough information
9 to select preferred alternatives, you could select preferred
10 alternatives at this time. You can always change that later.

11
12 **MR. FISCHER:** So we're at the state where we could choose
13 preferred alternatives and this is going out to the public
14 after?

15
16 **DR. FROESCHKE:** It's a framework action and I don't know that we
17 were anticipating going to public hearings.

18
19 **MR. FISCHER:** It's either we accelerate it and we keep in
20 everything in Action 1 or we realize that we will be out of time
21 and we can't do Action 1 and we delete Action 1.

22
23 **MS. LEVY:** You don't want to delete Action 1. What may happen
24 is that whatever action that you take regarding Action 1 may not
25 be implemented in time to affect the 2015 season and so right
26 now, the issue is that we have an ACL that's greater than the
27 current ABC, albeit by not that much, and so for purposes of
28 actually projecting when a closure should happen, the difference
29 probably really is inconsequential, but we still need to move
30 forward and address that issue, as well as the long-term catch
31 levels.

32
33 We don't want to get rid of Action 1 and from what I understand,
34 the seasons, based on history, could possibly be ready to close
35 in August, before we could even implement something if we took
36 final action in April.

37
38 NMFS is going to have to make a conservative judgment on when to
39 close the season, based on the current catch limits, and we are
40 going to have to implement this as soon as we can if as soon as
41 we can means taking final action in June, fine. If we can take
42 it sooner, but I think that schedule is up to you all and staff
43 as to what you can accommodate and get done in the amount of
44 time you have.

45
46 **DR. FROESCHKE:** The only question I have about that is if we
47 don't get it in time for 2015 and the rationale is that the ACL
48 is above our current ABC, in 2016 that won't be the case,

1 because there is a large increase in any of the options that
2 we're considering are all well below the 2016 through 2018 ABC.

3
4 **MS. LEVY:** I understand that, but there are still reasonable
5 alternatives in there to either have it at a constant 1.72 or a
6 zero and so I think you have to make the decision about where
7 you want the catch level to be after 2015, even if we can't act
8 in enough time to affect 2015.

9
10 **DR. FROESCHKE:** If we did nothing, it would be a constant 1.78
11 beyond and if we did Option 2, for example, it would be 1.72.

12
13 **CHAIRMAN GREENE:** Okay. I don't know and you guys have got me
14 lost on this thing and what you all are talking about right now.
15 I believe it's my understanding that we are ahead of schedule
16 and is that correct right now? Okay.

17
18 I think at this point Mr. Fischer had made a comment a minute
19 ago about to try to run through these items and pick preferreds,
20 if you're comfortable with doing so, understanding it may change
21 after public testimony and during full council. I guess my
22 question to the committee is do you want to go through these
23 items and try to make an attempt to pick a preferred, in the
24 essence of speeding up this deal, as Ms. Bosarge said, to try to
25 get this done in committee and not have to deal with it at
26 council? Does the committee have any preference one way or the
27 other?

28
29 **MR. FISCHER:** I have a feeling, sitting in Alabama, we'll hear a
30 lot of comments at public on amberjack and I think they could
31 steer us in a proper direction. We only have three action
32 items, if I'm not mistaken. It's not a very burdensome
33 document.

34
35 **MR. WILLIAMS:** Were you speaking for preferreds or against
36 preferreds?

37
38 **MR. FISCHER:** I was speaking that we let public testimony happen
39 and see. I would sit down and do it tonight. I mean we can
40 work through it tonight, establishing preferreds, but I am sure
41 people will come to the podium and talk about amberjack.

42
43 **MR. WILLIAMS:** So you would like to hear what the public says
44 and then the council do preferreds?

45
46 **MR. FISCHER:** If we could get something done at this meeting and
47 move forward and actually get something before the end of this
48 season, it might give some relief, once again, to the fishermen.

1
2 **CHAIRMAN GREENE:** Okay and so I interpret it as the committee
3 doesn't want to take any action right now in selecting
4 preferreds, until after public testimony. Unless I am mistaken,
5 I guess that will wrap up amberjack at this particular point.

6
7 Looking at our agenda, we were going to move Amendment 39 until
8 tomorrow and Public Hearing Draft Amendment 28, we can't do that
9 either and so I guess the next thing would be -- We can't do the
10 report on Ad Hoc For-Hire Red Snapper and so I guess it would be
11 the Final Action on Framework Action to Adjust Recreational For-
12 Hire Red Snapper Management Measures and Mr. Atran. We will
13 skip ahead to Item X on the agenda.

14
15 **MS. BADEMAN:** I think it would be helpful to hear Item IX before
16 jumping into X, because they kind of go together. One is the
17 report from the AP and then Item X is taking some action on the
18 for-hire management measures. Would we want to try the options
19 paper to update minimum stock size threshold, maybe?

20
21 **CHAIRMAN GREENE:** I believe you're correct on that. I was just
22 trying to, off-the-cuff, skip ahead here and I didn't catch
23 that. My apologies. I guess Agenda Item XI, Options Paper,
24 and, Mr. Atran, are you prepared to lead us through that? That
25 will be Tab B, Number 13.

26
27 **OPTIONS PAPER - UPDATE MINIMUM STOCK SIZE THRESHOLD FOR REEF**
28 **FISH STOCKS WITH LOW NATURAL MORTALITY**

29
30 **MR. ATRAN:** By the way, just to let everyone know, we are way
31 ahead of what we estimated our schedule would be and so we will
32 almost definitely not need all day tomorrow and we may not even
33 need half a day tomorrow, just to let you know in advance.

34
35 Minimum Stock Size Threshold is an options paper, Tab B, Number
36 13, and this came about because we were requested to consider
37 changing our current method of determining the minimum stock
38 size threshold, which is the formula one minus the natural
39 mortality rate times whatever the biomass at MSY is.

40
41 With the natural mortality rate, or M, when that is a very low
42 number, when we have long-lived species, then that creates a
43 very small buffer between the maximum sustainable yield level
44 and the minimum stock size threshold and sometimes so small
45 that, given natural fluctuations, it may not really be
46 meaningful.

47
48 I understand the South Atlantic Council recently completed a

1 regulatory amendment to redefine their minimum stock size
2 thresholds for stocks with low mortality. Staff was instructed
3 to use that as a template to help put together this document.

4
5 We had to do things a little bit differently, because the South
6 Atlantic Council already had a minimum stock size threshold for
7 every one of the species that it was covering under its
8 regulatory amendment, whereas on the reef fish fishery, we only
9 have minimum stock size thresholds currently for about a half-
10 dozen species, but we tried to stay as close as possible to what
11 the South Atlantic Council did and also add an action to set a
12 default MSST for those other stocks as well, if you want to
13 consider that.

14
15 Action 1 begins on page 9 of the document and Action 1 is to
16 define or, in some cases, redefine the minimum stock size
17 threshold for species in the Reef Fish Fishery Management Unit
18 with low natural mortality rates and one of the things you would
19 have to do is define exactly what you mean by a low natural
20 mortality rate.

21
22 The alternatives would be the no action alternative and don't
23 make any change and all species would continue to be governed by
24 that one minus M times BMSY formula, unless the formula is
25 modified in Action 2.

26
27 Alternative 2 would define or redefine the minimum stock size
28 threshold for selected species in the Reef Fish Management Unit
29 that have a low mortality rate and so they would be at a fixed
30 75 percent of BMSY or the BMSY proxy.

31
32 The threshold for adopting this MSST is if the natural mortality
33 rate is -- Then you have three choices: an M of 0.15 or lower,
34 an M of 0.20 or lower, or an M of 0.25 or lower. Incidentally,
35 if you select 0.25 or lower, one minus 0.25 is 75 percent anyway
36 and so you might want to consider mainly Options a or b.

37
38 Alternative 3 would redefine MSST to be, instead of 75 percent
39 of BMSY, 50 percent of BMSY, which is the lowest you can go in
40 defining minimum stock size threshold. Again, the same three
41 thresholds to consider, either an M of 0.15 for Option a, an M
42 of 0.20 for Option b, or an M of 0.25 for Option c.

43
44 To give you a better idea of how this would affect the species
45 that we have under management, on page 11, beginning on page 11,
46 are a series of tables that indicate species that would be
47 affected by these alternatives.

1 We are only using species where we have a natural mortality rate
2 that's been defined either in a NMFS or Florida FWC stock
3 assessment or where we found fairly reliable estimates of M in
4 the published literature.

5
6 If you were to select an M of 0.15 or lower under either
7 Alternative 2 or Alternative 3, the species that would be
8 covered by that would be mutton snapper, red snapper, yellowedge
9 grouper, goliath grouper, red grouper, black grouper, or gag.
10 Those would all become either 75 percent of BMSY or 50 percent
11 of BMSY, instead of the formula. If you went with the option to
12 use an M of -- We have a question.

13
14 **MR. WILLIAMS:** Steve, what is red snapper now, the minimum stock
15 size threshold?

16
17 **MR. ATRAN:** Red snapper, the current estimate of M I believe is
18 0.09 or --

19
20 **MR. PERRET:** 0.094277. That's how good we are.

21
22 **MR. ATRAN:** Right and so the stock size threshold is more than
23 99 percent of BMSY. You have less than a 1 percent differential
24 between BMSY and the minimum stock size threshold.

25
26 If you were to go with species that have natural mortality rates
27 of 0.20 or lower, it would be all the species in Table 2.1, plus
28 yellowtail snapper, yellowedge grouper, tilefish, and hogfish.
29 Then if you were to go with the natural mortality rate of 0.25
30 or lower, it would be all of the species in the previous two
31 alternatives and we would add lane snapper, although there is
32 two different estimates in the published literature of natural
33 mortality rate for lane snapper.

34
35 Ault et al. based the natural mortality rate on fish from the
36 Florida Keys and came up with 0.30 and so that would not meet
37 this threshold and Johnson et al. was looking at fish from I
38 believe the northern Gulf of Mexico and he came up with a range
39 of 0.11 to 0.24, which would meet this threshold. We would have
40 to decide which of those references we would want to go to or
41 just make a decision whether to include lane snapper in this or
42 not. Then I believe that's the only one that would be added to
43 the list.

44
45 Then the species that we have natural mortality estimates above
46 0.25 that wouldn't be affected at all by any of the alternatives
47 are greater amberjack and gray triggerfish. Both of those would
48 remain using the one minus M formula and you can see in the

1 table they have natural mortality estimates currently of 0.28
2 for greater amberjack and 0.27 for gray triggerfish and so did
3 you want to discuss this or should I go on and just review
4 Action 2?

5
6 **CHAIRMAN GREENE:** Any discussion by the committee? I don't see
7 any hands and go ahead, Steven.

8
9 **MR. ATRAN:** As I said, we have not defined minimum stock size
10 threshold for all of our species. We were going to do this in
11 the status determination criteria amendment, but that's been
12 moving slow and as long as we are going to determine a minimum
13 stock size threshold for several species with low natural
14 mortality rates, I thought that it might be worth considering in
15 this document going ahead and setting some default minimum stock
16 size threshold for anything that is not included in Action 1.
17 That way, we would get that requirement out of the way and we
18 would have a minimum stock size threshold specified.

19
20 The alternatives would be no action for Alternative 1. Except
21 as specified in Action 1, MSST for species that have a defined
22 specification will not be changed. If it's undefined, they will
23 not have a definition specified and that will have to be handled
24 on a case-by-case basis.

25
26 Alternative 2 would define MSST as our current formula, one
27 minus M times BMSY or its proxy, or 0.5, 50 percent of BMSY,
28 whichever is greater. In other words, it can't go below 50
29 percent of BMSY. For all reef fish in the Reef Fish Management
30 Unit, except where otherwise specified in this amendment or
31 other subsequent management action and I kept that in there
32 because you might have particular stocks that you, in the
33 future, may want to go with a different MSST.

34
35 Alternative 3 would set the default at 75 percent of BMSY and
36 Alternative 4 would set it at 50 percent of BMSY for all stocks
37 that are not otherwise defined in Action 1 or specified in
38 another subsequent amendment and there was something else I
39 wanted to say, but I can't think of what it was and so I will
40 stop at that point.

41
42 Basically, the action alternatives are either to use our current
43 definition of one minus M times BMSY for all stocks other than
44 the low mortality ones specified in Action 1 and Alternative 3
45 would be to use a fixed MSST of 75 percent of BMSY and
46 Alternative 4 is a fixed estimate of BMSY and it's possible that
47 if you select Alternative 3 or 4 that whatever you select in
48 Action 1 could become moot.

1
2 I don't think you would want to select a minimum stock size
3 threshold that's lower for the high natural mortality stocks
4 than for the low natural mortality stocks, if I'm getting that
5 right. I may have that backwards.

6
7 **MR. WILLIAMS:** Steven, if we chose let's say Alternative 3,
8 minimum stock size threshold at 75 percent of BMSY, how many of
9 these species back in Table 2.2 or 2.3 are going to be below the
10 minimum stock size threshold or maybe you don't know.

11
12 **MR. ATRAN:** The ones that are currently declared overfished,
13 because those have been assessed and already determined to be
14 overfished and I believe we have four stocks that are in that
15 situation and if we went with 50 percent, I am not sure if red
16 snapper would continue to be declared overfished. It wouldn't
17 be rebuilt and so we would still be in a rebuilding plan.

18
19 Greater amberjack, I know we're fairly close to rebuilding it
20 and so I believe either of these alternatives would probably
21 result in it no longer being overfished. The other stocks that
22 we have declared overfished, I just don't know, off the top of
23 my head.

24
25 **DR. CRABTREE:** Just looking at one of the tables in Shannon's
26 presentation, red snapper is at -- I guess if you went with 50
27 percent, that would be a 13 percent SPR and we're at 15.8 and so
28 if you went with 50 percent, red snapper is no longer overfished
29 and if you went with 75 percent, I think that's a little higher
30 than 15.8 and so I think then it would be overfished.

31
32 Steve, if we decided we wanted to treat red snapper differently,
33 because we know a lot more about it and we've observed it at
34 very low stock sizes and things like that, structurally is there
35 a way in the document or -- It seems like the way it's
36 structured, it would be difficult to split out a single species
37 and treat it as an exception.

38
39 **MR. ATRAN:** We could add a list of exceptions to any of these
40 alternatives. Remember this is just an options paper at this
41 point and the other thing to be concerned about or to take into
42 consideration is we're not specifying what the proxy for BMSY
43 would be.

44
45 That will still be done in the status determination criteria or
46 in a separate action and so unless it's modified, the proxy for
47 red snapper would continue to be F 26 percent SPR and the proxy
48 for most of the other reef fish would continue to be F 30

1 percent SPR and for gag, it would continue to be Fmax.
2
3 **MR. WILLIAMS:** Dr. Crabtree, would you be comfortable with
4 Alternative 3, a minimum stock size threshold of 75 percent of
5 BMSY?
6
7 **DR. CRABTREE:** Probably so. That's what we did ultimately in
8 the South Atlantic when we went through it. I think what I am
9 not comfortable with is no action and leaving it where it is.
10 It seems to me that all these minimum stock size thresholds are
11 set much too close to the rebuilding target and so I do think
12 that we need to adjust them and lower them down. I don't think
13 we need to choose a preferred alternative right now until there
14 is some more analysis in it, but I think we do need to make a
15 change to it.
16
17 **MR. WILLIAMS:** Don't or do need to --
18
19 **DR. CRABTREE:** This is just an options paper, right, Steve, and
20 so we're not at that stage, I don't think.
21
22 **MR. WILLIAMS:** Are we looking for preferreds here?
23
24 **MR. ATRAN:** No.
25
26 **CHAIRMAN GREENE:** Okay, Steve, carry on, please.
27
28 **MR. ATRAN:** What I'm hearing -- As I said, this is just an
29 options paper and we'll develop it into a draft framework
30 action. Did you want, in Action 2, to provide for a list of
31 exceptions to some of those thresholds? If so, I would like
32 some guidance on what to include in that list.
33
34 **CHAIRMAN GREENE:** Looking around the table, I know there was a
35 comment about lane snapper earlier, but, Mr. Williams, do you
36 have a comment?
37
38 **MR. WILLIAMS:** On the one hand, you're not ready for us choosing
39 preferreds, but if we chose one, then you could tell us what the
40 impact would be. Say if we specified MSST at 75 percent BMSY,
41 you could tell us then what species would be affected by our
42 action. I suppose you could do that for any of them though.
43
44 I mean I am not looking to create more trouble for red snapper
45 or anything else that we've got good stock assessments on and so
46 whatever we do here, I wouldn't want it to affect red snapper,
47 gag grouper, red grouper, or anything where we've got a good
48 stock assessment.

1
2 **DR. CRABTREE:** It will affect all of those, because you will be
3 changing the formula that we use for the minimum stock size
4 threshold. As I said, I think you need to change that. I think
5 that red snapper is a classic example. We've got the minimum
6 stock size threshold set at 96 percent of BMSY. In my judgment,
7 that is not nearly enough spread.

8
9 What's going to happen in the future is you're just going to
10 have, because of natural variations in recruitment, you're going
11 to have things become overfished because you've set the minimum
12 stock size threshold so close to it.

13
14 Originally, the thinking behind setting these minimum stock size
15 thresholds was that it was some critical stock size and if you
16 drop below it, it impairs recruitment and things like that. We
17 know that -- Because we have observed red snapper well below
18 even 50 percent BMSY and we haven't seen any evidence that it
19 has impaired recruitment and so there is lots of rationale for
20 bringing them down.

21
22 Now, whether you want to bring them down to 75 percent or
23 exactly where, that's something you can have a lot of discussion
24 about, but if you make this change, it will change the minimum
25 stock size thresholds for red snapper and gag and some of these
26 stocks, depending on where you put it, that are now considered
27 overfished may not be overfished, but you're still in the
28 rebuilding plan and it's not going to affect the amount of yield
29 you're getting and it's not going to affect the fishing
30 mortality rate you're fishing at.

31
32 Remember in our accountability measures, we at times had
33 different accountability measures for overfished stocks versus
34 not overfished stocks and oftentimes we required paybacks for
35 things that are overfished and not for things that are not
36 overfished and so it does have a practical significance in terms
37 of that and it also has significance in the future for when
38 we're required to put rebuilding plans in place.

39
40 I don't think we want to put a rebuilding plan in place if a
41 stock is so close to the target level that we virtually can't
42 distinguish the difference between them and I think that's where
43 we find ourselves with the current way we've done this.

44
45 **MR. ATRAN:** Another consideration is if you go to one of the
46 more lenient MSSTs, we also have an overfishing definition which
47 is more restrictive. Whereas MSST gives you some leeway for the
48 biomass to drop below BMSY, our maximum fishing mortality

1 threshold we generally set right at FMSY and so if the fishery
2 is being fished at a rate that would cause it to decline below
3 MSST, presumably we would catch that and the current
4 regulations, the current guidelines, require that overfishing be
5 ended immediately and so, in theory, we would catch that in time
6 and the stock would not go below MSST.

7
8 **MS. LEVY:** I just have a question. We have Action 1, which is
9 just for the picking those low mortality rate stocks, and then
10 is what happens is depending on what eventually gets picked in
11 Action 1, we'll sort of decide what's covered in Action 2,
12 meaning things that end up falling outside of whatever the
13 preferred is in Action 1 will automatically flow into Action 2?
14 Is that how it's set up?

15
16 **MR. ATRAN:** It was set up to first select where you want to set
17 the minimum stock size threshold for the low mortality stocks
18 and then for everything else, have some sort of a default and
19 bring all the stocks that don't currently have a minimum stock
20 size threshold identified to a point where we have met that
21 requirement for all of the stocks.

22
23 Now, there could be some complications if, for the low mortality
24 stocks -- I am trying to think how this would work. If you were
25 to select Option c, which is the estimation is it's 0.25 or
26 lower, and then you set it all to 75 percent of BMSY, and then
27 for Action 2, you would be setting Alternative 3, MSST equals 75
28 percent of BMSY for everything else, and it's kind of
29 meaningless to have two actions, because you're going to
30 effectively set all stocks to that MSST value. I guess that's
31 what I was trying to point out a little bit earlier.

32
33 **MS. LEVY:** Right and all I was trying to clarify was that
34 whatever stocks, and I just want to make sure I'm right, get
35 excluded because of what M is picked in Action 1 would then
36 automatically fall into whatever gets picked in Action 2.

37
38 **MR. ATRAN:** Correct.

39
40 **CHAIRMAN GREENE:** Okay. Anybody else have anything on that?
41 Steven, are you --

42
43 **MR. ATRAN:** As I said, unless we receive any specific guidance
44 from the council, our plans are to develop this further into a
45 draft framework action and bring that back to the council at a
46 subsequent meeting to select preferred alternatives and then
47 later go on and take final action.

48

1 **CHAIRMAN GREENE:** Okay. Looking around the table, I don't see
2 anything else there that would prevent you from doing that. I
3 guess I'm trying to figure out where we should go next.

4
5 **EXECUTIVE DIRECTOR GREGORY:** It is five o'clock and since we're
6 so far ahead, we could just recess until tomorrow morning.

7
8 **CHAIRMAN GREENE:** Excellent idea.

9
10 **MR. ANSON:** Johnny, is that the general consensus of your
11 committee, is to recess until tomorrow?

12
13 **CHAIRMAN GREENE:** No, I think they want to go back through it.
14 No, I'm just kidding and we'll recess until tomorrow morning.

15
16 **MR. ANSON:** Thank you. So we will see everybody tomorrow at
17 8:30 in the morning to reconvene Reef Fish.

18
19 (Whereupon, the meeting recessed at 5:00 p.m., January 26,
20 2015.)

21
22 - - -

23
24 January 27, 2015

25
26 TUESDAY MORNING SESSION

27
28 - - -

29
30 The Reef Fish Management Committee of the Gulf of Mexico Fishery
31 Management Council reconvened at the Grand Hotel Marriott, Point
32 Clear, Alabama, Tuesday morning, January 27, 2015, and was
33 called to order at 8:30 a.m. by Chairman Johnny Greene.

34
35 **CHAIRMAN GREENE:** Right off the bat, I know that we have a
36 couple of things going on and so I'm going to turn it over to
37 Doug Gregory for just a minute on a couple of housekeeping items
38 that he has and then I will get to you in just a second, Mr.
39 Pearce.

40
41 **EXECUTIVE DIRECTOR GREGORY:** Good morning. Yesterday, you all
42 decided that you wanted to have a phone meeting to discuss the
43 red snapper ABC with the provisional data. We are trying to
44 schedule the SSC to meet the week of the 16th of February and so
45 we're going to do a doodle poll with the council and I just want
46 to give you heads-up so you can be thinking about it, because we
47 will send it out this afternoon to you and we would like to get
48 answers by the end of the week.

1
2 For the last three days of the month, this would be February 25,
3 26, and 27 and then the first three days of March, which would
4 be March 2, March 3, and March 4. Wednesday through Friday of
5 the last week of February and Monday through Wednesday of the
6 first week in March and we will give you alternatives of morning
7 through afternoon. We are thinking a three-hour conference call
8 from nine to twelve or from one to three and so that's what we
9 will do with the doodle poll and so if you could check your
10 calendars and we could get this done pretty quickly.

11
12 Steve Branstetter has a -- They have analyzed the timeline and
13 they think that's an ideal way to do it and we can have
14 substantial analyses of the alternatives to you by the end of
15 the month. It may not be complete, but it will be enough for
16 you to see what their impacts are. Any questions? Thank you,
17 Mr. Greene.

18
19 **CHAIRMAN GREENE:** With that, Harlon was waving his hand at me
20 pretty erratically and so I will see what he is --

21
22 **MR. PEARCE:** I just want to challenge the rest of the group.
23 Yesterday was a pretty quiet day and I think we've got a lot of
24 important decisions to make here today and even if you're not on
25 this committee -- Including myself. I should have said some
26 things I didn't say yesterday.

27
28 We've got to make some solid decisions and we've got to make
29 some moves here and so let's be more vocal today and let's get
30 more on the record today, so that we can let our staff and let
31 the rest of the world know what we really want to do and I think
32 that's very important.

33
34 **CHAIRMAN GREENE:** All right. A little encouragement from the
35 team cheerleader this morning. Yesterday afternoon, we finished
36 up with the options paper on minimum stock size threshold and I
37 just wanted to throw that out there in case anybody had thought
38 of anything else that they wanted to bring forward.

39
40 I am not seeing anybody and so with that, we will pick up where
41 we had scheduled yesterday morning, to move the presentation on
42 red snapper poaching by Mexican lanchas by Jason Brand. With
43 that, I will turn it over to Jason and we will get into that
44 scenario now.

45
46 **RED SNAPPER POACHING BY MEXICAN LANCHAS**

47
48 **LCDR BRAND:** Thank you, Mr. Chair. Before we start the

1 presentation, Captain Joe Hester, who is our Chief of Response
2 for the Coast Guard District 8, the Admiral's Chief of Response
3 in Charge of Maritime Response for All Search and Rescue, Law
4 Enforcement, and Pollution is here to support this. He's been a
5 staunch advocate of this problem set and would like to kick off
6 this presentation and then I will follow up with the slides.

7
8 **CAPTAIN JOE HESTER:** Good morning, Mr. Chairman and Gulf Council
9 and ladies and gentlemen. Thank you so very much for the hard
10 work that you're doing to make sure that the Gulf Coast remains
11 as vibrant and active a source of fish, jobs, and work for our
12 country.

13
14 I come from a place where the Great South Bay went dead about
15 ten years ago, because of overfishing. The work you do,
16 although it may be difficult and hard and sometimes dry, thank
17 you for the important work you do and, sir, you had asked us to
18 be a little more lively today and I will do my part to see that
19 the Coast Guard gives you a lively discussion about a topic that
20 we take very much to heart.

21
22 With that said, I bring you greetings from Admiral Cook, who
23 commands Coast Guard forces from the border with Mexico all the
24 way to the Panhandle of Florida, up 10,000 miles of rivers and
25 off to the outer continental shelf.

26
27 I come to you as the grandson of baymen and of fishermen. My
28 grandmother was serving out in a lobster boat as a child. She
29 was one of a bunch of daughters and she lost the draw and had to
30 go out with great-grandpa to haul lobsters out of Point Judith
31 and her cousins, the Dykstra's, became the beginners of the
32 original co-op in that part of the world.

33
34 I understand this part of the business I think a little bit from
35 the fishing side. My grandfather had polio and so he couldn't
36 go out on the water and he began an insurance company that
37 served the baymen, to make sure that their lost gear could be
38 brought back together by the rest of the community, so that no
39 family would starve during the Depression.

40
41 That's the background I brought to the Coast Guard when I joined
42 the service and my career has been spent in law enforcement,
43 primarily at sea. I have chased illegal migrants and illegal
44 drug smugglers and all kinds of craziness out on the open
45 waters.

46
47 I have done fisheries law enforcement from the U.S. Virgin
48 Islands when I commanded a small patrol boat and thankfully I

1 was given a much bigger boat to take up to the Bering Sea and it
2 was up there that I got the phone call saying, congratulations,
3 you've been assigned to New Orleans.

4
5 For those of you familiar with Coast Guard operations and as
6 Jason said, my job includes oil spill response and New Orleans
7 is the hub of oil spill response for the Coast Guard and this is
8 the pinnacle job for somebody with a very different career than
9 my own and so on day one, it was only appropriate that I sit
10 down in the briefing room and we look up at the slides and a
11 10,000 gallon spill had begun on the river because a large barge
12 had cracked in half and sunk with a crane on it.

13
14 I thought, oh my heavens, am I over my head. As soon as the
15 brief was over, I followed the Admiral into his office and I
16 said, Admiral Cook, sir, I am embarrassed to tell you that oil
17 spills are not my forte and I will do everything I can to see
18 that I don't embarrass you as your Chief of Response. His reply
19 to me was, Joe, I can teach you everything you need to know
20 about oil spill response and don't you worry about that one bit.
21 I brought you here for a different problem. I brought you here
22 because I need you to help me with Mexico and I need you to help
23 me with law enforcement and I need you to help me run my fleet
24 of small law enforcement cutters that work across the entire
25 Gulf Coast and that's what you're here for.

26
27 To that end, I have a career serving, like I said, in law
28 enforcement and also overseas. I served in Columbia for two
29 years and Mexico for one as the Coast Guard's attaché and so I
30 think I understand this problem from both sides of the national
31 angle as well, at least a little better than many of my peers.

32
33 What we're bringing to you today is not just something that's
34 important to Jason and not just something that's important to
35 the fine team of Coast Guard officers that I have here, but
36 something that is deeply personal to me and to the Admiral who
37 selected me at risk for a job where he understood that yes, I'm
38 going to put aside my oil spill response concerns for a little
39 bit and I am picking you to help me go after this Mexican
40 problem.

41
42 That's probably all the introduction this needs and, Jason, I
43 would like you to tell folks what we're dealing with here. The
44 reason the Admiral is not here in person is he is making final
45 preparations in his office and as soon as we're done today, I
46 will be driving back to New Orleans and we're on a plane before
47 dawn tomorrow morning to make a very similar presentation to the
48 Mexican Navy, SEMAR, and so this is important to us and I

1 believe this is very important to you and this is important to
2 our nation. Thank you very much and I am happy to introduce the
3 man you well know and I respect as Law Enforcement Fisheries
4 Expert Jason Brand.

5
6 **LCDR BRAND:** Thank you very much, Captain. Before I get
7 started, I just want to introduce the team here with us today,
8 because they have all been very intimately involved in this
9 problem. We have my supervisor, Commander Rich Sundland, who is
10 the Chief of Enforcement from New Orleans, and Commander Dan
11 Deptula, who is basically our Field Operations Officer for this
12 problem. He covers all of south Texas and is in charge of all
13 the tactics involved in catching these guys.

14
15 We also have Lieutenant Commander Emily Gibbons from our legal
16 office here to keep us all out of trouble and we have Commander
17 James Herlong from our Atlantic Area Command in Portsmouth,
18 Virginia, along with Lieutenant Beth Denicola, who will briefing
19 with me today. They were tasked and completed an academic
20 study, a two-year study, to help us understand the true
21 magnitude of this problem and that's why we're ready to brief
22 you on the results today.

23
24 We can take questions during the brief or hold them to the end,
25 as I might be able to answer the questions as I go through the
26 presentation.

27
28 This problem set is at least a twenty-five-year problem set to
29 us. What I plan to do today is walk you through this problem
30 set, the threat that these lanchas impose on our waters and our
31 resources, the results of the model and the magnitude to our
32 resources, and what we're doing to mitigate this illegal
33 poaching activity and how you can help us.

34
35 The pictures on the right are examples of photos taken from a
36 Coast Guard aircraft of Mexican lanchas in U.S. waters. They
37 are home ported out of a stretch of beach ten miles south of the
38 border. Historically, the name is this stretch of beach has
39 been Playa Baghdad. They recently renamed this stretch of beach
40 the Playa Costa Azul. It sounds a little bit better, I guess,
41 for tourism.

42
43 These vessels home ported out of Playa Baghdad routinely operate
44 out of the red box, as you see in the bottom left picture. This
45 red box stretches fifty miles offshore from Texas and seventy
46 miles north of the U.S./Mexican maritime boundary line and this
47 square encompasses 3,500 square miles. For comparison, the
48 State of Rhode Island a little over 1,000 square miles and so

1 you could fit the State of Rhode Island three times in that box
2 and we're patrolling that with what limited resources we have.

3
4 An overview of the lanchas themselves, the top right picture is
5 a typical lancha that has been seized and is sitting in the
6 Coast Guard Station at South Padre Island Boneyard, awaiting
7 destruction. These vessels are twenty to thirty feet long and
8 they are powered by seventy-five to 200 horsepower outboard
9 gasoline tiller-driven engines. Typically they are fiberglass
10 constructed and they are crewed by two to four crewmen.

11
12 Their gear setups are usually longline or gillnet. However,
13 recently we've been catching them with basically hand line gear,
14 as they venture further north and fish off the rigs.

15
16 The picture to the bottom left is a seizure from a Coast Guard
17 cutter. As you can see, this one is set up for longline gear
18 and below the Coast Guardsman is a bait box with all the hooks
19 and we also have that picture blown up over here for you to see
20 closer, on my right-hand side here.

21
22 This is a -- He is looking at the fish box full of very healthy,
23 huge red snapper and as we know from yesterday's reports, our
24 rebuilding plan is built on the success of getting these larger,
25 older red snapper and so by them taking these larger snapper --
26 As we know, the females in this box that are twenty-four inches
27 long produce as many eggs as 212 of the smaller two-year-old
28 females seventeen inches long and so this goes against our
29 rebuilding plan and it's very destructive to the stock.

30
31 The bottom right picture is a typical gillnet that has been
32 abandoned and our Coast Guard assets located it during routine
33 patrols. This is a very common occurrence, a picture like this,
34 and as a matter of a fact, we have seized 214 miles of this
35 illegal gear in the last three years. This would be enough gear
36 to stretch from New Orleans to Pensacola, Florida and we find
37 this very often.

38
39 The targeted species from these lanchas are shark and red
40 snapper. These boats, you may have heard them be referred to as
41 shark boats in the past and you can see why here in this
42 picture.

43
44 Although we do not manage HMS, this council, I do believe this
45 is very important and very destructive to the health of our
46 ecosystem, which affects the stocks that we do manage. As we
47 know, this picture here to the right was from an abandoned
48 gillnet that was about five to seven miles long and just

1 continued to ghost fish until it was completely full of sharks
2 entangled in the mesh.

3
4 These sharks, as we know, and the red snapper have been fished
5 out of Mexican waters and so the risk continues to be worth the
6 -- The benefits outweigh the risk. The market for red snapper
7 meat and shark meat and the black market for shark fins continue
8 to keep these folks coming into our waters, as these species
9 have been fished out in Mexican waters.

10
11 I did my research on sharks and so I know how destructive a
12 picture like this is, due to the very slow productivity, the
13 slow, low fecundity. They are slow growing and long lived and
14 they produce very few juveniles and so this can wipe out a
15 population of sharks in just a couple of trips.

16
17 This bar graph depicts lancha sightings in blue and lancha
18 interdictions in red. These sightings include numbers from the
19 Coast Guard, federal, local, and state law enforcement agencies,
20 as well as good Samaritans. Good Samaritans have reported these
21 lanchas to us over the past few years and they have resulted in
22 a handful of seizures from these reports. All of these numbers
23 are lanchas sighted in U.S. waters.

24
25 At first glance, your impression may be that this is a growing
26 problem. However, all of us believe that it's been a steady-
27 state problem over the years and the justification or the
28 explanation for the increase in numbers over the last three
29 years have been simply because this team here has made it a
30 priority to locate these vessels and send additional resources
31 and improve our tactics, our capabilities, our strategy, to find
32 and interdict these boats.

33
34 The reason of the difference between the red and the blue is
35 simply a time, distance, speed problem. The background behind
36 one of the numbers in this chart would be a Coast Guard aircraft
37 is flying a patrol in the red box that you saw earlier and they
38 locate a lancha and they report the finding to Commander Deptula
39 and they try to attempt to vector in the closest surface asset
40 for an interdiction.

41
42 Due to the proximity of the border, we just run into the time,
43 distance, speed problems, which accounts for not being able to
44 seize all the ones that are sighted.

45
46 This graph shows you what we in fact do know, what we see, what
47 we get eyes on. What I'm so excited to be able to brief you on
48 today is that we've undergone a two-year academic study and

1 we've asked Commander James Herlong and Lieutenant Beth Denicola
2 for their help, to tell us what we're not seeing. We can't be
3 patrolling in every part of that box 24/7, but we were able to
4 feed all the raw data to Lieutenant Beth Denicola and ask if she
5 can develop a model to tell us, based on best science available,
6 what the true impact is to our resources and the magnitude of
7 these incursions. This is where Lieutenant Denicola will come
8 in to explain the model and so I would like to introduce her.

9
10 **LIEUTENANT BETH DENICOLA:** Good morning. Like Lieutenant
11 Commander Brand said, my name is Lieutenant Beth Denicola and
12 I'm here from Portsmouth, Virginia, representing the Atlantic
13 Area. We are a team of operations research analysts and we do
14 work like this for the districts whenever they request our
15 assistance.

16
17 The information that you see here on Mexican lancha incursions
18 is based on the model that we created and the study that we've
19 done over the past two years. We are excited about this. It's
20 the first time that we've been able to estimate the true impact
21 that we're not able to see with the resources available.

22
23 We have an estimated average incursion per year of 1,138 lancha
24 incursions and that's based on information from Calendar Year
25 2013 and 2014. The typical catch per trip that we're using
26 within the model is 800 to 1,500 pounds and something that I'm
27 going to touch on a little bit further is that that's something
28 that we're estimating a minimum catch per trip. We have seen
29 examples of larger lanchas carrying catch upward of 3,000 pounds
30 per trip.

31
32 Over the past two years, our estimated number, based on the
33 model, was 1,525,715 pounds of red snapper poached and that's
34 the amount for a two-year period. Demonstrating the higher end
35 of the catch per lancha, we actually observed on March 30 and 31
36 -- We cited a group of seven lanchas, five of which were seized.
37 These contained 2,589 red snapper and so if you think at about
38 eight pound a fish, that's over 4,000 pounds of snapper per
39 lancha and that's something that we saw in March of 2014.

40
41 We have never had the ability to estimate the incursion rate
42 before because we see so little of their activity and we're
43 unable to maintain 100 percent coverage of that area that
44 Lieutenant Commander Brand showed you and so we built a
45 simulation model, which is the study that I reference, to shed
46 some light on what we don't see with this problem.

47
48 This shows the model and the methodology that we used for the

1 simulation. The inputs to the model, we took data about our
2 asset presence, and so our air assets and our surface assets,
3 and where they were patrolling over the year period. We looked
4 at lancha location preference, the spots of the Gulf where they
5 like to fish, areas with artificial reefs where the snapper may
6 be gathering more, proximity to the border, places where they
7 think they can evade law enforcement more easily.

8
9 All of that played into lancha preference, the location where
10 they like to be, and then lancha behavior we also modeled based
11 on what we've observed, their transit speed and the way that
12 they execute their fishing trips, making multiple stops
13 throughout the duration of the trip.

14
15 We used a probability distribution to model the arrival rate,
16 which is the piece of this that we really don't have visibility
17 on. We don't know how frequently they're crossing our border
18 and we don't know how often and so that's something that -- We
19 seem to be having technical difficulties.

20
21 I will keep talking about the model. The arrival rate is
22 something that we estimated. We used a probability distribution
23 to determine the arrival rate for the model and so with those
24 inputs and then the arrival rate that we used, the model is able
25 to output a likelihood of discovery of Coast Guard assets and so
26 the number of times lanchas were sighted in the model divided by
27 the total number of incursions and so basically how likely are
28 we to detect these lanchas, based on our asset locations?

29
30 The total number of incursions, which is something we haven't
31 had visibility on, the impact to the biomass in pounds and so
32 that's not just the red snapper that is poached by the lanchas,
33 but that's also the red snapper that law enforcement seizes and
34 confiscates from those lanchas. That goes into the biomass
35 impact and then the illicit economic gains as a result of
36 fishing in our waters.

37
38 This shows the outputs of the model itself and all of these are
39 model outputs and so these are our estimates for Calendar Year
40 2013 and 2014 and then the average over the two years.

41
42 This is an effort, like we said, that just began about two years
43 ago and we are continually working to improve this model. It
44 represents a lower bound on the issue and it makes conservative
45 assumptions. For example, it doesn't account for drifting nets
46 like the net that Lieutenant Commander Brand showed you earlier
47 in this presentation, the nets that just drift and kill marine
48 life as they float.

1
2 It doesn't account for those larger lanchas and so the lanchas
3 that are simulated in this model only take 800 to 1,500 pounds
4 of catch, but we have shown that we've seen lanchas that have
5 seized upwards of 3,000 or 4,000 pounds in one trip and so this
6 model doesn't account for those extreme cases that we have
7 observed.

8
9 The model itself, just to kind of briefly walk you through the
10 way it works, it actually simulates lancha crossings of the
11 border and so you have a lancha in the model and it steps
12 through that area that Lieutenant Commander Brand showed you,
13 that red box in the Gulf, and it simulates a lancha moving from
14 area to area and fishing and then it simulates the probability
15 that law enforcement will detect that lancha in different areas,
16 based on where our assets actually were over that year period.

17
18 It steps through an entire year in thirty-minute intervals and
19 then it tallies everything of interest to us and so it tallies
20 the number of incursions and it tallies the number of detections
21 and it tallies sightings, seizures, and it records everything.
22 We run that model multiple times and we take an average over
23 those model replications to come up with these estimates here.

24
25 Like I said, this is a newer effort and we're continuing to
26 refine this model and I wanted to open it up now if there are
27 any questions about the model or the methodology at this time.

28
29 **CHAIRMAN GREENE:** Any questions?

30
31 **MR. PERRET:** I have a question, but it's not about the model.

32
33 **LIEUTENANT DENICOLA:** Yes, sir.

34
35 **MR. PERRET:** I am just curious as to the procedure the Coast
36 Guard uses when they confiscate illegal fish. At the state
37 level, we have to get bids and all that sort of thing and how do
38 you guys handle thousands of pounds of illegal take?

39
40 **LIEUTENANT DENICOLA:** I am sorry and I will turn this over to
41 Lieutenant Commander Brand.

42
43 **LCDR BRAND:** Thank you, Mr. Perret. We'll get that on the next
44 slide. Any other questions?

45
46 **MR. CAMPO MATENS:** Jason, you may be already covering this a
47 little later and if so, that's fine, but where do these fish go,
48 the illegal fish? Where do they go and not just the snapper,

1 but the sharks and the finning or there was a mahi-mahi in
2 there.

3
4 **LCDR BRAND:** Let me get to that. Just to reiterate the model
5 there, we are looking at 1,100 incursions a year and about
6 780,000 to 800,000 pounds of red snapper is what the model is
7 telling us.

8
9 Once we do catch these lanchas, as you can see in the top right-
10 hand picture, we seize them and store them at our Coast Guard
11 Station at South Padre Island. This is an example of about
12 twenty-five or thirty lanchas being stored.

13
14 We seize the gear and we seize the fish. They take it back to
15 the station, as you can see in the bottom right. That's the
16 Coast Guard Station. They actually organize and lay them out
17 and take a picture and they actually weigh the fish now. They
18 have an industrial-sized scale.

19
20 Then they reload the fish back on the boat and take it back out
21 at sea and abandon the fish and so that's what happens. That's
22 the disposition of the illegally-seized fish. Now, the fish
23 that is brought back to Mexico, there is different markets that
24 I assume that they're selling them to, but we don't know the
25 details of what happens to that illegal fish once it gets back
26 to Playa Baghdad.

27
28 **MR. MATENS:** Those fish that are going back to Mexico, I'm like
29 Corky and I'm curious. Do you think they're staying in Mexico
30 or are they finding their way back to the land of the round
31 doorknobs here?

32
33 **LCDR BRAND:** That's a very good question, Mr. Matens. We can't
34 be positive. We can't be for certain to track the red snapper
35 once they hit the markets in the U.S. or the restaurants. That
36 would be great to be able to do, to apply additional violations
37 of Lacey Act. At this time, we don't know for certain where the
38 tracking of the fish goes.

39
40 **MR. MATENS:** This may be obvious or redundant, but the first
41 slide there was -- Where I go to Mexico, they call those pangas,
42 was Number 5, something Number 5. I am assuming that these
43 fishermen are operating as independent contractors, but there
44 are organizations in Mexico that are running all of this and is
45 that a correct statement or not?

46
47 **LCDR BRAND:** There is different fish camps down there that are
48 organized in an organized manner and as Captain Hester has been

1 more involved in the Mexico side, he may want to address that
2 with you when we're complete. Once I finish this slide, I will
3 bring Captain Hester up and we can talk about the Mexico
4 organization with these camps.

5
6 Turning back to this slide, as I mentioned, this is the lancha
7 graveyard up in the right-hand picture. What we do is we just
8 periodically destroy all of these lanchas and then fill it back
9 up again. We have repeat offenders and we have one guy that we
10 know pretty well. We have actually caught him fifteen times and
11 so that's a common occurrence. You get so you know these guys
12 pretty well.

13
14 As I mentioned, we seize the lancha and the gear and the fish
15 and then we return the fish to sea, but during the disposition
16 of this case, we work closely with NOAA and we talk to Cindy and
17 we talk to General Counsel and NOAA OLE to make sure we're all
18 straight on the procedures of the disposition. We turn the crew
19 over to CBP, who then deports them back to Mexico.

20
21 The picture on the left is an example of a large gillnet that
22 has been abandoned and it just kind of shows the sheer
23 magnitude, the sheer size, of these gillnets. It requires a
24 forklift and a dually truck and it fills it completely up. I
25 have another blown-up picture of that over here to the right.

26
27 The picture on the bottom right is something that Lieutenant
28 Denicola mentioned in her brief. In one day, we seized five
29 lanchas and there was an additional three or four that we didn't
30 catch and from those five lanchas, there was 2,589 red snapper
31 seized from those boats and so this is a huge problem and I'm
32 glad that we can share these results with you today and,
33 finally, we would like to ask you for your help.

34
35 We have a blown-up wanted poster up here that Commander Deptula
36 developed with his local partners and we really need your help
37 to have eyes on the water for us and report this activity to us.

38
39 As a member of this council for the last two-and-a-half years, I
40 have witnessed the sacrifices and the commitment to rebuilding
41 the red snapper and making it a sustainable fishery for future
42 generations to fish and so it really bothers me when I see this
43 kind of activity going on when we can fish seven days or ten
44 days a year and catch two fish a day and we have guys that have
45 been caught fifteen times with upwards of 500 or 600 red snapper
46 per boat.

47
48 As you continue to manage this fishery, they continue to

1 freeload off of your sacrifices. It's not right and so we want
2 to ask your help and we can meet with the Law Enforcement AP at
3 the next session to continue our efforts in combating this
4 poaching activity and so that's all of our slides today and now
5 we would be open for questions from anybody in the team here.
6 We have subject matter experts locally. Captain Hester has
7 knowledge of Mexico and Commander Sundland on the enforcement
8 activity as well as the legal side.

9
10 **MR. PEARCE:** First off, thanks for all your hard work and from
11 the time I've been on this council, through all the events that
12 we've had, from the BP event to Katrina, you guys have done a
13 good job in working with the council and with NOAA to make sure
14 things are done correctly.

15
16 One thing I want to assure you is I don't think we have any drug
17 smugglers in this room, but I think some of us are on drugs from
18 time to time and so I think you're safe here and, again, your
19 last comments were right on. We work very hard to make sure we
20 have fish for everyone in this country and things like that
21 probably go back to Mexico, but come back to this country affect
22 us in many, many, many different ways.

23
24 We have got to figure out how to do a better job to do it and if
25 you look at the fish that you had in those pictures, those were
26 all large adult, big fish and that's what we have done at this
27 council, is to bring that to fruition, to get these fish to the
28 age that we need them to grow and all and so your job is a tough
29 one and it's an area that it's tough to cover and it affects us
30 and I'm just so glad that Roy hasn't tried to take it out of our
31 allocation yet, that million-and-a-half. So far we're safe with
32 that, but I mean at least today.

33
34 **MR. MATENS:** They're thinking about it.

35
36 **MR. PEARCE:** They're thinking, yes. My brother Camp over here
37 has got me nervous, but he wants to take it out of the
38 commercial allocation knowing him, but I appreciate all you're
39 doing and whatever we can do to help you.

40
41 The IUU stuff is just very important to this country and not
42 just to this council, but there is so many other things, when
43 you look at the unregulated fisheries and the child labor in the
44 different countries around this world that are affecting
45 everything we do in this country and how do we control that and
46 this is a big part of the problem, but it's a much bigger
47 picture that we have to worry about with IUU stuff and at some
48 point, we've got to try to get a better handle on how to do that

1 and, personally, anything I can do to help you guys, you know
2 I'm here to try to help and I appreciate all you do and
3 everything you've done so far for this council and so keep up
4 the good work.

5
6 **CHAIRMAN GREENE:** Thank you, Harlon. Jason, you guys did a
7 fabulous job with the presentation and I certainly appreciate
8 that. Next up is Robin.

9
10 **MR. ROBIN RIECHERS:** Jason, certainly thank you and on behalf of
11 Texas Parks and Wildlife and our law enforcement folks -- If
12 they were here, I know they would say thank you as well for the
13 cooperation that you all have down there in trying to deal with
14 this issue.

15
16 I've got a couple of questions. I want to explore the numbers
17 just a little bit, if I may. In the presentation, you basically
18 suggested that based on your sightings you really believe that
19 even though in the last couple of years you've had an increased
20 sighting rate, you really believe that goes back in time and do
21 you care to elaborate on that a little bit, about why and the
22 justification of that? Then I want to explore the actual catch
23 numbers a little bit.

24
25 **LCDR BRAND:** Sure. The reason we believe it's been a steady-
26 state problem is just due to the fact that the increase in hours
27 have resulted in an increase in sightings and interdictions and
28 so we have put more effort down there and we've seen success and
29 results and so it's just kind of with less hours you see less
30 and so just basically that's kind of the formula of why we
31 believe it's steady-state.

32
33 Since my time here, we have taken nearly a hundred boats off the
34 water. However, we still see continued increase in lanchas and
35 so it hasn't had an effect yet. We haven't hit that tipping
36 point that prevents them from coming back.

37
38 **MR. RIECHERS:** I definitely appreciate that and so that means
39 really what we're seeing here is that while you're estimating
40 this for 2013 and 2014, we might even be able to apply it
41 backward in time, based on your kind of expert opinion about
42 that.

43
44 The other part to the question, I think, has to do with the
45 averages and the actual catch rates and I think it was the other
46 presenter there who spoke to the fact that you were seeing --
47 You kind of based it on these what we'll call median kind of
48 trips, where the poundage was lower. What is the observation

1 rate of those, in kind of a percentage fashion, if you have it,
2 of those trips where you see those catches up in the 3,000-pound
3 trip limit?

4
5 Do you all have enough there to know whether we're really
6 working with kind of an average between 800 and 1,500 pounds or
7 whether we have enough belief that there's a proportionality of
8 enough of those larger trips that that average could even be up
9 in that scale more?

10
11 **LIEUTENANT DENICOLA:** Part of the challenge with this issue is
12 that we have such low visibility on what we believe is actually
13 happening and so if you looked at the likelihood of discovery,
14 you are looking at percentages from 12 to 18 percent over the
15 past two years and so of what we see -- I mean we'll see
16 everything from empty lanchas that we seize to those couple of
17 cases where we have more than 4,000 pounds.

18
19 Off the top of my head, I don't know those exact percentages,
20 but the reason we chose to model it the way that we did was
21 because we thought it would be more valuable to provide what we
22 can justify as the lower bound to the problem instead of trying
23 to guess, based on such limited information, what we're actually
24 seeing. Does that answer your question, sir?

25
26 **MR. RIECHERS:** Yes, I think it does and now that I look back,
27 you really had thirty-three intercepts there in the last year
28 and so you're probably talking maybe one or two observations at
29 that higher level and so I understand why you did it the way you
30 did it, yes. Johnny, I have another question, but it's probably
31 for the Center and I can either defer it or however you would
32 like.

33
34 **CHAIRMAN GREENE:** No, if you would like to go ahead.

35
36 **MR. RIECHERS:** Roy, as you see these numbers and these
37 estimations, is there going to be a way we can consider these in
38 regards to the stock assessment at some point in time, because
39 obviously this poundage of removal is not insignificant.

40
41 **DR. PONWITH:** The answer is yes, we've been keeping an eye and
42 the Coast Guard has been very good about keeping the Center in
43 touch with the data that they've been collecting and they've
44 collected not only the counts and the weights of the fishes that
45 they've gotten, but they've also gotten some individual weights
46 and have talked to us about it.

47
48 When we originally heard about it, the numbers were small, but I

1 think as we see the results from the model and as we see the
2 results that the fact that there's a correlation between
3 increased amount of effort in observing this and increased
4 numbers of incursions, I think that it's certainly something
5 that we'll take a good long look at and figure how we should
6 deal with that in the next assessment.

7
8 **MR. PERRET:** Thank you very much and, Jason, Commander,
9 Lieutenant Commander, Captain, Lieutenant, I hope I didn't miss
10 anybody, thank you very much. All of us in this room have been
11 impacted by storms and I am thinking of Katrina and the oil
12 spill recently and all and you guys, your agency, does a
13 tremendous job, an absolutely tremendous job.

14
15 I had the opportunity once to sit on your annual or semi-annual
16 -- It was in Providence, Rhode Island and it had to do with
17 budget for the Coast Guard and I was absolutely amazed at the
18 amount of money your agency has dedicated for fisheries law
19 enforcement, with all the other responsibilities and so on you
20 have, and so thank you very much for the excellent job all of
21 you do.

22
23 I have a suggestion and I'm sure the attorney can tell me right
24 off why it can't be done that way, but it seems to me that
25 confiscated product could be donated to charity or something
26 like that.

27
28 I know in the states that I've worked in that we have to get
29 bids and we sell it and then we keep the evidence and all that
30 and the money is turned over and so on or we can bring it to
31 charity.

32
33 Now, one of the problems I ran into is we bring it to the
34 charities, but then they wanted the fish filleted and all that
35 stuff and we're not in that business, but I am sure your mandate
36 prevents you from donating to charity, but if at all possible, I
37 think that would probably be beneficial to a lot of poor people
38 if it could be done that way. That's number one.

39
40 Now, my question is for Robin. Robin, with the model showing
41 1.5 million pounds taken in the last year, can you give us any
42 idea what Parks and Wildlife law enforcement people have done
43 insofar as --

44
45 **LCDR BRAND:** Just one correction, Corky. That's the last two
46 years. The 1.5 million pounds was in the last two years.

47
48 **MR. PERRET:** Anyway, Robin, has Parks and Wildlife -- I'm sure

1 they've had similar experiences, your JEA guys and all that, and
2 do you all have any kind of estimate on what your people have
3 done or was all of this JEA work?
4

5 **MR. RIECHERS:** I will ask the Lieutenant here whether or not
6 they've included the Parks and Wildlife in here. I was under
7 the assumption that this was all law enforcement activities, but
8 I don't know that for a fact.
9

10 **LCDR BRAND:** That is correct. The sightings and the
11 interdictions are from all government agencies as well as good
12 Samaritans that have called us.
13

14 **MR. PERRET:** One more. Texas is a very big state and I don't
15 assume you all had this problem in any parts of the Gulf off of
16 some of the other states and it was only in that basically south
17 Texas area.
18

19 **LCDR BRAND:** That's correct and we have seen them venture
20 further north. The rigs are upward of seventy miles and as
21 we've heard from public testimony from Captain Hickman's folks
22 in the Association, they are seeing them up near Corpus Christi
23 and so they're getting further and further north.
24

25 **MR. PERRET:** Again, thank you all very much for your work.
26

27 **LCDR BRAND:** I would like to just let Captain Hester address the
28 donation question, the charity question, and the question about
29 the organization of the Mexican camps down there.
30

31 **CAPTAIN HESTER:** About the donation of the fish, that is
32 something we're interested in doing if we possibly can. We do
33 have some concerns about the catch and one of the reasons we
34 don't sell it is because it's not, as you can see in the
35 pictures here, maintained to proper standards.
36

37 It's not kept on adequate ice and it's not properly preserved
38 and so there is some health concern for us and whether it's
39 refit for sale, rather for man or beast, and so that's one of
40 those concerns that our legal folks have. Rather than throw the
41 good Lieutenant Commander under the bus, I will just say we are
42 working on it and we would like to do it if we can.
43

44 Then to the question about the lancha camp owners, because we
45 cannot prosecute these people and incarcerate them, I am allowed
46 to talk to them and so we have our intelligence people that have
47 carried out hundreds of custodial interviews with these Mexican
48 lanchamen.

1
2 Of course, you're mixing fact with fiction, but that's our job,
3 is to figure out that, okay, here is the vein of truth running
4 through that. We know, as a result of those interviews and a
5 lot of other work that we are doing, a great deal about the
6 lancha camps that are operating the lanchas out there.

7
8 The Mexican lanchamen report approximately eight major camps
9 that are operating with over 100 lanchas that get underway every
10 day, only some of which cross the border, but they cross our
11 border every day, to the tune of 1,100 per year. That's a
12 pretty great rate. Does that answer your questions about the
13 lancha camps and about what we do with the catch?

14
15 **MR. MATENS:** Thank you for your comments and you guys have heard
16 a whole lot about how great a job we think you guys are doing
17 and I've been on the water in the Gulf all my life and your
18 organization has a wonderful reputation here in the Gulf and
19 certainly in Louisiana.

20
21 However, speaking about the business model of these guys, you're
22 really just dealing with the sharecroppers. You're dealing with
23 employees and I know how that works and I am curious and if you
24 can't speak to this, please don't, but I am curious whether your
25 organization might be moving forward to see if something else
26 can be done maybe with other enforcement agencies in the United
27 States. I am assuming you can't chase them across the border
28 and is that correct?

29
30 **CAPTAIN HESTER:** Actually, sir, that's one of the paradigms
31 we've been able to change. We've been able to document and
32 establish, for the Coast Guard purposes, hot pursuit and so the
33 classic chase them across the county line with the lollipops
34 going, the same thing.

35
36 As long as they stay outside of Mexican waters, I will chase
37 them and so just this past weekend, we seized two of them and we
38 had chased three. The third one, we chased for thirty-five
39 miles into the Mexican EEZ, the exclusive economic zone, but
40 they remained outside of Mexican territorial waters and so I
41 could maintain a hot pursuit of them all the way down the coast
42 and we did.

43
44 **MR. MATENS:** That's great, Captain. That's wonderful. Now, you
45 know nothing much changes until the risk/reward changes. These
46 guys have a lot of reward and the only risk is losing the boat
47 and it just seems to me that this is going to go on for a while
48 and this is not going to stop tomorrow.

1
2 **CAPTAIN HESTER:** Sir, when you talk about the reward, monetarily
3 alone, and we were advised to remove it from our slides, because
4 those numbers are subject to interpretation and interpretation
5 can be wild, but we estimate the value of the fish removed from
6 those waters to be between -- Jason, correct me if I get these
7 figures wrong, but between \$3.8 and eleven-and-a-half million
8 dollars, depending on whether you're talking retail or wholesale
9 value on those fish. That's not chump change and where I'm
10 from, that will keep your lancha camps running.

11
12 **MR. MATENS:** Where I'm from in south Louisiana, that will pay
13 the light bill. Based on those numbers, it would be difficult
14 for me to believe that those fish aren't entering the United
15 States.

16
17 **CAPTAIN HESTER:** Those numbers are based on the figures of the
18 value for sale here. I would -- We do see spikes in their
19 activity during Semana Santa, Holy Week, that leads us to also
20 believe in a large Catholic nation that a number of that is
21 probably for internal sale, but whether -- You asked earlier if
22 I could answer much more about engagement with law enforcement,
23 other law enforcement entities, and what I am comfortable
24 telling you, sir, is that we have a very tight cooperation
25 happening with our RECOM team, with our Regional Coordination
26 Mechanism, which is our law enforcement partners, state, local
27 and federal, in Texas and on a national level.

28
29 As I said, as soon as we're done here, I will be driving back to
30 Louisiana and changing out my bag for the one going down to
31 Mexico and we'll be working international as well with SEMAR.

32
33 **MR. MATENS:** Thank you again and I'm taking too much of your
34 time and I wanted to leave with one thought. What little I can
35 do, and I'm sure everyone on this council can do, to make this
36 better for you, we will do. We have a pretty good relationship
37 with your Lieutenant Commander Brand.

38
39 **CAPTAIN HESTER:** You have our best and brightest there, sir, and
40 thank you so much.

41
42 **CHAIRMAN GREENE:** We have a few more questions from Mr. Atran,
43 Sanchez, Roy, and then Harlon. That's what I have on the list
44 for now.

45
46 **MR. ATRAN:** I had two questions and one of them Robin already
47 asked, about providing the catch estimates to the Science Center
48 to incorporate into stock assessments. My other question is

1 what is the reason why these vessels are coming into U.S. waters
2 when they could legally fish in their own waters? If we could
3 address the reason why, maybe we could reduce the amount of
4 incursions. Is it because the resource is overfished in their
5 waters or it's too difficult to comply with the regulations in
6 Mexico? Can you answer that question of why they're doing it?

7
8 **LCDR BRAND:** Yes, Steve. Those resources are fished out of
9 Mexican waters, due to poor regulation. As the Captain
10 mentioned, sometimes they discuss in the interviews about why
11 they do it and they tell us that they can catch upwards of three
12 time as much by coming into the U.S. as by fishing in Mexican
13 waters.

14
15 **CAPTAIN HESTER:** We should talk about the average weights in
16 south Texas and the weights of the fish we're seeing further
17 north.

18
19 **LCDR BRAND:** The average weight that they're catching is -- You
20 know they're catching the big, healthy red snapper, as you can
21 tell, and as they start to fish out even the U.S. waters, they
22 continue to fish further north and so, as we mentioned before,
23 they can catch 800 to 1,500 pounds a trip when they come to U.S.
24 waters and they can't get anywhere near that when fishing in
25 Mexican waters.

26
27 **MR. JOHN SANCHEZ:** I just wanted to ask, is there something that
28 can be done where you can keep a guy from coming back fifteen
29 times after you've caught him fifteen times? It seems kind of
30 absurd that you can't get that guy off the water. I understand
31 and I'm sure there's a million legal reasons why you can't do
32 it, but there has got to be something that can be done to
33 address that.

34
35 **LCDR BRAND:** International law prevents incarceration for
36 fishery violations from foreign fishing vessels. In the
37 Magnuson-Stevens Act, it specifies that as well and so that's
38 kind of what we're up against of trying to incarcerate foreign
39 fishing vessels for fishing in our waters and so that's the law
40 and that's what we follow. We have to follow that.

41
42 **MR. WILLIAMS:** Thank you, Jason. You said there were about
43 eight camps, or perhaps it was Captain Hester that said eight
44 camps, but those are the financiers of this operation, I guess,
45 right? Those are the central business operations and they
46 provide the guy who has been captured fifteen times with a new
47 boat the next time he comes back and is that how it works?

48

1 **LCDR BRAND:** That's correct.
2
3 **MR. WILLIAMS:** Are these fish houses, standard fish houses, in
4 Mexico? I mean I guess they have a legal side as well as an
5 illegal side and this isn't the only thing they are doing and
6 they are probably legally fishing Mexican waters as well?
7
8 **LCDR BRAND:** I will let Captain Hester add to that again. He is
9 more familiar with that area.
10
11 **CAPTAIN HESTER:** Legal in Mexico and regulation in Mexico is
12 pretty much what you see in the press. They have their hands
13 full with a lot of major, major problems, people skinning each
14 other and terrible violence. That said, so a fish house in
15 Mexico is not going to look like a fish house down here in Bayou
16 LaBatre or something. It's a different place with lesser
17 regulation.
18
19 Sort of throwing salt in the wound, we did have a recent press
20 release sent to us from the newspaper in Tamaulipas, the state
21 abutting Texas there, and right at Playa Baghdad, the CONAPESCA
22 fishing organization is donating new engines and a new boat to
23 the fishermen working in Playa Costa Azul.
24
25 This was in their press and they are proud of giving them some
26 new four-stroke engines that are more efficient and better to
27 operate and so we do have a problem with sort of mismatched
28 messages there.
29
30 We are checking against the photos that were available attached
31 to that press release to see if any of the gentlemen that we
32 catch are in those press releases, because that's something we
33 would like to be able to tell Mexico about.
34
35 **MR. WILLIAMS:** One follow-up. You said you destroyed the boats,
36 the lanchas themselves are destroyed. Do you destroy the
37 engines too or are those sold? Can you sell those?
38
39 **CAPTAIN HESTER:** They are all destroyed, sir.
40
41 **MR. WILLIAMS:** Everything is destroyed? Does international law
42 require that?
43
44 **CAPTAIN HESTER:** Coast Guard regulations, sir, our Coast Guard
45 policies. We are not in the resale business. We don't do that
46 and the vessels are not particularly safe. Several of them have
47 sunk out from underneath us when they get to chasing them. They
48 beat them up pretty hard. We've got videos that go on too long

1 and we decided not to show them to you, because they are mostly
2 rather boring, but in the exciting parts, you can see the
3 Mexican lanchas leaping right out of the water and they are just
4 not well built and so we have had several of them crack and sink
5 and that's why we catch them.

6
7 We have also had several sink or take water over the side and
8 roll over and so we would not consider these vessels safe for
9 operating, as you've seen, up to seventy miles north of the
10 border and we have seen them many, many miles out to sea, fifty
11 or sixty miles out to sea. They are not great boats and the
12 engines aren't much better.

13
14 **MR. BOYD:** Jason, a quick question for you. Is there any way to
15 mark certain fish so that they can be identified later in the
16 chain of distribution?

17
18 **LCDR BRAND:** Not to my knowledge, Mr. Boyd. If you have any
19 recommendations or any ways to show us how to do that, that
20 would be great, to be able to track the fish.

21
22 **MR. BOYD:** I am not a scientist. I would think that there is
23 bound to be some way, either genetically or fin clipping or some
24 kind of a tracking device, that maybe later we could find one
25 someplace to get some leads, but that would be a big operation,
26 I would think.

27
28 **LCDR BRAND:** Some kind of tag and release, I guess.

29
30 **MR. WALKER:** Thank you, Jason. I'm grateful for all you and the
31 Coast Guard can do for us. The thing I would like to ask about
32 is the gear. Are they using a hand line or a longline or what
33 kind of gear are they mainly using?

34
35 **LCDR BRAND:** They use three different types of gear and let me
36 go back here. That's an example of the gillnet that they use.
37 They just let it set and soak for five to seven hours and then
38 retrieve it. They also use longline gear and you can see that
39 in the bottom left picture. That's a bait box below the Coast
40 Guardsman there, full of the hooks and the bait. Then they also
41 use hand line gear when they work the rigs further north,
42 because they are not able to lay the longline around the rigs.

43
44 **MR. WALKER:** I figured the nets were probably for the sharks and
45 so forth. As far as the -- That was one thing you were asking,
46 the platforms. I was wondering if they fished natural bottom or
47 if they fished the platforms or do they have GPS? What kind of
48 equipment is on them?

1
2 **LCDR BRAND:** They typically have GPS. I think they probably all
3 have their favorite fish spots that they plug in and they fish -
4 - I think they have different favored areas. Different camps
5 have different places they like to go within that red box that I
6 showed you earlier.

7
8 **MR. WALKER:** Then they mainly target -- I guess they're
9 longlining and they're going to be targeting the larger fish and
10 I noticed that there was very little ice on the fish, but I
11 would assume that they're targeting the larger fish that would
12 probably hold up better with less ice.

13
14 **LCDR BRAND:** That is true and what you can't see is once they
15 fill the fish box, there is probably about a hundred fish that
16 are just lying in the bottom of that boat with all the gas cans
17 and the oily water and so that's part of the reason it's hard to
18 do much with the fish. It's in pretty bad shape once we come
19 across it.

20
21 I wanted to also make sure that -- These wanted posters, we're
22 going to leave a big stack of them in the back and so we would
23 like you guys to all take these and make copies and take the
24 numbers down and put them in your phones and pass them out to
25 your associations. Get the word out as much as you can for us
26 to -- Anybody that sees these boats can either tell us, if they
27 can, on the radio when they're out underway or when they get
28 back where they were located, to help us try to find these guys.

29
30 **CHAIRMAN GREENE:** All right. Sounds good.

31
32 **MR. PEARCE:** A quick comment. Because of the hard work of this
33 council, the harvesting component of the snapper fishery is
34 doing a lot better than it has done in the past and make no
35 mistake that these fish are not staying in Mexico.

36
37 They are undermining the markets that are developed by our hard-
38 working fishermen and dealers in this country. A lot of this
39 fish is in New York and a lot of this fish is in Panama City and
40 so all the work of this council is clearly being undermined by
41 these type of fisheries and so I want to make that very, very
42 clear, that this is affecting all of us in this room.

43
44 **LCDR BRAND:** Yes, sir.

45
46 **CHAIRMAN GREENE:** Okay. Any more questions? I don't see any
47 more.

48

1 **LCDR BRAND:** For everyone in the audience that may have
2 questions, we would be more than happy to meet you all in the
3 lobby to answer those questions after this presentation or at
4 the next break. I know there's probably a lot more questions
5 and the team here can't stay for the entire council meeting and
6 so they will be departing later today and so please take the
7 opportunity to talk with them before they have to head out.

8
9 **CHAIRMAN GREENE:** Okay. Thank you, Lieutenant Commander Brand.
10 That was a very good presentation and good dialogue and I
11 appreciate all of the hard work and effort that you guys have
12 put into it and I thought it was very enlightening. I have
13 never been around that and had no idea that that was going on,
14 but thank you very much for your presentation.

15
16 **LCDR BRAND:** Thank you, Mr. Chair.

17
18 **CHAIRMAN GREENE:** With that, we will try and move on back to our
19 agenda. We're going to pick back up on Item Number VII, which
20 is Draft Amendment 39. At this point, I am going to ask Dr.
21 Lasseter to go over just a couple of little brief things to get
22 us ready for the presentation, which will very shortly ensue.

23
24 **DRAFT AMENDMENT 39 - RED SNAPPER REGIONAL MANAGEMENT**

25
26 **DR. LASSETER:** Yes and I would like to help you understand how
27 staff has laid out the action and then we're going to ask Kiley
28 Dancy from the Mid-Atlantic Council to come up and speak about
29 the summer flounder management. This is in your briefing book
30 and it's Tab B, Number 8, Regional Management of Recreational
31 Red Snapper, and if we could go to page 8. That is where Action
32 1 begins.

33
34 The IPT has restructured the document and in this first action
35 for the type of regional management, the regional management
36 approach alternatives available to you, Preferred Alternative 2
37 remains the delegation option that is currently selected as
38 preferred and you still have the Preferred Option c of allowing
39 it to sunset after three calendar years of the program.

40
41 We replaced the previous Alternative 3, which was a council-
42 implemented, council-directed, type of regional management plan,
43 which is essentially the same as no action. At any time, the
44 council can decide to assign different regulations to the
45 different regions.

46
47 What we have replaced that with is an Alternative 3 and 4 and 3
48 and 4 are both structured based on the summer flounder model of

1 management in the Mid-Atlantic region and one of them we are
2 regarding as the fast track and the other as a slow track and
3 the difference between the two is that under Alternative 3,
4 there would only be one stage of the review process and in
5 Alternative 4, there would be two.

6
7 For both of these alternatives, they are based on the regions
8 developing conservation equivalent measures for how they will
9 manage their portion of the quota and in Alternative 3, those
10 conservation equivalency measures would be written up in a
11 proposal that the regions would submit to NMFS for review.

12
13 In Alternative 4, the regions would still develop those
14 proposals, but they would be submitted first to a technical
15 review committee for review, for suggestions of modifications,
16 and then final proposals would be sent on for NMFS for the
17 review.

18
19 We call this the slow track, because currently we do not have
20 this type of a review body and Ms. Dancy will go into more
21 detail as to what their type of review committee consists of,
22 but I wanted to present this to you first, so you kind of get a
23 sense of, one we're providing an alternative where we would need
24 to create an additional review body and then it goes to NMFS
25 review and then the other, Alternative 3, does not use that
26 additional review body.

27
28 With that, I am going to ask Ms. Dancy from the Mid-Atlantic
29 Council, and she is the plan coordinator for the summer flounder
30 fishery, to speak to us a little bit.

31
32 **MAFMC PRESENTATION ON SUMMER FLOUNDER MANAGEMENT**

33
34 **MS. KILEY DANCY:** Good morning, everyone, and thank you. Thank
35 you for having me here and I'm very happy to be here where it's
36 warm and sunny, as opposed to where it's snowing up north. My
37 name is Kiley Dancy and I am the staff at the Mid-Atlantic
38 Council with the lead for the summer flounder plan and I have a
39 presentation about summer flounder management and specifically,
40 conservation equivalency in the Mid-Atlantic and how that works.

41
42 Summer flounder are cooperatively managed through the states by
43 the Atlantic States Marine Fisheries Commission and the Mid-
44 Atlantic Fishery Management Council. The commission and the
45 council have complementary fishery management plans for summer
46 flounder and they make joint decisions on annual quotas and
47 management measures, as well as any modifications to the plans.

1 The recreational fishery for summer flounder is allocated 40
2 percent of the total allowable landings and each year, the
3 council and the commission's Summer Flounder Management Board
4 decide whether to manage the fishery for the upcoming year using
5 either coast-wide measures or conservation equivalency, which I
6 will describe in the next slide. Each year since 2001, the
7 council and the commission have chosen conservation equivalency.

8
9 For summer flounder, conservation equivalency means that each
10 state or region is allowed to establish its own set of
11 recreational measures, including possession limit, size limit,
12 and season, as long as the combined effect of the measures is
13 equivalent to that of the specified set of federal coast-wide
14 measures that would achieve the same level of conservation.

15
16 Under conservation equivalency, the council and the commission
17 do choose a set of non-preferred coast-wide measures that are
18 expected to constrain landings to the harvest limit and the
19 combination of state or regional measures is supposed to be
20 equivalent to that set of non-preferred coast-wide measures in
21 terms of ability to constrain landings.

22
23 Under conservation equivalency, the federal waters measures are
24 put in the federal regulations, but they are waived and then
25 anglers are subject to the regulations of the state in which
26 they land.

27
28 I will describe a little bit of the history of how conservation
29 equivalency has evolved. From 1993 to 1998, coast-wide measures
30 were in place, consisting of the same bag, size, and season for
31 all the states in the management unit. The problem with coast-
32 wide measures was that, due to seasonal migrations of summer
33 flounder, the summer flounder are available to different states
34 at different times of the year and so coast-wide measures were
35 having different impacts by state and tending to
36 disproportionately negatively affect some states, most often the
37 southern states.

38
39 In 1999 and 2000, interim conservation equivalency measures were
40 used which allowed each state at the time to decide between
41 implementing either a specified set of coast-wide measures or
42 choosing an equivalent modified set of measures that were
43 theoretically conservationally equivalent, but the results of
44 leaving this choice to each state without having appropriate
45 guidelines in place was that the necessary coast-wide reductions
46 were not being met and so states were sometimes selecting the
47 coast-wide measures because they impacted that state's fishery
48 less than the amount that was required for the coast-wide

1 reduction and so it ended up resulting in coast-wide reductions
2 that were not being met and the fishery was exceeding its
3 landings limit.

4
5 In 2001, the plan was modified to put the system permanently in
6 place, but also to modify the way that it worked to ensure that
7 the system was likely to constrain landings to the harvest limit
8 and so this modification specified that the system would consist
9 of an annual decision by the council and the commission between
10 coast-wide measures or state-by-state conservation equivalency.

11
12 The system was set up to be all or nothing and so that is the
13 individual states could no longer choose between the coast-wide
14 measures or the modified state measures and it was either all
15 states were under coast-wide measures or all states were under
16 conservation equivalency.

17
18 Then in 2006, the council and the commission added the option to
19 form voluntary regions of adjacent states that had identical
20 measures and although that's been in the plan for several years,
21 regional conservation equivalency was only implemented for the
22 first time in 2014.

23
24 I am going to describe now the annual process that we go through
25 for setting recreational measures. The recreational fishery is
26 managed through an annual evaluation process and first, in
27 August of each year, the recreational harvest limit is set
28 jointly by the council and the commission.

29
30 Next, in November, the Monitoring Committee reviews fishery
31 performance and recommends measures that constrain the landings
32 to the harvest limit and so the monitoring committee is a joint
33 committee of the council and the commission that consists of
34 council staff, commission staff, state biologists from each
35 state, NMFS Regional Office staff, and the species scientists
36 from the Northeast Fisheries Science Center.

37
38 The Monitoring Committee's responsibility is to review the
39 fishery performance and make a set of recommendations that
40 includes a recommendation for either coast-wide measures or
41 conservation equivalency and those recommendations are provided
42 to the council and the commission.

43
44 Also in November, we have an advisory panel meeting to get
45 recommendations and comments from our Summer Flounder Advisory
46 Panel. Then in December, the council and the commission review
47 those recommendations and makes recommendations for coast-wide
48 or conservation equivalency recreational measures.

1
2 If they were to choose coast-wide, they would specify what those
3 measures would be and the council staff would package and submit
4 those to NMFS for rulemaking, but if they choose conservation
5 equivalency, as they typically have, there is a little bit more
6 to the process and the first step of that process involves the
7 commission's Technical Committee, which is actually composed
8 mostly of the same people that are on the Monitoring Committee,
9 meaning primarily the state biologists, and they do most of the
10 technical work for this part of the process.

11
12 That group meets to evaluate state proposals for management
13 measures and those proposals originate from the state fisheries
14 divisions and are evaluated by the Technical Committee for
15 technical merit and the proposals are based on regional or state
16 data and they include modifications for any reductions or
17 liberalizations that are needed and they often include multiple
18 options for combinations of measures in each state.

19
20 Then in February, the commission's board meets without the
21 council and reviews and approves a set of options for state or
22 regional measures and so after the board approves those options,
23 the states are responsible for implementing those measures and
24 often states will choose from a set of measures, from a few
25 different options, after taking them out for public comment, if
26 multiple options have been approved by the board.

27
28 In the background of this process, the council staff is
29 preparing and submitting a specifications package to the agency
30 that contains conservation equivalency as the preferred
31 alternative and then, finally, sometime after all the state
32 measures have been decided on, the commission will send a letter
33 to the NMFS Regional Office that certifies that the combination
34 of state and regional management measures meets the requirements
35 for constraining landings to the harvest limit and so the
36 ultimate authority for implementing either coast-wide measures
37 or conservation equivalency lies with the agency and so they
38 have to have some communication from the commission that the
39 combination of measures is expected to be sufficient.

40
41 A few quick notes on compliance. Under conservation
42 equivalency, if a state either does not submit a proposal or
43 submits a proposal that's inconsistent with the conservation
44 equivalency guidelines, that state would be assigned the
45 precautionary default measures and these are a set of measures
46 that are voted on by the council and the commission when they
47 choose conservation equivalency.

48

1 That's a set of measures that would achieve at least the
2 necessary coast-wide percent reduction in each state and they
3 are intended to be generally unappealing. I don't believe they
4 have ever been implemented in a particular state, but if a state
5 is assigned those precautionary default measures, they do have
6 an additional opportunity to submit revised proposals.

7
8 Another quick note on compliance is that the states do have to
9 comply with the elements of the commission's FMP. For example,
10 they can't just refuse to implement the precautionary default
11 measures if they are assigned that, because if states are deemed
12 out of compliance with the FMP, they can have their fishery shut
13 down by the Secretary of Commerce and that is under the
14 authority of the Atlantic Coastal Fisheries Cooperative
15 Management Act and that provides some regulatory teeth to the
16 Atlantic States' actions, although this consequence has actually
17 never happened. It is worth noting, as you probably are aware,
18 the Gulf States Commission does not have this similar authority.

19
20 How is the harvest limit allocated by state or by region?
21 Summer flounder have been managed on a state-by-state
22 conservation equivalency basis until last year, in 2014, and so
23 the state-by-state allocations are -- They come in the form of
24 harvest targets for each state that are derived by taking the
25 coast-wide harvest limit and then applying the proportion of
26 landings by state from 1998 and so this base year was used
27 essentially because it was the last year that coast-wide
28 measures were in place.

29
30 Later years would be confounded by the effects of different
31 regulations by states and it has been argued that earlier years
32 reflected totally different fishery conditions and so the base
33 year was reconsidered early on in the process and it was
34 ultimately written into the plan in 2003 and the technical
35 committee did consider some other options, but they decided that
36 1998 was the best option.

37
38 There has been a lot of debate and criticism of the state-
39 specific measures and the 1998 base year as the years have gone
40 by, especially in recent years. These frustrations have been
41 exacerbated by apparent shifts in availability for summer
42 flounder, which are thought to be due to climate change or
43 population expansion as the result of rebuilding or some
44 combination.

45
46 This is a big factor in the recent decision to shift toward
47 regional management. Some states have been continually
48 exceeding their harvest target and other states have been

1 underperforming under this system and so the states that have
2 regularly exceeded their targets have had their management
3 measures increasingly tightened and they have argued that the
4 1998 base year is outdated and should be reconsidered, in light
5 of recent information.

6
7 Then that tightening of the regulations in those states has also
8 led to states -- To increasing discrepancies in regulations
9 between neighboring states, which has led to some confusion and
10 conflict in shared waters and some states basically think that
11 the 1998 base year either was originally unfair or is no longer
12 appropriate and other states are arguing that abundance is
13 increasing over the entire management unit and the allocation
14 shouldn't be changed.

15
16 With increasing tension over this issue and pressure to
17 reevaluate, the coast-wide measures were more seriously
18 considered last year, in 2014, but ultimately not chosen and the
19 commission did decide to attempt to smooth out some of this
20 disparity in performance by shifting to regional measures.

21
22 In 2014, there were five regions that were ultimately selected
23 and implemented through an addendum to the commission's plan and
24 there has been a lot of debate about where these regions should
25 be and if you can see the table here, you can see that some of
26 the regions are actually individual states, including
27 Massachusetts, Rhode Island, and North Carolina have individual
28 state regions, and others are combinations of states.

29
30 The details of the regional system are frankly still being
31 worked out a little bit. 2014 was envisioned as sort of a test
32 year for regional management and the targets assigned to each
33 region were kind of loose targets based on 2013 performance and
34 so how the performance is going to be evaluated by region is
35 still being worked out. The commission does plan to continue
36 this approach in 2015, but perhaps with some modifications to
37 the regional boundaries.

38
39 Some of the overall benefits of the conservation equivalency
40 system and regional management, the major benefit is flexibility
41 and the ability to customize state measures and meet the needs
42 of each state and so that state is going to attempt to maintain
43 some of their traditional fisheries and so this is really the
44 key benefit and something that's been really important to the
45 council and the commission and our stakeholders.

46
47 Another issue that's not so much a benefit of conservation
48 equivalency as it is a drawback to coast-wide measures is that

1 it's become very difficult to analyze and predict the effects of
2 coast-wide measures and so it's difficult to recommend coast-
3 wide measures because states have had complex and varying state
4 regulations for so long and it's hard to recommend measures that
5 won't disproportionately affect some of the states.

6
7 Another benefit is that some of our advisors have noted that
8 conservation equivalency allows for a little bit of increased
9 stakeholder involvement at the state level and they have more of
10 an ability to impact the measures that are chosen in working
11 with their states.

12
13 Some of the challenges, first and foremost, would probably be
14 the allocation issues we have been discussing in recent years
15 and especially in the face of the shifting populations due to
16 climate change or rebuilding.

17
18 There is a lot of complex questions being raised about how to
19 allocate this fishery fairly, either, for example, using current
20 availability or using historical fisheries or both, and it's
21 difficult or impossible to come up with a new baseline for these
22 allocations without going to coast-wide measures for at least a
23 year.

24
25 Another big problem is different regulations in shared waters
26 and this an often raised problem that did exist under state-by-
27 state conservation equivalency and it continues to exist under
28 regional conservation equivalency and so it's a big problem
29 under state-by-state conservation equivalency. Specifically,
30 it's been a problem for New York, which shares water bodies with
31 Connecticut and New Jersey and has often had much more
32 restrictive measures.

33
34 Then under conservation equivalency, the problem was sort of
35 shifted to the Delaware Bay and so given that a regional
36 delineation was drawn between Delaware and New Jersey, there is
37 a line drawn right down the middle of Delaware Bay, where there
38 is kind of drastically different measures. That's always going
39 to be kind of a problem wherever you draw the boundaries and so
40 there is a lot of questions and disagreements about where to
41 draw these regional boundaries that are still being discussed.

42
43 Some additional challenges include the fact that our
44 recreational estimates under MRIP are less precise at smaller
45 spatial scales and some of the state measures have been trending
46 toward what one of our Monitoring Committee members referred to
47 as hyper customization. You get even less precise estimates
48 when you break down different estimates by wave or by mode and

1 these complex measures have also led to some confusion and just
2 general complexity in the system.

3
4 Finally, one of the administrative drawbacks is that
5 conservation equivalency just involves a longer process overall.
6 It involves more meetings and staff time and more analysis and
7 so that has drawbacks in terms of getting things implemented in
8 a timely manner, but we usually manage to make it happen.

9
10 In general, the majority of our stakeholders, the council
11 members, and the commission members, have seen the flexibility
12 of conservation equivalency as outweighing these drawbacks and
13 so that's all the slides that I have to describe the process,
14 but I am happy to take any questions. Thank you.

15
16 **CHAIRMAN GREENE:** Thank you for a good presentation and before
17 we get into some questions, I want to send it to Mr. Pausina for
18 just a second and let him recognize an individual and then we'll
19 get to some questions.

20
21 **MR. MYRON FISCHER:** Randy doesn't have a microphone and so
22 passed the baton to me, but we wanted to introduce our Secretary
23 of Louisiana Wildlife and Fisheries who just showed up, Robert
24 Barham. Thank you, Mr. Chairman, for allowing that.

25
26 **CHAIRMAN GREENE:** Absolutely and thank you for being here.

27
28 **MR. PERRET:** Thank you very much for that presentation. I have
29 got three or four questions for you, if you don't mind and if
30 the members don't mind. We, the Gulf Council, are seventeen
31 voting members and Mr. Donaldson's commission is fifteen
32 commissioners and that's thirty-two members and we've got a
33 tough enough time at seventeen members trying to agree on
34 anything and so if we put thirty-two of us together, we would
35 probably have a little bit more difficult time.

36
37 I assume one of the major reasons for the joint complementary
38 plan is because of the legislative authority the Atlantic States
39 Commission has, that they have some enforcement powers? Okay.
40 The Gulf Commission does not have that authority.

41
42 We are talking regional management as a possibility for
43 management in some of our fisheries and you mentioned one thing
44 about problems with lines and you mentioned something about a
45 line right through Delaware Bay. With the flounder plan, for
46 the most part, are the lines the boundaries between each state?
47 That's one question.

48

1 **MS. DANCY:** Under state-by-state management, state-by-state
2 conservation equivalency, the lines were drawn between each
3 individual state. Last year, when we moved to regional
4 management, they were drawn -- I think I had a slide, but
5 there's between -- I can't remember which states, but Delaware
6 and New Jersey was one of the states that the line has to be
7 drawn somewhere and there are a lot of arguments about what you
8 should take into account when drawing those lines. Is it a
9 biological basis or political or based on the fisheries? The
10 lines are drawn wherever the state water boundaries end.

11
12 **MR. PERRET:** Okay and I think you mentioned that if a fisherman
13 follows the rules of the state where they land the fish, what's
14 the enforcement complications with that type of system? Has the
15 Coast Guard or state law enforcement people had real problems or
16 do they seem to be able to enforce that kind of management
17 situation?

18
19 **MS. DANCY:** I am not really sure what the enforcement issues
20 have been. I haven't heard that there's a lot of problems with
21 enforcement. I have heard the question raised of what happens
22 when you're out fishing in federal waters and you can claim
23 you're landing in a certain state, but what if you're not. That
24 may be an issue in terms of enforcement, but I haven't heard
25 that there has been a lot of problems and the system has been in
26 place for a couple of years and so I'm sure.

27
28 **MR. PERRET:** I have one last one. Has there been examples of
29 non-compliance by states and, if so, what regulatory action was
30 taken? You say the authority is to shut a state down and has
31 that happened?

32
33 **MS. DANCY:** I do not believe that that has ever happened. I
34 think that it's been threatened. I guess the first step in the
35 compliance is that if a state doesn't submit a consistency
36 proposal, they are assigned the precautionary default set of
37 measures and if they don't go along with that, then they would
38 be out of compliance with the FMP entirely and then that
39 ultimate authority that the Atlantic States Commission has to
40 threaten to shut down the fishery would come into place and I
41 think that's been threatened once for another species, but it's
42 never actually happened.

43
44 **MR. PERRET:** So the state the second year came into compliance?

45
46 **MS. DANCY:** I think any time that that is threatened, that
47 they're going to have precautionary default measures put in
48 place or -- You never it gets to the point of having the threat

1 of having their fishery shut down and the states have been, in
2 general, very good about submitting proposals that are
3 consistent with the guidelines.

4
5 **MR. RIECHERS:** I thought Mr. Perret was going to get my
6 question, but he didn't quite get there. When you talked about
7 states managing waters jointly or having waters that were joint
8 in that respect, how do those states with differential
9 regulations handle that? Is it by where the fish is landed or
10 is the line drawn and people with certain licenses are supposed
11 to be staying in one line or the other? I am just curious how
12 that is and how the states or regions are working that out.

13
14 **MS. DANCY:** It is based on the state in which you land the fish
15 what regulations you're subject to and under regional
16 management, all the states within a region have to have
17 identical measures, except there is some leeway for season. You
18 have to have the same number of days per wave open, but you can
19 adjust them slightly. Based on the exact days, you can shift
20 that a little bit.

21
22 **MR. RIECHERS:** One more. Obviously you all have been in a
23 regional management plan for a while and you have now -- Well,
24 you were in more of a state-based regional management plan and
25 now you've moved to larger regions.

26
27 When that decision was being made, and for the reasons you
28 suggested, it's harder to go back to coast-wide measures or to
29 understand what they would mean, because you've been more in a
30 localized or broken-up fashion with regulations in some respect,
31 but the overall benefit of your benefits slide, basically -- I
32 mean obviously you all have been having a lot of talk about
33 that, but you all maintained some sort of regional management
34 approach and so I am assuming folks, as you suggested in your
35 conclusion, still believe even though it has its certain
36 complications, it's better than the alternative of one-size-
37 fits-all.

38
39 **MS. DANCY:** Yes, I think that's the general consensus for most
40 of the council and commission members. I think it got to a
41 point where some of the states, under state-by-state
42 conservation equivalency, were pushing for coast-wide measures,
43 specifically New York, because they were continually exceeding
44 their target and had very, very restrictive measures that were
45 drastically more restrictive than their neighboring states.

46
47 There was some push for coast-wide measures, but, overall, it
48 was sort of politically unworkable and most of the council and

1 commissioners see the conservation equivalency as being much
2 better for the management of the species.

3
4 **MR. WILLIAMS:** I missed the very first part of your presentation
5 and so maybe you answered this, but is the TAC static? The 40
6 percent of it, in your presentation, is allocated to the
7 recreational fishery and is it the same year after year after
8 year or is there variability in the TAC?

9
10 **MS. DANCY:** No, it's not static. It changes pretty much every
11 year based on our assessments and assessment updates and what
12 we're projecting the biomass to be. We have an ABC control rule
13 and the quota does change year to year and so we do have to
14 account for that when we're setting measures for the next year.
15 We have to adjust measures to achieve the target for the next
16 year.

17
18 **MR. WILLIAMS:** So if the TAC is changing annually, do the
19 regulations change annually, too? So you get this board
20 together and the states propose -- Each state proposes a new set
21 of regulations every year and is that how it works?

22
23 **MS. DANCY:** Generally, yes. Everything is evaluated annually
24 and when the council and board make the decision to go to
25 conservation equivalency, the states get together and look at
26 their measures and see if they need to reduce or if they're
27 allowed to liberalize. In some cases, they do stay status quo,
28 but in most cases there is adjustments in each state to account
29 for both the new quota and whatever overage or underage they had
30 from the previous year.

31
32 **MR. WILLIAMS:** That was my next question. Are things static, do
33 they tend to be static, within a state and they're not? They do
34 tend to change year after year.

35
36 **MS. DANCY:** They tend to stay in the general ballpark of similar
37 regulations for each state, but they do change year to year.

38
39 **MR. WILLIAMS:** Do these varying regulations make the assessment
40 itself fairly difficult and lacking uniformity from state to
41 state and within Delaware Bay and within Chesapeake Bay and does
42 that create a real problem for the assessment people or do you
43 know?

44
45 **MS. DANCY:** I am not sure. I don't think it causes a big
46 problem for the assessment. The assessment does take into
47 account the MRIP estimates and, perhaps, as far as the MRIP
48 estimates, if that makes them a little bit more unstable, it

1 might affect the assessment, but it does have effects, or we've
2 heard from advisors and council and commission members, in terms
3 of compliance if the regulations are shifting around a lot and
4 if the regulations are very different in neighboring waters. If
5 you're fishing in Long Island Sound and the regulations are
6 different a hundred yards away, it becomes very difficult for
7 some people to stick to the more restrictive regulations, or so
8 we've heard from our advisors.

9
10 **MR. WILLIAMS:** One final question. How big is the board that
11 determines conservation equivalency? You said it contained
12 members from the states and from I guess ASMFC and the Mid-
13 Atlantic Council and how many -- They are mostly technical
14 people, I would guess, quantitative scientists, that are on the
15 board?

16
17 **MS. DANCY:** The board consists of Atlantic States Commission
18 members from North Carolina through Massachusetts and so there
19 are three members for each state and each state gets one vote
20 and so I don't know off the top of my head exactly how many,
21 twelve or fifteen, members or votes, I guess you would say.

22
23 **MR. WILLIAMS:** So the board itself doesn't meet separately and
24 they just meet as part of an ASMFC meeting, I guess?

25
26 **MS. DANCY:** Yes, it's similar to a committee of the council.
27 It's a Summer Flounder Management Board that meets as part of a
28 commission meeting.

29
30 **MR. ANSON:** Thank you for coming to give the presentation and I
31 have several questions myself and the first one might have
32 already been addressed and I was distracted and so I might be
33 repeating someone else's question, but relative to the timeline,
34 I guess, you had laid out the months and so it was my
35 understanding -- I don't have the presentation in front of me,
36 but it starts in August and it ends in spring sometime as far as
37 when it's at least sent to NMFS. You are looking at nearly a
38 year, a ten-month or nine-month, process and is that correct?

39
40 **MS. DANCY:** Yes, it's a long process and so I guess we have two
41 joint meetings per year with the council and the commission and
42 one is in August and that sets the annual quotas and the
43 resulting landings limits for the recreational and commercial
44 fisheries. Then we delay the recreational decision making until
45 December, when we have as much recreational estimates as we can
46 get for that year.

47
48 It is a long process and in the spring, we are also submitting a

1 specifications package for the recreational fishery on the
2 council side and the agency doesn't usually publish a proposed
3 rule until around April and then a final rule around June and so
4 it does kind of publish right before the fishery kind of really
5 gets going.

6
7 **MR. ANSON:** At this August meeting, you said you kind of make
8 adjustments based on landings and so this is outside of an
9 actual assessment and you just take recreational data and maybe
10 some other pieces of the commercial landings data and kind of
11 use that as a guide to kind of make some adjustments, if you
12 will, or is there a formal assessment that's conducted on a
13 regular basis and if there is, what's the timeline for that?

14
15 **MS. DANCY:** We typically get for summer flounder -- Summer
16 flounder is one of our most assessed species and so we just had
17 a benchmark assessment in 2013 and we typically get updates
18 fairly regularly for that assessment and that occurs in the
19 summer and then it's fed into the August meeting for the council
20 and commission and that's when they decide on what the overall
21 ABC and the recreational harvest limit and the commercial quotas
22 are going to be. Once we have that decision already made in
23 August, then we know what our recreational harvest limit is for
24 the upcoming year and then we use that to make our recreational
25 recommendations.

26
27 **MR. ANSON:** My last question is I think you had a bullet on one
28 of your slides regarding federal waters and that the federal
29 waters remain open and so, again, it's a landings issue as far
30 as whether or not the angler is in compliance at that state and
31 so they could be fishing in federal waters anytime throughout
32 the year. The waters are open and then they just -- When that
33 angler transits back into that state to land, they need to be in
34 compliance for that particular state or region, correct?

35
36 **MS. DANCY:** Yes, that's correct. The federal regulations, we
37 actually put in the regulations that set of non-preferred coast-
38 wide measures, but those are waived and so the anglers are
39 subject to the regulations of the state where they land.

40
41 **MS. BADEMAN:** Thank you for your presentation and I have a
42 couple of questions. First, what is the status of this fishery?
43 I thought you mentioned it was in a rebuilding plan and has that
44 been true from the beginning when this started, this state-by-
45 state management and then into regional management?

46
47 **MS. DANCY:** It was declared rebuilt in 2010 or 2011 and so it
48 was under a rebuilding plan I think for a lot of the time when

1 this system was put in place, but it is rebuilt now and we are
2 not under a rebuilding plan currently.

3
4 **MS. BADEMAN:** Then my other question is the fishing year I am
5 assuming starts January 1, but the work starts -- To start
6 putting together regulations starts in August and I am trying to
7 figure out how that fits into the timeline.

8
9 **MS. DANCY:** The recreational fishery, because of the seasonal
10 migrations, the recreational fishery doesn't really get started
11 until the spring. Conservation equivalency expires at the end
12 of each year and so I guess it defaults to whatever the --
13 Technically, it defaults to whatever the non-preferred set of
14 measures are, but then once the rule publishes in the spring,
15 it's kind of right before the fishery really gets started for
16 the recreational sector.

17
18 **MS. BOSARGE:** I was wondering, can you give us a little more
19 detail on the nuts and bolts of the conservation equivalency?
20 In other words, how do you determine that a state's plan or
21 proposal is conservationally equivalent to what the federal or
22 coast-wide measures would have been? Not technical in that who
23 decides this and that, but are there formulas for this or what
24 are the actual nuts and bolts that go into this?

25
26 **MS. DANCY:** There are some methods that the -- The commission's
27 Technical Committee does most of this very technical work and
28 usually evaluates what the landings were in numbers of fish and
29 what the target for the upcoming year is in numbers of fish and
30 where each state stands relative to their performance and how
31 the specific set of measures performed.

32
33 There are some details that I am not really that familiar with,
34 because I do listen in on the Technical Committee meetings, but
35 they do have some sets of data and methods that they use and
36 some formulas, in some cases, to account for adjustments, for
37 example, interactions between if you adjust both the bag limit
38 and the size limit and what kind of reduction does that get you.

39
40 In a lot of cases, I think it's based on state-specific data.
41 Some states use volunteer angler surveys and other states don't
42 have that available and some states have better MRIP estimates
43 than others and each state uses basically the information that
44 they have in order to calculate the effects of given changes in
45 measures and then the rest of the Technical Committee evaluates
46 that proposal and will critique it.

47
48 **MS. BOSARGE:** My second question is kind of a follow-up to that.

1 If the states are doing most of the grunt work for this
2 essentially, the collection of the data and this and that and
3 they come up with the plan, and then those states -- It's their
4 Department of Marine Resources for each individual state.

5
6 Then that plan is kicked up to a commission that each one of
7 those Department of Marine Resources heads sits on to be blessed
8 and I guess -- Maybe this is my accounting background in
9 auditing, but the internal control there, that seems a little
10 off.

11
12 I mean is there ever an independent body that evaluates those
13 plans to make sure they are conservationally equivalent, whether
14 that be at a federal level or something, rather than having a
15 state plan that is then blessed by a body that's made up of
16 those state directors?

17
18 **MS. DANCY:** I think that the Technical Committee actually is
19 very critical of the proposals and they come up with some
20 options based on what might work for their state, but they do
21 analyze everything very quantitatively and are very quick to
22 point out flaws in each other's logic in terms of the reductions
23 or liberalizations that are needed.

24
25 They are fairly good about doing that and, additionally, at the
26 commission level, you don't just have the state department heads
27 there. You have governors' appointees and other members that
28 are kind of keeping things in check as well.

29
30 **DR. CRABTREE:** Thanks, Kiley, for being down here. Summer
31 flounder right now is not overfished or undergoing overfishing
32 and is that correct?

33
34 **MS. DANCY:** Correct.

35
36 **DR. CRABTREE:** What is the approximate mix in the recreational
37 fishery of how much is caught in state waters versus federal
38 waters?

39
40 **MS. DANCY:** The vast majority is caught in state waters in the
41 recreational fishery, but I don't know the numbers off the top
42 of my head.

43
44 **DR. CRABTREE:** That's good enough. Among the measures that the
45 states adjust for their conservation equivalency, it is just
46 adjusting the bag limit, the season, and the size limit? Are
47 they limited to those three things?

48

1 **MS. DANCY:** Yes and some of the states do have special programs,
2 for example, of shore-based sites, where they have a separate
3 set of measures, a smaller size limit, but yes, they are
4 focusing on bag, size, and season.

5
6 **DR. CRABTREE:** If a state goes over for whatever reason, do they
7 have to pay the overrun back the next year or how does that
8 work?

9
10 **MS. DANCY:** Under state-by-state conservation equivalency, they
11 would have to adjust their measures to account for whatever
12 overage they had and so they would have to -- Assuming that the
13 quota is not raised enough so that it's not an issue, but if
14 they go over and the quota is relatively the same, they do need
15 to account for that in their adjustments for measures.

16
17 Under this regional management addendum that the commission
18 passed last year, it is a little bit different. There is some
19 kind of what they describe as fish sharing going on. For a lot
20 of the states that have been underperforming for many years and
21 a lot of the states have been overharvesting and there is a
22 little bit more flexibility with this regional approach and the
23 details of that are still kind of being worked out, what the
24 consequences are going to be for regions that overharvest, and I
25 think a lot of it was going to hinge on whether the total coast-
26 wide recreational harvest limit was exceeded.

27
28 If the recreational harvest limit wasn't exceeded, I think it
29 was kind of seen as not as much of a problem, but if it was
30 exceeded, then there would have to be some more discussions at
31 the board level about what the consequences were going to be for
32 each region.

33
34 **DR. CRABTREE:** I think all of these states are in the MRIP
35 program, but you mentioned something about other surveys could
36 be used and how does that work?

37
38 **MS. DANCY:** Some of the states have additional data from either
39 logbook programs or they have volunteer angler surveys and
40 sometimes they use that data to supplement the MRIP data. It's
41 primarily MRIP-based, the analysis, but sometimes if they feel
42 the MRIP data is lacking in a certain area and they have
43 information to supplement that and they can estimate a better
44 idea of what the effects of the changes are going to be, they
45 will use supplementary information.

46
47 **MR. RIECHERS:** I want to follow up on Roy's -- The preceding
48 question to his last one and that was regarding the overages and

1 the payback. As I understood your answer, it's not a payback,
2 but it's they adjust to make sure that in the next year they
3 stay within the -- They basically try to make an adjustment to
4 make sure they stay within the appropriate TAC that they're
5 allowed or catch limit that they're allowed and is that correct
6 or is it an actual payback? I just want to make sure we're not
7 talking past one another as you answered that.

8
9 **MS. DANCY:** Yes, that's correct. There is not a strict pound-
10 for-pound or fish-for-fish overage payback, but they do have to
11 account for it in their measure setting for the next year.

12
13 **MS. BADEMAN:** Going back to -- I am trying to think through the
14 timeline again. For the regulations that are going to come out
15 this spring, you guys set the ABCs back in August, which means
16 that the data that you used for the ABCs is probably from two
17 years ago and is that right?

18
19 **MS. DANCY:** Actually, for the quota setting side of the process,
20 we have started to move toward multiyear quotas and I didn't
21 mention that in my presentation, but we actually set the quotas
22 for several years based on the 2013 assessment and so the data
23 for the quota, the basis for that quota in 2015, is that 2013
24 assessment and so we set multiyear quotas. We reviewed them in
25 August and the council and commission decided not to change them
26 and so that's what that is based on.

27
28 **MS. BADEMAN:** But you would, for the 2013 assessment, I'm
29 assuming your last year of MRIP is 2012 or maybe even 2011?

30
31 **MS. DANCY:** 2012, yes.

32
33 **MR. PERRET:** Back to paybacks. If any segment of the fishery,
34 for whatever reason, goes over, there is no payback the
35 following year, but there is a reduction in their allocation for
36 that state or that region? In other words, you said on the
37 recreational there is no payback and what about on the
38 commercial guys?

39
40 **MS. DANCY:** The adjustments under conservation equivalency are
41 kind of separate from our accountability measures that we have
42 on the federal side for the council. We have the accountability
43 measures in place as well and so for the commercial side, if
44 there is an overage, the commercial side has to do a pound-for-
45 pound payback in the subsequent year.

46
47 For the recreational fishery, the council recently modified the
48 recreational accountability measures in 2013 to do away with

1 pound-for-pound paybacks and the consequence for exceeding the
2 annual catch limit in the recreational fishery is tied to stock
3 status.

4
5 If the stock is not overfished or overfishing is not occurring,
6 then basically, under most circumstances, the accountability
7 measure would be adjustments to bag, size, and season. If the
8 total catch is over the annual catch limit, then that needs to
9 be taken into account somehow by adjusting bag, size, and season
10 and accounting for our predictions for how well the measures
11 were going to work not being accurate.

12
13 **MR. PERRET:** Why wouldn't you do it and be fair and equitable to
14 all?

15
16 **MS. DANCY:** That's what a lot of our council members have said
17 as well. It was something that it -- It used to be we used to
18 have in-season closure authority for the recreational fishery
19 and pound-for-pound paybacks and that was modified by the
20 council a couple of years ago.

21
22 **MR. WALKER:** I noticed in your presentation you had one of the
23 problems was migration and I was wondering -- Here in the Gulf,
24 we have storms and episodic events and red tide and different
25 things that affect species and there were species after the oil
26 spill that got dislocated and we couldn't catch them in certain
27 areas that we used to and in other areas, they started catching
28 fish, like vermilion and different species. I was just
29 wondering if these type of events, storms and so forth, have an
30 effect on your area.

31
32 **MS. DANCY:** I am not sure what effect they have on the
33 distribution or the migration patterns of summer flounder. I
34 know that, for example, Super Storm Sandy in 2012 had a large
35 effect on the fishery itself and a lot of the recreational
36 capacity in New York and New Jersey was -- Effort was down,
37 according to as a result of that storm. I mean it does affect
38 the fisheries, but I am not sure what effect it has on the
39 migrations or the movement patterns of the species.

40
41 **MR. WALKER:** There is times like in even Alabama, with the
42 hurricanes, where you don't catch a lot of red grouper and then
43 a storm will come through and move red grouper up in our area or
44 gag grouper and then I've seen times in history where we weren't
45 catching fish and a storm would come through Mexico and it would
46 push fish into Texas and Louisiana. I mean it affects a lot of
47 our species like that and I was just wondering what your
48 experience was. Thank you.

1
2 **MS. LEVY:** Just a question about the EEZ and I understand that
3 it remains open as long as everyone actually is determined to
4 have a conservation equivalency plan. I think you said this
5 hasn't happened, but what if a particular state or region
6 submitted a plan or didn't submit a plan and so there was no
7 conservation equivalency and those non-preferred measures kick
8 in for the EEZ?

9
10 I assume through the commission they also kick in for the state
11 and so then what I guess I'm getting at is there would be a
12 time, if that would happen, when the EEZ would actually be
13 closed off a particular area or that would never happen?

14
15 **MS. DANCY:** That wouldn't happen, according to my understanding.
16 The precautionary default measures would be put into place for
17 any state that doesn't submit a proposal or that submits a
18 proposal that basically doesn't achieve the goals of the
19 conservation equivalency for that year and so the precautionary
20 default measures are voted on by the council and commission each
21 year and those would be put in place for the states and then the
22 EEZ would remain open.

23
24 **MS. LEVY:** So it would then just be sort of whatever the season
25 would be would be the state season and the EEZ would still be
26 open and it would still be based on landing in that state and is
27 that what --

28
29 **MS. DANCY:** Yes, it's still based on wherever the angler is
30 landing.

31
32 **CHAIRMAN GREENE:** Okay. Any other questions? With that, we're
33 going to go ahead and take about a fifteen-minute break and
34 we'll start back up about 10:45.

35
36 (Whereupon, a brief recess was taken.)

37
38 **CHAIRMAN GREENE:** I think the next item we had the presentation
39 we just went through and so, with this, I'm going to send it to
40 Dr. Lasseter and let her pick up on the red snapper regional
41 management.

42 43 **COMMITTEE RECOMMENDATIONS**

44
45 **DR. LASSETER:** Thank you, Mr. Chairman. We are back in the
46 document again, Tab B, Number 8, and we have stopped in the
47 table of contents here for a moment just so you can see an
48 overview of the actions.

1
2 Again, the IPT has restructured the document and renumbered a
3 lot of the alternatives as well and so Action 1, as I just
4 briefly showed you before Kiley's talk, concerns the form, the
5 type, the structure, of regional management you may wish to
6 pursue.

7
8 The second action addresses how the charter for-hire component
9 fits in with regional management and this gets to our timeline
10 of this document and this is how the IPT figured out how to work
11 this in and structure it and provide you alternatives with how
12 you see the components underneath regional management.

13
14 Action 3 is selecting the regions for management and 4 is
15 apportioning the quota among the regions and Action 5 are the
16 post-season accountability measures and so we will go through
17 each one of these.

18
19 Action 1, again, begins on page 8 and, again, the Preferred
20 Alternative 2 is the delegation alternative and it's currently
21 your preferred alternative with a sunset provision of three
22 years after the program.

23
24 Alternative 3, again, is what we're terming the fast-track
25 approach to the conservation equivalency form of management,
26 modeled after summer flounder, and, again, this has -- It's fast
27 tracked because it would only have one stage of a review
28 process.

29
30 The regions would put together their proposals that explain the
31 conservation equivalency measures and then those proposals would
32 be reviewed by NMFS.

33
34 Alternative 4 is more similar to what the Mid-Atlantic does. It
35 would include an additional stage of the review and we have
36 termed it here a technical review committee and in the Mid-
37 Atlantic, it's the Summer Flounder Board. As Ms. Dancy noted,
38 it consists of the Atlantic States Commission, representatives
39 from each state, and so you have the greater stakeholder
40 involvement in not just composing the proposals, but in
41 reviewing them as well before they go to NMFS.

42
43 However, it would be a longer process once implemented, because
44 it's an additional stage, and also going this route, we would
45 probably need more time in fully implementing this amendment,
46 because we would have to compose this group, populate this
47 group. There might be a few more steps involved and so there's
48 tradeoffs with each of these and I will pause here for a

1 question.

2

3 **MR. WILLIAMS:** Ava, under Alternative 3, I presume you've had a
4 discussion with NMFS at some point on this and they are willing
5 to accept this responsibility to evaluate the conservation
6 equivalency.

7

8 **DR. LASSETER:** That is correct. We have a couple of NMFS staff
9 on the IPT, including Mara, our legal counsel, who have stated
10 that a NMFS part of the review would be required. They would
11 have to review it and they are willing to do so.

12

13 **MS. BADEMAN:** Ava, help me understand differences in the process
14 with 2 and 3. With Alternative 2, and correct me if I'm
15 understanding this incorrectly, but as long as a state stays
16 within the bounds, if they can stay within the bounds of the
17 size limits and bag limits and yada, yada, yada, they don't have
18 to get a plan approved and is that right, versus 3, where you
19 have to go through the process and get the plan approved by
20 NMFS? Mara, is nodding her head no and Ava is --

21

22 **DR. LASSETER:** Actually, even in the delegation, NMFS will still
23 be reviewing what you put in place, because if it's determined -
24 - Whatever management measures that region wishes to propose,
25 authority would be delegated to a state to adopt those
26 management measures and they would still have to be consistent
27 with the FMP and the rebuilding plan and so in all of them,
28 there is still a NMFS review component, approval component.

29

30 **MR. PEARCE:** I am not on your committee, but Preferred
31 Alternative 2 basically delegates, which means it's a super
32 majority vote in order to have that happen. Alternatives 3 and
33 4 is not a super majority vote and it's just a regular 51
34 percent and we win, correct? I just want to clarify that. If
35 we do 3 and 4, we don't have to worry about a three-quarter
36 vote, right?

37

38 **DR. LASSETER:** That is correct.

39

40 **MR. FISCHER:** I would just ask what is going to be our procedure
41 through this? Are we going to possibly make changes or
42 alternations or change our preferred as we go or are we letting
43 Ava go through the document and then we come back? It's your
44 call.

45

46 **CHAIRMAN GREENE:** I don't know. It would be up to whatever you
47 guys feel is best at this point. I mean we can certainly go
48 through it each item and deal with it as we get to it and that

1 may be the best way.

2

3 **MR. FISCHER:** Before we get off of Action 1, I am looking to
4 change this.

5

6 **MR. RIECHERS:** Ava, in the previous document, we had a preferred
7 option that listed management measures that the state could
8 undertake and it seems now, to me -- First, I don't see that in
9 the document anymore and I am wondering about the removal of
10 that.

11

12 Two, and I'm going to guess what your answer is, that it's
13 probably included as Alternative 3 in conservation equivalency,
14 but we seem to be much more limited in those options there and
15 so could you explain how we went from that previous document to
16 this document, because I am not remember us removing that as a
17 council.

18

19 **DR. LASSETER:** I had a big star there and I neglected it. In
20 restructuring the document, we did remove the Action 4. At the
21 IPT level, we've had several issues with that. One, having
22 every alternative selected as preferred was an issue and so we
23 had the structural issue with the document.

24

25 Then also, when we went towards the summer flounder model, as we
26 were instructed to, the only measures that are modified under
27 the summer flounder model are bag limits, season structure, and
28 the size limit.

29

30 In these alternatives in Action 1, they actually do specify that
31 the regions would establish those three management measures.
32 The size limit one is still a sticky issue and while each region
33 could propose, or adopt in their regulations if it's delegation,
34 the size limit that they prefer, NMFS will have to determine
35 whether or not it is workable.

36

37 As for the other alternatives that were originally in Action 4,
38 I thought we had talked at the last meeting and definitely the
39 sub-allocations part would have to go through the full council
40 process, because we're going to have to address issues with
41 fairness and equity. It's going to require a whole NEPA
42 analysis.

43

44 If you did want to do that at just a state-by-state level, I
45 would have to check with Mara, but we could possibly have that.
46 It would have to be a whole separate action. It would have to
47 be a whole separate component of the document to analyze and
48 consider that.

1
2 Then the other alternative on there was the closed area one and
3 the more we get into summer flounder, we just -- It's just
4 unworkable. We don't know how to do that. It seems like if
5 your state waters are open and you just want to close the EEZ,
6 then you would be fishing essentially under the coast-wide,
7 Gulf-wide restrictions or the default regulations, as we've laid
8 out in the introduction chapter. Does that help?
9

10 **MR. RIECHERS:** It helps explain how we got to this document, but
11 I don't know if it helps explain that that's not exactly the
12 action that I think was asked for. I think the action that was
13 asked for at the last meeting was to put a summer flounder
14 alternative in or put that model in here, but we didn't ask for
15 deletion of that other action and at least consideration of
16 those.
17

18 I understand we've had discussions about the legal workings of
19 those and the difficulty of various aspects of it and some of
20 the size limit issues and how that might affect the stock
21 assessment and the modeling, but it certainly, I think, was a
22 council level decision to put those in and if I -- Since we
23 haven't had a council level decision to take those out, I think
24 they should be included in here still.
25

26 **MS. LEVY:** One of the issues, as Ava pointed out, with that
27 particular action was that it had all of these alternatives for
28 what the states could manage and then they were all selected as
29 preferred.
30

31 What we did was incorporate them into Action 1 and say what you
32 could do under each of these alternatives and we did take out
33 those ones that seemed to complicate the situation, knowing that
34 you all wanted to move forward with this.
35

36 If you want to have them in the document, then there are a
37 couple of ways to do that. One is to add them back into these
38 alternatives in Action 1 and so instead of saying that each
39 region would establish season, structure, bag limit, and minimum
40 and maximum size limit, add in there "and closed areas".
41

42 You can fit them in that way. The thing with the allocation,
43 and I think Ava is probably right about that, is if we really
44 want to have separate allocations or sector separation under
45 regional management, it's kind of addressed in the next action
46 and it doesn't contemplate right now state-by-state decisions on
47 that. It's sort of an overall thing and either it's included or
48 it's not, but we could potentially modify that action to allow a

1 state-by-state choice.

2
3 The issue is you have to make the choice here, so that it can be
4 analyzed, and then run with it until you come back and modify
5 the plan to change that, but we can fit those things in. We
6 just didn't do it right now, because we wanted to make it as
7 simple as we could.

8
9 **MR. RIECHERS:** I appreciate the notion of restructuring the
10 document from a structural standpoint so that it makes more
11 sense. I would just hope that we're not losing things that the
12 council has voted on as we restructure that and that the IPT
13 team does not make those decisions on behalf of the council.

14
15 I would suggest that, and if I need to make it in the form of a
16 motion, I certainly will, but I would move that we alter --
17 **Really, in my mind, it's not an alteration, but it's revise**
18 **Action 1 to reflect the preferred alternatives that we had in**
19 **the previous Action 4.** Is that right?

20
21 **DR. LASSETER:** Charlotte, may I help you? It's to revise Action
22 1 to reflect the previous preferred alternatives in Action 4, if
23 that's okay.

24
25 **CHAIRMAN GREENE:** Mr. Riechers, is that your motion?

26
27 **MR. RIECHERS:** Yes.

28
29 **MS. BADEMAN:** I will second that.

30
31 **MR. FISCHER:** Could we list what they are, just so that -- The
32 previous Action 4 isn't in this document.

33
34 **MS. LEVY:** What you might say -- I would suggest putting "to
35 revise Action 1 and 2", because I think that the closed areas
36 fit under Action 1, but the sub-allocations, which relate to
37 sector separation, fit under Action 2, which actually deals with
38 that question.

39
40 **Maybe you can say to revise Actions 1 and 2 to reflect the**
41 **preferred alternatives of closed seasons and sub-allocations in**
42 **previous Action 4.** Those are the only two things that are not
43 currently reflected in Action 1.

44
45 **CHAIRMAN GREENE:** Okay. We have a motion on the board to revise
46 Actions 1 and 2 to reflect the preferred alternatives of closed
47 seasons and sub-allocations in previous Action 4. It was
48 seconded by Martha and is there any discussion?

1
2 **MR. FISCHER:** Was it closed seasons or closed areas?
3

4 **MS. LEVY:** **Closed areas.** That was my mistake.
5

6 **DR. CRABTREE:** Mara, maybe you can help me. I can see how under
7 Alternatives 3 and 4 a state will come in with its conservation
8 equivalent measures and its bag limits and size limits and a
9 season and those things are pretty standard and we analyze them
10 all the time and so we don't have NEPA issues, but what I'm
11 having a hard time understanding is the closed area end of it,
12 because we can put this in here, but then we have not analyzed
13 any particular closed area and so wouldn't we then have to go
14 through the whole NEPA process?
15

16 I think we can do closed areas through the framework, but
17 essentially if a state came in asking for that, it would then go
18 before the council and we would have to go through a framework
19 action and put that closed area in place and analyze the whole
20 reasonable range of alternatives and then go through a proposed
21 rule and final rule and put the closed season in place and then
22 it would stay in place until the council changed it and is that
23 how it would have to work?
24

25 **MS. LEVY:** I don't know what the exact process would be for a
26 closed area in the EEZ, because we have to have some sort of
27 federal regulation that actually closed that area and so without
28 knowing in advance what it is, I think that's right that we
29 would have to evaluate the proposal and there would have to be
30 some sort of federal action that actually closes it.
31

32 It's not as simple as us just waving a bag, size, and season as
33 long as the states set it consistent with the FMP, because the
34 federal EEZ is open and so we would actually have to establish
35 the closed area. If you knew what you wanted it to be and we
36 set it up in this document, then we could do that.
37

38 **DR. CRABTREE:** At this point, haven't heard or seen anything
39 that indicates what it would be and so it seems to me that it's
40 a significant complication of the whole process and it would
41 really slow things down.
42

43 Now, on the sub-allocations, we have approved Amendment 40,
44 which analyzed a range of alternatives for establishing sub-
45 allocations and the council has a preferred that it selected and
46 would it be possible to set this up in a way, rather than
47 allowing states to just come up with any sub-allocation, could
48 we set it up so a state could decide either to have a sub-

1 allocation or not to have a sub-allocation and if they decide
2 they want the sub-allocation, it would be the preferred
3 alternative that's already been analyzed and was approved in
4 Amendment 40 and then applied to that state.

5
6 It seems to me if we did that that might enable us to kind of
7 move that without having to go through a whole lot more
8 analysis, because it's already been looked at and we've already
9 done it through an EIS. Of course, that presumes that Amendment
10 40 would be approved or not, but does that seem like a viable
11 way to deal with sub-allocations, if it was an opt in or opt out
12 of the allocations established in Amendment 40?

13
14 **MS. LEVY:** I think when we get to Action 2, you will see that
15 there are alternatives for how regional management and sector
16 separation interact and one of those would be for regional
17 management to extend the separate management of federal for-hire
18 and private angling components of the recreational sector.

19
20 We could modify this to sort of allow the states to choose if
21 they want to do that in their particular regions and using the
22 allocation that is selected in Amendment 40 and analyze it in
23 this document. I think that we could set it up that way, but we
24 would just have to modify how Action 2 looks.

25
26 **DR. CRABTREE:** Otherwise, we can't do -- We can't do allocations
27 through our framework and so otherwise, if a state wanted to
28 establish a sub-allocation, we would have to go through the full
29 plan amendment process with the council voting it and going
30 through what we all know is a more than a year-long process and
31 is generally very controversial, as we've all seen. That seems,
32 to me, to be really cumbersome.

33
34 **MR. PEARCE:** I am not on the committee, but I just think this
35 warrants a lot of discussion and following up on what Roy just
36 said, I think this is very important and that all the tedious
37 and tough work we did the last council about Amendment 40 needs
38 to follow this document and that the charter vessels that I'm
39 talking to in the hall today need the protection of 40, whether
40 it's federal or state-managed at all. It's got to be part of
41 the process and it's got to be the same guidelines of Amendment
42 40, so the charter guys are protected.

43
44 **MR. FISCHER:** Mr. Chair, this would be directed either to
45 yourself or Mara. Looking at this motion, the closed area could
46 be one of the region's measures where the sub-allocation is
47 definitely in Action 2 and am I correct and shouldn't we just
48 split this motion and vote on the one that pertains to Action 1

1 now and then worry about sub-allocation in ten minutes, when we
2 get to that?

3
4 **MR. RIECHERS:** I am not even trying to talk about the merits of
5 either one of these. The fact is they shouldn't have been
6 dropped from the document in the first place. The IPT team
7 should not be making a decision to remove preferred alternatives
8 that we've had in the document before and so let's get them back
9 in here and then we can have a discussion about the merits and
10 about whether we want to keep them as preferred and whether or
11 not we think it's a workable solution or whether it's a NEPA --
12 If it's going to take NEPA analysis.

13
14 The simple fact is we left a meeting and they were in there and
15 we come back and they're not and so we need to get them back in
16 here and then we can have the broader discussion, but we just
17 need to make sure we keep the things in our documents as they
18 move from one meeting to the next.

19
20 **CHAIRMAN GREENE:** Any other discussion relative to the motion?

21
22 **MR. FISCHER:** I wanted my question answered about should we
23 split the motion, because then I might move to split the motion,
24 so we could move forward.

25
26 **DR. CRABTREE:** Make a substitute motion.

27
28 **MR. FISCHER:** My question was does the first portion of closed
29 areas relate to Action 1 and the sub-allocation -- Okay and so
30 let's split the motion so we can get through Action 1 and then
31 move forward. **I move that we split the motion.**

32
33 **CHAIRMAN GREENE:** Okay, Mr. Fischer, and so your substitute
34 motion is to split the above motion and you are meaning to
35 basically take out the language in the motion above that says
36 "and 2", correct?

37
38 **MR. FISCHER:** The sub-allocation and then we'll deal with that
39 when we get to Action 1.

40
41 **CHAIRMAN GREENE:** Okay. Help us get the motion on the board,
42 the substitute motion, correct as you wish. I would prefer you
43 just take the above motion and copy and paste and remove the
44 items that you have rather than me trying to go here and do it
45 for you.

46
47 **DR. CRABTREE:** Maybe they're going to do it, but, Myron, your
48 substitute motion needs to say what you want the motion to be

1 and not just to split it. I think you need to --

2
3 **MR. FISCHER:** Substitute motion to revise Action 1 to reflect
4 the preferred alternatives of closed areas. We will deal with
5 the other half of the motion in a few minutes, when we get to
6 Action 2.

7
8 **CHAIRMAN GREENE:** Mr. Fischer, is that your motion?

9
10 **MR. FISCHER:** Yes, it is.

11
12 **CHAIRMAN GREENE:** Is there a second to the motion?

13
14 **MR. RIECHERS:** Second.

15
16 **CHAIRMAN GREENE:** Second by Mr. Riechers. Any further
17 discussion about this motion?

18
19 **MR. WILLIAMS:** What are you trying to do with this? I mean in
20 practical terms, what closed areas are you thinking about? I
21 would like to know the consequences of what I'm going to be
22 prepared to vote for.

23
24 **MS. BADEMAN:** From Florida's perspective, I could see if we end
25 up in a regional management scenario where we end up splitting
26 our state -- We have an extensive coastline and very different
27 fishing seasons and availability of tourists and so I would like
28 to see that option, to be able to have the Panhandle and
29 adjacent EEZ waters open at one time and then further south open
30 at a separate time and that would require some kind of closed
31 areas thing.

32
33 I mean we could do that potentially in the scenario that Roy is
34 laying out, but I mean I think that option needs to be in here
35 somehow to have the closed areas.

36
37 **DR. CRABTREE:** I don't see that as a closed area. That, to me,
38 would be in your conservation equivalent plan you would just
39 establish one season in this part of the state and another
40 season in another part of the state and provided you could
41 provide an analysis that shows it's going to adequately
42 constrain catches, I don't see why you couldn't do that, but I
43 don't see that as a closed area.

44
45 What I see, in my read of what this means, is leave state waters
46 open year-round and close the EEZ and I think that's contrary to
47 what we're trying to do here, which is why I'm probably not
48 going to support this, but I think what you're talking about

1 doing is included within the description of seasons.

2
3 **MR. RIECHERS:** Roy, you said that's what you were afraid of and
4 what would it -- At that point, the state has a TAC or an annual
5 catch limit and as long as the state keeps their conservation
6 equivalency within that state limit, does it matter where those
7 fish are caught?

8
9 **MR. WILLIAMS:** Robin, if I may --

10
11 **MR. RIECHERS:** Let me finish and I will give you an example and
12 she laid out one example. We have got a big state too and we
13 may choose to do zones or something. We have to enforce those
14 and we understand that, but either way, those fish are going to
15 be landed in Texas. Maybe a few may leak over to Louisiana and
16 some may go to Mexico, but, for the most part, anything that
17 comes into Texas -- Anything that comes into Texas, we're going
18 to be accounting for those.

19
20 The other thing we could do in our state is, for instance, right
21 now we have an EEZ season of, predictably in the next season,
22 one day for a recreational season. We've got state waters open,
23 as we've had them, and some other states are going to have
24 different state water seasons and federal waters seasons and you
25 may choose to have a mixture of those things.

26
27 All we've tried to do, as we've talked about this document from
28 the very beginning, is give the states the tools, with as many
29 of those tools as we can.

30
31 We still have to come before some body and some decision-making
32 group and suggest to them how it's all going to fit together and
33 work. We are just trying to keep all the tools in the toolbox
34 as we go forward.

35
36 **MR. WILLIAMS:** May I respond? What area are you considering
37 closing?

38
39 **MR. RIECHERS:** We may close the EEZ for certain periods of time.

40
41 **MR. WILLIAMS:** For private boats only or are you going to
42 include the charter boats in that?

43
44 **MR. RIECHERS:** I don't know the answer to that. It could be
45 both or it could -- I mean right now they're closed for periods
46 of time.

47
48 **MR. WILLIAMS:** I am going to have to know before I am prepared

1 to vote for this.

2
3 **MR. RIECHERS:** Well, I mean we can get into this again, but
4 this, frankly, is in the document today and I can call a point
5 of order and suggest that we shouldn't even be discussing this,
6 because, frankly, it was in the document when we left it.

7
8 Staff should not be making decisions to pull preferred
9 alternatives out of the document and that's all I'm trying to do
10 right now, is get them back in there.

11
12 **MR. PERRET:** I am not on your committee, but everybody is
13 telling me what Myron's motion means and, Myron, what do you
14 mean by "closed areas"? Are you referencing something like your
15 shrimp zones and you could have Zone 1, 2, and 3 and open one
16 area versus the other and that sort of thing? What do you mean
17 by your closed area?

18
19 **MR. FISCHER:** Presently, we have no interest in zones and so it
20 could work like the shrimp zones. All I was trying to do was
21 split the motion, because the germane part of the sentence, one
22 applies to one part of the document and one applies to the other
23 part and we don't want to take up the whole document at one
24 setting and so split it and just move forward.

25
26 **DR. CRABTREE:** I guess, Robin, I understand what you're saying
27 and I guess I don't fundamentally necessarily have an objection
28 to what you're talking about doing there. My problem is more
29 having it included in this document, because, as you see here,
30 we don't know what the closed area is or who it applies to and
31 so we can't analyze it in the context of this document and so if
32 you decide to do that, you're going to have to come back to the
33 council and say we would like to have this closed area and we're
34 going to have to go through the whole process and vote and do a
35 NEPA analysis and conduct public hearings and then go through a
36 rulemaking and approve it.

37
38 I just don't see how this is workable in the context of what
39 we're laying out here, where we come in with a conservation
40 equivalency and we go through NMFS looks at it and makes a
41 determination on it, because I don't think NMFS is going to look
42 at a closed area and be able to make that determination on it.
43 I think that's going to have to come back before the council and
44 go through a whole rulemaking in it, because there is no NEPA
45 analysis to support any of it.

46
47 I think we could do what you want to do, but I just don't see
48 that it can be part of this conservation equivalency process

1 that we're laying out. I just don't see how the NEPA side of it
2 and the rulemaking would work that way.

3
4 **CHAIRMAN GREENE:** Thank you, Dr. Crabtree. We have a motion on
5 the board, a substitute motion, to revise Action 1 to reflect
6 preferred alternatives of closed areas in Previous Action 4. **By**
7 **a show of hands, all those in favor please raise your hand, two**
8 **people in support of the substitute motion; those opposed please**
9 **raise your hand. The substitute motion fails and so I guess we**
10 **go back to the original motion, which is to revise Actions 1 and**
11 **2 to reflect the preferred alternatives of closed areas and sub-**
12 **allocations in previous Action 4.** Is everybody comfortable with
13 where we are?

14
15 **MR. WILLIAMS:** These sub-allocations refer to sub-allocations
16 within the recreational fishery, I guess? I am trying to figure
17 out how this overlays with Amendment 40, where we have already
18 proposed sub-allocations within the recreational fishery.

19
20 What specifically do these sub-allocations refer to? Are they
21 by area or are they within the charter fishery or headboat
22 fishery or are they between private and recreational, I mean
23 between private and for-hire? I don't understand what they
24 mean.

25
26 **CHAIRMAN GREENE:** Mr. Anson, I had your name down and was it to
27 this?

28
29 **MR. ANSON:** No, it wasn't and it might come up at full council.
30 It was relative to the previous motion. I wanted some
31 clarification and so maybe at full council.

32
33 **MR. RIECHERS:** Roy, I think the sub-allocations, and we can turn
34 to our IPT team, but I believe what they were suggesting is that
35 from the previous motions, where we basically were going to
36 allow a state to consider sub-allocations between the two
37 recreational sectors, charter for-hire and private rec, and
38 possibly even party boats, if you want to make that distinction,
39 different from charter for-hire. The state would have that
40 ability. When that Action 4 was dropped out of this, they
41 believe it will fit under Action 2 more appropriately.

42
43 **MR. WILLIAMS:** Robin, how does that overlay with Amendment 40,
44 if it's approved?

45
46 **MR. RIECHERS:** I think what they're trying to do here is still -
47 - If you look at Action 2, right now Action 2 basically suggests
48 you take Amendment 40 as it is or you're out of Amendment 40. I

1 think Dr. Crabtree was suggesting some sort of opt-in or opt-out
2 option and so I assume that's what you would be looking to do,
3 is change Action 2, where there might be an opt-in/opt-out
4 strategy.

5
6 **MR. PEARCE:** I'm not on your committee, but if this comes up in
7 full council, I will definitely vote against this, because I
8 don't want any opt-in or opt-out of Amendment 40. We've got to
9 protect the charter vessels and if this gives the opt-out, I am
10 not interested.

11
12 **MR. RIECHERS:** A point of order, Mr. Chairman, or chairman of
13 the committee. These actions were taken by full council and put
14 into the document that we had before and now they are removed.
15 My viewpoint is we're taking and we're spending a lot of time --
16 We talk about complicating things and we're spending a lot of
17 time on actions the full body has already taken and we're
18 arguing over them again.

19
20 We can certainly argue to pull them out again, which, Harlon,
21 you certainly have the right to do that or anyone else does, but
22 it seems to me we're arguing over things that should have been
23 in the document and so I am going to suggest we get some sort of
24 discussion about that, because they really should have never
25 been removed.

26
27 **MR. ANSON:** Robin, you've got a point. Certainly I think staff
28 used a little bit too much license to modify the document so
29 that that action, Action 1 or 2, did not include any of those
30 preferreds that were identified in the previous document.

31
32 At this point, we are in the middle of the discussion of how to
33 remedy that, outside of trying to get a motion to put them back
34 in. I certainly want as much discussion to be had to try to
35 keep moving the ball to regional management, if at all possible,
36 and so I am just thinking out of the box here right now and
37 certainly we can talk about things, but maybe focus most of our
38 conversation on the action items that are now included in this
39 current edition that we can discuss and maybe come back at a
40 future council meeting with all of the original preferreds in
41 the previous action that was removed put back into this
42 document. I am just making that as a suggestion.

43
44 Certainly there is some comments that were made from Dr.
45 Crabtree that I would like to try to follow up on. Again, I was
46 going to defer to full council, but that's my only comment and
47 so if that's amenable to the Reef Fish Committee and that's
48 something that you all want to do, but I certainly agree that we

1 would like to have the documents to remain intact as we select
2 each meeting.

3
4 If, under review from the IPT and such, there is some other
5 information that would cause some modifications to the
6 documentation, maybe a version that comes back to the council
7 would have a substitute or some discussion relative to another
8 option or another draft that would be modified at that point and
9 certainly hopefully staff can work towards that end for next
10 time, is to come back with a document that might have some
11 additional language that could be modified at that meeting, but
12 yet maintaining the integrity, as much as possible, of the
13 previous document.

14
15 **EXECUTIVE DIRECTOR GREGORY:** I hope I am not stepping in it.
16 Well, the old Action 4 has everything except the closed area and
17 I haven't followed this amendment closely between October and
18 now and everything else is in there and it looks like what the
19 states would do instead of -- They would say go to NMFS and say
20 this is our plan and this is what we want to do.

21
22 Why is closed areas, from NMFS's standpoint, different than
23 changing a bag limit or a size limit or a season? Why was the
24 areas concept pulled out of that? That's the only thing that's
25 different.

26
27 **DR. CRABTREE:** Because we can pre-do the NEPA analysis on bag
28 limits and seasons and things like that, but we don't have any
29 analysis of these closed areas, because we don't know what the
30 closed areas are. That's why it's fundamentally different.

31
32 **EXECUTIVE DIRECTOR GREGORY:** But you don't know what bag limit
33 is going to be proposed. The constraints we had in the old
34 Action 4 of like fourteen to eighteen inches and zero to four
35 red snapper, are those constraints in the document today? If
36 they're not, then you don't know what is going to be presented
37 by the states.

38
39 **DR. CRABTREE:** I think that might be a problem if there aren't
40 any limits put on it. We did have limits put on bag limits
41 between this and size limits between this and so we could
42 analyze all of that kind of thing. I don't even know how you
43 put constraints on closed areas. It is so open-ended, but I
44 think it does need to have some constraints, probably, on bag
45 limits in here, so that we're able to analyze it.

46
47 **MR. ANSON:** If we were to come back with some language on closed
48 areas, just for discussion here, for NEPA analysis, how much

1 direction for -- I mean for size limits, it's fourteen to
2 eighteen and so you could come back with a finite number of
3 options that a state or states may feel like they're looking at
4 for future management.

5
6 Robin, I'm sure you've got some ideas where your breaks would
7 be, right, and what potentially that could set up as far as a
8 Corpus Christi or -- I don't know your geography and so you
9 might have some two or three combinations and, again, it's
10 additional analysis, but that would have some implications or be
11 helpful in regards to answering the NEPA question and would that
12 be correct?

13
14 **DR. CRABTREE:** I think if we had something like that that we
15 could analyze, then we could look at it.

16
17 **CHAIRMAN GREENE:** Okay, Mr. Anson, and so we have a point of
18 order and I am not real sure which way to lead us from here.

19
20 **MR. ANSON:** Regarding the motion? I thought it was a point of
21 order for the agenda or the topic.

22
23 **MR. RIECHERS:** Either we're sitting here working with motions
24 that frankly we're discussing the same items we discussed when
25 we first put them in as preferred and while I'm not opposed to
26 doing that, we should be dealing with them as preferred options
27 still, as they were in the previous document. I thought it
28 would be easy to get us back to where we were in the previous
29 document by making a motion and obviously it's not going to be
30 that easy.

31
32 **MR. ANSON:** John, where are we on the two motions that are on
33 the board? The substitute motion was dispensed, was killed, and
34 so we're still at the top motion. I don't know -- In light of
35 the discussion that we've had and the importance of including
36 the preferreds in the document to maintain, again, the
37 structural integrity, maybe it could be readdressed or someone
38 could bring up that motion, to try to move that along.

39
40 These are two -- I still see the importance of separating the
41 two, the subsector allocations, and moving it into Action 2 of
42 the current document, for continuity, and leaving the rest of
43 the preferreds in Action 1. This motion does not do that and so
44 that's why I'm saying this motion may not be appropriate or may
45 not --

46
47 **MR. RIECHERS:** I would suggest that in the structural revision
48 of the document, which is what has occurred, that nothing should

1 be dropped out. As you follow it from one document to the next,
2 regardless of the thoughts about the feasibility of those or
3 not, that they should be reflected here and so we need to
4 basically revise Action 1 and 2. We need to advise staff to
5 revise Action 1 and 2 back to where they reflect what was in the
6 previous document.

7
8 **MR. ANSON:** I think that would be appropriate. Now, I guess the
9 next question would be whether or not we want to discuss
10 something that isn't in front of us and that's why I went back
11 to my previous statement about possibly just having discussion
12 on the other action items which have not been modified, as that
13 course. I don't know and, Mara, do you have any -- I mean that
14 probably would not be the best thing to do, is to discuss a
15 document that isn't fully prepared.

16
17 **MS. LEVY:** In trying to attempt to give you the options between
18 a delegation and a conservation equivalency model, the IPT did,
19 in some respects, fundamentally rearrange and change the way the
20 document is presented.

21
22 Another example of that would be you had an action in the
23 previous document that addressed default regulations, which was,
24 again, really a non-action. You had to establish them, but it
25 was in there and we incorporated that into Action 1 and
26 basically said if you fall outside the delegation or the
27 conservation equivalency, then the default regulations apply.
28 That's just a part of the process of doing the delegation or the
29 conservation equivalency.

30
31 We did and staff did rearrange this to try and fit both the
32 delegation and the conservation equivalency into the framework
33 of the decisions you need to make and in doing that, did remove
34 the closed areas and the sub-allocations, because it was very
35 difficult to figure out how to do that in the conservation
36 equivalency piece of it and make everything consistent and fit
37 together.

38
39 That's the only comment I'm going to make, is that the document
40 as a whole was fundamentally reorganized, in order to accomplish
41 that conservation equivalency and make it a more sort of step-
42 wise kind of process and include sector separation and things
43 like that.

44
45 It's not just those two pieces that changed and so I understand
46 what you're saying about having preferreds that got taken out,
47 but that was essentially a result of the reorganization of the
48 whole thing.

1
2 **MR. ANSON:** Right and so I understand that and so Robin brought
3 up the motion or made his comments relative to the preferreds
4 that were in the previous document that were identified and his
5 observation here is in Alternative 3 there isn't any mention of
6 closed areas and so perhaps maybe, because this would be a more
7 appropriate format, is maybe the motion needs to come forward
8 with just including closed areas in here, which, again, the
9 motion that's on the board does not do cleanly.

10
11 I go back to a comment that Doug was making, and I don't know if
12 there's an answer, but for NEPA analysis, Alternative 3 is very
13 wide open and so there are no finite bounds, like there were in
14 the previous document that had the preferreds, and so does that
15 mean that we don't need to have that description or that range
16 within each of the bag limits and minimum and maximum size
17 limits, in this document now?

18
19 **MS. LEVY:** I think that's something that I am going to need to
20 think about, but I think the reason for that was that if you're
21 developing a conservation equivalency plan, then you're
22 constrained by the fact that it has to be the conservation
23 equivalent of whatever the coast-wide type measures would
24 provide and so you've got to -- There is only a certain bag
25 limit that you could possibly actually implement, but I think
26 that it might be wise to -- If the council wants to do that, in
27 my mind the wisest thing would be to have those same constraints
28 and to specify the limits of what should be in that plan, but
29 maybe it's not as necessary for the conservation equivalency as
30 it is for the delegation, because for the delegation, you're
31 saying we're delegating this to the states and this is the
32 constraint we want you to abide by and there is no more action
33 on the part of the federal side unless for some reason whatever
34 the state does is inconsistent with the FMP.

35
36 On the conservation equivalency side, all of those plans have to
37 be submitted by one process or another and NMFS has to make an
38 affirmative determination that it is a conservation equivalency
39 before the states actually go ahead with it and so there's a
40 burden difference there and so that might be a justification for
41 having the specified limits for the delegation, but not for the
42 other one, but we could certainly talk about adding those
43 specified limits back in there for all of them.

44
45 **MR. PERRET:** All this discussion is well and good, but we have a
46 motion that was made and seconded and we had a substitute motion
47 made and seconded that failed and it seems like we're in a
48 parliamentary situation where we either vote -- The committee

1 votes this motion up or down or, Robin, did you make the
2 original motion? Whoever made the motion, the motion needs to
3 be withdrawn or vote it up or down. That's, to me, where we are
4 now.

5
6 **MR. RIECHERS:** The reason why I raised the point of order was
7 certainly, in my mind, I can withdraw the motion, but I want to
8 ensure that we're going to go back to the original document.
9 Not only have we lost some issues regarding seasons here, but
10 you have lost also the size limit issues and other things.

11
12 Staff was asked to draft an alternative that would basically
13 present that conservation equivalent measure model in here and
14 what we've done is we've drafted that alternative and we have
15 also structurally changed the document that we had before and I
16 am just trying to get at the root of that, if I can.

17
18 **MR. ANSON:** If you would like, I will certainly let staff
19 explain more in more detail as to why they did. There has been
20 some discussion on that already. I guess my question, again,
21 goes back to Mara and whether or not -- Can we discuss or is it
22 wise to discuss Action 1 with possibly the understanding of the
23 delegation now including some of the ranges that were originally
24 identified in the preferreds or do we not talk about Action 1?
25 I am just trying to move us along as much as possible, but not
26 get in any hot water out of procedural or legal aspects relative
27 to discussion in this document.

28
29 **MS. LEVY:** I think it would be helpful for you to discuss Action
30 1 in terms of the broad ideas that are presented to you. Is the
31 council still interested in moving forward with delegation or is
32 that just off the table now? If it's off the table, do you want
33 to move that alternative to considered but rejected and just
34 deal with the conservation equivalency?

35
36 Talk about the broad issues that each action and alternative
37 represents and then we can go back and flesh out the other
38 things to present to you the next time around.

39
40 That would be my suggestion and if that means adding the closed
41 areas back in, but noting that this is still a relevant
42 discussion point, or something like that, then that's what we'll
43 do, but I would focus on the broad management scheme that you
44 actually want to pursue in this document and what to do with
45 sector separation and the regions and all those others things
46 that are relevant to that broader decision.

47
48 **CHAIRMAN GREENE:** Okay and so based on what Ms. Levy has just

1 said, I guess we need to pick back up the current motion as it
2 is on the board.

3
4 **MR. WILLIAMS:** Following up on what she said, could we table
5 this and then go ahead and work our way through these and then -
6 - Maybe we just reject it now. I mean that's what I'm going to
7 do, but --

8
9 **MR. RIECHERS:** I will withdraw the motion.

10
11 **CHAIRMAN GREENE:** The motion has been withdrawn and I guess we
12 pick back up with where we were. Does the seconder agree to
13 withdraw the motion?

14
15 **MS. BADEMAN:** I think it was me and if it was, then yes.

16
17 **MR. ANSON:** As Mara just described, I think in broad terms we
18 can talk about it and yes, I think staff has got note and I have
19 made comment that it would be best that there is some continuity
20 between the previous document and this document.

21
22 We might have to come back and deal with that and just say all
23 of those are moot or don't apply anymore and we can make a
24 motion to that effect, but I think they've gotten -- Is that
25 correct, Dr. Lasseter, that you will go ahead and include the
26 Action 4 language into this document for the next version?

27
28 **DR. LASSETER:** Yes, I will work with the IPT and we will figure
29 that out. I should also note that yes, we cut out that Action
30 4, Action 5, and Action 7 and so we really did completely
31 restructure this and simplified it down and then brought it to
32 you, but yes, we will bring those back in.

33
34 **MR. ANSON:** Is that sufficient, Robin?

35
36 **MR. RIECHERS:** Yes.

37
38 **CHAIRMAN GREENE:** With that, I guess we move to Dr. Lasseter to
39 carry on and is that correct?

40
41 **MR. ANSON:** Only in as much as Ms. Levy had described, that we
42 can talk in broad context of the current alternatives that are
43 under Action 1 and if you feel like you've had that discussion,
44 then we can move on, but I would leave it up to the committee.

45
46 **CHAIRMAN GREENE:** Okay and I had a couple of people on the list
47 to speak before that motion was made, Mr. Fischer and Ms.
48 Bademan. Would you like to pick back up where we were before

1 that motion, Mr. Fischer?

2
3 **MR. FISCHER:** Thank you, Mr. Chairman. Getting back on track, I
4 think it would be prudent to make a motion so we could have
5 something on the table to discuss and keep us focused on one
6 topic. **That Alternative 3 be the preferred alternative.**

7
8 In the discussion, I am sure we will talk about bag limits and
9 if we want to include a size range, for analysis reasons, and
10 minimum and maximum size limits, like we did have in the
11 original document, but Alternative 3 would be the conservation
12 equivalent measures, where the states create their own measures
13 and whatever date certain it has to be in by, submit it to
14 National Marine Fisheries for approval.

15
16 **MR. WILLIAMS:** Second.

17
18 **CHAIRMAN GREENE:** The motion is made by Mr. Fischer and seconded
19 by Mr. Williams. Any discussion about making Alternative 3 your
20 new preferred?

21
22 **MR. FISCHER:** Some of the reason about Alternative 3 versus
23 Alternative 4, while it's fresh in our minds, is from the
24 presentation we saw, there is a lot of words that came out, like
25 Alternative 4 or what the Mid-Atlantic could do.

26
27 It was slow and as far as the technical review committee, it's
28 not created yet and parts of it are complicated and it adds
29 another layer of complication to the process, but yet, it
30 doesn't make anyone more accountable and in the end, Roy's
31 office has to analyze it and look at it and approve it either
32 way and so this more streamlined method, the quicker method,
33 would be states create their plan and submit them by, like I
34 said, whatever dates, if we back the calendar up -- It may have
35 to be, Roy, the fall, sometime in the fall, to your office for
36 submittal.

37
38 **MR. ANSON:** I just wanted to follow up with Myron's comments
39 from what Mara just said, that at least for Alternative 3 that
40 we probably won't need to include, and I am just talking to Dr.
41 Lasseter, that you don't need to include the fourteen to
42 eighteen inches and all that stuff, since that would be included
43 in the process of equivalency. I just want to make sure. Thank
44 you.

45
46 **MR. FISCHER:** Then to finish up, the alternative had various
47 options for sunset and we used the preferred three-year and we
48 also used three years for sector separation and so to keep it

1 consistent, we could stay with three years, because we may be
2 merging these documents either in this document or down the
3 road. I could see them marrying together.

4
5 **CHAIRMAN GREENE:** Okay and so you're wanting to modify -- It
6 would be Preferred Alternative 3, Option c, and the seconder is
7 fine with that? Okay.

8
9 **DR. CRABTREE:** I am okay with Alternative 3 if that's the way
10 you want to go. I mean you are as a council essentially
11 abdicating a lot of control over this, because the technical
12 review committee would serve at your pleasure and you would
13 appoint them. That's up to you.

14
15 I don't know why you want to sunset this. Why do we keep
16 sunsetting things? We are going to have spent five years
17 getting this put in and then it's going to go away in three
18 years and we're going to have to go through this whole process
19 to stop it. If after three years you don't like it and it's not
20 working, you can get rid of it, but I don't really know why you
21 want to put a sunset in there. I think they are just generally
22 bad ideas.

23
24 **MR. RIECHERS:** I will turn to NMFS. As we heard this morning in
25 the presentation on the model in the Mid-Atlantic and the
26 difference in the way they are approaching this regional
27 management approach as opposed to delegation, after we've gotten
28 past -- Well, I guess two things.

29
30 Describe to me the difference between getting this passed using
31 Preferred Alternative 2 or Preferred Alternative 3 and then also
32 our steps to get rules passed each year subsequent to that. It
33 seems to me that the second phase is very similar, but the first
34 phase may be different and I am just trying to understand the
35 differences between Alternative 2 and Alternative 3 in regards
36 to what it means from a timeline and what it means from a NEPA
37 analysis and what it means from that kind of perspective.

38
39 **MS. LEVY:** The delegation option requires the three-quarter
40 majority vote to submit it and implement it, but once that's
41 done, there is no annual rulemaking and so NMFS would review
42 what the states propose to do under the delegation and make a
43 determination about whether that's consistent with the FMP and
44 the rebuilding plan and all that. Essentially, is what you're
45 proposing going to constrain the harvest sufficiently to your
46 allocation?

47
48 As long as there is no determination that it's not consistent,

1 then you have your state regulations that you implement. If
2 there's a determination that it's not consistent, then the
3 delegation essentially gets revoked until there is something put
4 forward that NMFS can say is consistent with the FMP.

5
6 The burden there is initially on the council establishing the
7 delegation and then that delegation is effective unless it gets
8 suspended.

9
10 The Option 3 and 4, which are the conservation equivalency,
11 require this initial plan to set it up by majority vote. It's
12 not a delegation, but then the states have the burden of
13 submitting their plans for review through some type of process
14 and NMFS has to make an affirmative determination every year
15 that those plans meet the conservation equivalency and publish a
16 rule to that effect.

17
18 The main difference between these are the burden shifting and
19 then the regulatory process that has to happen after the fact
20 for the conservation equivalency part that doesn't happen for
21 the delegation.

22
23 **MS. BADEMAN:** I think I'm okay. My question was long the same
24 lines as Robin and just maybe I will ask Myron why you're
25 advocating for 3 versus 2. I think I know the answer, but --

26
27 **MR. FISCHER:** Actually, I thought it would appease the crowd,
28 because that's what we did in the last document and it's what we
29 did for sector separation. I am not on to any firm sunset and I
30 agree with Roy that we could do away with the sunset, because
31 all it takes is a stroke of votes to do away with any plan we
32 have, but Alternative 3 I am fixed on. I am not fixed on a
33 sunset.

34
35 **MS. BADEMAN:** Why?

36
37 **MR. FISCHER:** For the reasons Roy stated. We could vote it down
38 at any time and I was hoping -- It gives stability and gives
39 time for the program to march forward and see the merits of it,
40 but yes, we could always vote it out and so maybe it's just a
41 drill that we state a three-year sunset and then in reality, we
42 could vote it out in a year.

43
44 I would not -- I would encourage anyone who would think a two or
45 a five-year sunset. I would like to talk about it and I would
46 like them to agree with me on Alternative 3, much more so than
47 the years in the sunset.

48

1 **MS. BADEMAN:** I am not worried about the sunset. Whatever.
2
3 **DR. CRABTREE:** My inclination is to prefer Alternative 4. I
4 think I would prefer to have a technical review panel appointed
5 by the council, because I can see a lot of states looking at
6 what other states are doing and having a lot of questions about
7 this and that and I think that a technical review panel that has
8 people from each of the states might be a pretty good way for
9 the states to know what's going on and to kind of keep an eye on
10 all of this.
11
12 I know it takes a little longer, but I just have a feeling that
13 if it's just up to NMFS to look at this that we're just going to
14 get inundated with all sorts of dissatisfaction and questions
15 and this and that and I'm not sure it wouldn't be better just
16 right off the bat to have some other eyes than the Fisheries
17 Service involved in looking at this stuff.
18
19 **MR. WILLIAMS:** To Martha's question about the two years, Martha,
20 if we do two years --
21
22 **MS. BADEMAN:** I am not asking about years. My question was not
23 about years and the sunset. My question was why was Myron
24 advocating for Alternative 3, the conservation equivalency
25 option, as opposed to the delegation option. That was my
26 question.
27
28 **MR. FISCHER:** I answered the wrong question, Martha, and I'm
29 sorry. Because this looks like a very doable option. It still
30 needs the approval of the council and needs the approval of
31 Roy's office and so it's got criteria it has to maintain for any
32 state, including your state, to submit a plan and it's got
33 flexibility and it's doable.
34
35 **MR. MATENS:** I hope I am not picking a nit here, but I wonder if
36 Mr. Fischer and Mr. Williams would agree to remove the language
37 about the sunset or would you entertain a substitute motion?
38
39 **MR. FISCHER:** Yes, we did.
40
41 **MR. MATENS:** So you've eliminated that language?
42
43 **MR. FISCHER:** We eliminated it.
44
45 **MR. ANSON:** Dr. Crabtree, I guess there is some benefits and
46 some drawbacks to the technical committee, review committee, but
47 relative to the statement that you wouldn't want necessarily
48 your staff to be doing the analysis on whatever a state -- I

1 mean your staff does analysis all the time.

2
3 I can understand that it might be a little bit more lengthy with
4 having potentially five plans being submitted, but you're going
5 to be doing analysis if one state selects fourteen on one end
6 and eighteen in another state and you will still be reviewing
7 whatever is provided by the states and am I correct?

8
9 **DR. CRABTREE:** Right and I don't have a problem with the work
10 and doing the analysis. We will do that anyway. My problem is
11 having just the burden put on us. I know some states have been
12 particularly critical of the Fisheries Service and their
13 management, in some cases. It seems to me that you might want
14 to have some other folks involved in this so that we don't get
15 in a situation where the Fisheries Service is making this
16 decision alone.

17
18 I think there is some benefits to having a technical review
19 committee. I am not over one way or the other, but given some
20 of the issues that we've had and some of the statements that
21 have been made, it seems to me that you guys would probably want
22 some additional review outside of the Fisheries Service over
23 this.

24
25 **CHAIRMAN GREENE:** Any further discussion on the motion on the
26 board to select Alternative 3 in Action 1 to be the preferred?
27 **Seeing no more hands, all those in favor of the motion on the**
28 **board please raise your hand; all those opposed please raise**
29 **your hand. The motion passes.** That moves us on to -- Dr.
30 Crabtree.

31
32 **DR. CRABTREE:** Before we go, one of the issues that I think Mara
33 raised was is delegation still an alternative you want to
34 consider or is it essentially off the table and something that
35 could be removed from the document, to help streamline it? I
36 would pose that question to you.

37
38 **MR. RIECHERS:** This is just one member of the committee
39 speaking, but I think we very much want to leave delegation in
40 the document at this point. I think we are getting our arms
41 around conservation equivalency and had a presentation this
42 morning and Myron -- I know he has looked at this a little
43 closer than maybe some of us have and certainly it offers what
44 seems like maybe some benefits, but delegation also offers some
45 other benefits and at this point, I don't think we would want to
46 remove it from the document.

47
48 I think we would want to leave it there, realizing that yes, it

1 requires more analysis if we leave it in there through the whole
2 timeframe, but obviously we're not here to vote this up or down
3 today, or at least I'm not anticipating that we are, and so I
4 would certainly want to leave it in until we have another chance
5 to look at pros and cons and to further analyze where we may be,
6 from a delegation perspective or a conservation equivalency
7 perspective and once we see the full range of options as well,
8 which we don't have in the document right now.

9
10 **CHAIRMAN GREENE:** Okay. Any further comments?

11
12 **MS. BADEMAN:** Just to say that I agree with that and it seems to
13 me there are some potential benefits to delegation. It seems
14 like that's the faster faster option, since you're not having to
15 do annual rulemaking. If states get in a place where they're
16 happy with the rules that they have and they want to carry them
17 over a couple of years in a row, it seems like delegation would
18 be one way to do that and so I think keeping it in is the way to
19 go for now.

20
21 **MS. LEVY:** I just wanted to mention that we had the brief
22 discussion about the ranges of like size limit and bag limit not
23 being in there anymore and I briefly stated why that might not
24 be necessary for the conservation equivalency piece and also the
25 fact that with the conservation equivalency, there is a
26 rulemaking each year that happens and so NMFS would do a NEPA
27 analysis on whatever plans the states submit.

28
29 That is not the same for the delegation and so I would just
30 suggest, when we go back and modify this document, that we add
31 the ranges back at least to the delegation alternative and I
32 just wanted to bring that up now, so that when we go back and do
33 that that you're not sort of surprised that the ranges are back
34 in the delegation section, but maybe not in the conservation
35 equivalency pieces. If anyone objects to that, let us know now.

36
37 **CHAIRMAN GREENE:** Okay. I think what we're going to do now is
38 it's a few minutes after twelve o'clock and it's probably as
39 good a time as any to stop right now for lunch and pick back up
40 at 1:30. We will resume Reef Fish at 1:30 and we stand
41 adjourned until then.

42
43 (Whereupon, the meeting recessed at 12:05 p.m., January 27,
44 2015.)

45
46 - - -

47
48 January 27, 2015

1
2 TUESDAY AFTERNOON SESSION
3
4
5

- - -

6 The Reef Fish Management Committee of the Gulf of Mexico Fishery
7 Management Council reconvened at the Grand Hotel Marriott, Point
8 Clear, Alabama, Tuesday afternoon, January 27, 2015, and was
9 called to order at 1:30 p.m. by Chairman Johnny Greene.

10
11 **CHAIRMAN GREENE:** We are going to go ahead and call the Reef
12 Fish Committee back together here. We are going to pick back up
13 under regional management, under Action 2, and with that, I will
14 turn it over to Dr. Lasseter.

15
16 **DR. LASSETER:** Thank you, Mr. Chairman. Actually, Charlotte,
17 can we go back to where we were? I would like to request a
18 point of clarification for staff. A committee motion was passed
19 to change the preferred alternative to Alternative 3 and then
20 there was discussion about the sunset options. Did we finish
21 that discussion and are you leaving the preferred alternative
22 underneath Alternative 2 or did you want to change it or are we
23 taking this up later? I didn't quite catch the end of the
24 discussion.

25
26 **CHAIRMAN GREENE:** I guess I would go back to our last motion
27 that was passed and that was from Mr. Fischer.

28
29 **MR. FISCHER:** Yes and it was to use Alternative 3 as the
30 preferred alternative with no sunset clause. We had a friendly
31 between myself and Roy to remove the sunset clause.

32
33 **DR. LASSETER:** Okay. Wonderful. So then it will no longer be
34 preferred under Alternative 2 as well and I just wanted to
35 confirm. Thank you. Let's move on to Action 2, which begins on
36 page 13 of the document.

37
38 This action would only be applicable if sector separation is
39 implemented and in place that the time that this document goes
40 final and will be implemented and so the Alternative 1, no
41 action, specifies that sector separation would be in effect for
42 the years 2015 to 2017.

43
44 If it is adopted and implemented, Amendment 40, that is how
45 Alternative 1 is written, that those three years we would have
46 separate management of the quotas. Uncertain of when this
47 amendment, Amendment 39, regional management, will go forward,
48 some of this may need modification.

1
2 Alternative 2 proposes that for regional management to extend
3 the separate management of the federal for-hire and private
4 angling components and that this amendment would then apply to
5 the private angling component only. Alternative 3 proposes to
6 end the separate management of the for-hire and private angling
7 components, should this amendment be put in place before 2017,
8 and the action of this amendment then apply to both the federal
9 for-hire and private angling components of the recreational
10 sector.

11
12 **MR. FISCHER:** At times, I get confused on this. I will tell you
13 what I would like to see and, of course, I would need support
14 from the committee and I would need a majority of support, would
15 be an alternative that specifies that each region can adjust
16 separately their private angling fleet and their charter angling
17 fleet.

18
19 Now, the charter percentage would be dictated by Amendment 40.
20 It would have to be incorporated in and each state's percentage
21 may be different, because historically they didn't all catch
22 that static 42.7 or whatever the percent was. It may be one of
23 these three options, but I am not reading it specifically.

24
25 **DR. LASSETER:** I think what I'm understanding, and I just got
26 affirmation of this from Mara, this sounds like the way we would
27 work back in that sub-allocation alternative from the previous
28 Action 4 in the previous document. We could work that in as an
29 Alternative 4 and I believe reflect what you're getting at,
30 Myron. One question though. How are you envisioning allocation
31 under that?

32
33 **MR. FISCHER:** The allocation would be -- The council would
34 allocate to the region, but the sub-allocations would be
35 dictated, again, through council action at this past meeting
36 through Amendment 40.

37
38 It may take some work on Roy's office to say, Louisiana, you are
39 going to get this many pounds total and this much will be for
40 private and this much will be for charter, but we could let our
41 people decide what dates and what bag limits and what they want
42 that suits our region.

43
44 **MS. BADEMAN:** Ava is looking really confused and I was just
45 going to say basically I think what Myron is saying is you would
46 apply the formula that was approved in Amendment 40 to that
47 state, to their charter for-hire and then their private anglers.
48 The percentages would be different, but you would be using the

1 same method to get your breakdown. Does that make sense? Is
2 that right, Myron?

3
4 **MR. FISCHER:** Yes.

5
6 **DR. LASSETER:** I think what we will need to do is add an
7 alternative in this action and then we'll also modification the
8 allocation alternatives in what is new Action 4.

9
10 **MR. FISCHER:** In essence, the document would be creating not
11 five allocations, one for each region, but it would actually be
12 creating ten allocations, one for each region's private anglers
13 and one for each region's charter fleet. That would be living
14 up to what we passed in Amendment 40.

15
16 **MR. RIECHERS:** Myron, I thought it -- I started out thinking you
17 were suggesting Alternative 4 that was an opt-in or opt-out
18 notion. I thought when you first said you were going to include
19 the Action 4 that that's what you were attempting to do, because
20 we had it as a choice in the previous document.

21
22 Obviously Amendment 40 has passed and so you're suggesting there
23 may be a way -- If you want it built in, it's Alternative 2, as
24 I understand it. Then you also brought in bag limits that could
25 be differential, which I think really fits under the other
26 Action 1 that we -- I mean there is nothing ever saying that bag
27 limits possibly cannot be differential, because in fact bag
28 limits aboard charter vessels are handled differently where
29 charter captains and so forth can't have bag limits now. In
30 some respects, there's a subtle difference there now.

31
32 **MR. FISCHER:** I don't want to get in the weeds on the verbiage,
33 but the last sentence of Alternative 2 is the actions of this
34 amendment would apply to the private angling component only,
35 which then would lead me to believe it doesn't include the
36 charter vessels, but as long as it arrives in the next document
37 where we could work with it and it's understandable.

38
39 **CHAIRMAN GREENE:** Just to make sure that I understand what
40 you're getting at, if your state had a hundred charter boats in
41 it and they were awarded a specific number of pounds, you're
42 asking for it to be included within that state's sub-allocation?

43
44 **MR. FISCHER:** Correct and if our boats want a pure summer
45 fishery with two fish and Alabama boats want a one fish bag
46 limit starting in March, both regions could have their wish.

47
48 **CHAIRMAN GREENE:** Okay and I think I saw a hand over here

1 somewhere. Mr. Williams.

2

3 **MR. WILLIAMS:** What if an Alabama boat wanted to fish off of
4 Louisiana, which a lot of that goes on now?

5

6 **MR. FISCHER:** We have a lot of fine Alabama boats come and they
7 could go to his office and buy the license and show up and fish.

8

9 **MR. WILLIAMS:** They wouldn't be landing though. I am trying to
10 figure this out and I'm sorry that I'm a little slow here, but
11 so a boat from Alabama or from Destin fishes off of Louisiana
12 and they would have to land the fish there, too. If Florida
13 were closed or Alabama were closed, they would have to land the
14 fish --

15

16 **MR. FISCHER:** If they are leaving Alabama and coming back to
17 Alabama, their fish would be counted as Alabama fish.

18

19 **MR. WILLIAMS:** As long as the Alabama season is open.
20 Otherwise, there's a violation.

21

22 **CHAIRMAN GREENE:** I understand what you're getting at and if you
23 have a specific number of vessels in your state that got an
24 allocation and you have boats from another region coming and
25 fishing against the Louisiana allocation, that may be rather
26 sticky, but that's your prognosis.

27

28 **MR. FISCHER:** You mean if they come and stay, as we have a lot
29 of Alabama boats come? Unless something changes in today's
30 regulations, I would feel that they could come and fish and
31 offload their fish. They would have to buy the out-of-state
32 captain's license.

33

34 **CHAIRMAN GREENE:** It was just a point to make sure that
35 everybody was clear on that. Do you want to make a motion to
36 reflect the new alternative or how do you wish to proceed here,
37 Mr. Fischer?

38

39 **MS. LEVY:** I don't think that you need a motion. I think what
40 we're going to do is go back and look at the best place to do
41 it, whether it's here or in the action that decides allocation.
42 From what I hear, this essentially has to do with the states
43 being able to either opt in or opt out of doing sub-allocations
44 for the private angling versus their charter vessels, which is
45 kind of what we had in that old Action 4, which is what we
46 talked about adding back in. Where we add it, we'll figure out
47 where it best fits, but if that's the intent, then we were going
48 to do that anyway.

1
2 **CHAIRMAN GREENE:** Okay. I thought that's where we were going,
3 but I just wanted to make sure with that. Any more discussion
4 on this before I turn it back to Dr. Lasseter?

5
6 **MR. MATENS:** A point of clarification. In full council, will
7 this item be on the table in full council tomorrow or the next
8 day?

9
10 **DR. LASSETER:** This will be in the report that staff will be
11 adding these alternatives. If you're not passing it as a
12 motion, it won't be something for the full council to vote on
13 again, but staff is just understanding this as instructions on
14 how to modify the document for the next iteration.

15
16 **MR. MATENS:** Okay and if I may go further, I would like to be
17 sure that I understand this. I think that if I get in my little
18 boat and go to off of Sarasota, Florida in the EEZ and catch a
19 snapper legally and bring it back and land it in Louisiana, it's
20 a Louisiana fish. I see a bunch of pigeons nodding their heads
21 and okay.

22
23 I also believe that if Alabama, for example, and I am not
24 picking on Alabama, comes, as they do, and harbors a bunch of
25 their boats at Venice for the winter and go out and catch
26 anything and land it in Louisiana, that's a Louisiana fish,
27 whatever species it is, and they have to be licensed properly in
28 Louisiana and is that a correct statement? Thank you.

29
30 **CHAIRMAN GREENE:** Thank you. Go ahead, Dr. Lasseter.

31
32 **DR. LASSETER:** Thank you, Mr. Chairman. I want to point out one
33 more thing before you move on from Action 2. In the
34 restructuring --

35
36 **CHAIRMAN GREENE:** Hang on one second.

37
38 **MR. WILLIAMS:** I am not going to pose that and put it on in
39 here, but as a practical matter, that's just not how the fishery
40 operates. I mean there are a lot of boats that come -- If we
41 end up with different seasons in Louisiana, Alabama, and
42 Florida, that's going to -- What you're talking about is going
43 to have a huge impact, because there are Alabama boats that come
44 fish off of Florida and they go back to Alabama and vice versa.

45
46 There is a lot of boats that fish off of Louisiana from at least
47 Destin westward and that's going to have a big impact on the way
48 the fishery operates and I think it's going to be real hard to

1 estimate the impacts of some of it and I suspect we're going to
2 hear that. During public testimony, we're going to hear
3 something about this.

4
5 **MR. FISCHER:** Roy, you could make a motion, because we're going
6 to have to take comment. You could make a motion that if a boat
7 travels to another state they could only land fish if their
8 state is open or something to that effect, and give it as an
9 option for the public to look at, because I think that's what
10 you're getting to.

11
12 **MR. WILLIAMS:** That's going to be the impact and I'm saying I
13 think that's not going to be palatable to -- That's not the way
14 the fishery operates now and so I think we'll hear a lot about
15 that.

16
17 **MR. WALKER:** That was a question. In Louisiana, when you buy a
18 fishing license there commercially, you buy a vessel license and
19 a captain's license and I guess my question was how would the
20 license work for a recreational fisherman that came to Louisiana
21 to fish?

22
23 **MR. FISCHER:** If they're a recreational angler, they would have
24 to buy an out-of-state recreational license if they're from out
25 of state. If they're from Louisiana, they buy a resident
26 license. It's simple.

27
28 **MR. WALKER:** We have a non-resident, but, commercially, you have
29 to have a vessel license and then you also have to have a
30 captain's license, two licenses.

31
32 **MR. PERRET:** Let me see if I can confuse things even more. If a
33 region is closed, and we seem to be using Louisiana now as an
34 example, since it's the central part of the Gulf and we've got
35 fishermen from other states, from east as well as west, but
36 we've got state waters and we've got the EEZ.

37
38 If Louisiana's state waters are closed, Louisiana fishermen
39 would still be able to fish the EEZ off of Louisiana as long as
40 they land in Texas and are properly licensed and land in
41 Mississippi if they are properly licensed. I assume other
42 state's fishermen could still fish off the EEZ of Louisiana as
43 long as they're landing in their state, but they could not fish
44 state waters and I used Louisiana, but that would be true for
45 any state and so we're all on the same playing field then?
46 Okay. Thank you.

47
48 **CHAIRMAN GREENE:** With that, I will go back to Dr. Lasseter at

1 this point.

2
3 **DR. LASSETER:** Thank you, Mr. Chairman. Before we move on from
4 Action 2, I wanted to raise one more point. When we
5 restructured the document, we also removed what was previously
6 Action 5 and that addressed the for-hire permit, known as
7 provision 30B, and because we had this action that addressed
8 sector separation, we had removed that one, but since you had a
9 preferred alternative in that, I did want to bring up the action
10 again and see if you are comfortable with us removing it or
11 would you like us to insert it?

12
13 Again, it was a two-alternative action. You had no action,
14 which required the federally-permitted for-hire vessels to fish
15 under the more restrictive federal regulations, if state
16 regulations are less restrictive, and then the Preferred
17 Alternative 2 you had selected would be to remove that
18 provision.

19
20 In the IPT discussions, that action did not seem applicable any
21 more in the situation that we were going forward in, but since
22 we had removed it, I wanted to bring it back up and see what you
23 would like us to do with it.

24
25 **CHAIRMAN GREENE:** Any comments relative to that, Mr. Riechers?

26
27 **MR. RIECHERS:** If it was applicable in the previous document, I
28 guess I am struggling to see why it isn't applicable now.

29
30 **DR. LASSETER:** Even at the time, it was not really applicable
31 and the discussion laid that out, because if you were -- At the
32 time, it was delegation or the state implemented and your
33 regulations would apply into the EEZ and basically you are
34 covering both your for-hire and your private angling vessels.

35
36 With this Action 2 here, the decision is are each of the regions
37 going to apply the regional management regulations to just the
38 private angling component or to both the for-hire and private
39 angling component and therefore, it overlaps with what the issue
40 was in the other document, where you were handling just what to
41 do with the for-hire sector, the for-hire component.

42
43 **MR. RIECHERS:** Maybe I am confused and maybe I am the only one,
44 but it seems to me that if you are managing your state and your
45 federal waters and you have a charter vessel and each state is
46 managing that, then 30B still applies here if you wanted to
47 remove it.

48

1 Obviously I think our notion here was to remove it, because you
2 didn't want people under different regulatory patterns who were
3 moving back and forth between federal and state or not
4 necessarily have them in different regulatory patterns.

5
6 I think, while I heard the explanation, I think it may still
7 apply here. I am at least in favor of making sure we pull it
8 back into this document and let us see that discussion again and
9 decide then whether or not it should be removed. At least that
10 would be my preference.

11
12 **CHAIRMAN GREENE:** Any further discussion?

13
14 **DR. CRABTREE:** There are some scenarios in here where you can't
15 remove it. If we're going to manage the -- If sector separation
16 is going to continue, then you have to have the 30B provision to
17 make it work and so I agree with the decision to take it out of
18 here.

19
20 The other problem you've got is if a state opts out of this and
21 opens up their state waters year-round or something, do you want
22 the whole for-hire fleet to be able to go fish there, because
23 that's going to spill over and have effects on the other states
24 that are participating in it and so I think staff made the right
25 decision.

26
27 **MR. RIECHERS:** If I may, status quo of that alternative is no
28 action and so while you -- I agree, Roy, there are some places
29 where it may not work here and there are some places where it
30 may work here to have it removed. I am not certain where we end
31 up, but, again, even within the context of having the
32 alternative in the document, you had the no action alternative,
33 which was 30B in place.

34
35 **DR. CRABTREE:** My argument would be there is no circumstance in
36 the amendment where removing the requirement is necessary. If
37 the states all go to regional management and if it applies to
38 for-hire and other vessels, then the 30B requirement is moot and
39 so I just don't think that's an action that needs to be in here.
40 You don't need to get rid of it. It won't affect, because there
41 is no conflict between the state and federal regulations.

42
43 **MR. RIECHERS:** I understand that aspect, but there is still
44 people who are going to be federally permitted and those who are
45 not federally permitted and I am a little bit worried about us
46 tangling ourselves up without some ability to talk to that in
47 this document.

1 **CHAIRMAN GREENE:** Any further discussion?

2
3 **DR. LASSETER:** We will carry on with the next action, Action 3,
4 which begins on page 14. This is the action where you establish
5 the regions for management and we have reordered these.
6 Initially, one had been removed and sent to considered but
7 rejected and then brought in again and then there were some
8 other changes and so we have now reordered them so that the
9 alternatives with two regions are together and your five regions
10 come after.

11
12 Alternative 1 would be no action, retaining the current federal
13 regulations for management of recreational red snapper in the
14 Gulf. Alternative 2 would be to establish an east and west
15 region. Alternative 3 also is an east and west region.
16 However, Alternative 2, Mississippi is in the east and in
17 Alternative 3, Mississippi is in the western region with
18 Louisiana and Texas.

19
20 Preferred Alternative 4 is to establish five regions
21 representing each Gulf state, your current preferred, and then
22 also we modified the Alternative 5 somewhat. Previously, it
23 spoke to the individual Gulf states could get together and
24 submit a proposal and we modified the wording a little bit and
25 it's now establish five regions representing each Gulf state and
26 those regions may voluntarily form larger, multistate regions
27 with adjacent states. Is there any further discussion on this
28 action? This one has probably changed the least out of all of
29 the actions.

30
31 **CHAIRMAN GREENE:** Any discussion on Action 3, establish regions
32 for management? We currently have a preferred to establish five
33 regions representing each Gulf state. Any discussion? I am not
34 seeing any and go ahead, Dr. Lasseter.

35
36 **DR. LASSETER:** Thank you, Mr. Chairman. Moving on to Action 4,
37 it begins on page 18 and this is apportioning the recreational
38 quota among regions.

39
40 **CHAIRMAN GREENE:** Hold on, Mr. Fischer is waving.

41
42 **MR. FISCHER:** Sorry for being late and it has nothing to do with
43 the alternatives in the action, but it has to do with the
44 descriptions. I think we've stated many times that the harvest
45 would be counted in the port they landed in or the region, the
46 state, they landed in, but yet we continue to talk about the
47 lines and the lines aren't necessary.

1 I just wanted to have a quick discussion on the necessity of
2 continuing to have the lines in the document, because it does
3 confuse people. It's based on where the fish are landed and we
4 just talked about the examples. An Alabama boat comes off of
5 Louisiana and catches fish and goes back to Alabama, it's an
6 Alabama fish and it doesn't matter where he caught it. It's
7 where he landed it and that's the way MRIP and all of the state
8 systems operate.

9
10 I don't know if we're the only people who see it that way, but I
11 think it's a subject to confuse the public when they think
12 they're fishing within the boundary.

13
14 **DR. CRABTREE:** So what happens if one state opts out or their
15 equivalency plan is rejected? Then we're going to have to put
16 some regulations in place in the EEZ off of that state and how
17 do we do that without delineating that state?

18
19 **MR. FISCHER:** Roy, that's a real good point and I guess I don't
20 look at people being guilty upfront, but you're right. I don't
21 know if there's another alternative, another method, of doing
22 it, but --

23
24 **DR. CRABTREE:** There might be another method and I am not
25 prejudging if anyone is guilty upfront, but we need to think
26 about what happens if a state just opts out right off the bat
27 and doesn't want to do this. Then how are we going to handle
28 the season off of that state? It's hard for me to see how that
29 works without the ability to draw some lines and then we
30 presumably put up some sort of opening and closure on the EEZ
31 off of that state, but I am open to your suggestions as to other
32 ways to handle it.

33
34 **CHAIRMAN GREENE:** I certainly agree. I know within seventy
35 miles of Orange Beach I can be off the coast of four states
36 legally and so it's certainly something that has to be
37 considered.

38
39 **MR. FISCHER:** Roy, after your explanation, I understand.

40
41 **MR. MATENS:** I hate to be a contrarian, but I just don't see any
42 reason for these lines. I am viewing the EEZ as sort of a free
43 zone and anybody can fish it. You can only fish state waters if
44 you are licensed within that state. If you fish in the EEZ and
45 Johnny comes over and fishes in Louisiana, and I am all for
46 that, and Alabama is closed and he lands in Venice and he buys
47 the necessary licenses to land in Venice, I think that's the way
48 it ought to be.

1
2 I think that we need to view the states having primacy in state
3 waters and whatever landings are landed in that state from
4 federal waters. I just don't see any conflict in that or any
5 confusion and if Johnny wants to fish in Louisiana and wants to
6 buy the licenses, we are happy with that.
7
8 **DR. CRABTREE:** What happens, Camp, if a state says we're not
9 going to play and we're opening up year-round, opens their state
10 waters up year-round and so they're now going to catch far more
11 than their allocation and do you want us just to leave the EEZ
12 open and not do anything about that?
13
14 **MR. MATENS:** To that point, Roy, if they catch their entire
15 allocation in state waters, then they've caught their entire
16 allocation. How that is enforced is not up to me. That is
17 somebody else.
18
19 **DR. CRABTREE:** Well, it is up to us. It's our plan and we have
20 to put it in place, but if we don't have the ability to close
21 federal waters off of that state, we have no way to constrain
22 the catches.
23
24 **MR. MATENS:** You can catch them at the dock. If State A has
25 closed their state waters and caused them to be closed for
26 whatever reason and I leave Cameron, Louisiana and fish, if
27 State A is Texas, forty or fifty miles into Texas in the EEZ,
28 what am I doing to the resource? The resource is just as
29 protected, because we're all constrained to the amount of fish
30 we can catch.
31
32 **DR. CRABTREE:** But you're not constrained if you don't choose to
33 participate is my point. A state could say they could submit a
34 conservation equivalency plan that's rejected and the state
35 could say, okay, we're going to open up year-round. We need to
36 then do something to constrain the catches, but without the
37 lines, how do we then do that?
38
39 **MR. MATENS:** If that's the way it went down, if I understand the
40 way this is going, then the Department of Commerce would close
41 that state and is that correct?
42
43 **DR. CRABTREE:** No, we can't close state waters.
44
45 **MR. MATENS:** They close the fishery, yes.
46
47 **DR. CRABTREE:** We can only close the EEZ.
48

1 **MR. MATENS:** If the Department of Commerce says State A has
2 exceeded their quota in state waters and they can't catch any
3 more fish, that's what you've said. That's what you've said.
4 If you're telling me that a Louisiana charter boat can't go into
5 the EEZ off of that particular state and land in Louisiana, I
6 don't see that. I don't see that being a problem. How does
7 that affect the resource?

8
9 **DR. CRABTREE:** We can talk about it, but I don't think this is
10 workable without the lines and I've said that and I don't want
11 to belabor the discussion.

12
13 **MR. MATENS:** Notwithstanding the point that Louisiana right now
14 is in different two lines, but not going there.

15
16 **CHAIRMAN GREENE:** Any more discussion? Go ahead, Dr. Lasseter.

17
18 **DR. LASSETER:** Thank you, Mr. Chairman. Let's go back to Action
19 4, beginning on page 18, apportioning the recreational quota.
20 We have made some modifications to this action. First of all,
21 we have updated the time series to include 2013 and so
22 Alternative 2 now would be to apportion the recreational quota
23 among the regions based on landings for the years 1986 to 2013.
24 That is our longest time series.

25
26 Alternative 3 is a shorter time period, 1996 to 2013, and
27 Alternative 4 is even shorter, 2006 to 2013, and this Preferred
28 Alternative 5, your previous preferred alternative you selected
29 this 50/50, the council Boyle Law. For the years 1986 to 2013,
30 50 percent and 50 from 2006 to -- I believe at the time it was
31 through 2012. However, now we have updated all of our landings
32 through 2013.

33
34 Also, in Preferred Alternative 6, you have options to remove two
35 years from the time series and you have previously selected to
36 remove both 2006 and 2010 from the time series in determining
37 the averages and before I go to the last alternative, in the
38 subsequent pages, the Table 2.4.1 has been updated with the
39 calibrated MRIP numbers, as have the following tables, 2.4.2
40 through 2.4.5.

41
42 These provide the resulting allocations based on the
43 Alternatives 2 through 5 with and without Preferred Option a and
44 Preferred Option b of Alternative 6.

45
46 Then, real quick, on Alternative 7 is the biological option for
47 apportioning the quota and it would be to establish eastern and
48 western recreational red snapper quotas, divided at the

1 Mississippi, based on the regional biogeographical differences
2 in the stock used in the stock assessments.

3
4 Those are our alternatives and so currently you do have selected
5 as preferred Alternative 5 and 6, with both Option a and Option
6 b. I wanted to point out that in the regional management
7 document you only removed the year 2010 of landings and so
8 that's a little bit different. Otherwise, you did select the
9 same times for an allocation for that document and so I will
10 turn this over for any discussion.

11
12 **MR. RIECHERS:** Ava, I am sure some other folks have maybe gone
13 back and by adding 2013, what percentages changed in the
14 preferred? Obviously the 2013 percentage changed and what
15 percentage has changed? I mean I can't imagine it being but a
16 fraction for each state, if it changed at all, given that long
17 time series, but --

18
19 **DR. LASSETER:** If you give me just one moment, I have the last
20 iteration right here. For the current Preferred Alternative 6,
21 in the last iteration you had Alabama would have been 26.6,
22 Florida 41.5, Louisiana 14.2, Mississippi 2.9, and Texas 14.8.
23 Now that same alternative results in Alabama 31.5 and so that's
24 an increase in five points; Florida at 37.9 and so that's a
25 decrease by three points, Louisiana at 15.5 and so that's about
26 1 percent greater, Mississippi is 3.1 and so 0.2 percent
27 greater, and Texas is 12.0 percent and so it's minus 2.8
28 percent.

29
30 **MR. FISCHER:** I would like to ask Roy if he sees any problem in
31 regional management omitting the two years, but sector
32 separation just omitting one year and if he felt it would be a
33 smoother document if it matched the exact time series of sector
34 separation.

35
36 **MS. LEVY:** I will answer that. You could potentially have
37 different exclusions for the years, but there needs to be an
38 explanation as to why you're doing it here and you didn't do it
39 in Amendment 40 and if there's not a good reason, then my
40 suggestion would be to keep them the same.

41
42 **CHAIRMAN GREENE:** Any further discussion?

43
44 **MS. BADEMAN:** Just some questions maybe about things that we
45 could update in the next round that we see here. I am looking
46 at the tables that go along with this action, with the
47 percentages for each state.

48

1 We've got some options in here where we're just talking private
2 anglers and some we're talking the entire recreational fishery
3 and can get both of those in there? Then I think at some point
4 we're going to have to get in here some analysis of some apples-
5 to-apples comparison of what this looks like in days or
6 whatever, assuming everyone has the same regulations and starts
7 their season at the same time. Like what does this actually
8 mean?

9
10 I have some reservations about the current preferred
11 alternative. I kind of think that an alternative that better
12 captures what is actually happening in the fishery now would be
13 appropriate. I understand that some people want to just stick
14 and do the same thing we did with sector separation, but I think
15 these are things we need to look at. Thanks.

16
17 **MR. RIECHERS:** Martha, I appreciate those comments, because
18 obviously percentages changed as we added 2013 and changed
19 dramatically, obviously, as we all discussed this allocation
20 being one of the more difficult aspects of this whole amendment.

21
22 I think obviously we want to look at that again and staff was
23 just trying to update it with the last year's worth of data and
24 certainly everyone understands that, but we probably need to
25 look back at those percentages and have that conversation again.

26
27 **MR. BOYD:** I just wanted to ask Ava, if she would, since you
28 read those quickly, could you email us those numbers, those
29 percentage changes, and the actual?

30
31 **DR. LASSETER:** Absolutely. Will do and then just to let Martha
32 know, all of those tables are for the entire recreational sector
33 and it does not split out the for-hire and private.

34
35 **MS. LEVY:** Just to clarify that the change was partly adding
36 2013, but probably, I suspect, mostly due to the calibration
37 that went back all the way and I just want to make clear,
38 Martha, that what you were asking for in the next iteration is
39 when we put in those alternatives about potentially keeping the
40 sectors separate under regional management, how those
41 percentages would fall out for each of those sectors and is that
42 right?

43
44 **MS. BADEMAN:** Yes and so I mean if we're going to only do this
45 for the private recreational fishery, it would make sense to
46 only consider private landings, for example, if we're going to
47 do an allocation based on landings history, for one.

48

1 Then also, when we're putting together these tables, putting the
2 additional information, number of days, what this is actually
3 going to mean for each state, potentially, if we all had
4 consistent regulations. We could do the two fish bag limit at
5 sixteen inches starting on June 1 or whatever, something that
6 you could compare. Do you see what I'm saying, Mara?

7
8 **MS. LEVY:** You would have to assume the current federal
9 regulations and how much percentage, knowing that if this were
10 to get implemented, the states could modify it however they want
11 to get the season they want.

12
13 **MS. BADEMAN:** Yes.

14
15 **DR. CRABTREE:** I agree with Martha that that all needs to be in
16 here and I also agree that we ought to go through here and look
17 at if we had a two fish bag limit and a sixteen-inch size limit,
18 here's how this would -- Given the catch rates we've seen in
19 recent years, here's what this would translate into days,
20 because I have had someone suggest to me why isn't it a
21 reasonable alternative to set the allocations up in a way that
22 would give every state the same number of days and I don't think
23 we have that in there and I don't think we've ever calculated
24 what that would be and I don't have a reason in my mind why that
25 wouldn't be reasonable. Maybe it comes out exactly the same as
26 this, but I suspect it will be somewhat different and I don't
27 know.

28
29 **MS. BADEMAN:** I think that's a reasonable alternative as well.

30
31 **CHAIRMAN GREENE:** Okay. Anybody else? Okay, Dr. Lasseter.

32
33 **DR. LASSETER:** Thank you, Mr. Chairman. If we're finished with
34 discussing Action 4, we will move on to the last action, Action
35 5, which begins on page 23, and this action addresses post-
36 season accountability measures.

37
38 Since the last version of this document that you saw, you did
39 pass a framework action adopting an overage adjustment for the
40 recreational sector and so your previous -- One of the previous
41 alternatives has now become the no action alternative and so
42 under no action, retain current federal regulations for managing
43 overages of the recreational red snapper quota in the Gulf EEZ.
44 While red snapper are overfished, based on the most recent
45 Status of U.S. Fisheries Report to Congress, if the recreational
46 red snapper quota is exceeded, reduce the recreational sector
47 quota in the following year by the full amount of the overage,
48 unless the best scientific information available determines that

1 a greater, lesser, or no overage adjustment is necessary.

2
3 Then this also has added on that the recreational ACT will be
4 adjusted to reflect the previously established percent buffer,
5 which is currently 20 percent. I want to point out two features
6 of all of these alternatives.

7
8 One, none of these post-season AMs would be triggered unless the
9 entire recreational sector quota is exceeded and so if the quota
10 is not met, there is no payback and, two, these are applicable
11 while red snapper are classified as overfished, based on the
12 most recent Status of U.S. Fisheries Report to Congress.

13
14 Also, while red snapper is considered overfished and is
15 undergoing a rebuilding plan, the payback would be effective and
16 that's per the National Standard Guidelines. That is
17 Alternative 1.

18
19 Moving on to Alternative 2, this is your preferred alternative
20 that you have previously selected and this one would specify
21 that the overage adjustment would be applied to the region which
22 exceeded its regional quota and it would be by the full amount
23 of the region's quota overage in the prior fishing year. Again,
24 the ACT is then applied after the quota is determined.

25
26 Alternative 3 would apply the overage adjustment to the
27 component of the recreational sector, either the for-hire fleet
28 or the private angling component, by the full amount of the
29 overage. Again, only if the whole recreational quota is
30 exceeded.

31
32 Then Alternative 4 combines both of those and so in the event of
33 an overage, a quota overage, the following year reduce the for-
34 hire component's quota by the full amount of the component's
35 overage and for the private angling component's quota, reduce
36 the quota by any region which exceeded its regional quota by the
37 amount of the region's quota overage in the prior fishing year.

38
39 This is set up a little differently and I am imagining a
40 tweaking, given what Martha just said, that we need to provide
41 the different tables with the allocations for both private only
42 and for-hire only, because this Alternative 4 does retain those
43 separate at this time, because we don't have the allocations
44 broken out by sectors in this document. I am going to turn it
45 back over for questions and discussion.

46
47 **CHAIRMAN GREENE:** Any discussion?
48

1 **MR. ATRAN:** Given a comment that came up yesterday regarding
2 stocks that are no longer overfished because they have gone back
3 up above their minimum stock size threshold but are still in a
4 rebuilding plan, I am wondering if maybe the wording on these
5 alternatives, which currently says while red snapper are
6 overfished, should be changed to while red snapper are in a
7 rebuilding plan. The current wording says that when they get
8 back above MSST that this parameter would no longer be in
9 effect.

10
11 **DR. CRABTREE:** I think the overfished is consistent with how
12 we've handled it in most cases and I think that was how we
13 intended it to be handled.

14
15 **MR. ANSON:** I am just curious and I don't recall seeing it in
16 the previous version and I haven't looked it up, but, Ava, while
17 red snapper are overfished, based on the most recent Status of
18 U.S. Fisheries Report to Congress, can you explain that? It
19 just seems like there's a long delay from when the SSC
20 determines it not to be overfished and the report.

21
22 **DR. LASSETER:** This wording was actually proposed to reflect the
23 wording that was put in the accountability measures and Andy
24 Strelcheck is actually going to come up and speak to it. He
25 provided this language and he said it was consistent with the
26 language that is in the accountability measure framework action.

27
28 **MR. STRELCHECK:** Kevin, just for your benefit, although there is
29 an annual report to Congress, we actually do quarterly updates
30 and post those updates on our website and so at the most, there
31 would be a three-month lag time between the final decision by
32 the SSC and when the status is updated. Previously, it was
33 worded as if it was under a rebuilding plan and obviously that
34 can be very different than if it's overfished.

35
36 **CHAIRMAN GREENE:** Any more discussion?

37
38 **MR. RIECHERS:** Ava, given the discussion we had this morning, it
39 seems like Alternative 1 is closest to the way that fishery was
40 handled and am I --

41
42 **DR. LASSETER:** I believe your preferred alternative was to make
43 a region-specific payback. You had another alternative that was
44 a different overage adjustment.

45
46 **MR. RIECHERS:** Yes and I am not -- I think our preferred was the
47 by region, but I think the way the discussion this morning -- I
48 am just reflecting back on the presentation and they, I think,

1 were lumping the entire sector together and did I remember
2 correctly from this morning, just as an alternative way to do
3 it? I think it's more closely aligned to our Alternative 1.

4
5 **CHAIRMAN GREENE:** Any further discussion?

6
7 **MS. LEVY:** I thought, from what I understood this morning, are
8 you talking about for the summer flounder?

9
10 **MR. RIECHERS:** Yes.

11
12 **MS. LEVY:** They don't have a payback provision for the
13 recreational sector and it's not overfished and it's not in a
14 rebuilding plan and so it doesn't really apply to what we're
15 doing. What she was saying is if they go over, they have to
16 account for that in what they set for next year.

17
18 **MR. RIECHERS:** Correct and I agree that it doesn't really apply,
19 but I think as we talked about it, our discussion mostly
20 centered between Alternative 1 and Alternative 2 and do you do
21 the payback by region or do you look at it overall by the whole
22 recreational sector and, for instance, if Texas were to go over
23 by a small amount, but Louisiana was under by a large amount, or
24 enough to make up for that difference, do you penalize that
25 state or region, if it were, or do you really look at it or are
26 we still meeting our rebuilding goals? Again, like I said, I
27 understand where we ended up as preferred, but I am just
28 throwing that out for discussion.

29
30 **MS. LEVY:** That's what this does and so none of this kicks in
31 unless the entire recreational quota is exceeded and so if Texas
32 went over, but Louisiana was under and so the recreational quota
33 itself was not exceeded, then no payback would kick in. It only
34 kicks in when there is a total exceedance, and then your
35 decision is do you apply it to the whole thing or do you apply
36 it to each region or do you divide it into the component that
37 went over, if you keep sector separation in there.

38
39 **MR. RIECHERS:** I am sorry, Ava, and I think you did say that
40 right at the beginning, that you were applying it to all -- It
41 applies to all four of the alternatives.

42
43 **DR. LASSETER:** And only if the entire quota is exceeded.

44
45 **DR. CRABTREE:** If I could, but in the situation you described,
46 in that case, if Texas went over, then they would be expected to
47 take some corrective action the following year, but no payback.

1 **CHAIRMAN GREENE:** Anything else, Dr. Lasseter?
2
3 **DR. LASSETER:** That's all and if there's any further discussion
4 on this action, but I have one more thing to address.
5
6 **CHAIRMAN GREENE:** Any further discussion on this action? Seeing
7 no hands --
8
9 **DR. LASSETER:** There was, finally, one more action that we did
10 remove and it was formerly Action 7, which concerned the default
11 regulations. Mara briefly touched on this. We have rolled that
12 into the introductory chapter. You had selected -- The
13 preferred alternatives you had selected really wasn't too much
14 of a decision. It's what is going to happen is what you
15 selected and so that is written up as part of the process in
16 Chapter 1, that default regulations will have to be in place,
17 and so we did remove that action, if it's okay.
18
19 **CHAIRMAN GREENE:** Okay and any comments on what Dr. Lasseter
20 just described? Seeing none, I guess that wraps up that portion
21 of it and on the agenda, there is Committee Recommendations, but
22 I think we've taken care of that as we've gone through, unless
23 anyone else wants to weigh in on anything.
24
25 **MR. FISCHER:** We will have it all rewritten and ready for
26 council?
27
28 **CHAIRMAN GREENE:** I hope so, but I have no idea.
29
30 **MR. FISCHER:** I take that as an affirmative, a yes?
31
32 **DR. LASSETER:** The next council meeting, yes.
33
34 **CHAIRMAN GREENE:** With that, that will carry us to our next
35 agenda item, which will be Item VIII, Revised Public Hearing
36 Draft of Amendment 28, Red Snapper Allocation, Tab B, Number 10,
37 and Dr. Diagne.
38
39 **REVISED PUBLIC HEARING DRAFT AMENDMENT 28**
40
41 **DR. ASSANE DIAGNE:** Thank you, Mr. Chair, and good afternoon.
42 What I will try to do today is to quickly summarize the document
43 as it stands to date and spend most of the time discussing a
44 potential timeline for taking final action.
45
46 Amendment 28 is a single-action amendment and it considers the
47 reallocation of red snapper within the commercial and
48 recreational sectors.

1
2 On page 6 of the document, you have the single action, Action 1,
3 allocation of red snapper. We have a status quo alternative,
4 Alternative 1, and as structured, we have two sets of
5 alternatives.

6
7 The first set, Alternatives 2 to 4, would reallocate a fixed
8 percentage of the total quota. Those percentages considered
9 here are 3, 5, and 10 percent for Alternatives 2, 3, and 4,
10 respectively.

11
12 The second set of alternatives includes three alternatives,
13 including your preferred alternative, which is Alternative 5,
14 and it reads that if the quota, red snapper quota that is, is
15 less or equal to 9.12 million pounds, maintain the status quo
16 allocation at 51 percent commercial and 49 recreational.

17
18 If the quota exceeds 9.12, allocate 75 percent of the amount in
19 excess of the 9.12 to the recreational sector and 25 percent to
20 the commercial sector. Based on our current quota of eleven-
21 million pounds, the resulting allocation would be 5.12 to the
22 commercial and 5.87 million pounds to the recreational sector.

23
24 We have two additional alternatives that are built on the same
25 premise, meaning with a threshold and then an allocation of the
26 excess amount above the threshold. Alternative 6 would give the
27 entirety of the excess above 9.12 to the recreational sector
28 and, finally, Alternative 7 chooses a different threshold, which
29 is ten-million pounds. Above ten-million pounds, anything in
30 excess would be allocated 75 percent to the recreational and 25
31 to the commercial.

32
33 There is a table in the document on page 10 and it is Table 2.13
34 and it essentially summarizes the alternatives, including
35 Preferred Alternative 5, and gives us, in million pounds and
36 percentage of the quota, the respective allocations for each one
37 of the sectors.

38
39 To summarize the document at this point, that is all I have and
40 so I will spend the remainder of the time discussing what we see
41 going forward.

42
43 The first thing is that based on the recent red snapper stock
44 assessment, we fully expect that the quota is going to change.
45 As soon as we have the number that would reflect your decision,
46 we would turn around and update the document and update the
47 respective percentages and quotas allocated to each one of the
48 sectors. That is one thing.

1
2 The timeline that we have discussed at the IPT level could
3 possibly provide you the opportunity of taking final action
4 let's say in June, because we are going to update the document
5 and make them reflect the new red snapper quota, for one thing,
6 and NMFS would have the opportunity to publish the DEIS and the
7 comment period would have ended by then and you would be
8 presumably in a position of taking final action at the June
9 meeting. At this point, that's all I have and I will try to
10 answer questions if you have any. Thank you.

11
12 **CHAIRMAN GREENE:** Okay. Any discussion relative to Dr. Diagne's
13 document?

14
15 **DR. CRABTREE:** Assane, it also seems to me that Amendment 40
16 will need to be taken account of in here, because it would seem
17 to me that will change the potential relative impacts on the
18 private sector and the for-hire sector vessels.

19
20 **DR. DIAGNE:** Dr. Crabtree, if you could be a little more
21 specific. I am not sure that I follow, because in Amendment 40,
22 what we have done is determined some type of percentage between
23 the two subcomponents, if you would, of the recreational sector
24 and that is a separate issue from the allocation of the entire
25 quota.

26
27 **DR. CRABTREE:** Except if you change the allocation in a way so
28 that more fish go to the recreational sector, which is the
29 current preferred. A bigger slice of that is going to go to the
30 for-hire sector if Amendment 40 is in place than would have gone
31 were Amendment 40 not in place and so the impact on the
32 economics of the for-hire would seem to be different of doing
33 this, to me, with Amendment 40 in place than it would have been
34 without it.

35
36 Without it, they were catching on the order of 20 percent, I
37 think less than 20 percent, of the recreational quota, but if I
38 recall correctly, with Amendment 40 in place, their allocation
39 is around 42 percent of it and so it seems to me the impact on
40 trips and things would be different.

41
42 **DR. DIAGNE:** Yes, absolutely.

43
44 **DR. CRABTREE:** I will leave that to the economists to figure
45 out, but one other thing I would come back to is the purpose and
46 need of the amendment. I think that one of the things you need
47 to think about are some of the implications that come out of the
48 new stock assessment.

1
2 It does seem to me that at least arguably there are some
3 allocation implications out of this assessment. For one thing,
4 what we've seen in the presentation is that part of the reason
5 the quota is increasing is because of the recalibration of the
6 recreational time series.

7
8 Our allocations have historically been based on a perception of
9 what the historical mix in the fishery is and that has changed.
10 In other cases, in a couple of instances in the South Atlantic,
11 when we recalibrated the catches, we also recalibrated the
12 allocations when we did that.

13
14 That is more complicated here, because the timeline we used to
15 establish the red snapper allocation started in 1979 and I think
16 went through 1986 or 1987. 1979 and 1980 aren't supported by
17 MRIP anymore and so there is no way to calibrate the catches
18 back that far.

19
20 I also think that there are problems. As you go further back in
21 time, the calibration probably becomes less meaningful and so
22 it's not as straightforward to do it as if we had an allocation
23 that was based on more recent years. What you're going to do
24 with that I don't know, but you do have some changes to the
25 historical time series and that clearly seems, to me, to have
26 allocation implications that need to be addressed within the
27 document.

28
29 The other thing that happened in the new assessments are some
30 change in the recreational selectivities that resulted in
31 increased quotas. Some are probably to argue that may have some
32 allocation implications.

33
34 That is more debatable, to me, because I can't recall of a case
35 where we shifted allocations based on changes in selectivities,
36 but I also don't recall a case where we've had a change in
37 selectivity laid out so clearly to us and it made a big
38 difference in the cases, but I think in this document that
39 you're going to need to deal with all of these and make a
40 decision as to how that plays into that and how you're going to
41 handle it.

42
43 I think you need to have some discussion and think about that,
44 because I think we need to complete our work on this document
45 and come to a conclusion and get this done, rather than having
46 this hanging over our heads for a whole lot longer. That's
47 something I think you need to think about.

48

1 **MS. BADEMAN:** I agree with what Roy said and I've been thinking
2 about this document and I think one of the things that I would
3 be interested to see added to this -- Let me back up. We hear
4 all the time that the recreational fishery is all about the
5 opportunity to catch a fish and I am talking a fish and not
6 necessarily pounds of fish.

7
8 The commercial sector, clearly you get more pounds, you get more
9 money and that's a straightforward relationship. I think it
10 would be beneficial to add to this document an analysis of how
11 the quota increases in each sector express those in numbers of
12 fish and also the harvest over the years in numbers of fish.

13
14 Because we've had these weight changes and these changes in
15 selectivities, I think it's a little more obvious if you set it
16 up that way and look at it that way. As the recreational quota
17 in pounds has gone up, the quota in number of fish has not
18 necessarily done the same and a lot of times, it has dropped
19 with this quota increase.

20
21 I think it makes -- The benefits, I guess, to those quota
22 increases, you can make the case that the benefits have not been
23 as great for recreational as they have been for the commercial
24 and I think if you look at it in numbers of fish, that case is a
25 lot more clear and so that's something I would like to see added
26 to this as well. Am I making sense and do you understand what
27 I'm asking for, Assane?

28
29 **DR. DIAGNE:** Yes and if you would like for us, for the
30 statistics, to reflect essentially the number of fish instead of
31 pounds, we would just get the average weight per fish as it
32 changes over time and then essentially show those numbers.

33
34 **MS. BADEMAN:** Yes, because we have the weights for the fish for
35 every year. We know how many were brought in and we know what
36 the quota was and to express those in numbers of fish, I think
37 that would be helpful as well.

38
39 **DR. DIAGNE:** Yes and we could do this Gulf-wide or should we
40 perhaps also provide some information on the region-specific, as
41 much as we can?

42
43 **MS. BADEMAN:** I was just thinking Gulf-wide, but if people want
44 to do regions, I am cool with that too.

45
46 **DR. DIAGNE:** We will start with the Gulf-wide information.

47
48 **CHAIRMAN GREENE:** Okay. Any further discussion?

1
2 **MR. WALKER:** All right. Amendment 28, best I can remember,
3 started back in 2010 and it was a red grouper reallocation
4 amendment and then it changed to red snapper, to look at
5 reallocation. That was in 2010 and that was five years ago.

6
7 I think, at the time, Bob Gill was the Chairman and then we had
8 Bob Shipp was the Chairman and then Doug Boyd was the Chairman
9 and now Kevin Anson is the Chairman and you know we've been
10 looking at this for five years and I don't know how long
11 National Marine Fisheries Service wants us to -- The policy
12 requires us to continue looking at this, but I agree with Roy
13 that I think it's time to make a decision with this.

14
15 Right now, I see that it's no action and I don't see any
16 justification for reallocation. The commercial industry has --
17 We came to the table years ago and we knew we had a problem and
18 we needed a better plan than what we had and so we came together
19 and we developed a plan and it's been a successful plan.

20
21 Then you sent this to the SESSC and it's been sent there several
22 times and I think the last one they had the discussion was that
23 before you look at any allocation plans, you need to look at
24 fixing your fishery management plan. You need a plan that gives
25 you what you're looking for.

26
27 We have heard testimony from Randy Boggs and he has come up here
28 and I think Randy told me he had a ten-month season last year.
29 I mean he has better data and there's more access and I mean
30 you've got to take and look at things that is going to help you.

31
32 It has not benefitted -- These increases have not benefitted the
33 recreational fishery and that's true and that's because the plan
34 -- If you don't have a fishery management plan, it doesn't
35 matter how many fish you reallocate into that. Until you get a
36 plan, you are just spinning the bottle and you just keep on
37 spinning the bottle and this has been going on for five years
38 and I think it's time to get to work on a plan, just like the
39 best science recommended.

40
41 **CHAIRMAN GREENE:** Okay. Any further comments?

42
43 **DR. CRABTREE:** There is just a lot of silence and I have raised
44 some issues now that I think you need to think about in terms of
45 dealing with it, but no one has given any guidance to staff. We
46 do have a catch share policy that indicates we need to review
47 these allocations, but, to me, reviewing allocation implies
48 reaching some sort of a conclusion.

1
2 If you look at this amendment, at least your preliminary
3 conclusion appears to be that some reallocation is in order, but
4 we have never gotten to the final step, but without some
5 guidance to your staff in terms of what do you want to do about
6 the calibration and what do you want to do about some of these
7 issues, I don't know how they can be expected to finish this
8 document and get you to a point where you can take action on it.

9
10 You guys need to give some rationale to support whatever
11 decision you're going to make, but if we just sit here and say
12 nothing, I don't know how we're going to ever get this done.

13
14 **MR. ANSON:** I was going to reiterate what Dr. Crabtree had
15 stated as far as some of the other issues that we might want to
16 address in this document and encourage the committee to have
17 some discussion about that.

18
19 Certainly he brought up a clearer purpose and need and perhaps a
20 more detailed purpose and need and so that might be something
21 else that could come forward from the committee to full council
22 to give a good clear indication as to why the council is looking
23 at this issue and looking at this issue for as long as it has.

24
25 Lots of council members have come and gone too, David, and I am
26 certainly with you that we need to come to some resolution and
27 perhaps the resolution might be different. We have different
28 opinions on it, but certainly we need to try to make a good push
29 here, a final push, to try to do something, because it's just
30 dragging on and on and certainly the folks out there in the
31 audience, they are waiting for some sort of answer so they can
32 kind of get on with their business and such.

33
34 I think we ought to really try to wrap this up one way or the
35 other and it's just something that we need to do. Yes, we're
36 required to review and we're not required to do anything, but
37 obviously there was a need for us to bring this document
38 forward, at least at the time, and it has languished for quite
39 some time and I certainly would like to try to get it off the
40 council's docket myself.

41
42 **CHAIRMAN GREENE:** Anybody got any ideas?

43
44 **MR. RIECHERS:** Just very briefly, because it's already been
45 said, but, Roy, I thought -- I mean don't take silence as a lack
46 of concurrence with what you suggested in adding to the document
47 or also in what Martha suggested as adding to the document. I
48 think those both help build the rationale and help describe some

1 of the reasons why we're looking at reallocation from a purpose
2 and need standpoint, as well as give us some more information to
3 base those judgments on as we move forward.

4
5 I think there certainly is a reason to look at that and to have
6 staff do that work and for us to come back and look again at our
7 alternatives in light of that information that you may be
8 bringing forward that's a little bit different in the way it
9 couches this in regards to opportunity as opposed to pounds and
10 so forth.

11
12 Again, certainly I believe that we should move forward, but I
13 don't know that I have a lot more to add in what should be added
14 to the document or in rationale at this point.

15
16 **DR. DIAGNE:** Based on the comments that Dr. Crabtree offered,
17 what we need would be, if possible, from the committee very
18 specific guidance. At this point, the alternatives that we have
19 before you are structured in the way in which basically you
20 selected, fixed percentages of 3, 5, and 10 percent, and then
21 having a threshold and allocating in some kind of way above that
22 threshold.

23
24 Now, if as a committee you have some specific alternatives that
25 you would like to offer for us to add to this document, I think
26 today is a great opportunity for you to offer those, something
27 to the effect of based on the calibration results, et cetera, we
28 would consider a reallocation of X percent, whatever X may be,
29 but for us to move forward, move this document forward, we would
30 need very specific guidance from the committee, if not from the
31 council, by the time we get there before, the end of this
32 meeting.

33
34 **CHAIRMAN GREENE:** Okay and so I know Martha had laid out some
35 stuff as well, but with that, I see Mr. Perret has his hand up
36 and so I will go to him.

37
38 **MR. PERRET:** Thank you, Mr. Chairman. This will probably be a
39 half-a-dozen meetings in a row, but I am still waiting for staff
40 and council members and anybody and if they can put it in the
41 document, I would love to see it, but the document doesn't
42 relate to the purpose and need.

43
44 We want to be fair and equitable to reallocate and okay, but
45 what's fair and equitable when you've got a fishery that has
46 gone over its quota by millions of pounds all but two of the
47 last twenty-something years, but we're going to be fair and
48 equitable and we're going to reallocate and fine.

1
2 I have yet to hear how we're going to maintain or how we're
3 going to improve stability in the recreational fishery by just a
4 handful of more days and if anybody can provide that rationale
5 to staff to do that, I think we need to add that to this
6 document. Stability, how are we going to improve stability by
7 doing this reallocation? I think that needs some justification.

8
9 **CHAIRMAN GREENE:** Anything else? Has somebody got more
10 discussion or more specifics?

11
12 **MS. BADEMAN:** Not that I really want to open this can of worms
13 right now, but I mean if we've been operating under the wrong
14 allocation all along, based on this MRIP calibration, I mean I
15 think we need to understand that and correct that through this
16 document.

17
18 I mean changing the allocation, if that's what we need to do to
19 reflect really what has happened in this fishery and what's
20 going on in this fishery, then let's do it and let's move on,
21 but I will stop there.

22
23 **CHAIRMAN GREENE:** I understand where you're coming from and I
24 certainly understand your point and I really don't know where to
25 lead you from here.

26
27 **MR. WILLIAMS:** Both David and Corky have made good points. If
28 we go forward with this allocation, our plan for the
29 recreational fishery is just to give them these pounds and
30 they're going to fish a couple more days and then it's over.

31
32 The benefits are small. They're very small from this and until
33 we have some sort of real way to control the recreational
34 harvest or to control recreational effort in this fishery, I
35 don't think we're going to get much out of it. I am going to
36 defer to the people that are really in favor of this document to
37 help provide the rationale as to why they want it, but it looks
38 to me like the benefits are very small.

39
40 **CHAIRMAN GREENE:** I certainly understand.

41
42 **MR. ANSON:** Roy, that may be true, as you define what small is,
43 but when we're talking about days for the currency and a few
44 more days could represent a fairly significant increase and, for
45 that matter, I hate for us to be thinking in those types of
46 terms, small and large benefits.

47
48 I mean we'll be looking potentially at mackerel and adjusting

1 the allocation in mackerel and there are some problems in the
2 commercial mackerel fishery and certainly some pounds going to
3 mackerel, commercial mackerel, would be helpful to those guys
4 and when you do the analysis, there might be very negligible
5 benefits there, but it would be an improvement to their
6 situation. That's all and I just want to keep things in context
7 that benefits are benefits.

8

9 **CHAIRMAN GREENE:** Any more comments or discussion?

10

11 **DR. CRABTREE:** Just a couple of things. Recall though that we
12 have changed the accountability measures in the recreational
13 sector now and it appears to work and they have stayed within
14 their quota. I also think with Amendment 40 that I wouldn't be
15 so quick to say what the benefits are going to be.

16

17 I suspect that for the for-hire sector there would be a
18 significant change in the number of days of fishing they would
19 have with Amendment 40 in place and with the higher quota if you
20 stayed with your current preferred alternative.

21

22 Now, whether that's right or not or fair or what you want to do,
23 I leave it to you to decide, but I wouldn't assume that the
24 changes in season lengths are very small, because we have
25 changed the way this fishery is managed now and I think those
26 changes will change the distributions and the impacts.

27

28 **MR. PERRET:** Roy, would you explain how those accountability
29 measures are working? I mean we can shut the EEZ down, but
30 states are keeping their waters open.

31

32 **DR. CRABTREE:** We put in place the 20 percent buffer and that
33 has been sufficient to take into account those types of
34 uncertainties and we seem to have, based on all the data we have
35 right now, we have stayed well within the quota this year.

36

37 I have no reason not to think we will continue to stay within
38 it. Now, if we get some really unexpected actions by the
39 states, maybe that changes, but at least for right now, it seems
40 to be working. My point is just that we have changed the status
41 quo now.

42

43 **MR. PERRET:** Yes and you're right, but hopefully they will
44 continue to work.

45

46 **MR. RIECHERS:** I mean I think, as others discussed it and I will
47 try to shed a little bit of extra light on it maybe, is that the
48 recalibration of the time series associated with the

1 recreational fishery, and what looks like the increase in
2 poundage is going to be in the neighborhood of two-million
3 pounds from where we are now to the next assessment, give or
4 take some pounds, appears to have been largely due to that
5 recalibration of the MRIP landings.

6
7 One could argue that all of that two-million pounds should in
8 fact be added to the recreational side and the series should be
9 recalibrated and that should be the percentage that we're
10 starting with. That would be similar to Alternative 6 in the
11 document now.

12
13 What we've done is Alternative 5, which is instead of taking 100
14 percent of that allocation and pushing it to one location, we
15 basically would -- We have an argument in there now for 75
16 percent of that allocation and you could make the argument that
17 in fact this last increase might should all go in that direction
18 and so there is a way that we could look at that in here if we
19 wanted to change those percentages or come up with that sort of
20 allocation.

21
22 Dr. Crabtree mentioned the recreational selectivity and the
23 change and Martha's suggestion about trying to look at that by
24 fish is a way we are going to know a little bit more about that
25 as well. As far as the benefit we receive, I think when you're
26 talking about benefit, you are talking about negligible days,
27 but I don't think, as Kevin suggests, that negligible days
28 necessarily means negligible economic value or economic impact
29 and so I think we have to keep that in mind as well.

30
31 I think there is a lot of rationale that we've talked about in
32 the past and there's a lot in the document and, of course, we
33 are going to see some new things brought to bear in the document
34 as well and so, again, I think we have a range of alternatives
35 in here that ranges from 3 percent to 100 percent of that in
36 excess of 9.12 million pounds and so we've got a pretty wide
37 range of alternatives that we can choose between in here now.

38
39 **MR. WILLIAMS:** Going back to Roy's point, Roy, it is easy to see
40 how the charter boats would benefit from this. They are under a
41 permit moratorium, which is a limited entry program. It might
42 go on forever or we might turn it into a formal limited entry
43 program at some point.

44
45 It is easy to see how they would benefit from it, but what --
46 They're not in the position though where another 10 percent more
47 boats are going to be fishing next year or 20 percent more
48 boats. The other side of this fishery, the recreational

1 fishery, isn't in that position and it kind of begs the question
2 then as to if we're going to allocate between commercial and
3 recreational, do we need to be looking at commercial charter
4 boat and private boat?

5
6 It's easy to see the benefits to the charter boats, to me, and
7 it's not so easy for me to see the private boats, because there
8 is just going to be more boats next year. If there is more
9 fish, there is going to be more boats that jump into it and it's
10 hard for me to see -- As David said and Corky said, we don't
11 have a real way to control recreational fishing effort other
12 than fix the number of days, fix the season at some quota.

13
14 It just ends up with more and more boats catching the same thing
15 or catching whatever more we give them. It's difficult for me
16 to assess what the benefits to them are and whether it is a true
17 benefit taken away from the commercial sector to give to those
18 private boats and I don't know if it's a benefit or not. I can
19 see it with the charter boats, but I don't know that I can see
20 it with the other side.

21
22 **MS. BOSARGE:** Two things. First, to Robin's point about the
23 recalibration and the increase in that two-million is due to the
24 recalibration of recreational landings and I am just a
25 commonsense kind of girl and I would not -- It doesn't make
26 sense, to me, to reward for overshooting quota.

27
28 If we recalibrated and the quota was exceeded by that much more
29 and we said that was due to the recreational sector and our
30 response to that is we should reward them by giving them more
31 allocation, that doesn't make sense to me.

32
33 I don't think that's the direction we should be going and if
34 that's the case, then, if I was a commercial person, I would say
35 I need to go exceed my quota by two-million, because then they
36 will give me more allocation. That's not the path we need to go
37 down.

38
39 On a more positive note, and I'm not on your committee, but I
40 would like to bring it up now for thought, for later. Obviously
41 I support no action on this and in a lot of people's minds, this
42 and recalibration, it's all -- It all, in their mind, is
43 reallocation and in my mind, it's not.

44
45 This was an amendment that the purpose and need talked about
46 stabilizing the recreational fishery and to do that, we were
47 looking at reallocation. To me, that does not stabilize the
48 recreational fishery. What we're doing in some of our other

1 amendments may. In 40, it may and in 39, depending on what we
2 do there, it may.

3
4 Now, I know that around this table though you want to get to
5 reallocation. In a separate amendment looking at those
6 recalibrations of the landings, in a separate amendment, I don't
7 know how I am going to vote on it, because it depends on how far
8 you go back and how you apply things and this and that, but in
9 my mind, I can justify that.

10
11 I can understand that if your landings changed and if you have
12 changed your methodology and you see that you were not
13 accounting for all the recreational landings and we based the
14 allocation originally on landings, then I can understand how
15 that would affect your allocation. That, in my mind, is moral.

16
17 This reallocation, supposedly to stabilize the recreational
18 sector, that, in my mind, that doesn't fly. That doesn't hold
19 water. Now, if you vote no action on this and get rid of this,
20 then we could look at a new amendment that will address
21 reallocation, but it will address it for solid principles that
22 somebody could stand for and justify with the appropriate
23 purpose and need.

24
25 Now, how that would fall out in the numbers, I don't know. It
26 depends on how we apply all these recalibrations and when we
27 look at it, we would get into it, but that's something I think
28 we could realistically look at and this is not.

29
30 **MR. PERRET:** Robin, you can talk about recalibration and you can
31 talk about better data and we can talk about this on and on and
32 on and on. B-8, Regional Management of Red Snapper, Updated
33 Draft, January 16, 2015, here are the facts.

34
35 You mentioned two-million pounds and yes, two-million pounds,
36 that's great, but the recreational sector went over by over
37 four-million pounds in 2013 and by over two-million pounds in
38 2012 and so we're going to give them more fish and that's great.
39 That's good, but how is that going to stabilize the fishery that
40 has continued to go over, other than last year, like Dr.
41 Crabtree said.

42
43 We put measures in and I hope they work and I hope we're able to
44 do that and I hope the states will be in a better situation, if
45 we ever get to this regional management, and looking at the way
46 things have happened today and the complexities of it, it's
47 going to probably be a while before we're ever able to implement
48 something like that, but hopefully for the future we'll have

1 that and the states will have better flexibility, but I have a
2 lot of problems with the document.

3
4 The purpose and need, I have repeatedly said, doesn't address
5 what we're trying to do, in my mind, but hopefully I am wrong
6 and this will help to stabilize this fishery and that's all I
7 can say. I have my doubts.

8
9 **MR. FISCHER:** Assane was asking for advice of items to enter
10 into the document and one thing I would like him to look into is
11 overall angler trips. Angler trips are not escalating. They
12 are not going through the roof. Angler trips are actually very
13 stable.

14
15 It's a flat line and you take out the exception of 2010 and
16 2011, with the repercussions of the spill, and angler trips are
17 very flat. That's something we have to think about. I mean we
18 were just talking about all the people getting involved in the
19 recreational fishery and the millions of extra boats and the
20 data doesn't show it.

21
22 It's like we've become selective on what data we want to use and
23 what data we don't use and I am not referring to the Service,
24 but I mean in our deliberations. If you're going to try to look
25 at -- Get real fine on angler trips just on one species, it's
26 very difficult on a nine-day season, or any day season, but when
27 you look at recreational anglers, they will fish for what's
28 open.

29
30 When amberjack is open, they will fish for it and when gag is
31 open, they fish for it and when snapper is open, they fish for
32 it. Angler trips by the recreational component is not
33 escalating and MRIP data will back that up.

34
35 **MS. LEVY:** I have heard a lot of discussion about the purpose
36 and need in the document and the idea that part of the purpose
37 for this amendment is to stabilize the fishery or the sector and
38 maybe when we first started talking about this some years ago
39 that might have been a purpose or an appropriate purpose.

40
41 Maybe recent events have changed the council's thinking as to
42 the purpose with that regard, but, to me, the remedy then is to
43 reevaluate your purpose and need. It's your document and if the
44 purpose is no longer to have this stability, then, at the very
45 least, the purpose is to look at the allocations and make a
46 determination about whether they are fair and equitable and to
47 do that evaluation every number of years, to come back and
48 revisit your allocation decisions, that's still a valid purpose

1 here and then you make a decision, after looking at all of that,
2 whether there is a basis to reallocate or not.

3
4 I encourage you to, if you don't think that there are things
5 that are appropriate in the purpose and need at this point, to
6 change the purpose and need of what you're doing. You don't
7 have to keep saying it doesn't do this and it doesn't do this.
8 It's your document and what do you want it to do? What's the
9 purpose?

10
11 Is it to look to act consistently with the catch share policy
12 and just reevaluate these, because it's been so long, or is
13 there some other reason?

14
15 **CHAIRMAN GREENE:** Any further discussion? Dr. Diagne, have you
16 got the information you need?

17
18 **DR. DIAGNE:** I am hoping that during full council we will get a
19 more specific direction, if you would, from the council, because
20 as it is, we cannot add alternatives to this document and we
21 cannot modify the purpose and need as written, because that is
22 the one that is reflective of your previous discussions. I am
23 hoping that during full council that additional discussion will
24 give us more specific guidance. Thank you.

25
26 **CHAIRMAN GREENE:** With that, I guess we'll move into Item Number
27 IX, Report of Ad Hoc For-Hire Red Snapper AP, Tab B, Number 11,
28 and Dr. Diagne.

29
30 **REPORT OF THE AD HOC FOR-HIRE RED SNAPPER AP**

31
32 **DR. DIAGNE:** Thank you again, Mr. Chair. I will try to quickly
33 summarize the meeting, the first meeting, of the Red Snapper
34 For-Hire Advisory Panel. It was a meeting held in Tampa,
35 Florida in early December.

36
37 At this point, I will just go ahead and read the motions and,
38 Charlotte and Karen, if you could help us out and maybe put them
39 on the board, so that if I miss something, people will be able
40 to follow.

41
42 The meeting started with a review of the charge and they had an
43 election and selected a Chair and a Vice Chair. We talked about
44 the charge and I will just go over the recommendations made to
45 the council.

46
47 First, the panel recommended to the council that it accelerates
48 the development of an electronic logbook, including some type of

1 validation tools. A quick question, Mr. Chair. Should I just
2 keep going and if I see a hand, I will stop or should I stop
3 after each motion?
4

5 **CHAIRMAN GREENE:** Just keep going and if they have a question,
6 they can certainly raise their hands and we will address it at
7 that point.
8

9 **DR. DIAGNE:** Thank you. The second recommendation made would be
10 to consider separating the for-hire component into a headboat
11 and a charter component, separate components. Another
12 recommendation, motion, is to adopt a one fish bag limit for
13 2015 for the charter for-hire component.
14

15 The following motion recommends to the council to establish a
16 split season with 66 percent of the quota allocated for the
17 first portion of the season and following a determination of the
18 landings, open a second season in the fall for the remainder of
19 the quota for 2015, or until an electronic reporting method is
20 implemented.
21

22 The next motion recommends that the council begins the
23 development of a charter for-hire management plan. Along the
24 same lines, it is recommended that the council consider
25 management options such as AMOs, angler management
26 organizations, made up of for-hire vessels, one part of which
27 could feature dividing the for-hire into regional groups, a
28 catch share program, a tag system, and a days at sea program.
29

30 A recommendation was made to the council to consider how the
31 cost of any new program will be shared between the charter for-
32 hire industry and the agencies charged with management of the
33 program.
34

35 The panel also expressed the desire to meet and recommended that
36 the council convene an ad hoc headboat red snapper and grouper
37 AP. They recommended to the council to establish then a
38 separate AP specific to the headboat sector, to look at red
39 snapper and grouper.
40

41 Also, it is recommended that the council reconvene this panel as
42 soon as possible after the January council, preferably by the
43 end of February, to continue discussions on the charter for-hire
44 program development.
45

46 The next recommendation is to explore ways to identify latent
47 effort in the charter for-hire industry and if I didn't miss any
48 motions, I believe that was the last motion made by the panel.

1 It was a very productive meeting and, in summary, these are the
2 recommendations that they offered. Thank you.

3
4 **CHAIRMAN GREENE:** Okay. Does anybody want to have any
5 discussion about the report that Dr. Diagne has provided to you
6 about the for-hire AP?

7
8 **MR. BOYD:** I would just like to comment on the motion that was
9 passed that cost sharing be looked at. Andy also, in his
10 presentation the other day, mentioned cost sharing and I would
11 just wonder why we would want to share any costs at all when
12 this is a program that was pushed and desired by the industry
13 and why wouldn't they fully accept the cost of the program?

14
15 **CHAIRMAN GREENE:** Okay. Mr. Walker, did you have a --

16
17 **MR. WALKER:** Can I add a motion?

18
19 **CHAIRMAN GREENE:** Certainly.

20
21 **MR. WALKER:** Karen has it and she can get it up. **This is that**
22 **the Reef Fish Committee and direct staff to expand the for-hire**
23 **management scoping document initiated at the April 2014 Gulf**
24 **Council meeting to include additional long-term management**
25 **strategies for the for-hire fishery, following the**
26 **recommendations of the Ad Hoc Red Snapper For-Hire Advisory**
27 **Panel, and bring that scoping document back to the April 2015**
28 **Gulf Council meeting.**

29
30 **CHAIRMAN GREENE:** Mr. Walker has made a motion and it is before
31 you on the board and is there a second to this motion? Mr.
32 Williams seconds. Any further discussion?

33
34 **MR. RIECHERS:** Could you refresh us a little bit on what some of
35 the strategies were within that document?

36
37 **MR. WALKER:** What they're hoping for is to increase the
38 accountability of the sector, maximizing fishing opportunities,
39 and it gives individual operators increased flexibility to
40 decide when and how to fish.

41
42 **MR. BOYD:** I think I would like to see that document again
43 before I could vote for this motion. I don't know what's in it.
44 I don't remember what's in it and it hasn't been in front of the
45 council in a pretty good while.

46
47 **CHAIRMAN GREENE:** You have a motion on the board and it's been
48 seconded. Any more discussion? **All those in favor of the**

1 motion on the board please raise your hand; all those opposed
2 raise your hand.
3
4 **MR. ATRAN:** I have the motion failing by a vote of three to
5 five.
6
7 **MS. BADEMAN:** Can we, just to follow up, can we see what's in
8 that document and then revisit this? I would kind of like to
9 know that before I vote one way or the other, at full council or
10 whenever?
11
12 **EXECUTIVE DIRECTOR GREGORY:** Yes, we can distribute it
13 electronically to you before the council meeting.
14
15 **MR. PERRET:** Assane, I see one of the motions that was approved
16 fifteen to five was that the council adopt a one fish bag limit
17 for charter guys for 2015 and can -- Out of curiosity, were the
18 five against that from a particular geographic area of the Gulf
19 or were those five from throughout -- Do you recall where the
20 geography of those five that were against, where they were from?
21
22 **DR. DIAGNE:** Mr. Perret, no, I don't recall.
23
24 **MR. FISCHER:** Assane, was this relayed as one of the only
25 framework actions that could be accomplished for the 2015
26 season?
27
28 **DR. DIAGNE:** In terms of the motions, essentially --
29
30 **MR. FISCHER:** In terms of extending the for-hire season.
31
32 **DR. DIAGNE:** You had the motion looking at the one fish bag
33 limit and the subsequent motion discussed or considered a split
34 season. I believe that motion said to use 66 percent of the
35 quota in the first part and after looking at the landings,
36 establish a second season.
37
38 If I may add, Mr. Chair, I think I see the Chair of the AP in
39 the audience and so if the Chair wishes to, he may add some
40 comments to some of these, if need be.
41
42 **CHAIRMAN GREENE:** I certainly have no problem with that, if
43 there's any committee members that desire to do so.
44
45 **MS. BADEMAN:** I am good with that, but I went to that meeting
46 and if I remember correctly, the one fish bag limit was a
47 decision point that they made a point to talk about, since that
48 was something that we had discussed in October, and then they

1 had also brought up this idea of a split season, a split quota
2 thing, and I think the discussion was about that was something
3 that they wanted, but we weren't sure if that was something that
4 the council could accomplish before June of this year, but I
5 will let Jim fill in the details there.

6
7 **MR. JIM GREEN:** The one fish bag limit, it was -- I am going
8 back a little bit, but the one fish bag limit geographically was
9 Louisiana and Texas. The gentlemen that were from that region
10 were the ones that were the dissenting votes and I think it had
11 to do with the amount of distance they had to travel to access
12 that fishery. That was one of their main reasons why they
13 wanted to stay at two. It didn't make sense to run that far and
14 catch one fish.

15
16 The other question is on the split season and the split season
17 wasn't really a business decision and it was more of ensuring
18 the accountability of the fishery that we're now getting to kind
19 of critique ourselves in.

20
21 The 66 percent season, the first season in June, was really to
22 give us a decent season, which would have been over double what
23 last year's season was for us, and it would also, by opening
24 back in October, it would give staff time to make sure that we
25 knew exactly how much we had left so we could set a proper
26 season and maintain accountability in our subsector. Was there
27 another question? I will be right here if you all have anything
28 else. I will be sitting here.

29
30 **CHAIRMAN GREENE:** Okay. Mr. Riechers has a question for you.

31
32 **MR. RIECHERS:** In the discussion regarding the 66 percent of the
33 season upfront, did you all discuss 407(d) and how that could
34 impact that season?

35
36 **MR. GREEN:** Thank you for the question. Yes, sir, we did and
37 with Florida being the heaviest hitter on the actual catch, the
38 yearly catch, we decided that opening up in that general
39 vicinity of Florida that we would be able to maximize our
40 fishing opportunity and that way, they would kind of start
41 together and we would be able to kind of all have a level
42 playing field, if you will.

43
44 Charter boats wouldn't be out there earlier than private recs
45 trying to catch fish close by and everybody would kind of start
46 on an equal slate and so the reason 407(d) was kind of squashed
47 in that discussion is that we were all starting within the same
48 week, or the majority of the harvesters were.

1
2 **MR. RIECHERS:** I understand the start date, but I guess my
3 concern is if you -- Within the notion of the split season and
4 the way 407(d) will play out, you could set yourselves up for
5 setting aside a season in the fall and then not have the
6 poundage under the recreational quota to do it.

7
8 **MR. GREEN:** Yes, sir, that's true. That's very true and if that
9 did happen and we didn't have those fish, it wouldn't be because
10 the for-hire sector overfished their allotment. It would be
11 because of some other external reason besides our actions and so
12 it was brought up and it was discussed heavily.

13
14 **MR. WILLIAMS:** Thank you, Captain Green, but Robin's point is
15 you might not get that fall season. I think that's his point,
16 is you might not get that fall season at all. If Florida keeps
17 fishing and if they run an extended season in Florida state
18 waters, you might not get any fall season and did you discuss --
19 I presume you discussed that.

20
21 **MR. GREEN:** Yes, sir, and thank you, Mr. Williams. We did
22 discuss that, but, like I said, if we get a twenty-one-day
23 season, that's double what we had last year and it would also
24 put us in an accountable state.

25
26 The only guarantee for 2016 is that I'm going to get a bill from
27 the IRS and so there are no guarantees and if we can start on
28 the same date and we have double the season the first year into
29 Amendment 40, then we're going to have a lot more industry
30 support showing that we're accountable and that we got more
31 access from the previous year and we hope to continue that
32 trend.

33
34 407(d), with the election year and that, that's kind of on the
35 table right now and so we're kind of waiting to see how that
36 happens, but it had a lot to do with starting in that same week
37 as Florida and Alabama, who catch a lot, and really keeping it
38 even, because that's what the for-hire sector's mantra is. We
39 don't want more than we deserve, but we just want a fair shot at
40 what we've historically caught.

41
42 **MS. BOSARGE:** I just wanted to commend you for having that
43 discussion, because it sounds like you had the discussion and it
44 was on the table and everybody understood that if you had a
45 split season that it's a possibility that some other sector,
46 subsector, may overshoot the quota and you wouldn't get your
47 fall season, but that you cared enough about being accountable
48 that you still wanted that split season, to make sure that you

1 did your part to not overfish that red snapper fishery.

2
3 I just have to commend that. If that's the way that discussion
4 went and you wanted to be accountable and do it that way, take
5 that risk to make sure you were accountable, that you didn't
6 overfish it, that's very commendable.

7
8 **MR. GREEN:** I certainly appreciate it and we run into that in
9 the disposition we're in with 30B and everything. We're running
10 into that already. I mean triggerfish closing February 7, that
11 was totally out of our hands and that had a lot to do with state
12 noncompliance.

13
14 We are kind of getting accustomed to this, this external force
15 working against us a lot, but if what we give -- If what you
16 give us we're good stewards of, then we believe that you will
17 give us more in the future and so that's kind of the mantra that
18 we're toting right now.

19
20 **DR. LUCAS:** The State of Mississippi doesn't have anybody on the
21 committee and so we make it a point to call around and ask our
22 charter for-hire folks how they feel. They too are against the
23 one fish bag limit, because of the distance they have to run,
24 which I think you've also seen in Louisiana and Texas. I am
25 just going to offer that to you.

26
27 **MR. GREEN:** I know this has become more of a contentious talk as
28 one and two fish. Me personally, one fish works for me. I am
29 not going to -- I think a lot of people agree with you that --
30 We're not going to have an internal civil war on one fish or two
31 fish.

32
33 If those guys down there need two fish and that keeps the
34 industry in a cohesive unit on moving forward, then that's what
35 a lot of us are prepared to do. We've lived on two fish and one
36 fish would be nice. I would love to have a fifty-day or a
37 forty-day season compared to a thirty or twenty-five, but in
38 order for us to stay united and to move forward with this and
39 stay strong, that's the concession that most of us are willing
40 to make, the majority of us.

41
42 **MS. LEVY:** Related to that, I am just curious. Did you have the
43 discussion about the one fish bag limit before you discussed the
44 split season? Do you think if the decision was to keep it at
45 two fish that -- I guess I will just throw this out there, that
46 you all would then, and I am not expecting you to answer for
47 your group, but the possibility is that there would be a
48 preference to actually set the season based on the whole ACT

1 rather than a portion of it, so that you get -- You are assured,
2 I guess, the longest season that you can get and I don't know if
3 you talked about the possibility of sticking with the two fish
4 and how that would affect your split season decision.
5

6 **MR. GREEN:** We kind of took one motion at a time and when it
7 comes down to it, accountability, to us, is a more important
8 goal than accessibility at this point. Getting something off
9 the ground and getting it to where it's got scientific approval
10 and it's got community approval and it's got your approval,
11 accountability, to us, is more important than losing a third of
12 our season.
13

14 In the last seven years, we've lost way more than a third of a
15 season and we're actually getting on this threshold where we
16 actually have a really big say in it and our say doesn't affect
17 other subsectors and so in order to prove accountability, we are
18 willing to make -- What I would say is the majority of us are
19 willing to make sacrifices to ensure that we don't
20 scientifically blow it, I guess.
21

22 **MS. LEVY:** I understand that and I guess I just want to make
23 clear, and I'm sure everybody knows this, that we now have the
24 accountability measures that include an ACT and so the season is
25 set on a number that's 20 percent below, or will be, the
26 component quota and so there is that accountability built into
27 both the recreational sector as a whole and the sector
28 separation document and so I understand what you're saying about
29 accountable and I just want the council members to understand
30 that we have an accountability measure in season built in by
31 using the ACT as well.
32

33 **MR. GREEN:** If I could follow up on that, I think -- We know and
34 I think really what the advisory panel was looking at was the
35 fact that hopefully we have electronic logbooks soon, which
36 would remove a lot of the buffers and the uncertainty to it, and
37 that would allow us for a greater opportunity than just an
38 assumption or a very educated guess, Andy.
39

40 **CHAIRMAN GREENE:** Okay. Any more questions for Captain Green?
41 Thank you, Captain.
42

43 **MR. GREEN:** Can I have one minute, Mr. Chairman? Mr. Boyd, your
44 question about the cost, the motion for cost sharing and stuff?
45

46 **MR. BOYD:** Yes, sir, and it wasn't a question, but it was a
47 statement.
48

1 **MR. GREEN:** Could I hear it again? I couldn't quite -- There
2 was people talking behind me.

3
4 **MR. BOYD:** My comment was that I am having a hard time getting
5 my arms around -- That's not the words I used, but I am having a
6 hard time getting my arms around the fact that Andy mentioned a
7 cost sharing possibility and we talked about a cost sharing
8 possibility in that document and the charter for-hire fleet and
9 the headboat fleet have come to this council and asked for
10 sector separation and they have asked to be accountable and they
11 have asked to have their own quotas and I am not sure that I
12 would want to have somebody else pay for that when it's their
13 desire to have it in their business operation.

14
15 **MR. GREEN:** Mr. Boyd, I just want to comment on that and I know
16 you were there and I appreciate your time at that AP also.
17 Everybody's guidance really helped us move that along. My
18 opinion and how that should be perceived is not so much that we
19 want you all to pay for it, but whatever money has been
20 dedicated to the charter for-hire in that management, whatever
21 costs exceed that, is what we were saying that we were willing
22 to foot the bill for. That's how I viewed the motion and I
23 wanted to make sure there wasn't a mess-up in what you or
24 anybody else thought of it.

25
26 When we said cost, when we were talking about that motion with
27 cost, we were talking about if a VMS or electronic logbooks go
28 above what you have allocated in the budget for us, that's what
29 we're willing to help pick up on, if that makes sense. Thank
30 you all, everybody, for your time and thank you for putting
31 together that AP.

32
33 It was contentious on the membership and how it was going to go,
34 but, man, everybody really put aside their quarrels and worked
35 together well and thank you again for that opportunity.

36
37 **CHAIRMAN GREENE:** Thank you and with that, I am looking at a
38 couple more agenda items and it's 3:30 and I think we will be
39 able to get through the rest of this today and so with that, I'm
40 going to go with about a fifteen-minute break at this point, if
41 that's okay with the council Chair. Thirty minutes is good for
42 me, but --

43
44 **MR. ANSON:** We're talking if possibly we might want to squeeze
45 in one or two topics from the Mackerel Committee this afternoon
46 and so how about ten minutes?

47
48 **CHAIRMAN GREENE:** We can work right on through if you want to.

1 That's up to you and I don't care.

2
3 **MR. ANSON:** I think everyone would like a break, but ten
4 minutes.

5
6 **CHAIRMAN GREENE:** Ten minutes.

7
8 (Whereupon, a brief recess was taken.)
9

10 **CHAIRMAN GREENE:** We are going to pick up where we left off.
11 We're going to start on Final Action Framework Action to Adjust
12 Recreational For-Hire Red Snapper Management Measures and Mr.
13 Atran.

14
15 **FINAL ACTION - FRAMEWORK ACTION TO ADJUST RECREATIONAL FOR-HIRE**
16 **RED SNAPPER MANAGEMENT MEASURES**
17

18 **MR. ATRAN:** Thank you, Mr. Chairman. This is actually two
19 documents, Tab B-12(a) and Tab B-12(b). The first document is
20 most of the framework action and it includes actions for
21 modifying the bag limit for the charter for-hire sector and then
22 12(b) contains options to establish a split season.

23
24 When we heard that recommendation come from the Ad Hoc
25 Recreational For-Hire AP, we realized that it might be possible
26 to do this if the council wants to have a split season, but it
27 would have to take final action right now and so since the
28 council didn't actually request it and it was a request for the
29 AP, we decided to present the options as a separate document and
30 if the council wants to proceed with a split season, we can
31 incorporate that into the framework action once the council
32 makes its final decisions.

33
34 As I said, Action 1 would begin on page 16 and this was
35 requested by the council at the last council meeting, right
36 after Amendment 40 was approved, to allow separate management
37 measures to be established for the for-hire component and the
38 private recreational component of the recreational sector.

39
40 One thing that wasn't absolutely clear is whether passage of
41 this action was contingent upon Amendment 40 being approved. It
42 is still going through the review process right now and if it
43 is, since Amendment 40 has a three-year sunset clause in it,
44 whether it was the intent that if Amendment 40 is allowed to
45 sunset, should these actions also be allowed to sunset.

46
47 If you look on page 17, there's a note and this also appears in
48 the supplemental action. It says: Implementation of this action

1 is contingent upon implementation of the sector separation
2 provision in Amendment 40. If sector separation terminates,
3 then the bag limit adopted in this action will also end. The
4 red snapper bag limit for charter for-hire vessels will be the
5 same as for private vessels, unless modified in a subsequent
6 regulatory action. Like I said, similar language also is in the
7 action regarding a split season and so if that is not the intent
8 of the committee or the council, we would like to make it known.

9
10 The analysis in the NEPA portion of this document covers both
11 these actions being implemented with or without sector
12 separation. It sounded like this was to be contingent on sector
13 separation being in place, but we would like to confirm that
14 with the committee.

15
16 Having said that, we have three alternatives for bag limit
17 changes. Alternative 1 is no action and, by the way, the intent
18 of going to a smaller bag limit was to try to provide more
19 fishing days for the charter for-hire season, on the basis that
20 these vessels can advertise a red snapper fishing trip as long
21 as they can catch some red snapper and they would have to go
22 after other species anyway in order to put together a full-day
23 trip or a half-day trip or whatever. At least from the
24 perspective of some of the charter boat operators, a one fish
25 bag limit was just as good to them as a two fish bag limit and
26 may provide additional fishing days for them.

27
28 Alternative 1 is no action, don't change the bag limit from the
29 current two fish bag limit. Alternative 2 would set the bag
30 limit for the charter vessels and headboats at one fish per
31 person per day and, by the way, that would also allow the
32 provision that we have in place right now that on certain
33 qualified charter vessels that are out over twenty-four hours
34 that a two fish bag limit can be retained. That would still be
35 in place and so vessels that are out over twenty-four hours and
36 meet those conditions would still have their two fish bag limit.

37
38 Then, because we wanted to provide a broad range of alternatives
39 and going above the current two fish bag limit was not
40 considered to be within the scope of what we're looking at.

41
42 We did add a third alternative for what has come to be known as
43 fractional bag limits, set the red snapper bag limit for charter
44 vessels and headboats at one fish for every two anglers and this
45 is based upon a similar alternative that was considered several
46 years ago for greater amberjack and that was ultimately rejected
47 by the council, but since it had been considered at one point,
48 it seemed reasonable to at least include it for consideration in

1 this action in order to provide a broad range of alternatives.
2 Mr. Chairman, do you want me to also go over the supplemental
3 action on split seasons at this time or do you want to discuss
4 bag limits?

5
6 **CHAIRMAN GREENE:** We just heard the report come out about the AP
7 and there was some discussion about that. This was something I
8 had asked for at full council and so if you want to just go
9 through this and then we'll take the split season as a separate
10 issue, I think that would be the way to go.

11
12 **MR. ATRAN:** That concludes my summary at this point.

13
14 **MR. WILLIAMS:** Steve, if we implemented this as a framework
15 action regulatory amendment, can we have it in place by the time
16 -- Assuming Amendment 40 is approved, could we have it in place
17 by the time the season opens?

18
19 **MR. ATRAN:** That's our intent. We were looking at what the
20 timeframe is for processing a framework action and we believe it
21 could be in place for a June 1 opening if final action is taken
22 at this meeting.

23
24 **MR. WILLIAMS:** We could take final action that quickly?

25
26 **MR. ATRAN:** We have noticed this for final action and so final
27 action can be taken at this meeting.

28
29 **CHAIRMAN GREENE:** Mr. Atran, Table 2.1(a), it shows a two bag
30 limit, a one-and-a-half fish bag limit, one fish, and a half-
31 fish, which is what you call fractional bag limit. One-and-a-
32 half is a 22 percent increase of the number of days and is that
33 correct?

34
35 **MR. ATRAN:** Correct. I am not sure how the one-and-a-half and
36 one-half limits work in here. The idea is that the way it's
37 currently structured, there would have to be at least two
38 passengers onboard the vessel to catch one fish, one red
39 snapper. If you only had one fisherman onboard, you could not
40 catch a red snapper and then you would have to have at least
41 four fishermen onboard in order to catch two and so I am not
42 really sure where those one-and-a-half and one-half bag limits
43 fit in, but they do give you some indication of where the
44 fractional impacts would occur.

45
46 **CHAIRMAN GREENE:** I understand where you're coming from in
47 trying to give as many options as possible, but I think
48 fractional bag limits may create a lot of confusion. I could

1 certainly see how that would happen.

2
3 **MR. WILLIAMS:** Mr. Chairman, I would like to make a motion. Are
4 you ready for a motion? **I would like to move Alternative 2,**
5 **that we set the red snapper bag limit for charter vessels and**
6 **headboats at one fish per person per day, and make it contingent**
7 **upon the approval and implementation of Amendment 40.** That's
8 understood this is the for-hire fishery. That's the context.

9
10 **CHAIRMAN GREENE:** We will give her just a second to make sure we
11 get the wording correct.

12
13 **MS. LEVY:** It's to move that Alternative 2 be the preferred
14 alternative?

15
16 **MR. WILLIAMS:** Yes. **That Alternative 2 be the preferred**
17 **alternative.**

18
19 **MS. LEVY:** In Action 1. Well, I guess there's only one action
20 and so we can --

21
22 **CHAIRMAN GREENE:** We have a motion on the board before you and I
23 believe it's correct. Is there a second to this motion?

24
25 **EXECUTIVE DIRECTOR GREGORY:** We need further clarification.
26 After the word "set", use "the red snapper bag limit".

27
28 **CHAIRMAN GREENE:** Okay. You're good with that? Okay. I heard
29 a second from down the table somewhere and I'm not sure who it
30 was. Roy? Okay. We have a motion and a second and is there
31 any more discussion?

32
33 **MR. WILLIAMS:** Mr. Chairman, I think the reason for it is fairly
34 obvious. It's going to lengthen the for-hire season by 39 to
35 sixty-some percent and it's going to give them a lot more days
36 at sea, in terms of being able to target red snapper. I realize
37 that in some areas it's going to be a little harder for them,
38 but Bob Zales told the old Florida Marine Fisheries Commission a
39 long time ago that he can't sell a zero trip, but he can sell a
40 one king mackerel limit and we had set a zero limit at one point
41 and he made it real clear that a zero limit, there was no chance
42 and you can't sell that trip, but he can sell a trip for one
43 king mackerel. He didn't like it, but he could sell it and the
44 commission did that.

45
46 I think one fish is going to almost double the charter for-hire
47 season and I think we ought to -- They have gotten together at
48 our behest and they've come up with this recommendation and we

1 have enough time to implement it and I think we ought to do it.

2
3 **MS. BADEMAN:** I was all set to agree with this alternative, but
4 since the AP meeting, I have heard some changing opinions, I
5 think, about this alternative, some people that were even at the
6 AP meeting and supported the one fish.

7
8 They may be starting to think that maybe they actually really
9 want two and maybe I can get onboard with this in the end, but I
10 really want to hear from the public about this, I think, because
11 I think some of the opinions have changed out there now that
12 they've thought about it a little bit more, but maybe I will be
13 corrected.

14
15 **MR. FISCHER:** I was going to ask Roy if the purpose was to
16 extend the season, why didn't he choose Alternative 3? I
17 believe that would extend the season quite a bit further.

18
19 **MR. WILLIAMS:** Or I could have made up a fourth alternative for
20 one fish for every four anglers, too. I just didn't think it
21 was very practical and so I rejected it and I heard Corky and
22 Camp talking about going out together and Corky said he got the
23 head and he got the tail and I didn't want to -- It just didn't
24 seem fair to me and so I wasn't going to --

25
26 **MR. FISCHER:** I am not commenting on either portion.

27
28 **MR. BOYD:** I was at the AP meeting also and one of the things,
29 if I remembering correctly, and, Martha, you can help me, but
30 when they voted almost unanimously to go to a one fish bag
31 limit, I think that was the only alternative they were presented
32 with and they didn't have any other alternatives and so it was a
33 fairly heavily-weighted vote, but I don't think everybody there
34 really wanted to do that and what Martha is hearing, I think, is
35 probably indicative of that. I would like to also hear what the
36 public has to say about this.

37
38 **MR. PERRET:** This is a good example of why regional management
39 may be a good tool to have, that region that would want one fish
40 versus the region that would not want the one fish. There is
41 rationale for and against and I happen to be on the side that's
42 against at this time, but, again, a good reason for regional
43 management. Thank you.

44
45 **MR. RIECHERS:** Could I ask staff -- What kind of notice has been
46 out and to the public in this regard? I mean I realize we can
47 notice it and this can be the hearing and I understand that
48 we've had the AP meet and discuss it, but can you elaborate on

1 that, when it got up on our website and those kinds of things,
2 please?

3
4 **MS. CHARLENE PONCE:** We did a video presentation and it was
5 posted about a week-and-a-half ago. As of Friday, it had over
6 600 views and we have received a handful of comments and I can
7 tell you that there was no support for changing the bag limit.

8
9 **DR. CRABTREE:** Were the people commenting for-hire vessel
10 operators or are they private boaters or do you know?

11
12 **MS. PONCE:** It was a mix.

13
14 **MR. WALKER:** I was just going to say that for about four years I
15 had a charter boat and we ran some charters and I kind of agree,
16 too. If you've got one fish, you can sell a trip with one fish.
17 You can't sell zero and the longer you can extend the season,
18 you can address things like discards and mortality and things
19 like that, but I would like to see -- I think that would work
20 and I like the motion. I have heard Johnny speak in favor of
21 one fish before and I know a lot of these Alabama fishermen --
22 I've heard a lot of testimony from the charter fishermen in this
23 community.

24
25 **CHAIRMAN GREENE:** We have a motion on the board for you. Any
26 further comments or discussion? I guess we will pull it to a
27 vote. **All those in favor that Alternative 2 be the preferred
28 alternative, set the red snapper bag limit at one fish per
29 person per day in the for-hire fishery and make it contingent
30 upon approval and implementation of Amendment 40, all those in
31 favor please raise your hand; all those opposed please raise
32 your hand.**

33
34 **MR. ATRAN:** I have the vote failing three to six.

35
36 **CHAIRMAN GREENE:** With that, I guess we will move on into the
37 red snapper split season, Mr. Atran.

38
39 **MR. ATRAN:** Thank you, Mr. Chairman, and this is in Tab B,
40 Number 12(b). Again, this was trying to be responsive to the
41 recommendation from the AP to consider having a split season and
42 they were talking about trying to have it for the 2015 season.

43
44 The only way we could get this in place would be to add this as
45 an action to the framework action that we're currently
46 considering, but we didn't know if the council would want to
47 consider this or not and so we did this as a separate
48 supplemental document and if the council wants to add it in, we

1 can add it in under final action.

2
3 We have three alternatives again. We were trying to keep this
4 fairly simple. Alternative 1 would be not to have a split
5 season and continue the way we are. Alternative 2 is the exact
6 recommendation from the AP. Effective beginning in 2015, the
7 red snapper season for the federally-permitted charter vessels
8 and headboats will open on June 1 and will close on the date
9 when 66 percent of the for-hire ACT is projected to be reached.
10 The season will reopen on October 1 and will close on the date
11 when the for-hire ACT is projected to be reached or when the
12 total recreational ACT, for-hire and private angling combined,
13 is projected to be reached, whichever occurs sooner.

14
15 As was discussed a little bit earlier, depending upon what
16 happens between when that first season closes and when the total
17 catch is estimated, there is a possibility that that second
18 season might be more than a third or less than a third of the
19 allocation or no season at all, if the entire recreational quota
20 has been met before October 1.

21
22 Then Alternative 3 is several years ago, when Dr. Bob Shipp was
23 a council member, he had suggested considering moving the
24 starting date for the red snapper recreational season up to an
25 earlier period and so we decided to continue with the split
26 season alternative, but move the first season to sometime in the
27 spring.

28
29 We selected March for the opening date and then the second date
30 -- Again with 66 percent of the for-hire ACT and then October 1
31 would remain for the second season for any remaining for-hire
32 ACT.

33
34 I had selected March for this because that seemed to be a
35 reasonable month. That's spring break and it's also a period
36 when shallow-water grouper is closed in waters deeper than
37 twenty-fathoms and so it would allow an alternative species
38 where the red snapper are available, but after I wrote this and
39 it was a little too late to change the alternatives, I started
40 looking a little bit more closely at the public testimony from
41 back in 2010 and 2011 when this was discussed and most of the
42 testimony that was in support of an earlier season was talking
43 more in terms of maybe an April to May closure.

44
45 If the council is interested in this, you might want to find out
46 what the preferred spring season would be and, again, the spring
47 season cannot be implemented in time for the 2015 season and so
48 we said that effective beginning in 2016, if you wanted, this

1 spring season, split season, could be implemented.
2
3 If you wanted, you could adopt both Alternatives 2 and 3. You
4 could have a split season this year with a June and October
5 opening and then in 2016, switch to a March or a springtime
6 opening and an October opening. Again, this is mostly based
7 upon the recommendation from the AP and the comments that I was
8 able to find from those old council minutes where there was some
9 public testimony on this type of action.
10
11 **CHAIRMAN GREENE:** Okay. Is there committee discussion? We have
12 a couple or three alternatives in front of you and does anybody
13 care to make comment?
14
15 **MS. BADEMAN:** Just a question, first. Procedurally, do we need
16 to add this to the document or is it already included? I see
17 it's a separate attachment and I am just kind of confused if we
18 need to add this action or what.
19
20 **MR. ATRAN:** What I would suggest is if you want to make a motion
21 to adopt one of these alternatives is that the motion be to add
22 this as an action with a preferred alternative of whichever you
23 select.
24
25 **CHAIRMAN GREENE:** Any further comments?
26
27 **MR. RIECHERS:** Can you report on any comments regarding this
28 alternative that were received at this point?
29
30 **MS. PONCE:** This alternative was included in that same video
31 presentation and we got comments both in favor of and opposed to
32 the split season. The reasons were because it would be a great
33 benefit to the charter for-hire because of the fall customer
34 base and then the reasons for opposition were because private
35 anglers and charter for-hire should have the same season and
36 people felt that nothing should be done until electronic
37 monitoring is implemented.
38
39 **MS. BADEMAN:** Just what I've been hearing so far, I have heard
40 some support for Alternative 2 in Florida. June is a pretty
41 important season and October is a good opening time as well.
42 When we've had some of those fall supplemental seasons in the
43 past on the council, the ones that have fallen in October have
44 been received pretty favorably and so that would be the
45 direction I'm leaning at this point.
46
47 **MR. PERRET:** Steve, why do we have an alternative for 2016 in
48 this document?

1
2 **MR. ATRAN:** In trying to provide a range of alternatives, we
3 wanted to give you the opportunity, if you go with a split
4 season, of having the first season opening earlier than June, in
5 the springtime if you wanted, but we can't do that for 2015. We
6 don't have enough time to get it implemented.

7
8 **MR. PERRET:** I understand that, but why not -- If we want a
9 March 1, 2016, we've got a year to get that in place, if we want
10 to go in that direction, with a different document.

11
12 **MR. ATRAN:** That's true. If you don't want to consider a split
13 season this year, but you do want to consider something for next
14 year, we have plenty of time to implement that, but we wanted to
15 include a range of alternatives in this document for you to
16 consider.

17
18 **MR. PERRET:** I am not necessarily against a split season for
19 this year, but I just don't understand why we're a year ahead.
20 I mean if we want options for 2016, it seems like we ought to
21 have more than one date, March 1, June 1, whatever.

22
23 **DR. LUCAS:** As part of Mississippi's red snapper summit that we
24 held in May of last year, there was overwhelming support from
25 both charter for-hire and from the private recreational to try
26 to get a season that was established in the fall and so our
27 charter for-hire fisheries are for the split season. They do
28 understand that they will be impacted if we are over.

29
30 **CHAIRMAN GREENE:** Thank you. Anybody else have a comment?

31
32 **DR. CRABTREE:** Steve, I am looking at this and I guess we're
33 talking about voting this up at this meeting, but based on my
34 look at it, this is a four-page document and I don't see any
35 economic analysis or much of anything and I am really reluctant
36 to make a decision on this at this point.

37
38 I will say that Alternative 3, opening March 1, that would
39 interject a whole lot of uncertainty in terms of estimating how
40 many days they ought to get, because we haven't had the fishery
41 open before June in many, many years and so it would be kind of
42 a problem doing it, but I am a little concerned of do we have
43 enough analysis here to really take final action on this. Is
44 there any economic analysis, Steve, in how this might affect
45 trips and redistribute things and how it might affect different
46 communities in different areas differently?

47
48 **MR. ATRAN:** We didn't have any analysis in time for this

1 document, unless the economists on the IPT were able to put
2 something together since this was published. I don't think they
3 were. We were advised, during the IPT meetings, that we could
4 bring this for final action in the current format, but I
5 understand your concerns and if legal counsel has a different
6 opinion at this time, we would go with whatever that opinion is.

7
8 **MS. LEVY:** I mean I will just say that this was thrown together
9 very quickly, because it, like we've said, wasn't something that
10 the council asked for and it came up at the AP meeting and I
11 tend to agree with Roy that it lacks the analysis that I would
12 think you would all want to see before you make a decision about
13 the split season. I would caution that there is a risk in
14 deciding to do this without actually looking at any of the
15 effects analysis.

16
17 **DR. CRABTREE:** My guess is, like all things red snapper, there
18 will be people on both sides of this and I would be reluctant to
19 try and rush this through. Maybe this is a good thing to do,
20 but it seems more reasonable, to me, to spend more time on this
21 and flesh it out and focus on this as something maybe we do
22 starting in 2016, rather than making a hasty decision on it and
23 coming to regret it when, at our next meeting, a roomful of
24 fishermen show up who are opposed to this.

25
26 **CHAIRMAN GREENE:** Okay. Any further comments?

27
28 **MS. BADEMAN:** Just that I think it would be helpful if the
29 committee decided if they wanted to try to do this or not,
30 because I think that's going to affect what people think about
31 the one fish bag limit.

32
33 If the one fish limit is people's really only hope for extending
34 the season and that's their only option, then they may have a
35 different opinion, but if they can also consider this, they -- I
36 don't know. I think it's worth discussing and trying to figure
37 that out, at least a little bit, in committee.

38
39 We have heard from people for a long time that they've been
40 interested in split seasons. Like Kelly said, we had similar
41 workshops around our state and recreational anglers and charter
42 boats were interested in the split season. We have heard a lot
43 of people testify at council meetings again and again about this
44 and so -- Anyway.

45
46 **CHAIRMAN GREENE:** Thank you for those comments.

47
48 **MS. LEVY:** The one thing I will say is that there isn't anything

1 in this document that lets you know whether splitting the season
2 is actually going to make it more days, because we don't have an
3 analysis of what the effects of the split would be.

4
5 I can see that being something you would want to consider, but
6 there is no mechanism for you to actually consider it without
7 that analysis in there, which it doesn't have right now.

8
9 **MR. RIECHERS:** Martha, kind of to your point, I mean I think
10 I've heard from a lot of our fishermen across the Gulf too that
11 they like the split season, but that was the split season is the
12 context of we closed thinking we were at the quota and we found
13 out we still had quota and we reopened. They may still be in
14 favor of that, but I think I would like an opportunity to hear
15 from them some before we make any of those decisions.

16
17 Even like the bag limit, I don't think that we've had a lot of
18 opportunity to hear from different groups from across the Gulf
19 at this point in time. I mean obviously we will have groups
20 from each state come before us in public testimony, but at this
21 point, I don't know that we've heard from, each of us
22 respectively, from people at home on these issues.

23
24 It sounds like Mississippi reached out to some and each of us
25 may have done some of that, but this hasn't had a good, robust
26 public hearing kind of process at this point, with the exception
27 of going back to past times when we were considering it.

28
29 **MR. WALKER:** I was just going to mention that last year when I
30 was on the Reef Fish AP and we were in Tampa and it was about
31 grouper, gag grouper and red grouper, and there was some
32 discussion of different seasons, split seasons, and I think they
33 were all interested in exploring all options and I would like to
34 hear some more public comment myself.

35
36 **CHAIRMAN GREENE:** It sounds like everybody's desire is to hear
37 public comment on this and I am sure we will have some. With
38 that, I think that will wrap up Item X and we took care of Item
39 XI yesterday and Item XII was earlier this morning and so that
40 will move us into Item XIII, Other Reef Fish SSC Summary, by Dr.
41 Patterson and Mr. Atran. Mr. Atran, are you ready?

42
43 **OTHER REEF FISH SSC SUMMARY**

44
45 **MR. ATRAN:** I think Dr. Patterson is going to handle most of
46 this. One thing is the agenda does show a sub-item here of the
47 Progress Report on the Mutton Snapper Update Assessment and I
48 don't think Dr. Patterson was going to address that.

1
2 We were supposed to have gotten a mutton snapper assessment
3 presentation at the last SSC meeting, but they have run into
4 some difficulties on the projections and they were not prepared
5 to do a full presentation and so it was just going to say there
6 is a progress report and this is still in progress and we will
7 probably have some final ABC recommendations at the next SSC
8 meeting, but not at this one. I think the rest of these items
9 Dr. Patterson is going to address.

10
11 **REORGANIZATION OF SSCS**
12

13 **DR. PATTERSON:** Thanks, Steven. The three remaining items then
14 under Other Business, outside of the Mutton Snapper Assessment,
15 have to do with the Makeup of the SSC that Executive Director
16 Gregory discussed earlier in this meeting and basically, Doug
17 came to us and indicated he had some ideas about restructuring
18 the SSCs.

19
20 Most of his ideas about restructuring the SSC -- We had some
21 discussion and most folks were supportive. One issue that the
22 SSC stressed was that the original proposal was to have four
23 quantitative biologists or stock assessment type folks as
24 members of this reorganized SSC. We simply commented that we
25 thought that number was too low and I think since then there has
26 been a revision for that number.

27
28 In recent years, we have lost several quantitative ecologists
29 and stock assessment folks from the SSC, including Jim Cowan,
30 Joe Powers, Steve Zettelmeier, and Michael Prager. While we've
31 added some new folks, I am not sure that on balance we're back
32 to where we were as far as the quantitative expertise and most
33 of the advice that comes out of the SSC is related to stock
34 assessments and quantitative biology and ecology. Because of
35 that, there was a strong consensus that we wanted to see those
36 numbers be maintained, if not enhanced.

37
38 **REVIEW OF SEDAR ASSESSMENT SCHEDULE**
39

40 The second component under Other Business had to do with a scope
41 of work that was brought to our attention by Steven Atran that
42 had to do with the council's desire to have an updated red
43 snapper assessment in -- I believe 2016 was what he indicated
44 the council was interested in.

45
46 We discussed whether the SSC felt like it could make a
47 recommendation as to when red snapper should be revisited and if
48 you've read the SSC report, you will note that we discussed many

1 things, some of which were what new information might be
2 available and what type of assessment the next red snapper
3 assessment might be.

4
5 These included MRIP adjustments that may require reanalysis and
6 we have heard recently that MRIP re-estimating effort parameters
7 also is on the horizon and so that should be a component of that
8 as well, whether effects of the BP oil spill might be more
9 directly estimated in the next assessment, whether new fishery-
10 independent data sources might be available, and then also if
11 the council request separate east and west Gulf stock
12 assessments, the assessment approach would have to be revisited,
13 which would require a benchmark in that case.

14
15 These were all issues that were discussed at the meeting and you
16 will note we indicate here that there were a couple of motions
17 that were offered and did not pass. The votes were very close.

18
19 In the end, the SSC did pass a motion, which was the SSC
20 recommends that a standard red snapper assessment be conducted
21 in 2017 and that one actually passed eleven to five and so
22 obviously it was not unanimous.

23
24 Basically the idea, I think, that was expressed among the
25 prevailing side was that a standard assessment would enable some
26 of these sources of information to be incorporated as long as
27 there were specific terms of reference that came from the
28 council that enabled those to be incorporated, similar to what
29 we saw in the most recent assessment which was talked about
30 yesterday. Again, that was the vote for what type of assessment
31 and when it might be conducted, conducted in 2017.

32
33 Again, there was quite a bit of discussion about time and when
34 the SSC felt -- What kind of recommendation it felt it could
35 make here and one of the ideas that was discussed was to try to
36 have the most current information, or at least information
37 through 2015. Again, this was the vote that passed, the SSC
38 recommends that a standard red snapper assessment be conducted
39 in 2017.

40 41 **DISCUSSION OF ALTERNATIVE RED SNAPPER MSY PROXIES**

42
43 The presentation I'm going to go to now for the last bit of the
44 Other Business and the presentation file that I presented from
45 slides from yesterday, Dr. Ponwith correctly pointed out there
46 was an error in the first two slides, in which I transposed
47 figures.

1 That's been corrected in the revised file, but then this figure
2 we didn't quite get to yesterday. Shannon Calay, Dr. Calay, did
3 talk about the analysis that was requested by the Gulf of Mexico
4 Council here to examine projections using different scenarios
5 for MSY proxies, from 20 percent SPR up to the council's current
6 proxy, which is 26 percent SPR.

7
8 These analyses were requested by you of the Southeast Fisheries
9 Science Center. This actually didn't appear in the scope of
10 work for the SSC meeting, but we were made aware of it shortly
11 before the meeting and so we knew that this was something the
12 council was interested in us to examine and comment on and,
13 again, Shannon presented some of that yesterday as she worked
14 her way through the implications of these different SPR levels
15 and whether was sufficient information within the assessment to
16 recommend going away from or moving away from the council's
17 current SPR proxy.

18
19 Following on that discussion, I put together a list of different
20 ideas that were expressed within the SSC meeting. You will note
21 in the SSC report that there is not a consensus statement or
22 even a vote, a motion, with respect to the various SPR proxies,
23 but some of the items which were discussed included is there
24 truly no relationship between spawning stock biomass and
25 recruitment for Gulf of Mexico red snapper.

26
27 This has been a hot topic of discussion and one of the
28 implications of setting the steepness parameter for the
29 spawner/recruit relationship, fixing it at 0.99, is this
30 implication that there is no information in the relationship to
31 predict future recruitment or that the stock is just incredibly
32 productive and, in fact, we're fitting a steepness parameter
33 close to one.

34
35 Shannon indicated yesterday in her discussion about the biology
36 of the fish and fitting the spawner/recruit relationship in the
37 stock assessment model that it's unlikely that this stock has a
38 spawner/recruit relationship steepness value of one or close to
39 one, but that for the time series of information that we have,
40 we are unable to -- A type of analysis called likelihood
41 profiling in the assessment, there wasn't sufficient information
42 to select an alternative steepness other than fixing at 0.99.

43
44 The next statement then is what does fixing steepness really
45 imply? In the context of discussions about SPR values, I think
46 where the lower end of that SPR 20 came from is that in the last
47 assessment, when we examined Fmax as a proxy for FMSY, the SPR
48 equivalent to that was 20.4 percent and now it's basically 20

1 percent and so that comes from F_{max} .
2
3 When you have a steepness value of one, F_{max} and F_{MSY} , or MSY
4 and the yield at F_{max} , are equivalent and the reason that a
5 proxy is used in this case is because the SSC felt, and actually
6 the SEDAR process folks earlier had indicated, that a proxy
7 should be utilized, because if you don't have a reliable
8 spawner/recruit relationship, then by fixing the steepness at
9 any value, you are predetermining what the MSY value will be.
10
11 Instead of operating in that scenario, then it's a better
12 approach, as was recommended then, to actually use an MSY proxy
13 and, in fact, the council already had the MSY proxy of 26
14 percent SPR and so that was what was utilized historically.
15
16 This issue of what does fixing steepness really imply is
17 important, because even situations -- For example, the
18 predominant approach in the South Atlantic is to use a
19 metanalysis, which is basically a fancy term for looking at
20 steepness values across a number of species for which reliable
21 spawner/recruit relationships have been computed.
22
23 They basically have a parameter that they set initially and
24 allow it to vary through the model fitting process, in which for
25 demersal species with life histories similar to red snapper,
26 that prior is 0.84 and that's a from a paper from Shertzer and
27 Conn in 2012 and there are other metanalysis that have been
28 conducted through time by Myers and his colleagues, as well as
29 by Kenny Rose, another quantitative former member of the SSC we
30 no longer have, in which these steepness parameters for similar
31 life histories to red snapper have been estimated to be between
32 about 0.75 and 0.84, in the case of Shertzer and Conn.
33
34 Again, this issue is if you fix steepness, then you are
35 predetermining what the MSY value will be relative to the stock
36 dynamics of the fish and so in the Gulf, what has been the
37 predominant approach is not to put a prior such as 0.84 into the
38 model, but instead, what we're doing in setting steepness, or
39 fixing steepness, at a high value is basically indicating that
40 we feel that the near-term future recruitments are going to be
41 similar to the recent past.
42
43 It's not really a statement about stock productivity, but
44 basically that our future recruitments are going to be projected
45 at recent historical values and you will note that language in
46 the king mackerel assessment, which will be reviewed later, and
47 a similar logic was applied in that case as well.
48

1 For that stock, the council's proxy for MSY is relative -- It's
2 the yield at F 30 percent SPR and so, again, that logic has been
3 used in other assessments for which we don't have a reliable
4 spawner/recruit relationship and so this next point is working
5 from the council's current MSY proxy is sort of a null
6 hypothesis and can the SSC offer scientific guidance for a
7 change?

8
9 Shannon Calay spoke to this yesterday when she said that within
10 the red snapper stock assessment model, given the fact that we
11 don't have a reliable spawner/recruit relationship, there really
12 isn't strong evidence to suggest a change or what might be a
13 more plausible SPR proxy for the biomass at MSY. There is
14 external information that I indicated, but once you get away
15 from the species of interest, obviously there is uncertainty
16 involved there.

17
18 Lastly, we mentioned this yesterday, but just during the
19 discussion, Camp Matens was the council member present and Camp
20 asked us a couple of times whether any of the yield streams that
21 existed in the table that Shannon showed, whether these were
22 equally valid and we talked about what valid meant, but one
23 point that Dr. Crabtree mentioned to us at the time was the fact
24 that given the time horizon for rebuilding would likely change,
25 because rebuilding has to be accomplished in the timeframe that
26 the stock could recover, given zero fishing, and if that can't
27 be within ten years, you could add a generation time, but the
28 information that Roy provided, or sort of the guidance in this
29 respect, was that the timelines might change as well.

30
31 If those change, then these projections would change also,
32 because the time horizon for recovery or for rebuilding would
33 change, and so part of our ability to answer whether these are
34 valid or not is tied up in this issue of that time horizon would
35 likely change as well.

36
37 Again, this was a rich discussion and there were points made for
38 retaining the current SPR proxy and there were points made for
39 changing all the way down to a 20 percent SPR. We didn't
40 produce a consensus statement, nor did we pass a motion, but we
41 did have a rich discussion on that and I have tried to capture
42 much of what was discussed in that context here and, again,
43 Shannon did an excellent job, just from the biology perspective
44 and the quantitative model fitting perspective, providing some
45 information as to what the implications of these are and that
46 concludes the Other Business of the SSC Report and so I would be
47 happy to answer any questions.

48

1 **MR. PEARCE:** Thanks for your report. It was great. You know
2 one of the confusions I have with these SPR numbers and whether
3 we should go to Fmax or stay with 26 or not is does Fmax keep us
4 within a ten-year rebuilding plan?
5

6 **DR. PATTERSON:** I can't answer that. I haven't seen the
7 projections as to what the implications would be for that.
8

9 **MR. PEARCE:** I kind of thought that we heard in the other
10 presentation that all of them pretty much stay within that ten-
11 year rebuilding plan, but I'm not sure and that's why I'm asking
12 the questions. Do any of the other numbers besides 26 stay
13 within the ten-year rebuilding plan? Can you tell me that?
14

15 **DR. PATTERSON:** When you state "stay within the ten-year", right
16 now the rebuilding plan goes out to 2032.
17

18 **MR. PEARCE:** But we're supposed to rebuild in ten years, right?
19

20 **DR. PATTERSON:** No, right now the current rebuilding plan is
21 2032.
22

23 **MR. PEARCE:** Okay. Let me rephrase it. If we went to --
24

25 **DR. PATTERSON:** The ten years comes from if you change the proxy
26 and you could get there from here forward in quicker than ten
27 years, then that would affect the time horizon and we don't have
28 those projections done.
29

30 **MR. PEARCE:** Okay, because my next question was going to be if
31 we went to Fmax, would that hurt our fishery?
32

33 **DR. PATTERSON:** Hurt the fishery? I can only speak to the
34 biology in that respect and Dr. Crabtree actually summarized
35 this quite nicely yesterday when he indicated that the reason
36 higher catch can be landed in the near term, according to this
37 table, is that you have a higher fishing mortality rate at Fmax
38 and so that would enable you to fish down the biomass to remove
39 those strong recruitments, basically, that are present, but you
40 can see over time, even at the years that are shown here in
41 these projections, that eventually your catches, your projected
42 catches, allocations would be similar.
43

44 The risk that you run is that you are lowering the threshold.
45 You are lowering the bar for recovery, in that you're only
46 trying to get to a 20 percent spawning potential ratio, which is
47 the estimated number of eggs in an unfished stock, the estimated
48 number of eggs that would exist in the population relative to an

1 unfished condition.

2
3 For a fish like red snapper, the danger is red snapper is
4 referred to as a periodic life history strategist and, as we
5 know, they can live to be nearly sixty and so most fish that
6 have similar life histories, metanalysis as well as simulations
7 have shown that a more reasonable SPR would be in the
8 neighborhood of 30 to 40 percent and Shannon indicated that
9 yesterday as well.

10
11 Yes, there is risk. There is also uncertainty, because we don't
12 have information over a sufficient timeframe or we haven't
13 modeled it sufficiently well to examine stock dynamics such that
14 we could fit a steepness parameter to the spawner recruit
15 relationship for red snapper.

16
17 One thing to keep in mind is currently there is a model that's
18 computed for red snapper in the stock assessment, but there are
19 two subunits, but SS, Stock Synthesis, the platform, the
20 framework, that is used to compute the model, it doesn't enable
21 us to fit separate spawner recruit relationships for eastern and
22 western Gulf of Mexico.

23
24 We have information that the spawning stock biomass trajectories
25 are quite different and we can fit different recruitments
26 because we have recruitment deviations that are built into
27 either side and we also have different information feeding into
28 the catch at age, for example, into the model.

29
30 The estimates of recruitment are different between east and west
31 and perhaps if there were two separate stock assessments
32 computed, stock assessment models, we might have relationships
33 that could be fit. I am not trying to imply that that would
34 occur, but I am just saying that by fitting one relationship
35 more or less to the entire stock, it does cloud over some of
36 those inherent stock dynamics that we're missing.

37
38 **MR. PEARCE:** Just a quick follow-up. Red snapper is a lot more
39 prolific than a lot of these other fisheries than we have in the
40 Gulf. At age two, they begin producing eggs, right? How does
41 that fit into the grand scheme of things with all the other
42 fisheries we've got, like red drum? It's five or six years of
43 age before they become viable for the stock and doesn't that
44 make red snapper a stronger fishery for us at a younger age and
45 maybe allow us to go to a different SPR?

46
47 **DR. PATTERSON:** Yes, that would argue for higher productivity at
48 earlier ages and so there are three general life histories that

1 are typically discussed when talking about fishes. There is
2 opportunistic and these are things like anchovies, that only
3 live a few years and they reproduce very young, within six
4 months, often, and they spawn -- Bay anchovy spawns every day
5 its whole life, once it becomes mature. They have what's called
6 a high intrinsic rate of population increase.

7
8 Then we have the other extreme, which are equilibrium
9 strategists. These are things like sharks that live a long
10 time, but reach maturity late in life. Once they do, they might
11 only produce one or two pups every year or so and so they don't
12 recover -- They don't have this ability to bounce back from low
13 population levels.

14
15 Then we have this other group called the periodic strategists
16 and they typically live a long time and they delay maturity not
17 quite as long as the equilibrium strategists, but then once they
18 become mature, oftentimes they are batch spawners and they spawn
19 over many, many years and they rely on strong year classes to
20 come through.

21
22 Red snapper really fits into that group of periodic strategists,
23 but in answering your question, there are aspects of their
24 biology that are much more similar to an opportunistic
25 strategist and we do see differences between the eastern Gulf
26 and the western Gulf.

27
28 Some stocks have shown that with substantial fishing pressure
29 they actually will spawn at earlier ages. It's called
30 compensation and it's a compensatory mechanism and it's been
31 well documented, for example, in many cod stocks. Jim Cowan and
32 his graduate student, Melissa Woods, demonstrated about ten
33 years ago that in the eastern Gulf of Mexico red snapper spawned
34 at earlier ages and smaller sizes than in the western Gulf of
35 Mexico. We are seeing the same thing in the Atlantic, where we
36 know the estimates of spawning stock biomass are quite low.

37
38 Whether this is just a compensatory mechanism for the stock to
39 deal with low population biomass or whether this is just an
40 intrinsic part of their biology at lower population levels
41 that's sustainable without approaching a condition referred to
42 as recruitment overfishing.

43
44 **MR. PEARCE:** One last point is that this council is deliberating
45 at length about reallocating and getting more fish into the
46 fishery and if we've got a fishery that can withstand maybe a
47 lower SPR, that could help us get away from some of these
48 discussions and help us get more fish into this fishery in a lot

1 easier way and so I would really like us to consider that.

2
3 **DR. STUNZ:** Dr. Patterson, I just have a question for you,
4 maybe. Looking at this, these later recruitment years that
5 you're looking at and the later years are implying average
6 recruitment coming through the fishery and if we look at this a
7 little bit on the half-full side and follow up on Harlon's
8 comment, what if we're going to see better recruitment, or
9 recruitment at least as good as we're having right now coming
10 through and those numbers wouldn't be as low as fourteen-million
11 pounds or whatever and I'm just looking at the Fmax or whatever
12 and so since we're looking at a stock that we assess every
13 couple of years or whatever and we will know something in 2017
14 or whatever, I mean I think there is some opportunity here to
15 see, well, if we lower this SPR, we have an opportunity to see
16 what the fishery does.

17
18 If we have bad years of recruitment, we can tweak up the SPR and
19 if we have some years that are stable or even better age classes
20 coming through the population, we can keep it where it is and is
21 that a fair interpretation, if you looked at it from a half-full
22 standpoint?

23
24 **DR. PATTERSON:** I am not trying to look at it as half full or
25 half empty. I am just trying to present the information as we
26 have it and the information that we have or the approach that's
27 been taken here is projecting forward with the most recent three
28 years of recruitment estimates and you are absolutely correct
29 that those recruitments are among the lower in the time series.

30
31 We saw this in the last assessment, where they were even lower,
32 and Shannon indicated in her presentation yesterday that they're
33 higher since 2010 and that original estimate following the
34 spill, but they're still quite a bit lower than where they were
35 in 2009 and it doesn't track the same trajectory as what's going
36 on in the west.

37
38 But you're right that if recruitment is actually higher in the
39 next couple of years that that would affect the out years from
40 there. It wouldn't have an immediate impact on what's going on
41 in the east right now.

42
43 As those year classes enter the fishery, and we're seen this
44 recently, once the catch at age matrix from those year classes
45 gives us some information about the relative cohort strength,
46 then our estimates of recruitment for 2012 and 2013 and even
47 2011 will change.

1 It could be more pessimistic and it could be more optimistic,
2 but what you're indicating is if we projected with lower
3 recruitment than what actually is realized this year, next year,
4 and the year after, then the out years, when those fish really
5 start recruiting to the recreational fishery as two to three-
6 year-olds, then yes, then we would have underestimated the
7 biomass that would be available for harvest and that's
8 absolutely true.

9
10 **DR. PONWITH:** This goes to the question that Mr. Pearce asked
11 about these possible proxies for MSY and life is full of risk.
12 The two risks, the bookends, that we're talking about right now
13 is, on one hand, the risk of foregoing fishing opportunity and
14 that's the risk that we take if we set our proxy too high and
15 then the other risk is the risk of, if we set that proxy low, is
16 of actually undoing some of the gains that we've created through
17 the fishing regulations.

18
19 On one hand, you run the risk of being conservative influencing
20 what your landings are going to be and finding out that that was
21 done in a way that was unnecessary and the other risk is
22 actually taking a step backward and harvesting more fish than
23 technically would have been healthy for that stock.

24
25 That's what happens on those outer edges, if you go to an SPR 40
26 or an SPR 30, because the literature suggests that might be the
27 right -- You may be more conservative than you need to be and
28 then the other alternative.

29
30 Really what we have is a continuum here and one of the things
31 that we talked about today, kind of in a sidebar conversation,
32 is that there are some important decisions that the council
33 needs to make. One of the things that we can do is to help try
34 and quantify that risk on each end of this continuum, so you can
35 see what that looks like.

36
37 We can try and show at an SPR 20, based on our understanding of
38 the status of the stock right now, what the risks, the magnitude
39 of those risks, of making a mistake. If we pick 20 and the
40 correct number was actually 24, what would the impact to the
41 stock be?

42
43 We can run some simulations and show that and then, conversely,
44 if we pick 26 or if we pick 30, something on the higher end, and
45 it turns out that it really was 24 or 22, what would be lost in
46 terms of fishing opportunity? That math may be helpful in
47 helping to understand and quantify those risks.

48

1 **MR. BOYD:** Thank you, Will, for that update. I have a motion
2 that I would like to make and, Karen, if you would put it up.
3 Then, if I get a second, I will give a little bit of rationale.

4
5 **My motion is to remove red snapper SPR consideration from the**
6 **status determination document and request council staff to**
7 **develop a plan amendment to adjust the F SPR levels for red**
8 **snapper to alternatives for status quo, 24 percent, 22 percent,**
9 **and Fmax. The plan amendment should also determine the timeline**
10 **for F rebuild at each F SPR. That's my motion, Mr. Chairman.**

11
12 **CHAIRMAN GREENE:** We have a motion on the board and is there a
13 second? Mr. Matens seconds it. Is there further discussion?

14
15 **MR. BOYD:** The reason I thought about this motion yesterday and
16 crafted it last night was because Dr. Calay's presentation and
17 then Will's presentation and one of the things that stuck with
18 me was that we're managing risk. We do that in most everything
19 we do, is manage risk. We have risk of overfishing from
20 recreational or from charter for-hire or even from commercial,
21 even though we're in an IFQ program.

22
23 If these ranges of SPR are a matter of risk and we are saying we
24 want the least amount of risk possible, I would like to just
25 look at the alternatives to that. I am not recommending one of
26 these, but I am saying, with this motion, that I would like for
27 the council to consider all of the risks and make a conscious
28 decision, rather than just stay with status quo and so is there
29 further discussion?

30
31 **CHAIRMAN GREENE:** Anybody have anything they want to comment on
32 before we bring this to a vote? Okay. You have a motion on the
33 board and he read it into the record. **All those in favor please**
34 **raise your hand; all those opposed same sign. The motion**
35 **passes.**

36
37 **MR. ATRAN:** The motion passes six to zero.

38
39 **DR. CRABTREE:** I should have asked about this this morning when
40 the assessment was up, but I didn't and so I will ask about it
41 now. One of the things that we have heard repeatedly is
42 criticism of the red snapper assessment because of insufficient
43 monitoring of fishes on artificial reefs.

44
45 We have heard a lot about this from members of Congress as well
46 and the implication is that we're somehow underestimating the
47 population size because we aren't sampling sufficiently on
48 artificial reefs and I know Dr. Powers recently did quite a bit

1 of sampling of artificial reefs and made presentations to the
2 SSC and to this council of some of his results and estimates of
3 fish populations off of Alabama focusing on artificial reefs.

4
5 I know the SSC has reviewed that and so we have this new
6 assessment and my question to you is when you view the estimates
7 of fish abundance off of Alabama and you look at what the
8 assessment is estimating in terms of fish abundance, are the two
9 in sync or are they consistent or are you seeing disparities
10 there or what's your view on that?

11
12 **DR. PATTERSON:** The first part of your statement was that there
13 is criticism and I've heard this as well, that fish on
14 artificial reefs aren't being counted, and so I think the first
15 part of that is that there's a general misperception about how
16 the assessment works.

17
18 Most of the information that goes into the stock assessment is
19 from the catch at age matrix and, in fact, in 2009, Sean and I
20 both were members of the review panel for that assessment and we
21 purposely down-weighted the fishery-dependent information,
22 what's called the effective sample size, for the catch at age
23 matrix in order to get more information coming from fishery-
24 independent indices of abundance.

25
26 It's critically important the more fishery-independent
27 information you have, the better, but this idea that artificial
28 reef production is not part of the assessment is incorrect,
29 because most of the catch in the recreational fishery off of
30 Alabama, even in the western Gulf on oil platforms, actually
31 comes from artificial structures and so that's the number one
32 source of information in the model.

33
34 Now, in recent years, as Sean's research program has ramped up
35 off of Alabama, as work that we've been doing from Alabama
36 through the Panhandle of Florida, Doug Devries and his group at
37 National Marine Fisheries Service in Panama City have been doing
38 in the Panhandle as well, we have been conducting fishery-
39 independent estimates of abundance, of length composition, and
40 age composition, in some cases, of fisheries present on those
41 reefs.

42
43 In the last benchmark, the first attempt was made to incorporate
44 those as an index of abundance. Unfortunately, there wasn't
45 enough in the time series at the time to do an index of
46 abundance, but we did get the length composition information
47 into the assessment and so with many of these indices, it takes
48 a time series of data.

1
2 I think part of that criticism that it's not there and it's not
3 trying to be there, we are trying to get it in there. The more
4 fishery-independent information, whether it comes from natural
5 or artificial, the better.

6
7 Sean's estimates -- Sean presented to the SSC I guess it was
8 October, and I might have that wrong, but he presented his
9 estimates and it wasn't just artificial reefs off of Alabama,
10 but artificial and natural bottom. The estimate, and Sean can
11 correct me if I'm wrong, was that about 20 to 30 percent of the
12 estimated biomass in the eastern Gulf of Mexico was found on
13 Alabama artificial reefs or off of Alabama, I should say.

14
15 Remarkably, another estimate from that work is that there was
16 the same number or an equal number of red snapper estimated or
17 red snapper biomass estimated on the natural bottom that's
18 farther out toward the shelf edge than within the artificial
19 reef permit zone.

20
21 To me, those were the two big take-homes and we talked about
22 that work quite a bit and Clay Porch commented as well and it
23 was remarkable how well it fit together with what we think we
24 know about the eastern Gulf of Mexico and the distribution of
25 biomass and going back to Phil Goodyear's seminal assessment
26 from 1995 that kicked off a lot of this discussion of red
27 snapper.

28
29 In that work, based mostly on CPUE, he estimated that there were
30 two centers of abundance for red snapper, one in the western
31 Gulf of Mexico and then one off of Alabama and Mississippi.
32 That perception persists, but that recently work actually fits
33 quite nicely with what's estimated to be going on in the eastern
34 Gulf of Mexico.

35
36 We have done some recent work that actually we have used tagging
37 data to estimate mortality rates and in the fishing season, they
38 match the Fs pretty well coming out of the assessment and out of
39 the fishing season, when there is not a lot of fishing going,
40 they match really well our estimates of natural mortality for
41 adult red snapper, which is about 0.08 or 0.09.

42
43 These other sources of fishery-independent information are
44 coming online and they are being included when they can be and I
45 think there's a conscious effort -- This is the most complex
46 assessment that's done in our region and it might be the most
47 complex assessment that's done in the entire agency and the
48 SEDAR process is an incredibly transparent, laborious process,

1 to the point where many of us question of if we're trading
2 transparency for other gains that could be made, other stocks
3 being assessed.

4
5 I have heard from different sources the issue of whether
6 artificial reefs are being included or not and whether
7 information is being excluded or somebody's information is not
8 being included and those comments, to me, are pretty remarkable,
9 because this is an incredibly transparent process and if you
10 bring something to the table, it's considered.

11
12 It is evaluated and it's vetted and there is a full cadre of
13 different expertise at the table at any one of these SEDAR
14 processes and so if it's present, if you have information, there
15 is no reason why it won't be considered. It always is and
16 whether there is a sufficient time series or whether it's viewed
17 to be of sufficient quality to make it or not, that's a whole
18 different issue.

19
20 **DR. CRABTREE:** So what we're seeing, because I know we have
21 invested and the State of Alabama has invested a fair amount of
22 money in doing some of these surveys, but from what we're seeing
23 about the abundance of fish off of Alabama, it's consistent with
24 the estimates that we're getting from the stock assessments or
25 in line with it?

26
27 **DR. PATTERSON:** That was one of the inferences from after the
28 presentation that was given in the fall, was that these
29 estimates are not inconsistent with the stock assessment
30 results.

31
32 **DR. CRABTREE:** The new stock assessment estimates larger
33 population size, I believe, than the past one did and so that
34 would still hold?

35
36 **DR. PATTERSON:** I haven't made that comparison, but I think your
37 statement is generally true.

38
39 **EXECUTIVE DIRECTOR GREGORY:** Thank you, Will, and this is
40 interesting. That study by Shertzer and Conn you're referring
41 to seems, to me, to provide some insight as to why red snapper
42 may have a different SPR of maximum yield than the paradigm that
43 the population dynamics people usually go by, in that they
44 indicate, with the analyses they did, that contrary to what we
45 think of when the SSC was doing the productivity and
46 susceptibility analyses, their study shows that steepness is not
47 really related to longevity or age at maturity or reproductive
48 productivity in that sense and that could explain why red

1 snapper -- Red snapper are maturing at age two, but living and
2 reproducing to forty or fifty and it doesn't fit that paradigm
3 of what you would call a periodic life history or an
4 opportunistic life history. Like you said, it's a mixture of
5 both and so it's a very good study.

6
7 The upshot is they suggest that you use prior distributions in
8 estimating steepness, but, other than that, they didn't really
9 find a lot of stock assessments where there were spawner/recruit
10 curves and they just took steepness from other stock assessments
11 and it would be an interesting for an intern to research the
12 marine literature and see how many marine stocks really have a
13 well-defined stock recruit relationship and I would suspect
14 there would be very few and that's more of a theory than an
15 actual empirical evidence and we're stuck trying to estimate MSY
16 based on the stock recruit curves, where there is not well-
17 defined relationships. The scientific community has a
18 tremendous challenge and I don't envy the assessment process at
19 all in that, but thank you very much and these are very good
20 presentations.

21
22 **MR. ANSON:** The discussion that's been had addressed a lot of my
23 comments, but I just appreciate the comments from you, Will, and
24 the time you've taken today and yesterday to help us go through
25 a lot of the documents that the SSC reviewed and I certainly
26 look forward to more discussion on this issue, hopefully, as we
27 go forward.

28
29 **MR. WALKER:** Thank you, Will, and I've got some questions here
30 and it's relating to the size of the red snapper and how the SSC
31 looks at this. I know some of the data that came from the
32 headboat pilot program -- From what I understand, it was showing
33 that the fish were actually smaller and they got a longer season
34 and I was wondering if there was a tweak in the size limit of
35 the current recreational size limit now and could it be lowered
36 or raised a little so that it might provide them more fishing
37 opportunities on the size?

38
39 **DR. PATTERSON:** I try not to make statements about stuff that I
40 don't have analysis in front of me or data to base it upon. We
41 have seen a recent analysis in which the council staff, along
42 with Jake Tetzloff was involved as well, where they looked at
43 slot limits.

44
45 One component of a slot limit is lowering the minimum size and
46 with a slot, then you would also have a maximum size and you can
47 land fish in between and maybe have a trophy fishery, where you
48 could land one fish or whatever per boat, per day, that kind of

1 thing.

2
3 The trade-off that you get when you drop the size limit is that
4 you run the risk of growth overfishing, which basically means
5 you don't allow a cohort to reach its maximum biomass before you
6 remove most of it from the population.

7
8 If you do that long enough, you can actually also run the risk
9 of what's called recruitment overfishing, where you actually
10 start to have an impact on the number of babies in the next
11 generation.

12
13 If you will recall back a few years ago, there was a discussion
14 about minimum size limits in the commercial versus recreational
15 red snapper fisheries and the decision was made to lower the
16 size limit for commercial and I think, and correct me if I'm
17 wrong, but thirteen sounds right.

18
19 Where that came from is that if you actually -- If you had no
20 discard mortality and you threw away selectivity and you simply
21 computed a global maximum yield per recruit for red snapper,
22 then you would end up with catching fish somewhere in the mid-
23 twenty inches range and that would maximize your yield per
24 recruit and so growth overfishing, you are guarding against it.

25
26 The issue with red snapper is obviously there is barotrauma and
27 release mortality and so in the commercial fishery, that
28 thirteen inches was thought -- Because there were relatively few
29 discards, but the discards were estimated to have a very high
30 mortality rate, I think around 90 percent, that if you lowered
31 the size limit, then you would actually -- Recovery would be
32 enhanced.

33
34 You run the risk, by dropping the size limit, of delaying
35 recovery because you're having this effect on potentially
36 causing growth overfishing to occur and so you're not allowing
37 the biomass to accrue. Again, without looking at the
38 distribution and who is catching what and what the total
39 landings were projected to be, it would be tough to make a
40 definitive statement about it, but, generally, that's kind of
41 how it works.

42
43 **CHAIRMAN GREENE:** Okay. Any other questions for Dr. Patterson?
44 Okay, Mr. Atran or Dr. Patterson, is that all of your --

45
46 **DR. PATTERSON:** Yes, sir.

47
48 **CHAIRMAN GREENE:** Mr. Atran, did you have anything else in

1 regard to Action Item XIII?

2

3 **MR. ATRAN:** No, Mr. Chairman.

4

5 **CHAIRMAN GREENE:** Okay. Go ahead, Mr. Boyd.

6

7 **MR. BOYD:** Just one other thing. The council just approved
8 starting an amendment to look at the SPR and, Mr. Gregory, I
9 would like to ask that we have an education session for us
10 laypeople who are not scientists, giving us a background on SPR
11 and a short course. Our previous Executive Director called them
12 101's and could we get an SPR 101 in the future, so we better
13 understand what everybody is talking about?

14

15 **EXECUTIVE DIRECTOR GREGORY:** I'm afraid it will be more of a
16 graduate level class.

17

18 **MR. BOYD:** No, I need something less than that.

19

20 **EXECUTIVE DIRECTOR GREGORY:** Would you like to do it in
21 March/April or do it as part of -- See if the South Atlantic
22 Council is willing to do it as part of our joint meeting? We
23 are going to have a full-day joint session with the South
24 Atlantic Council at our June meeting.

25

26 **MR. BOYD:** I would leave that up to you. I would just request
27 that we have somebody give it that can bring it down to my
28 level.

29

30 **EXECUTIVE DIRECTOR GREGORY:** We can try.

31

32 **DR. STUNZ:** A quick comment and, Doug, just to follow up with
33 that, Doug sent David out to our new council training whenever
34 that was, a few months ago, and they had some really good
35 literature and they gave us some brand-new stuff and SPR was
36 sort of like -- It was like what does SPR mean to fishermen or
37 something and so it might be good, Doug, to -- I like everyone
38 to have a copy of that available would be very useful. It was
39 very well written and very easy to understand. I am not saying
40 don't have the 101 session, but that was some good literature
41 that they had there and I can tell you what it is later.

42

43 **MR. ANSON:** Something else that might be helpful in your
44 preparation of that presentation is the -- I believe it's the
45 introduction to stock assessments publication that Dr. Rick
46 Wallace from the Auburn University Marine Extension Center put
47 out about ten or twelve years ago and it's been reproduced a
48 couple of times and that might be helpful, too.

1
2 **EXECUTIVE DIRECTOR GREGORY:** Yes, I'm familiar with all the
3 literature and I've done this before. The point is it's not
4 easy to make some of this stuff understandable and to laymen or
5 even to other biologists, whether they've got a PhD or not. It
6 can get confusing easily and so I will try to find some really
7 good material that doesn't inundate you with stuff and we will
8 get somebody to talk to you all and we can have it as an ongoing
9 conversation.

10
11 **CHAIRMAN GREENE:** Under Other Business, Lieutenant Commander
12 Jason Brand has asked for some ideas for the LEAP Committee
13 meeting that is coming up and so if you guys will, as we move
14 through this process, entertain any ideas for him. He was
15 looking for ideas and topics to work on.

16
17 **MR. ATRAN:** To that point, just before this meeting started, I
18 heard from Steve VanderKooy, who is my counterpart with the Gulf
19 States Commission, asking for a draft agenda for that Law
20 Enforcement AP meeting and so if anybody has any ideas, would
21 you please contact me as well as Lieutenant Commander Brand?

22
23 **CHAIRMAN GREENE:** Any other business to come before this
24 committee? Seeing none, we are adjourned.

25
26 (Whereupon, the meeting adjourned at 5:05 p.m., January 27,
27 2015.)

28
29 - - -
30

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1
2
3 PAGE 36: Motion to ask staff to bring us a framework action to
4 increase the ACL for red snapper based on the ABC
5 recommendations by the SSC using the provisional 2014 estimates.
6 The motion carried on page 38.
7
8 PAGE 43: Motion to direct staff to begin a framework amendment
9 to adjust ACL/ACT and the season options for gag. The motion
10 carried on page 47.
11
12 PAGE 53: Motion to remove Suboptions 2a and 3a to the
13 considered but rejected. Suboption a is no ACT buffer. Note
14 this option would require a modification of the accountability
15 measures. The motion carried on page 54.
16
17 PAGE 60: Motion that all of the trip limits in Action 3 be
18 specified as gutted weights. The motion carried on page 61.
19 The motion was reconsidered on page 62.
20
21 PAGE 62: Motion in Action 3 to specify trip limit in pounds
22 gutted weight and include whole weight in parentheses for each
23 option. The motion carried on page 64.
24
25 PAGE 140: Motion that Alternative 3 be the preferred
26 alternative in Action 1. The motion carried on page 144.
27
28 PAGE 180: Motion to direct staff to expand the for-hire
29 management scoping document initiated at the April 2014 Gulf
30 Council meeting to include additional long-term management
31 strategies for the for-hire fishery, following the
32 recommendations of the Ad Hoc Red Snapper For-Hire Advisory
33 Panel, and bring that scoping document back to the April 2015
34 Gulf Council meeting. The motion failed on page 181.
35
36 PAGE 190: Motion that Alternative 2 be the preferred
37 alternative, set the red snapper bag limit at one fish per
38 person per day in the for-hire fishery and make it contingent
39 upon approval and implementation of Amendment 40. The motion
40 failed on page 192.
41
42 PAGE 208: Motion to remove red snapper SPR consideration from
43 the status determination document and request council staff to
44 develop a plan amendment to adjust the F SPR levels for red
45 snapper to alternatives for status quo, 24 percent, 22 percent,
46 and Fmax. The plan amendment should also determine the timeline
47 for F rebuild at each F SPR. The motion carried on page 208.

Reef Fish Committee: Action Schedule for Tab B

Agenda Item IV: Recreational Red Snapper Season Projection

Timeline Status: Information

Council Input and Next Steps: NMFS staff will present projections on the 2015 recreational red snapper season length under the Councils preferred alternative for a 14.30 mp ww total quota, divided into 7.293 mp ww commercial and 7.007 mp ww recreational, with a recreational ACT of 5.605 mp ww.

Agenda Item V: Headboat Collaborative Report

Timeline Status: Information

Council Input and Next Steps: NMFS staff and an economist working with the headboat collaborative will review of the first year of the headboat collaborative program and present preliminary economic results.

Agenda Item VI: Options Paper – Framework Action to Adjust Gag ACL and Season

Timeline Status: Draft Framework Options paper (Council staff intends to provide a framework action for final action at the June Council meeting)

Council Input and Next Steps: Gag is no longer overfished or undergoing overfishing. Council staff will present an options paper with alternatives to adjust the gag ACL and recreational ACT based on ABCs from the recently completed SEDAR 33 gag benchmark assessment. A second action provides alternatives to adjust the recreational fishing season for gag. Council is asked to determine if the range of alternatives is appropriate. For Action 2 (recreational season), the Council is asked to provide input as to whether it would like to consider options for a split season, and if so, how to structure options for a split season. Council staff intends to provide a framework action for final action at the June Council meeting.

Agenda Item VII: Final Action – Framework Action for Modifications to Greater Amberjack Allowable Harvest and Management

Timeline Status: Final Action

Council Input and Next Steps: Council Staff will present a framework action for final action with respect to setting ACLs and ACTs for greater amberjack, modify the recreational minimum

size limit, modify the recreational closed season, and modify the commercial trip limit. The Committee should select preferred alternatives, with final action and approval of the codified regulations to be taken by the full Council.

Agenda Item VIII: Scoping Summaries – Amendment 36 – Red Snapper IFQ Modifications

Timeline Status: Review and Discussion

Council Input and Next Steps: Staff will report on public comments received during a series of scoping meetings. Using this input, the Council is asked to identify which potential modifications it intends to further evaluate, which may be removed from consideration, and if any additional changes should be included. Also, the Council is asked to discuss potential actions and alternatives for these potential changes, for inclusion in an options paper or draft amendment to be presented at a subsequent Council meeting.

Agenda Item IX: Revised Draft – Amendment 28 – Red Snapper Allocation

Timeline Status: Draft Amendment

Council Input and Next Steps: The Committee will review a revised public hearing draft including new alternatives based on MRIP recalibration of recreational landings and change in size selectivity. In addition, the Committee is expected to consider a timeline for final action.

Agenda Item X: Revised Draft – Amendment 39 – Regional Management of Recreational Red Snapper

Timeline Status: Draft Amendment

Council Input and Next Steps: Staff will present revised actions and alternatives. The Committee is asked to discuss the range of alternatives for their completeness. The Committee will also provide feedback on a proposed process for the review and approval of conservation equivalency proposals.

Agenda Item XI: Options Paper – Joint South Florida Management

Timeline Status: Draft Options Paper for a Possible Amendment

Council Input and Next Steps: Staff will review options for a joint management approach to stocks in the south Florida area. Council is asked to determine if the range of actions and options is appropriate, and whether and how to proceed with development of an amendment.

Agenda Item XII: Charge to the Reef Fish Headboat AP

Timeline Status: Pre-AP meeting

Council Input and Next Steps: The Council will be appointing members to a newly created Reef Fish Headboat AP. Staff has prepared a draft charge to the AP for the Council to consider. The Council should decide whether to accept, revise, or replace the draft charge. This will be used to guide the AP when it meets following the Council meeting.

Agenda Item XIII: Other Reef Fish SSC Summary

Timeline Status: Information

Council Input and Next Steps: The SSC representative will review items from the SSC report that were not covered in the previous agenda items. This agenda item is for information only, unless the Council wishes to provide guidance to staff. Items include:

- a. FWC mutton snapper assessment – The SSC will make recommendations for OFL and ABC at its March meeting. However, since the mutton snapper stock crosses Gulf and south Atlantic jurisdictions, the Gulf SSC and South Atlantic SSC must agree on OFL and ABC. Assuming that the SSCs agree on catch levels once the South Atlantic SSC reviews the assessment in April, staff can report back to the Council in June for further guidance on whether to proceed with a framework action to adjust ACL.
- b. Discussion of MSST options. Staff is developing an options paper to adjust MSST for low-mortality (and possibly other) stocks. The SSC's input will be used to develop a draft amendment to present to the Council in June.
- c. Other



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Season Length Projections: Gulf Red Snapper



Quotas

Gulf-wide ACL = 7,010,000 pounds whole weight

Sector	Annual Catch Target	Headboat Collaborative
Gulf-wide	5,608,000	
For-Hire*	2,372,184	279,657
Private	3,235,816	

** Projected season length is based on ACT as adjusted for Headboat Collaborative quota*

State Seasons

State Season (days)		Details
FL	70	Open May 23 - July 12, resume Sept. 5-7 and finish with Saturdays and Sundays throughout Sept.-Oct., closes Nov. 1.
AL	0	Compatible with federal season
MS	~36	Open federal season, 3-day weekends July, Oct
LA	287	Opens Mar 20
TX	365	Open year-round, 4-fish bag limit in state waters, 15" minimum size limit

Note: Seasons for FL, AL, and MS have not been finalized

Data Inputs

Source	Time Period	Details
Marine Recreational Information Program	2004-2014	Landings and PSE by wave, recalibrated for changes in angler intercept survey
Texas Parks and Wildlife Department	2004-2014	Landings by wave from SEFSC Recreational ACL dataset, with 2013 used as a proxy for May-Dec 2014; CVs from TPWD staff
Louisiana Creel	2013-2014	Weekly landings and error estimates from LA Creel staff
Southeast Region Headboat Survey	2004-2014	Monthly landings through 2013 from SEFSC Recreational ACL Data (Feb 2015) and 2014 landings from SRHS staff
SEFSC Recreational ACL Dataset	2004-2014	Average weights by year and mode of fishing

Projection Scenarios

A

Charter catch rates equal 2014 catch rates, but average weight increase as projected. Headboat and Private catch rates and average weights equal 2014 .

B

All catch rates equal 2014 catch rates. All average weights increase as projected.

C

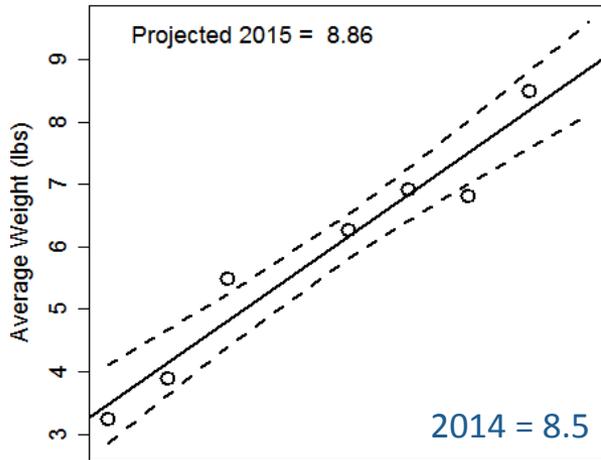
All catch rates and average weights equal 2014 catch rates and average weights.

Many other catch rate and average weight scenarios were evaluated using regressions based approaches on different input time series and predictor variables.

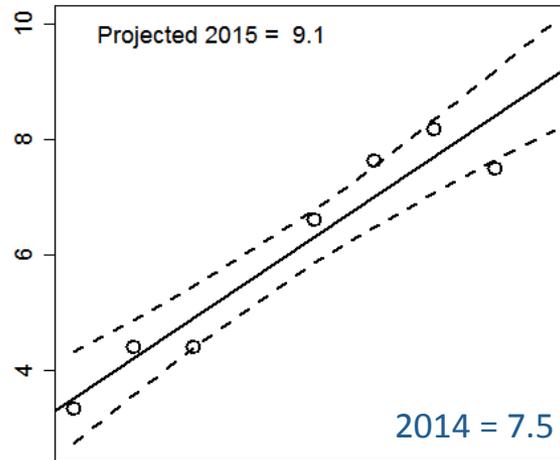
Average Weights

Federal average weights from June 2004-2014 used as inputs

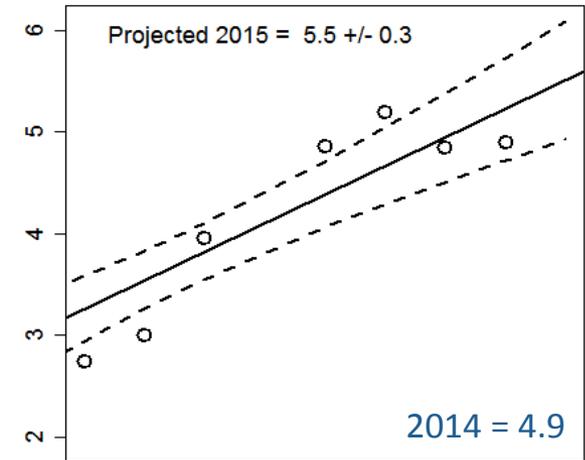
Charter Average Weight (East)



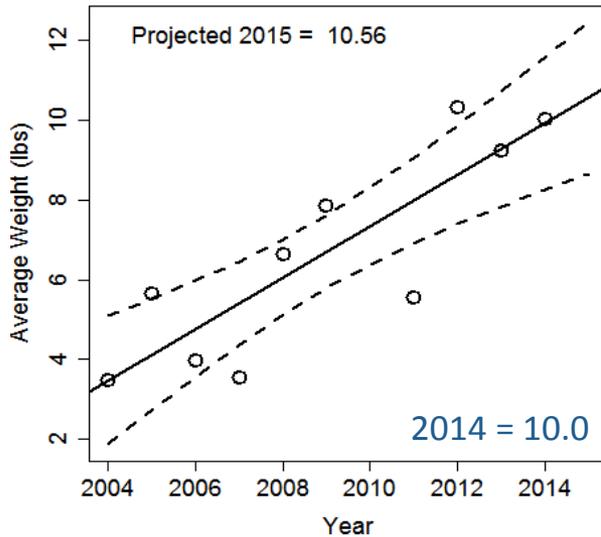
Private Average Weight (East)



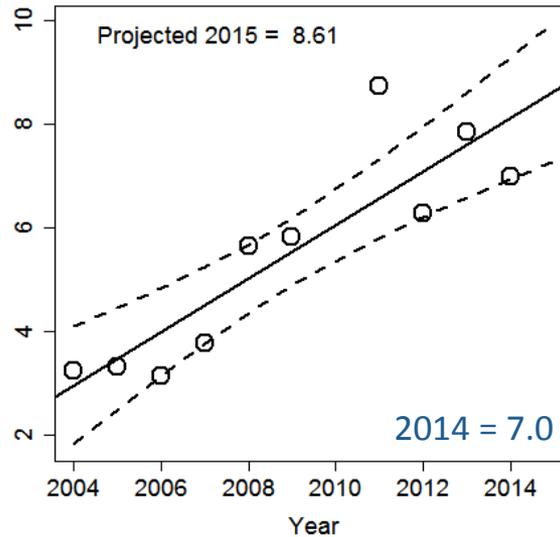
Headboat Average Weight (East)



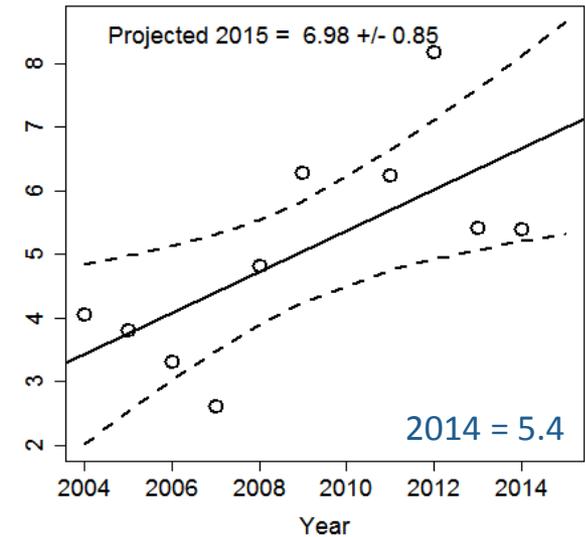
Charter Average Weight (West)



Private Average Weight (West)



Headboat Average Weight (West)



Catch Rates

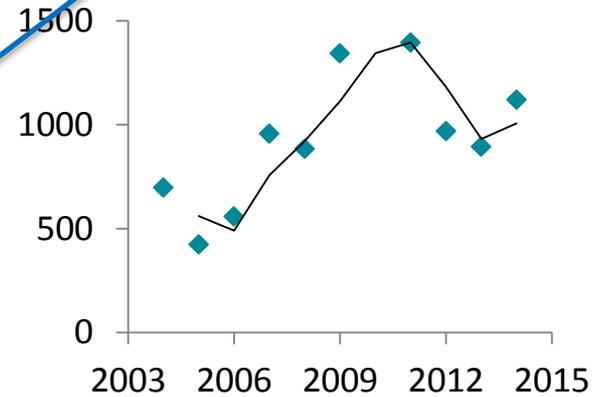
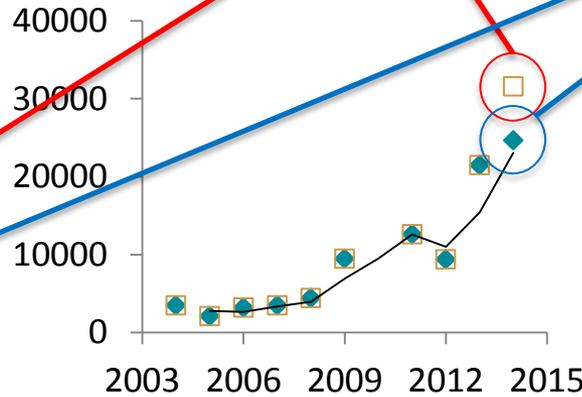
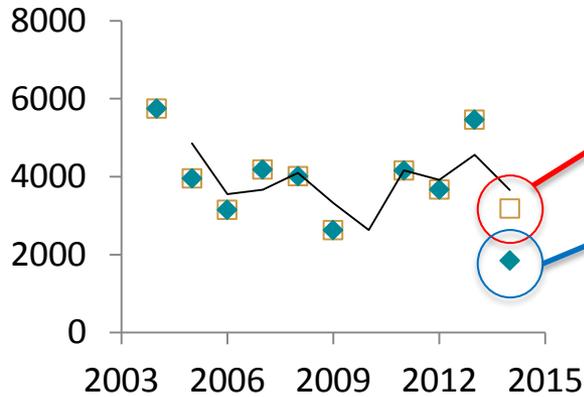
2014a (MRIP Wave 3)

2014 (MRIP June 1-9)

For-Hire (East)

Private (East)

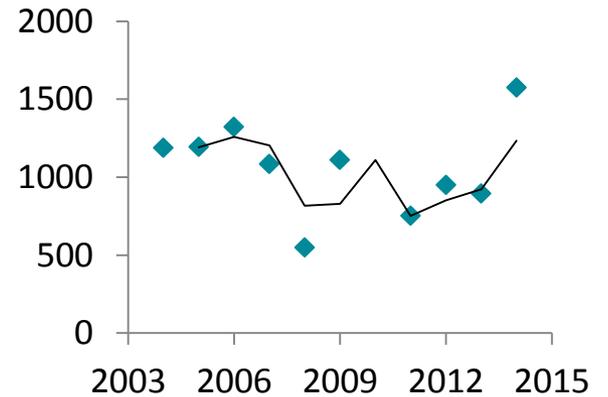
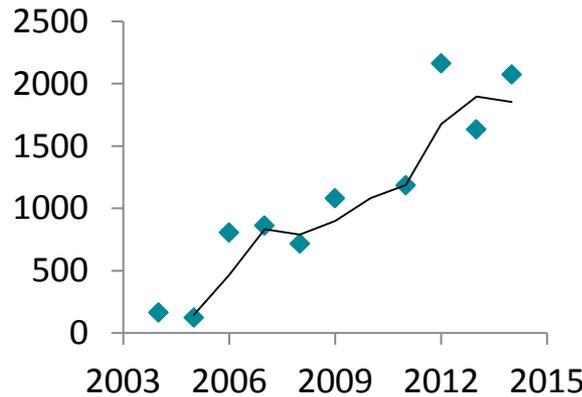
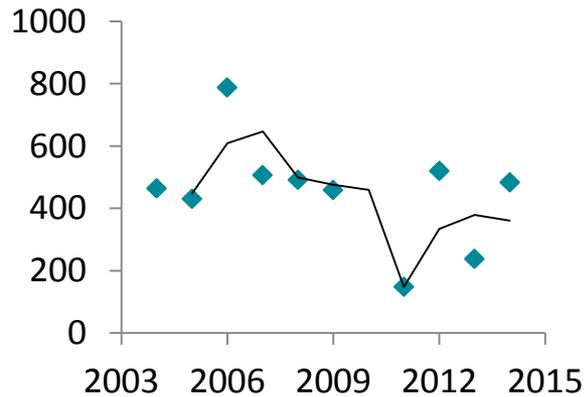
Headboat (East)



For-Hire (West)

Private (West)

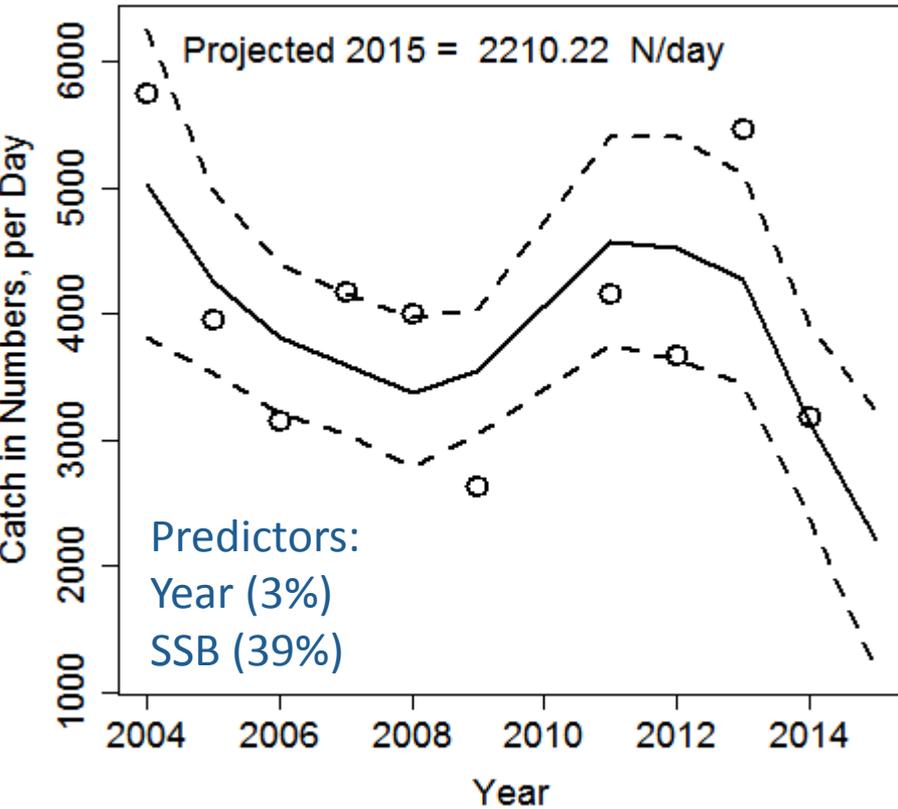
Headboat (West)



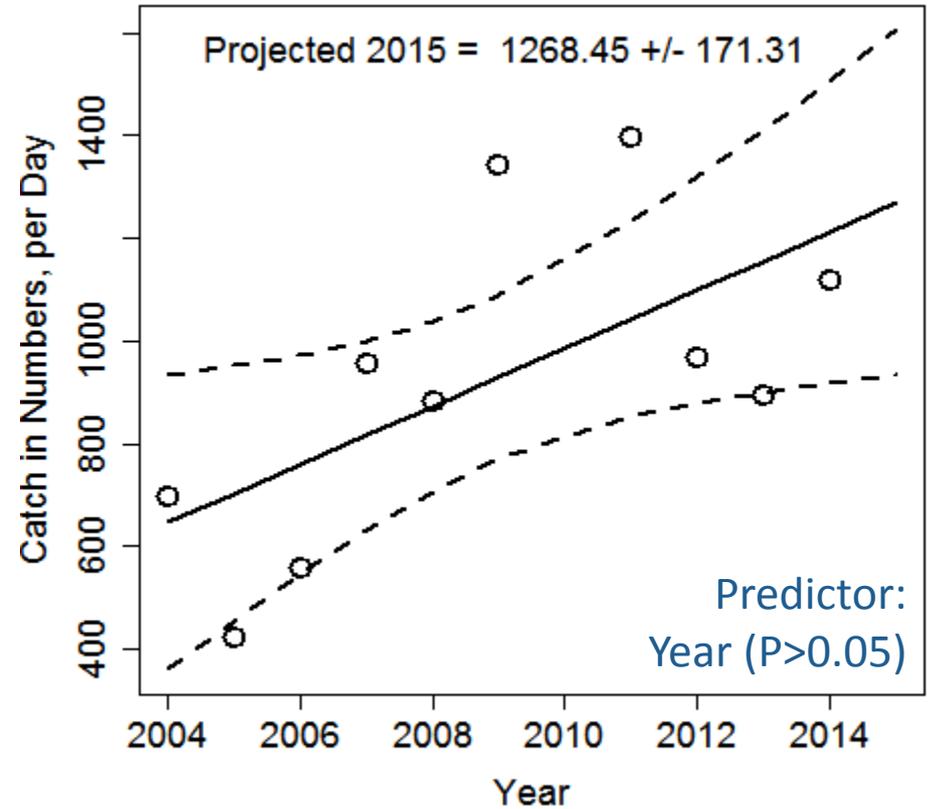
Federal catch rates shown for June 2004-2014 in # Fish per open federal day

State water catch rates (not shown) based on 2014 observed catch rates in pounds/day

Charter Catch per Day in Numbers (East)



Headboat Catch per Day in Numbers (East)

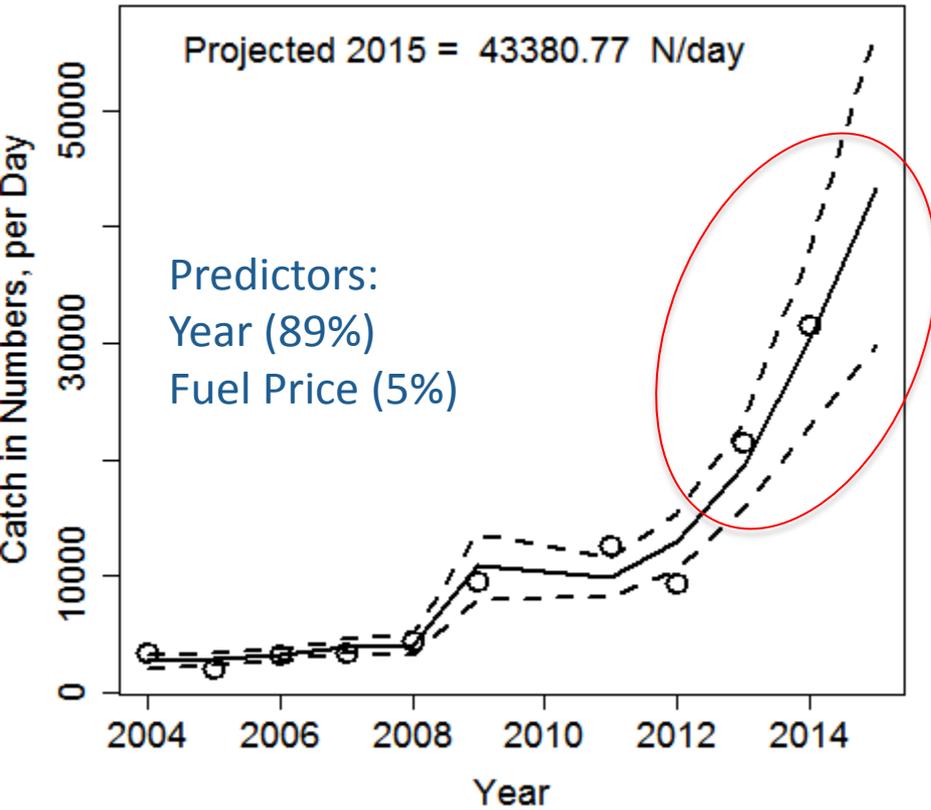


No significant regressions for Charter (West), Headboat (East), or Headboat (West)

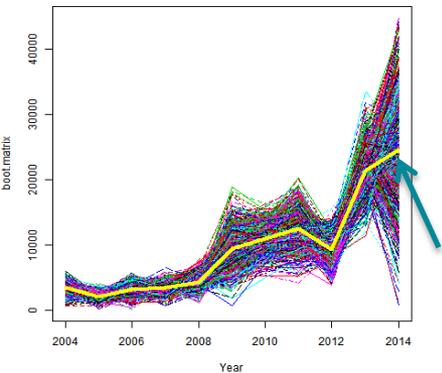
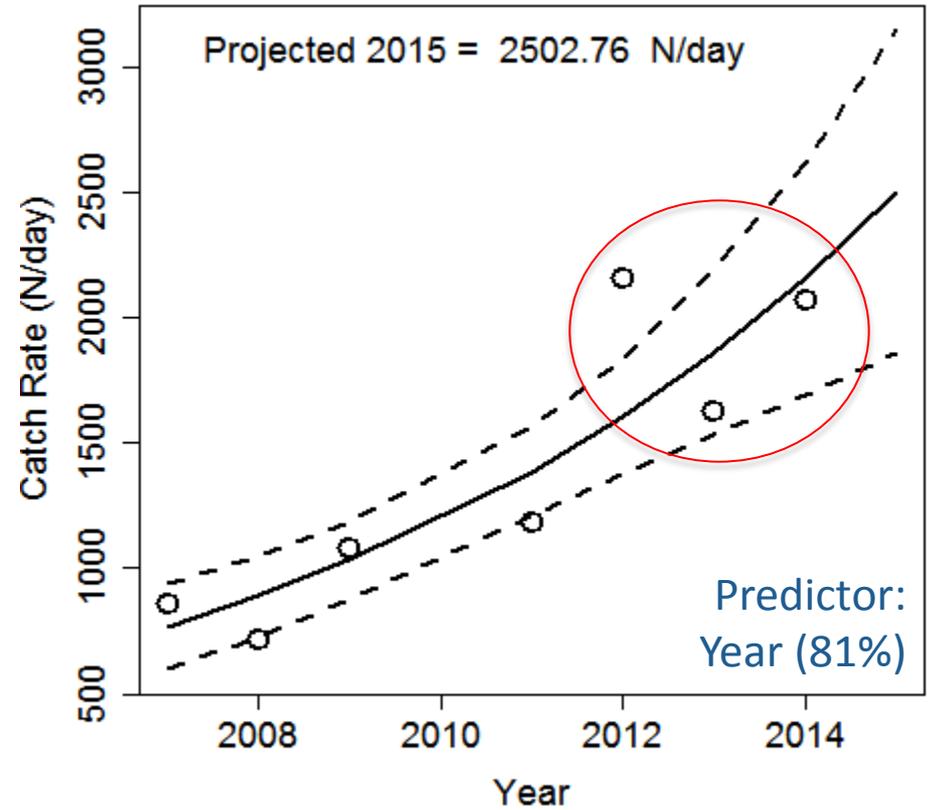
Charter (East) projection shows steep decline

Headboat (East) projection above last 3 years

Private Catch per Day in Numbers (East)



Private Catch per Day in Numbers (West)



Projected rate of increase for Private (East) may be unrealistic

Projected catch rate for Private (West) slightly higher than past two seasons.

Higher uncertainty in 2014 Private data due to short federal season

Season Length Projections

With Sector Separation in effect and non-compatible state seasons:

Run	Catch Rates			Average Weights			Season Length	
	Headboat	Charter	Private	Headboat	Charter	Private	For-Hire	Private
A	Const (2014)	Const (2014a)	Const (2014)	Const (2014)	Projected (2014a)	Const (2014)	45	11
B	Const (2014a)	Const (2014a)	Const (2014a)	Projected (2014a)	Projected (2014a)	Projected (2014a)	45	7
C	Const (2014a)	Const (2014a)	Const (2014a)	Const (2014a)	Const (2014a)	Const (2014a)	46	9

With Sector Separation and compatible state seasons:

Run	Season Length	
	For-Hire	Private
A	45	16
B	45	9
C	46	12

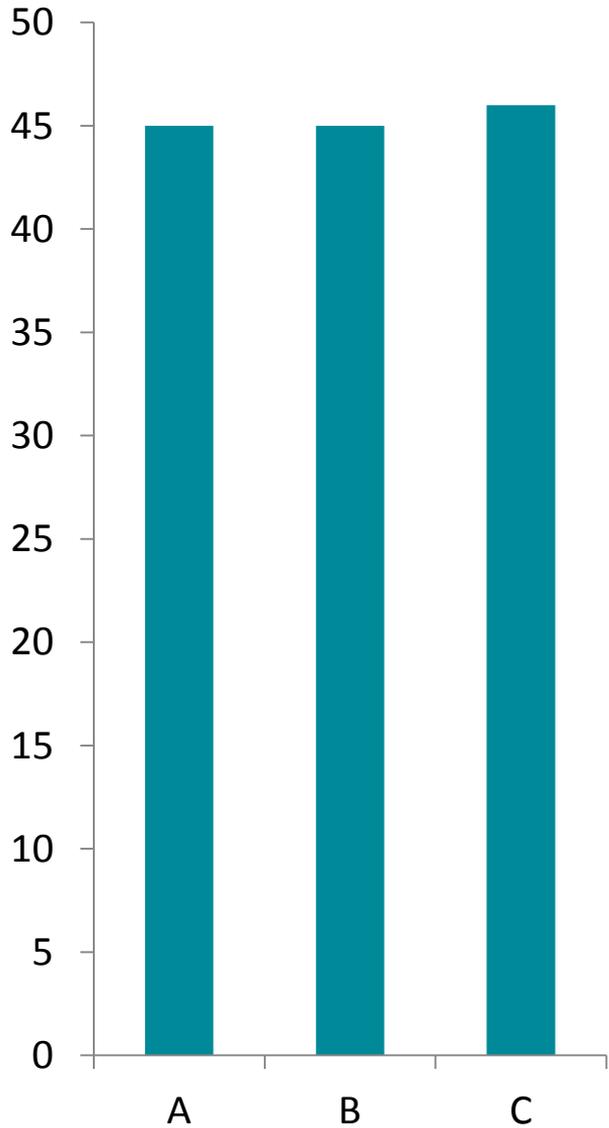
With no Sector Separation and compatible state seasons:

Run	Season Length
A	21
B	15
C	18

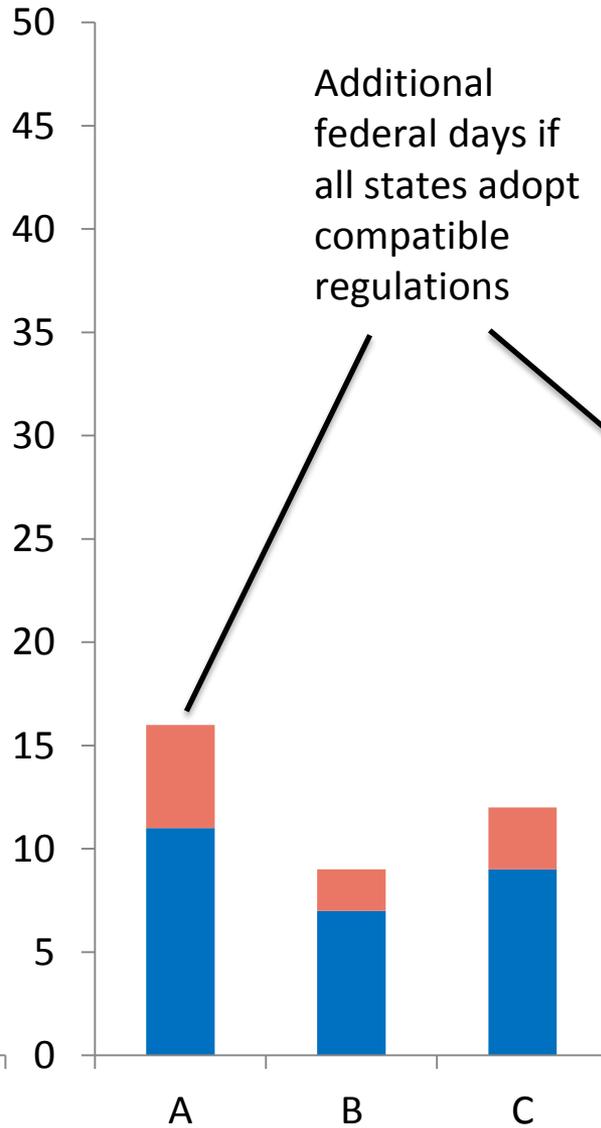
With no Sector Separation and non-compatible state seasons:

Run	Season Length
A	17
B	12
C	14

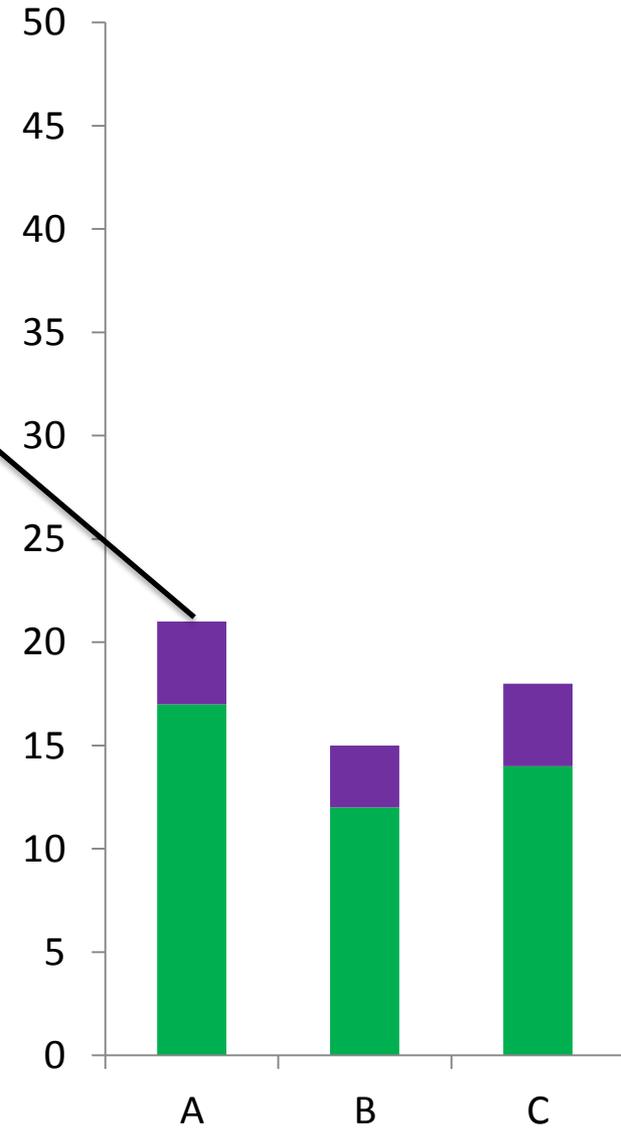
For-Hire



Private



No Sector Separation



QUESTIONS?



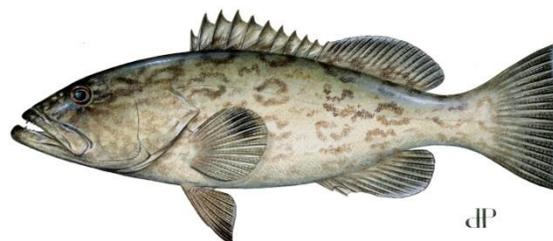
Image © Inventivefishing.com



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DRAFT FOR GMFMC MEETING MAR 30-APR 2

Headboat Collaborative Pilot Program 2014 Annual Report



National Marine Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SERO Catch Share support: 1-866-425-7627
<https://portal.southeast.fisheries.noaa.gov/cs>
E-mail: NMFS.SER.CatchShare@noaa.gov

March 18, 2015

SERO-LAPP-2015-01



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List of Abbreviations

CS System	Catch Share System
Council	Gulf of Mexico Fishery Management Council
EFP	Exempted Fishing Permit
e-Log	Southeast Headboat Survey's electronic logbook system
GG	Gag
HBC	Headboat Collaborative
FMP	Fishery Management Plan
MRIP	Marine Recreational Information Program
RA	Regional Administrator
RS	Red snapper
SERO	Southeast Regional Office
SRHS	Southeast Region Headboat Survey
VMS	Vessel Monitoring System

EXECUTIVE SUMMARY

The 2014 Headboat Collaborative (HBC) pilot program annual report is intended to provide an overview of data and information collected since the start of the program. This report is not intended to be a full comprehensive assessment of the program. The HBC program in 2014, consisted of 17 vessels and the headboat manager. Vessels were from four different regions: Florida west coast, Florida panhandle, Alabama, and Texas. Allocation for the HBC program was recorded in numbers fish, instead of weight. All allocation transfers and landings were tracking in next to real-time data in an online database, housed in the Gulf of Mexico's Catch Shares system.

The HBC program completed over 3,000 trips, with 60% of the trips landing either red snapper or gag. By the end of the year, the HBC program had landed 98% of the red snapper quota and 50% of the gag quota. Trips landed between 1 - 170 red snapper per trip and 1 - 50 gag per trip. The greatest landings occurred in June and July for red snapper and April, May and December for gag. The majority of red snapper landings, by numbers of fish, occurred in the Florida west coast and Texas regions, while the majority of gag were landed in the Florida west coast. Average weights were taken throughout the season to ensure that the HBC participants did not exceed their allocation in pounds. In-season weights differed from pre-season weights by 1.1% for gag and -3.3% for red snapper

HBC participants actively transferred allocation between vessels throughout the year. The reasons for allocation transfers included selling to another HBC vessel and bartering with another HBC vessel for allocation in the other share category. The majority of the allocation transfers that indicated a transfer reason were listed as bartering for allocation. Most of the transfers occurred within the same region.

Port agents were able to validate 19% of all trips. These validations revealed that the HBC vessels had accurate reporting by the HBC vessels, with a limited amount of discrepancies. When validation counts differed from the hail-in, the count was in general off by only a few fish. Exceptions to this occurred when there were typographical errors in submission or mis-identification of species. A small percentage of trips had technological errors that resulted in missing hail-outs, hail-ins, or e-Logs. All missing e-Logs were resolved as soon as identified and corrected in the databases. Port agents felt that the hail-out and hail-in requirements of the pilot program had improved sampling efficiency, reporting accuracy, and interactions and cooperation of vessel captains. While the e-mail notifications of hail-outs and hail-ins, allowed port agents to better prioritize their sampling scheme, some agents felt that a longer time frame for a hail-in would better able them to schedule sampling. These agents typically had a larger coverage area or further distance to travel.

While data centralization and improvements of the technological issues would improve the program, this program has shown that next to real-time recording of landings and catch was attainable. The second year of the program has begun, with two additional vessels participating in the program, for a total of 19 vessels.

BACKGROUND AND INTRODUCTION

The purpose of the Headboat Collaborative (HBC) pilot program was to evaluate the viability of an allocation-based management strategy for improving the conservation of marine resources and economic stability and performance of the headboat sector. Headboats participating in the pilot program were authorized to harvest red snapper and gag using quota allocation outside the designated recreational fishing seasons (e.g., red snapper begins June 1 and gag begins July 1). The HBC submitted an

application for an exempted fishing permit (EFP) to NOAA Fisheries. The application proposed evaluating the efficacy of an allocation-based management system using a limited number of headboats in a 2-year pilot study. The Gulf of Mexico Fishery Management Council (Council) reviewed the Headboat Collaborative's application at its April 2012 meeting, and recommended that NOAA Fisheries approve the application. On April 2, 2013, NOAA Fisheries published a notice of receipt of the exempted fishing permit application in the *Federal Register* and requested public comments. On August 26, 2013, NOAA Fisheries announced approval and issuance of the EFP. Since the EFP was neither a fishery management plan (FMP) nor a plan amendment, and was based on legal authority independent from the FMP, NOAA Fisheries determined that it was not subject to referendum requirements.

Exempted Fishing Permit

An EFP is an authorization by NOAA Fisheries for the target or incidental harvest of species managed under a FMP or fishing regulations that would otherwise be prohibited. EFPs may be authorized for limited testing, public display, data collection, exploratory, health and safety, environmental cleanup, and/or hazard removal purposes. EFP applicants must submit a completed application package to the Regional Administrator (RA) at least 60 days before the desired effective date of the EFP. An applicant for an EFP need not be the owner or operator of the vessel(s) for which the EFP is requested. The application package must include, but is not limited to, the following information:

- Application date,
- Applicant's name, mailing address, and telephone number,
- A statement of the purposes and goals of the exempted fishery for which an EFP is needed, including justification for issuance of the EFP
- For each vessel to be covered by the EFP, as soon as the information is available and before operations begin under the EFP:
 - A copy of the United States Coast Guard documentation, state license, or registration of each vessel, or the information contained on the appropriate document
 - The current name, address, and telephone number of the owner and master, if not included on the document provided for the vessel.
- The species (target and incidental) expected to be harvested under the EFP, the amount(s) of such harvest necessary to conduct the exempted fishing, the arrangements for disposition of all regulated species harvested under the EFP, and any anticipated impacts on the environment, including impacts on fisheries, marine mammals, threatened or endangered species, and EFH.
- For each vessel covered by the EFP, the approximate time(s) and place(s) fishing will take place, and the type, size, and amount of gear to be used.
- The signature of the applicant.

The RA may request additional information necessary to make a determination. The RA reviews each application and makes a preliminary determination whether the application contains all of the required information and constitutes an activity appropriate for further consideration. If the RA determines that any application warrants further consideration, notification of receipt of the application is published in the *Federal Register* with a brief description of the proposal. Interested persons are given 15 to 45 days to comment on the notice of receipt of the EFP application. In addition, comments may be requested during public testimony at a Council meeting. If the Council intends to take comments on an EFP application at a Council meeting, it must include a statement to this effect in the Council meeting notice and agenda.

Upon receipt of an EFP, the permit holder must date and sign the permit, and retain the permit on board the vessel(s). The permit is not valid until signed by the permit holder. In signing the permit, the permit holder: (1) agrees to abide by all terms and conditions set forth in the permit, and all restrictions and relevant regulations and (2) acknowledges that the authority to conduct certain activities specified in the permit is conditional and subject to authorization and revocation by the RA. Unless otherwise specified in the EFP or a superseding notice or regulation, an EFP is valid for no longer than 1 year. EFPs may be renewed following the application procedures in this section

The HBC EFP established a specific allocation of red snapper and gag, as calculated and described below under quota distribution, to be harvested during the fishing year by HBC vessels. All harvest of red snapper and gag counted against the harvest authorized by the EFP. The HBC EFP exempted the HBC’s listed vessels from recreational season closures for red snapper and gag (regulations at 50 CFR § 622.34(b) and (e)). The exemption did not apply to the February-March shallow-water grouper closure offshore of 20 fathoms in the Gulf of Mexico (50 CFR §622.34(d)). For gag, HBC vessels were exempted from the closure of the recreational sector when the gag catch target was reached (50 CFR § 622.8(b)). However, the EFP did not exempt the HBC participating vessels from Section 407(d) (16 U.S.C. 1883) of the Magnuson-Stevens Fishery Conservation and Management Act. Section 407(d) requires that, if NOAA Fisheries determined the Gulf of Mexico red snapper recreational quota had been met, harvest must be prohibited for the remainder of the fishing year, even if the HBC had allocation remaining. The HBC EFP is valid for two years, from January 1, 2014, through December 31, 2015. No recreational fishing by HBC vessels may occur for red snapper or gag outside the EFP.

Eligibility and Participating Vessels

To be eligible for consideration in the HBC pilot program, headboat owners/captains needed to have a valid federal Gulf of Mexico charter/headboat reef fish permit and be a participant in the Southeast Region Headboat Survey (SRHS) for at least three years. Interested headboat owner/captains submitted an application (Appendix 1) for membership to the HBC before November 5, 2013. The HBC’s board members selected vessels from the applicants to participate in the program in 2014. A total of 17 vessels were included, with nine from Florida, four from Alabama, and four from Texas (Table 1). All vessels and vessel owners underwent a review by NOAA’s Office of Law Enforcement for prior civil or criminal actions.

Table 1: Vessels participating in the HBC pilot program in 2014

Vessel name	Homeport
Captain John	Galveston, TX
La Pesca	Port Aransas, TX
New Kingfisher	Port Aransas, TX
Scat Cat	Port Aransas, TX
Escape	Dauphin Island, AL
Gulf Winds II	Orange Beach, AL
Reel Surprise	Orange Beach, AL
Zeke’s Lady	Orange Beach, AL
Destin Princess	Destin, FL
Destiny	Destin, FL
Sweet Jody	Destin, FL
Double Eagle II	Clearwater, FL

Double Eagle III	Clearwater, FL
Fish N Xpress	Port St. Jo, FL
Gulf Queen	Clearwater, FL
Super Queen	Clearwater, FL
Gulf Star	Tarpon Springs, FL

PROGRAM DESIGN

Quota Distribution

The initial amount of quota distributed to the HBC pilot program was determined by taking aggregate 2011 HBC vessel landings (as reported to the SRHS) relative to all recreational landings reported in 2011 for each species (Formula 1). The 2011 landings were chosen since they were the most recent landings data at the time of the EFP application. The resulting percentage was then multiplied against the 2014 red snapper quota and gag annual catch target to determine the HBC’s quotas in pounds (Formula 2).

Formula 1. 2011 HBC Proportion

$$\frac{\text{Recreational Landings}_{\text{Species},2011}}{\text{HBC Vessel Landings}_{\text{Species},2011}} = \text{HBC}\%_{\text{Species}}$$

Formula 2. 2014 HBC Quota

$$\text{HBC}\%_{\text{Species}} \times \text{Recreational Quota}/\text{ACT}_{\text{Species},2014} = \text{HBC quota}_{\text{Species},2014}$$

Quotas in pounds were then converted to quotas in numbers of fish using 2011 average regional and species-specific average weights from the SRHS. The HBC program received 5.3146% of the 5.39 million-pound (mp) whole-weight (ww) red snapper recreational quota and 2.8343% of the 1.51 mp gutted weight (gw) recreational gag target catch level (Table 2). These percentages equated to 55,527 red snapper and 6,017 gag (Table 2). All allocation was distributed to the HBC Manager on January 1, 2014. The HBC Manager then distributed allocation to each vessel. The EFP allowed HBC participants to decide how to distribute the allocation amongst the participating vessels and allowed trading within the HBC. The HBC decided to base individual vessel allocation on the vessel’s landings history from 2011.

Table 2: HBC quota distribution

	Red snapper	Gag
Recreational quota or target catch level	5.39 mp ww	1.51 mp gw
HBC percentage	5.3146%	2.8343%
HBC allocation in pounds	286,457 lb ww	43,053 lb gw
Average fish weight	5.16 lb ww	7.16 lb gw
HBC allocation in fish	55,527 fish	6,017 fish

Program Conditions and Requirements

To ensure 100% catch accountability and to enable a transparent monitoring system, HBC vessels adhered to strict protocols to track each fish caught and landed during a trip. Each vessel had an operational vessel monitoring system (VMS) that allows NOAA Fisheries to track the vessel while at sea. Vessel owners were responsible for purchasing VMS units (\$1,799 per unit), coordinating installation with the vendor, and paying for monthly service costs (~\$60 per month). All vessels used the CLS America VMS unit with the Thorium tablet. CLS America built customized software forms so that HBC participants could have a simple and fast way to enter information. HBC participants submitted a VMS declaration (hail-out) through the VMS unit prior to departing on every trip, regardless of whether or not red snapper or gag were the intended target species. Participants submitted a landing notification (hail-in) through the VMS unit at least one hour prior to returning to port regardless of whether or not red snapper or gag were landed. Hail-ins contained the vessel name, landing location, time of landing, and the number of red snapper and gag landed. The hail-in requirement was intended to provide law enforcement agents/officers and port agents the opportunity to be present at the point of landing so they can monitor and enforce the HBC EFP requirements dockside.

Landing conditions required that HBC vessels only land at approved landing locations. Approved landing locations ensure sites actually exist and law enforcement officers and port agents can access these sites. Landing locations must be publicly accessible by land and water.

All harvest of red snapper and gag from HBC participants were attributed to allocation for this pilot program. HBC vessels were required to abide by a 2-fish per person per species (red snapper and gag) bag limit consistent with current recreational fishing regulations. In addition, all HBC vessels were expected to retain all legal-sized red snapper (16-inch total length) and gag (22-inch total length) that appear to be mortally injured, as long as the bag limit or vessel allocation had not been exceeded. If a vessel's harvest exceeded the allocation available in that vessel's account, the vessel owner/captain must acquire sufficient allocation through an allocation transfer to cover the overage. After a vessel account's allocation was exhausted, that vessel owner/captain needed to cease any directed fishing for red snapper or gag. Each HBC vessel owner/captain needed to account for all red snapper and gag caught aboard that vessel. On the day fishing occurred, each vessel needed to submit landing reports through the SRHS electronic reporting system (Appendix 2). Landing reports contained the vessel name, number of anglers, trip location, depth fished, species and number of fish caught and released, and other biological and socio-economic data required by the SRHS. In addition, all HBC vessels needed a copy of the EFP prominently displayed onboard the vessel and available for inspection upon request from a law enforcement officer.

To ensure accountability and ease enforcement of the program, the HBC members decided to add a fish tag system as a requirement to join the program. In 2014, the HBC manager ordered Seton Tyvek tags equal to the number of fish allocated to the HBC program. The Tyvek tags were chosen because they were weatherproof, tear proof, and durable. The cost of the tags (~\$0.25/tag) was paid for by the HBC members. The tags were sequentially numbered and color-coded by species: yellow for gag and red for red snapper (Figure 1). For each fish caught, the crew was responsible for writing the vessel name, customer name, and date on the tag. Each tag came with a pre-punched hole and a wire tag. Some crews attached the tag receipt directly to the fish, some to the stringer with the fish, and others placed it inside a Ziplock bag with the fish fillet. When allocation was transferred, the Tyvek tags were also transferred, so that every fish caught by the program was associated with a tag. HBC members said that although some of the participants did not feel the tags were necessary, others found them extremely helpful when dealing

with law enforcement. When law enforcement encountered customers with red snapper during the closed season, they were able to confirm that the red snapper were legally caught through the HBC program by the tags and a phone call to the vessel for confirmation.

Figure 1: HBC Tyvek tags



Online System

The HBC pilot program took advantage of the existing Catch Shares System (CS System) infrastructure created by the Southeast Regional Office (SERO), which also hosts the Gulf of Mexico Individual Fishing Quota (IFQ) commercial red snapper and grouper-tilefish programs and Bluefin tuna Individual Bycatch (IBQ) program. The CS System is an online system (<https://portal.southeast.fisheries.noaa.gov/cs>) managed by the SERO that has the ability to track all transactions (e.g., landings, allocation transfers) in real-time. The administrative functions associated with the HBC pilot program, (e.g., registration, account access, allocation transfers) were designed to be accomplished online; therefore, a participant needed access to a computer and the Internet. A new program, with customized account roles, actions, and views, was created for the HBC pilot program. The CS system was also integrated with the VMS system and the SHRS logbook system to obtain trip declarations (hail-outs) and electronic logbook information. Each participant had an online account for viewing hail-outs, hail-ins, allocation, and landings. The CS system also allowed HBC participants to transfer allocation to the HBC manager or other HBC vessels.

The HBC pilot program had two account roles: Headboat manager (HBC manager) and Headboat vessel (HBC vessel). The HBC manager account had the ability to manage and transfer allocation to any HBC vessel account, view all HBC hail-outs, hail-ins, allocation transfers, and landings. The HBC manager account received the initial allocation at the start of the fishing year and was responsible for distributing allocation to each HBC vessel account as agreed upon by the HBC members. Each vessel approved to operate under the HBC pilot program had a HBC vessel account. Through the HBC vessel account, vessel owners/captains had the ability to transfer allocation and view their hail-outs, hail-ins, and landing transactions.

Data validation and monitoring

SERO Catch Share staff regularly audit hail-outs, hail-ins, and landing transactions. Auditing of the data occurs every 1 to 3 days, each week, with daily audits during peak red snapper season. During auditing,

catch share support staff ensured that for each trip the vessel made (as validated by VMS), there was a hail-out, hail-in, and e-Log, and that the fish declared on the hail-in match the number of fish on the e-Log. If discrepancies were found, the staff contacted the HBC owner/captain and/or local port agent and worked to resolve the issue. The auditing process involved staff monitoring the VMS system to identify when a vessel had left port and if they declared a HBC trip. Missing hail-outs were due to (1) user error - captain did not submit a hail-out, (2) VMS unit error - information entered into the unit, but it was not received or (3) VMS server error - information sent to the server, but an error occurred between the unit's server and NOAA's VMS databases. Submitted hail-ins for each HBC trip were identified and linked with a hail-out. Similar to hail-outs, missing hail-ins occurred for the reasons listed above. Landing transactions were monitored to ensure that the number of red snapper and gag reported match the hail-in. Missing landing transactions were due to (1) user error – captain did not submit an e-Log, submitted incorrect information (e.g., entered number under the wrong species), or did not correctly submit the e-Log, or (2) there was a delay or malfunction in transmitting the data from the SRHS data system to the CS system. Most landing transaction errors were due to user input, particularly failure to properly submit the e-Log (e.g., Captain thought the e-Log was sent) or failure to submit an e-Log.

To aid law enforcement, e-mails were sent to state and federal law enforcement officers, as well as state and federal port agents, each time a vessel made a hail-out or a hail-in. Law enforcement officers and port agents used the e-mails to prioritize their sampling and coordination with other law enforcement agents or port agents.

NOAA used existing dock-side and at-sea methodologies by federal and state port agents, with a priority on red snapper and gag catches, to validate HBC vessel catches. Port agents validated the number of fish on board the vessel with the number reported in the hail-in. In addition, a sub-sample of fish were measured and weighed to provide information for average in-season weights by region. Fish (in numbers) were converted to pounds using two methods: pre-season and in-season average weights. Pre-season average weights were calculated prior to the start of the program across all months by region. In-season average weights were calculated by using the current year's dockside sampling per month by region. In-season average weights were updated every 15-30 days as the information became available and landing estimates in both numbers and pounds were posted to the SERO Catch Share Web site.

PROGRAM REVIEW AND PERFORMANCE

Trip level Information

In 2014, vessels in the HBC took 3,140 trips, of which 60% (n=1,876 trips) reported landing red snapper and/or gag (Table 3). There were 1,295 trips that landed red snapper and 697 trips that landed gag. Individual HBC vessels took between 1 to 58 trips per month, averaging around 17 trips per month and 12 trips landing HBC species per month. The greatest number of trips per month occurred in the summer, June through August, with 517 trips in July (Figure 2). Most trips that did not report landing red snapper and/or gag occurred inshore and were typically half-day fishing trips.

HBC vessels took differing trips length (i.e., half-day, full-day, or multi-day trips) and there were differences in HBC species targeted and landed. The majority of trips were full-day trips (65.5%), followed by half-day trips (31%), and then multi-day trips (3.5%). Some vessels had back-to-back half day trips, where two trips were made within the same day. There were 14 vessels that completed two trips per day and 9 vessels that took multi-day trips. Of the participating vessels, only 11 vessels landed both red snapper and gag throughout the year. There were 12 vessels that landed gag, although five of

these vessels had a low total amount of gag landed (<20 fish). There were 16 vessels that landed red snapper, with four vessels landing <1,000 fish total for the year.

HBC vessels that landed red snapper landed between 1 and 170 red snapper per trip, with an average of 42 red snapper per trip. Average red snapper landed per trip varied by vessel, with averages between 12 and 127 red snapper/trip. Peak red snapper landings for the HBC vessels occurred in June and July, while smaller landings occurred in the last quarter of the year (Figure 3). These smaller landings late in the year were due largely to the decreased amount of quota allocation available in the last quarter. Average landings per trip were between 37 and 55 red snapper/trip for January through August (Figure 3). In the last quarter of the year, average landings per trip were variable as the number of trips taken and the amount of allocation available decreased.

Table 3: Trips taken by HBC vessels.

Month	Total Trips	HBC Trips Landing		
		RS and/or GG	RS	GG
January	123	70	39	39
February	184	97	68	43
March	236	137	89	51
April	236	135	88	61
May	298	202	146	79
June	490	345	287	77
July	517	373	312	80
August	404	232	185	54
September	188	89	39	51
October	232	96	38	64
November	110	46	3	44
December	122	54	1	54
Total	3,140	1,876	1,295	697

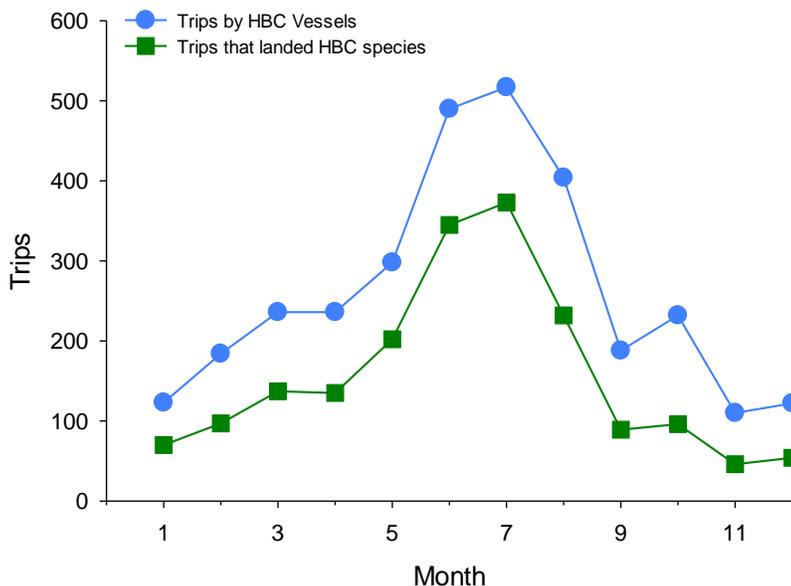


Figure 2: Total trips and trips with HBC species landed by month.

HBC vessels that landed gag landed between 1 and 50 gag per trip, with an average of four gag per trip. Average gag landed per trip for most vessels was 1-2 gag/trip. Peak gag landings occurred in April, May, and December, with smaller landings occurring from August through October (Figure 3). Average landings per trip for gag followed a similar pattern to the total amount of gag landed. Average landings per trip were greater in March, April, and December with 6-8 gag/trip and smallest during August through October (Figure 3).

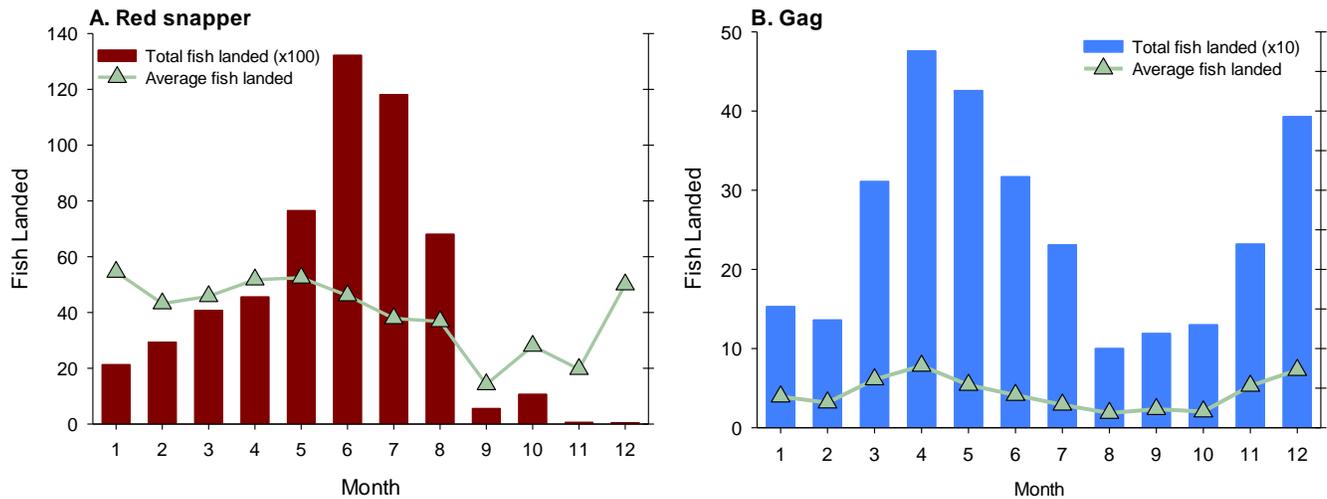


Figure 3: Total and average landings of a) red snapper and b) gag per trip

Quota Usage and Tracking

The HBC vessels landed 98.9% of the red snapper quota (54,907 red snapper) and 50.3% of the gag quota (3,024 gag). Weights from pre-season and in-season conversions were compared to each other monthly. There was very little difference overall between pre-season and in-season weights conversions for both red snapper and gag (Figure 4). Red snapper had an overall difference of -3.3%, where the pre-season weight exceeded the in-season weight (Table 4). Differences between weight conversions for red snapper varied month to month, with the greatest difference occurring in the summer months (Table 4). Most of the large percent differences in average weight were negative, with the in-season average weight being less than the pre-season average weight. Gag had an overall weight difference of 1.1%, where the in-season average weight exceeded the pre-season average weight (Table 4). Using in-season average weights, the HBC vessels harvested 274,443 lb ww of red snapper and 22,087 lb gw of gag.

Landings varied by region and month. Vessels in the Florid west coast and the Texas regions had the greatest number of red snapper fish landed (20,479 and 20,416 red snapper, respectively), followed by vessels in Alabama and the Florida panhandle (Table 5). Gag were primarily landed by vessels in the Florida regions (Table 5).

In-season weights were used to convert landings in fish to landings in pounds. Average red snapper weights ranged between 2.16 lb ww to 9.91 lb ww (Table 6). The Florida west coast region had the greatest overall average red snapper weight, followed by Texas, Alabama, and the Florida panhandle (Table 6). February and November had greater average red snapper weights, while October had the smallest average weight (Figure 5, Table 6). Average gag weights ranged between 6.04 lb gw and 14.57

lb ww (Table 7). Weights of gag were greatest in Texas (14.51 lb gw), followed by Alabama, Florida panhandle, and Florida west coast (Table 7). December had the greatest average weight, while October had the smallest (Figure 5).

Table 4: Pre-season and in-season pounds landed by HBC species and month

Month	Red Snapper				Gag			
	Pre-season	In-season	Difference	% Difference	Pre-season	In-season	Difference	% Difference
Jan	10,435	9,839	-596	-5.7%	1,123	1,076	-47	-4.2%
Feb	15,032	16,718	1,686	11.2%	1,067	1,027	-40	-3.7%
Mar	20,993	22,589	1,596	7.6%	2,202	2,013	-189	-8.6%
Apr	22,774	23,914	1,140	5.0%	3,398	3,566	168	5.0%
May	38,682	41,323	2,642	6.8%	3,082	3,340	258	8.4%
Jun	68,156	60,184	-7,972	-11.7%	2,288	2,234	-53	-2.3%
Jul	62,929	57,565	-5,364	-8.5%	1,683	1,576	-107	-6.4%
Aug	36,292	34,476	-1,816	-5.0%	734	671	-63	-8.6%
Sep	2,876	2,878	1	0.0%	844	816	-28	-3.3%
Oct	4,946	4,357	-589	-11.9%	1,017	795	-221	-21.8%
Nov	341	336	-4	-1.3%	1,639	1,790	151	9.2%
Dec	305	265	-40	-13.0%	2,763	3,184	421	15.3%
Total	283,759	274,443	-9,316	-3.3%	21,838	22,087	249	1.1%

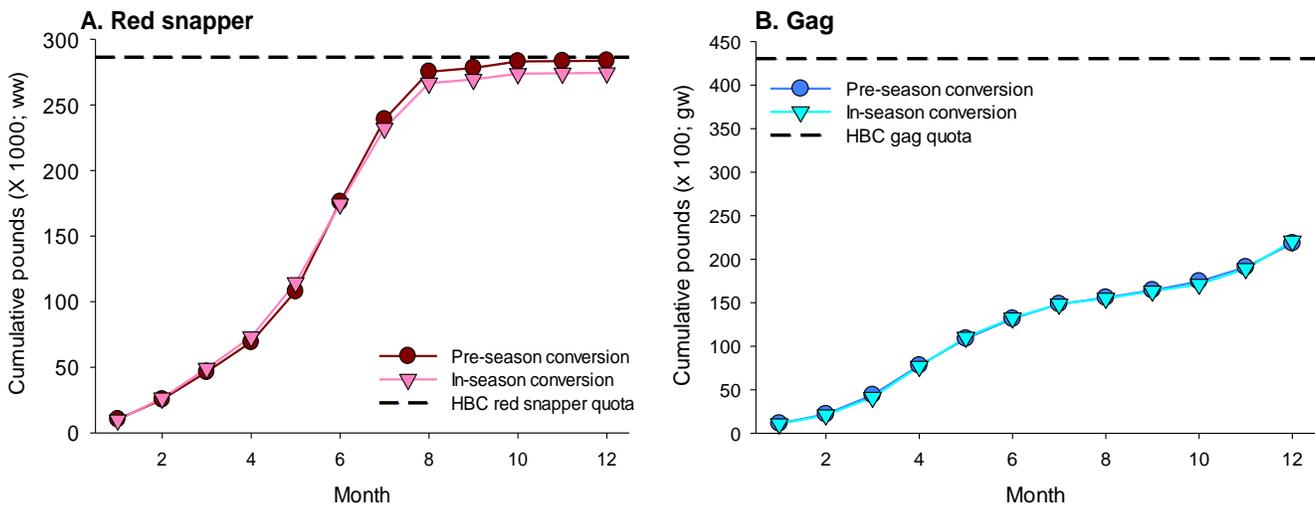


Figure 4: Comparison of pre-season and in-season weights by month for A) red snapper and B) gag.

Table 5. Landings by region and species

Region	Red snapper		Gag	
	Fish	Pounds (ww)	Fish	Pounds (gw)
Florida west coast	20,479	90,083	2877	20,533
Florida Panhandle	1,179	7,252	137	1,430
Alabama	12,833	66,409	8	95
Texas	20,416	110,699	2	29

Table 6: Red snapper average weights by month and region

Month	Florida west coast	Florida panhandle	Alabama	Texas	Overall
Jan		4.45	5.90	4.86	4.63
Feb	9.91	5.10	5.90	6.08	5.70
Mar		4.77	4.62	6.41	5.54
Apr	9.55	4.59	5.74	6.05	5.25
May	7.93	4.99	6.29	5.70	5.40
Jun	5.99	3.88	4.67	5.15	4.55
Jul	5.24	4.04	4.97	5.14	4.87
Aug	4.07	4.09	5.43	5.16	5.07
Sep	4.22	4.15	6.40	5.04	5.20
Oct	2.16	4.04	6.40		4.10
Nov	3.73		6.40		5.70
Dec	5.30				5.30
Overall Average	6.15	4.40	5.17	5.42	

Table 7: Gag average weights by month and region

Month	Florida west coast	Florida panhandle	Alabama	Texas	Overall
Jan	6.62	11.89			7.03
Feb	6.72	10.2			7.55
Mar	6.28	14.57			6.47
Apr	7.58	14.57	14.6		7.49
May	8.21	11.42	11.4		7.84
Jun	7.69	11.42	11.4		7.05
Jul	7.39	11.42	11.4		6.82
Aug	7.31	11.42	11.4	14.51	6.71
Sep	7.36	6.04		14.51	6.86
Oct	6.14	6.04			6.12
Nov	7.72	6.04			7.72
Dec	8.17				8.10
Overall Average	7.14	10.44	11.82	14.51	

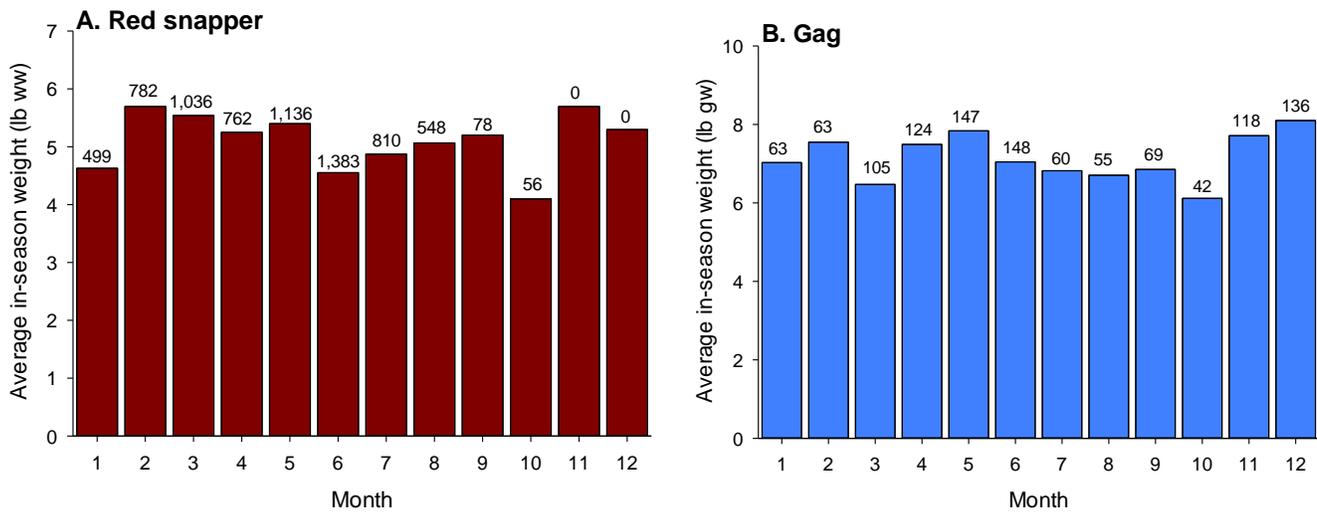


Figure 5: Average in-season weights by month for A) red snapper and B) gag.

Allocation Transfers

There were 31 vessel to vessel allocation transfers in 2014, 3 for gag and 28 for red snapper allocation. Participants transferred 3,288 red snapper and 49 gag amongst themselves. Thirteen of the transfers listed “Barter” as the reason for transfer, while the remaining transfers gave either “Sale” or “No Comment” as the transfer reason. The majority of transfers were within the same region (n = 23), while the other eight transfers were between regions.

The HBC established quota reserves of 5% each of the aggregate red snapper and gag allocations to ensure the HBC remained in compliance with its catch limits. The reserve amounts were deducted from aggregate allocations prior to individual distributions by the HBC manager. In coordination with NMFS, the HBC Manager monitored each HBC vessel’s landings in numbers and pounds of fish throughout the fishing year. If the estimated average fish weight of red snapper or gag grouper landed by a vessel was less than or equal to the average pre-season weight used by NMFS for determining aggregate allocations, then the reserve amount was released to that vessel. If estimated average fish weights landed by a vessel exceeded average pre-season weights, then the Manager either adjusted initial distributions as necessary to ensure the maintenance of the reserve amount was sufficient to avoid an overage or released a portion of the reserve amount to that member if the release would not result in an overage. Accordingly, the HBC remained below its catch limits (as expressed both in numbers and pounds of fish) for red snapper and gag in 2014.

Reporting Compliance

A total of 707 trips (23%) were validated by federal or state port agents. On average, there were 51 trips per month validated, with a range from 34 to 86 trips per month (Table 6). The greatest percentage of trips validated occurred in January when the program was initiated. The smallest percentages of trips validated occurred in June and July, mainly due to the high volume of trips taken during those months.

Table 8: Trips taken by HBC vessels.

Month	Total Trips	Trips Validated	% Validated
January	123	58	47%
February	184	65	35%
March	236	62	26%
April	236	44	19%
May	298	74	25%
June	490	63	13%
July	517	55	11%
August	404	97	24%
September	188	52	28%
October	232	60	26%
November	110	42	38%
December	122	35	29%
Total	3,140	707	23%

There were 23 trips where a port agent’s trip validation count differed from the submitted hail-in. No discrepancies were found for gag. Red snapper discrepancies had both over-counts (captain entered more red snapper on the hail-in than were actually present) and under-counts (captain entered less red snapper than reported on the hail-in). Both over- and under-counts were generally only off by 1 to 2 fish. The largest discrepancy found was 16 red snapper. Throughout the year, the HBC vessels reported 37 less fish than were on board the vessel and reported 10 more fish than were on board the vessel, for a net difference of 27 fish. These 27 red snapper compromise less than 1% of the red snapper landed by HBC vessels. All discrepancies, both under and over-counts, were corrected in allocation deductions and landings by SRHS and SERO staff.

Discrepancies happened for a variety of reasons: mate or captain unfamiliar with the protocols and/or software, misidentification or misreporting of vermilion snapper as red snapper, counts recorded as the wrong species in the e-Log submission form (e.g., red porgy instead of red snapper), transposing numbers when entering them into the system (hail-in or e-Log), and confusing trip counts when two trips were taken on the same day. Many times, the captain/owner was proactive in notifying the port agent when a typographical error was made in entering the counts into the hail-in or e-Log forms.

Out of the 3,140 trips, there were a small percentage of trips that had a missing hail-out, hail-in, or e-Log. There were 177 (6%) trips with a missing hail-out, but most of these (161) were due to technical problems in receiving the VMS information and not due to the captain forgetting to submit the hail-out. Similarly, of the 154 missing hail-ins, only 22 were due to the captain not submitting a hail-in. The majority of unsubmitted hail-outs/hail-ins occurred at the start of the program, although there was a small amount in nearly every month. Throughout the year, there were 62 e-Logs (2%) that were not submitted on the day of the trip. SERO staff followed up with the captain/owners of the vessel during auditing and all 62 e-Logs were eventually submitted. In some of these cases, the captain/owner did submit the e-Log into the system but failed to hit submit or there was a glitch in the connection between the SRHS database and the SERO database. There were some instances where the captain/owner forgot to submit the e-Log, especially when many trips were being taken or a new captain was operating the vessel that was less familiar with the reporting requirements. All missing e-Logs were resolved within a few days after SERO staff contacted the owner.

Socio-economic Impacts

HBC members are working collaboratively with Dr. Joshua Abbott at Arizona State University to conduct a socio-economic study of the effects of the HBC program. HBC members signed confidentiality waivers allowing historical and HBC vessel and trip specific landings and fishing effort data to be released for use in the socio-economic analysis. Additional survey instruments are also being used to gather socio-economic data from captains, vessels owners, and HBC customers. Data collection was focused on assessing: (1) How the pilot project has changed the temporal and spatial distributions of fishing, (2) how the number of anglers/customers has changed as a result of the pilot program, (3) how/if headboat owners are utilizing increased flexibility to provide more differentiated trips/services to customers, (4) and how the pilot project has affected costs and net revenue.

In addition to confidential, vessel- and trip-specific data, NOAA Fisheries released aggregated, non-confidential data from non-participating HBC vessels for use in socio-economic analyses per a request from Dr. Joshua Abbott. This data will allow for comparative socio-economic analyses to be conducted between HBC and non-HBC vessels.

Socio-economic results are not presented in this report. A presentation will be given by Dr. Joshua Abbott at the Council's March 2015 meeting discussing preliminary socio-economic results for year-1 of the pilot program. Per the conditions of the EFP, a draft report summarizing the results of the socio-economic study will eventually be provided to NOAA Fisheries for review and comment. NOAA Fisheries personnel will review the socio-economic study and determine if it is based on the best available scientific information.

Enforcement and Port Agent Sampling

As part of the review of the first year of the program, port agents and law enforcement officers/agents were asked to provide feedback about the program. Their feedback fell into three main categories: e-mail notifications of hail-outs and hail-ins, sampling efficiency, and cooperation of HBC captains.

Most agents appreciated the e-mail notifications of hail-outs and hail-ins because they allowed them to prioritize sampling. The hail-ins contain the expected number of HBC species on board, and for agents that receive the hail-in prior to traveling to the marina this allowed them to ensure they had sufficient supplies for biological sampling available. Some agents felt that the one-hour notification was not sufficient advanced notice for dock-side inspection/sampling, as distances may involve 1 to 4 hours of driving time. These agents that had a long distance to travel rely on the hail-outs for scheduling their sampling for the day. Some agents went an extra step and called the business or marina to help determine when the vessel would return. All agents agreed that the expected number of fish on the hail-in allowed them to immediately identify a discrepancy between the actual count and the hail-in count, and found this feature invaluable for monitoring the program. There were times when hail-outs and/or hail-in e-mails did not arrive in the agent's e-mail a timely manner. These were generally due to either VMS problems or glitches in the e-mail system, as described earlier.

Many of the agents felt that the hail-out/hail-in notifications had improved sampling efficiency and reporting accuracy, as the vessels knew that accurate reporting was required for program participation and that validation checks occurred to ensure accurate reporting. Agents suggested that two agents per vessel be assigned during the busier time frame or summer months. In summer months, the fish tend to be kept on ice and out of the sun as much as possible, which delayed counts and biological sampling. By having

two agents, one could count fish while the other began the biological sampling. Multiple port agents would also be useful for boats that completed two trips a day and were generally scheduled to leave an hour after returning from the first trip. Agents also suggested requiring the vessels to keep the snapper/groupers separate (e.g., separate stringers). This would increase sampling efficiency, as agents would not have to search through all the boxes for snappers and groupers. The reduction in looking for snapper/grouper would reduce counting time, increase counting accuracy, and increase time for biological sampling. A final recommendation from the agents was that if any state or federal law enforcement agent intercepted an HBC vessel instead of a port agent that the state enforcement agent report the fish count on board to help verify reported versus landed fish.

All agents felt that there was good cooperation with the HBC vessels and that the captains were very helpful during sampling. Agents felt that the program has created a much closer relationship with the owners, captains, office personnel, and vessel crew, with many of the agents now on a first name basis with the crews. This increased cooperation has also been seen when the vessel crew encouraged the anglers on board to have their fish biologically sampled before filleting the fish. Even when discrepancies in counts occurred, the captain and agent worked together and recounted the fish to verify the accuracy of reporting.

Program Administration

The HBC pilot study included oversight and administration by NOAA Fisheries. Both direct and indirect costs were associated with the program during the first year. Indirect and direct costs included software development of the online system, personnel for customer service and auditing of notifications and landings, travel to meetings with HBC members, dockside sampling by port agents, and enforcement by NOAA and state law enforcement agents/officers. No new personnel were hired by SERO to support the program. Partial staff time for some SERO Catch Share personnel, information technology specialists, and NOAA law enforcement agents/officers familiar with catch share programs was used to administer, develop, implement, and monitor the HBC. The Gulf States Marine Fisheries Commission also entered into contracts with independent contractors as port agents to validate catches and trip reports of HBC and non-HBC vessels. The contractors also collected biological samples and effort data from headboats which operate from Texas to Florida. Total costs for contracting port agents to sample both HBC and non-HBC vessels in 2015 were approximately \$441,000.

Program Challenges

While many aspects of the program worked extremely well during the first year of the pilot study, there were still areas for future improvement. One challenge that occurred was the submission of hail-outs, hail-ins, and e-Logs. As the VMS hail-out and hail-in requirements were new to the captains, there was a learning curve in the early months of the program as the captains learned how to properly send hail-outs and hail-ins. Additionally, timeliness of e-Logs continues to be an area for improvement. All e-Logs, even those trips that did not catch HBC species, were required to be submitted on the day of the trip, which was different from the SRHS weekly reporting requirements. SERO staff monitors all hail-out, hail-in, and e-Log reports, and contacts the HBC owners or captains when data were missing or late.

Another challenge with this program was the reliability of the VMS system. The CLS America units use blue-tooth connectivity; in some instances there were vessels that had problems with the blue-tooth connection. The failure of the blue-tooth connection was not always obvious, and therefore the captains believed their hail-outs/hail-ins were submitted when they were not actually submitted. In addition, there

were problems with data connections between CLS America system, VMS and the SERO CS system. Failures could occur between any of these connections, and identifying where a failure occurred was sometimes difficult to troubleshoot. Technical support from all (CLS America, VMS, Visma Consulting, and SERO technical support) parties was involved in identifying problems and providing solutions.

Problems also arose with data connections between the SRHS system and the SERO database. The link between these two systems was not instantaneous. This led to SRHS staff spending additional time confirming trip reports. The SRHS system currently has no method to flag when a record has been corrected. This led to SERO staff spending additional time tracking down data corrections and ensuring that those corrections were updated in the SERO CS system and allocation correctly assigned.

One lesson learned from this pilot program is that the data entry should be centralized with all information (e-Logs, validations, corrections) being entered through one data platform. Validation activities required careful collaboration between state agencies and NMFS, but are essential to a smoothly working system. Some additional technical changes would be to add a trip submission date field, include a flag to indicate when a record was updated, and to assign a unique identifier to all records to help with data processing.

Another concern for the HBC program is the number of biological samples taken per region and month. These samples were used to estimate in-season weights. For some regions and months there were insufficient samples to estimate in-season weights. SERO staff resolved this by combining similar months, regions, or months and regions to generate in-season weights. In-season weights were important as the HBC allocation is in number of fish instead of weight. With the differences in weight by region and month, accurate weight samples help to ensure the HBC pilot program does not go over their quota in weight.

Some additional improvements were suggested by various staff working with the program. In particular, an automatic method to link a trip from hail-out, to hail-in, to landing would be beneficial. This would reduce the amount of time staff takes in manually linking hail-outs, hail-ins, and landings and provide an efficient method to determine when a data connection failed. This would allow a view to be built so that HBC vessel owners could self-monitor their trips. Additionally, port agents recommended that hail-outs also indicate (1) whether the trip was targeting HBC species and (2) if they were fishing in federal or state waters. Port agents also mentioned that they receive both commercial hail-in notifications as well as HBC hail-in notifications, and many would prefer to not receive the commercial hail-in notifications.

Changes to the Program – Year 2

All 17 vessels that participated in the first year of the pilot study will also be participating in the second year of the program. In addition, two more vessels were added: the America II based out of Orange Beach, Alabama, and the New Buccaneer based out of Galveston, Texas. The other change that occurred in the second year of the program was the calculation of the red snapper quota based on the new Marine Recreational Information Program (MRIP) calibration that occurred during 2014. The percentage of the recreational quota that the HBC pilot program received is based on the total recreational landings in 2011 and the amount of landings by HBC vessels in 2011. The MRIP calibration that occurred late in 2014 increased the red snapper recreational landings for 2011 from 4,305,989 lb ww to 6,737,110 lb ww. The HBC vessels red snapper landings increased slightly due to the additional vessels added to the program and went from 234,085 lb ww to 269,576 lb ww. The proportion of recreational red snapper landings that were landed by HBC vessels decreased from 5.4363% to 4.0031%. This resulted in a smaller red snapper quota allocated to the HBC pilot program in 2015, despite an increase in the number of vessels participating. The red snapper quota allocated to the HBC program went from 293,017 lb ww in 2014 to

215,767 lb ww in 2015. In March 2015, the Council approved an increase in the total allowable catch of red snapper from 11 to 14.3 mp ww for 2015. If this increase is approved and implemented by NOAA Fisheries, the HBC quota will be increased during 2015 from 215,767 lbs ww to 280,497 lbs ww.

Appendices

Appendix 1. Headboat Collaborative Application Questions

1. Name, Vessel Name, Permit #
2. Homeport
3. Size of Vessel (length and number of passengers)
4. Average fishing trip duration
5. Approximately how many days do you fish during each year on average?
6. Do you typically land more red snapper or gag? What are your other primary target species?
7. Have you ever received a Notice of Violation and Assessment or Notice of Permit Sanction from NMFS?
8. Have you reviewed the terms of the EFP issued by NMFS for this pilot program?
9. Why do you want to participate in this pilot program?
10. Is there any other information you wish to provide to assist the Collaborative in reviewing your application?

Appendix 2. SRHS e-Log forms

Southeast Region Headboat Survey (kenneth.brennan@noaa.gov) My Account Sign out

Dashboard

Trip Report

New Trip Report

Past Trip Reports

Inactivity Report

Inactivity Reports

Manage

Manage Captains

Species Favorites

Admin Panel

Manage Areas

Manage Species

Manage Vessels

Manage Users

Export Data

Maps

Area Maps

Videos

Getting Started

Create a New Trip Report

Trip Details:

Trip Report #: **215**

Depart Date/Time: 12/15/2014 00:00 Return Date/Time: 12/15/2014 00:00

Vessel: Testing Vessel Captain: -- Select --

Passenger Info:

of Anglers (customers that fished): 0 # of Paying Passengers (anglers + non anglers): 0 # of Crew (excluding captain): 0

Fuel: Fuel used (gallons): 0 Price per Gallon (estimate): 0

Depths Fished (ft.): Minimum: 0 Maximum: 0 Primary: -- Select --

Location:

Lat/Long Degrees: -- Select --

Latitude Minutes: -- Select -- Longitude Minutes: -- Select --

SAVE TRIP REPORT INFORMATION

Catch Information

Show Species Grid
 Show All Species
 Order Species By Most Reported

Species: -- Select -- Number Kept: 0 Number Released: 0

SAVE CATCH INFORMATION

	Species Name	Number Kept	Number Released	
Edit	ALMACO JACK	5	0	Delete
Edit	BANDED RUDDERFISH	7	0	Delete
Edit	ATLANTIC SHARPNOSE SHARK	0	14	Delete
Edit	BLACK SEABASS	25	300	Delete
Edit	GAG	2	1	Delete
Edit	LITTLE TUNNY	2	0	Delete
Edit	RED PORGY	11	38	Delete
Edit	RED SNAPPER	0	21	Delete
Edit	REMORA	0	3	Delete
Edit	SPOTTAIL PINFISH	45	0	Delete
Edit	GRAY TRIGGERFISH	77	0	Delete
Edit	VERMILION SNAPPER	132	48	Delete

Appendix 3. Instructions for CLS American VMS forms

Trip Declaration (hail-out)

VMS declarations are made prior to departing for a trip, regardless of whether or not you plan to harvest red snapper or gag. Declarations are made through the CLS America VMS tablet. To declare a trip, you will need to select the Forms option on the main screen. Then select the SE Declaration (Figure A2.1), followed by SE Declaration – Headboat Collaborative Version (Figure A2.2). Then select the “Gulf of Mexico” for the Activity Code, “No” for the power down exemption, “No” for the research trip exemption, “Reef Fish” for the target species, and “Headboat Collaborative EFP” for the type of fishing. Click the submit button to submit the declaration.

Figure A2.1

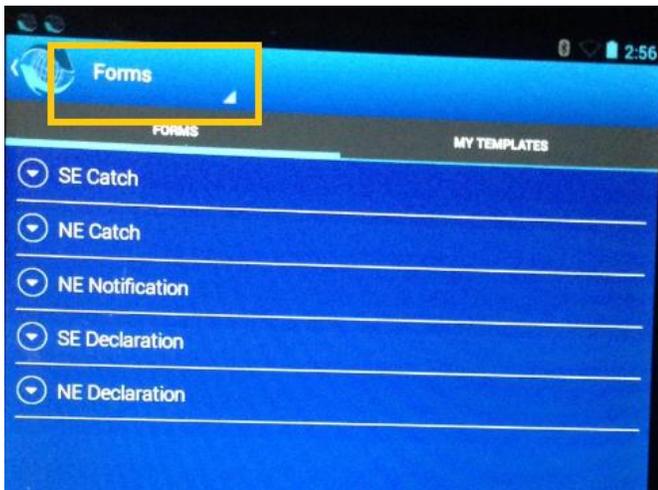
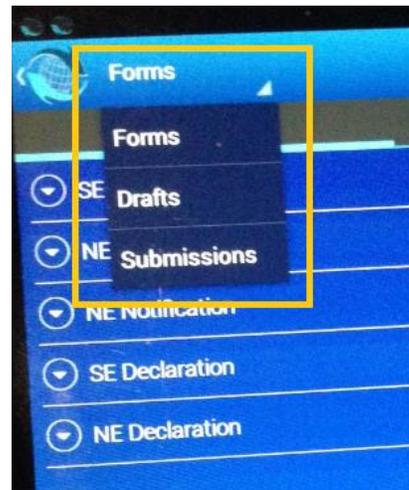


Figure A2.2



Appendix 4. Screenshot of the Catch Share Website

Headboat Vessel Homepage

The screenshot shows the NOAA Fisheries SERO Catch Shares Program Headboat Vessel Homepage. The page includes a navigation menu (Home, Allocation, Hail Out, Landing Locations, Landings, Notifications, Messages, My Account, Log Out) and a header with the NOAA logo and program name. The main content area displays an important message and an allocation summary table for 2014.

1 Home Allocation Hail Out Landing Locations Landings Notifications Messages My Account Log Out

Today is Wednesday, December 3, 2014 Welcome

Headboat Collaborative System - Headboat Vessel Home

2 Important Messages

ALL New!!! As of 12/2/2014, the current version of the Catch Shares Online System is 4.2.0.4. If you do not have this version, please close your web browser and reopen the application.

3 Allocation Summary for 2014 in numbers of fish

Share Category	Allocation Transfers In	Allocation Transfers Out	Landings	Current Allocation
HBC GAG	0	0	0	0
HBC RED SNAPPER	0	0	0	0

Customer Support Toll-Free 866-425-7627
Customer Support Email NMFS.SER.CatchShare@noaa.gov Additional Information

WARNING: Using the browser's refresh or back button will log you out of the application. All unsaved transactions will be lost.

This is the first screen Headboat Vessels will see after logging on to the HBC system.

Features:

1. The menu bar allows you to access other pages which you can use to view and transfer allocation, review your hail outs, review landing locations, review landings, review hail-ins, view messages, and update your account.
2. The top portion of the screen will list all important messages that relate to the HBC program.
3. The lower table will summarize your HBC annual allocation by share category. The table will also include allocation transferred into and out of your account during the year, total annual landings, and current allocation remaining to be used.

View Allocation

View Allocation

1
Shareholder Allocation

Share Category	Quantity	Units
HGG		NUMBERS
HRS		NUMBERS

2
Vessel Allocation

[Print PDF](#)

Vessel Account	Vessel Name	Vessel Number	Share Category	Quantity	Units
GLFQ4621	GULF QUEEN	611950	HGG		NUMBERS
GSTR2539	GULF STAR	1039798	HGG		NUMBERS
GWND8439	GULF WINDS II	904227	HGG		NUMBERS
REEL7251	REEL SURPRISE	904088	HGG		NUMBERS
CPJN8641	CAPT JOHN	1152450	HGG		NUMBERS
DBLE2542	DOUBLE EAGLE II	522907	HGG		NUMBERS
DBLE3683	DOUBLE EAGLE III	622650	HGG		NUMBERS
SPRQ9065	SUPER QUEEN	541178	HGG		NUMBERS

On the menu bar select **Allocation** then select **View Allocation**.

Features:

1. The table on the left summarizes the annual allocation (in numbers of fish) held by your account. This table will include only allocation that has not been landed during the year or that has not been transferred to a Headboat Vessel account.
2. The table on the right summarizes allocation (in numbers of fish) on all Headboat Vessel accounts. Allocation may be transferred to your Headboat Vessel account from the Headboat Manager account or from other Headboat Vessel accounts. The allocation in your Headboat Vessel account must be sufficient to cover the amount being landed on a trip.

View Vessel Allocation

NOAA Home | Weather | Oceans | Fisheries | Charting | Satellites | Climate | Research | Coasts | Careers | Privacy



NOAA FISHERIES

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

SERO Catch Shares Program



OPERATIONAL v4.2.0.4

Home
Allocation
Hail Out
Landing Locations
Landings
Notifications
Messages
My Account
Log Out

View Vessel Allocation

1

Vessel	Share Category	Numbers
DPRN7145	HGG	1041055
DPRN7145	HRS	1041055

2

Transferred In

Date	From UserID	From Name	Share Category	Numbers	Conf. Number

3

Transferred Out

Date	To UserID	To Name	Share Category	Numbers	Conf. Number

On the menu bar select **Allocation**, then select **View Vessel Allocation**

1. The top table provides a summary of the allocation currently in your Headboat Vessel account.
 2. The next table shows each allocation transfer INTO your Headboat Vessel account. This can be sorted by date, transferee, share category, or number of fish.
- The last table shows each allocation transfer OUT of your Headboat Vessel account. This can be sorted by date, transferee, share category, or number of fish.

View Landing Notifications (Hail-ins)

NOAA Home | Weather | Oceans | Fisheries | Charting | Satellites | Climate | Research | Coasts | Careers | Privacy

NOAA FISHERIES | SERO Catch Shares Program
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

OPERATIONAL v4.2.0.4

Home Allocation Hail Out Landing Locations Landings **Notifications** Messages My Account Log Out

View Notifications

Search: 2014

Date	Vessel Account	Vessel	Dealer	Dealer	Landing Conf.	Notification Conf

Detail of Selected Landing

Landing Date: Dealer: Vessel:

Conf. Number: DBA: Shareholder:

Trip Ticket Facility:

Total Price: Address:

Total CRF: City, State:

Species	Share Category	Quantity	Units	Type	Price/Unit	Total Price	CRF

On the menu bar select **Notifications** then select **View Notifications**

Every landing notification that you have made will be displayed on the **View Notifications** page. You can use this page to match up your landings transaction history (previous page) with your landing notifications.

1. You can search your notifications by vessel, confirmation number, date, or landing location.
2. Select a landing notification from the table by clicking it to highlight the row in blue. Details from the landing transaction that you select will be displayed in the space below.

You can also view your landings from previous years by selecting the year filter at the top.

Glossary

HBC Shares – The HBC program receives a **percentage of the recreational quota**. This percentage was based on HBC vessels' 2011 landings relative to the entire 2011 recreational landings.

Share Category – HBC share categories are established for two species: Gag (*Mycteroperca microlepis*) and Red Snapper (*Lutjanus campechanus*)

Allocation – For the HBC program, allocation refers to number of fish per share category you are ensured the opportunity to possess, land, or sell in a calendar year. Any unused red snapper allocation expires when it is determined that the quota was met. Any unused gag allocation expires on December 31 of each year. Allocation is calculated by multiplying the HBC shares by the entire recreational quota, resulting in pounds of allocation. Allocation pounds are then converted to fish by applying an average weight by region and species. The HBC manager receives all of the allocation at the start of each year and distributes allocation to the HBC vessels. Allocation may change from year to year if the total recreational quota changes or average weights by region and species change.

HBC Manager – The HBC manager is an individual responsible for managing and transferring initial allocation to all HBC vessels. The HBC manager receives initial allocation at the start of the fishing year and may view all vessels' landings and allocation transfers.

HBC Vessel – These are vessels approved to operate under the HBC pilot program. Each vessel has an account in the HBC online system where they can transfer allocation and view their landings. A maximum of 20 vessels are authorized to participate in the HBC each year.

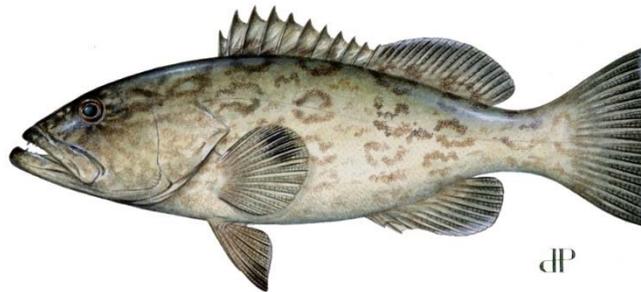
Landing Notification (Hail-in)- You must make a landing notification at least one hour in advance of landing. When providing a landing notification, you will be asked to provide your vessel identification number, landing location, date and time of landing, and estimated landings in numbers per share category. Landing notifications can be submitted using your vessel's VMS unit.

Landing- Landing means to arrive at a dock, berth, beach, seawall, or ramp.

Landing Transaction – Landing transactions are processed through the SRHS electronic-logbook (e-Log) program. Landings must be entered by the end of each day a trip is taken. Landing reports are transferred to the HBC Online system, where they are debited from a HBC vessel's allocation.

VMS Declaration (Hail-out)- You must make a trip declaration prior to leaving the dock. VMS declarations can only be made through your VMS unit.

**Options Paper
Gag Grouper
Annual Catch Limits, Annual Catch Targets,
and Recreational Season Adjustments**



GAG

Mycteroperca microlepis

**Options Paper for a Framework Action to the Fishery Management
Plan for
the Reef Fish Resources of the Gulf of Mexico**

March 2015



This is a publication of the Gulf of Mexico Fishery Management Council Pursuant to National Oceanic and Atmospheric Administration Award No. NA10NMF4410011.

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
ACT	annual catch target
AM	accountability measure
COI	U.S. Coast Guard certificate of inspection
EA	environmental assessment
EEZ	exclusive economic zone
EFH	essential fish habitat
EIS	environmental impact statement
FMP	fishery management plan
FWCC	Florida Fish and Wildlife Conservation Commission
GMFMC	Gulf of Mexico Fishery Management Council
gw	gutted weight
IFQ	individual fishing quota
IRFA	initial regulatory flexibility analysis
MFMT	maximum fishing mortality threshold
mp	million pounds
MSST	minimum stock size threshold
NMFS	National Marine Fisheries Service
OY	optimum yield
RA	regional administrator
RFA	regulatory flexibility analysis
RIR	regulatory impact review
SEDAR	Southeast Data, Assessment, and Review process
SSBR	spawning stock biomass per recruit
SSC	Scientific and Statistical Committee
SPR	spawning potential ratio
TAC	total allowable catch
TL	total length
VMS	vessel monitoring system
ww	whole weight

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CHAPTER 1. INTRODUCTION

1.1 Background

The 2006 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) established new requirements to end and prevent overfishing through the use of annual catch limits (ACLs) and accountability measures (AMs). In 2009 a gag update assessment (SEDAR 10 Update 2009) indicated the gag stock size had declined since 2005. A large part of the decline was attributed to an episodic mortality event in 2005 (most likely associated with red tide) that resulted in an additional 18% of the gag stock being killed in addition to the normal natural and fishing mortalities. The update assessment indicated the Gulf gag stock was both overfished and undergoing overfishing, and the Gulf of Mexico Fishery Management Council (Council) was informed of this status determination in August 2009. In response, an interim rule was implemented on January 1, 2009 to reduce overfishing of gag, followed by permanent rules under Amendment 30B (GMFMC 2008). Amendment 32 (GMFMC 2011a) subsequently established a formal rebuilding plan for gag not to exceed 10 years.

A benchmark assessment for gag completed in 2014 (SEDAR 33 2014) indicated that the gag stock was no longer overfished or undergoing overfishing, and had rebuilt to above its maximum sustainable yield level. However, in 2014 a major red tide event occurred off of the Florida west coast in the region of greatest gag abundance. Due to uncertainty about the impact of this red tide event on the gag stock, the Scientific and Statistical Committee (SSC) recommended a conservative acceptable biological catch (ABC) that assumed the 2014 red tide event would have the same impact on the gag stock as the 2005 event. The Council requested that the SSC reevaluate its ABC recommendation, and in January 2015 the SSC received an analysis of the red tide event from the Florida Fish and Wildlife Research Institute which indicated that the impact of the 2014 red tide event was only 4% to 7% of the 2005 event. With this new information, the SSC revised its recommendation and recommended ABCs based on a projection scenario that assumed no significant impact from the 2014 red tide event.

Gulf of Mexico Fishery Management Council

- Responsible for conservation and management of fish stocks.
- Consists of 11 voting members who are appointed by the Secretary of Commerce, 1 voting member representing each of the five Gulf states, and the Regional Administrator for the National Marine Fisheries Service Southeast Region.
- Responsible for developing fishery management plans and recommending regulations to the National Marine Fisheries Service for implementation.

National Marine Fisheries Service

- Responsible for preventing overfishing while achieving optimum yield.
- Approves, disapproves, or partially approves Council recommendations.
- Implements regulations.

1.2 Purpose and Need

The purpose of this amendment is to modify the gag grouper annual catch limit (ACL) and annual catch target (ACT), based on the 2014 SEDAR 33 benchmark stock assessment, and to modify the recreational fishing season to provide enough fishing days for the recreational ACT in the Gulf of Mexico to be harvested. The need is to allow each sector to harvest gag at a level consistent with achieving optimum yield while preventing overfishing, and to address social and economic impacts of keeping the recreational gag grouper fishing season open to achieve optimum yield.

1.3 History of Management

The following summary describes management actions that affect the reef fish fishery in the Gulf. A matrix of gag management measures is presented in Table 1.3.1. A more detailed history of management follows.

Table 1.3.1 Gag History of Management Measures

Date	Size Limit	Recreational Bag Limit	Recreational Closed Season	Commercial Trip Limit	Commercial Closed Season	Commercial Quota	Recreational ACL	Other
1990	20" TL	5 grouper aggregate bag limit				9.2 mp ww swg quota		Longline boundary established
1991	"	"				9.9 mp ww swg quota		
1992	"	"				9.8 mp ww swg quota		
2000	24" TL commercial 22" TL recreational	"			Feb. 15 through Mar 14	"		Steamboat Lumps and Madison/Swanson time/area closures established
2000	24" TL commercial 22" TL recreational	"			"	"		
2005	"	"		Stepped trip limit: 10,000 lb SWG until 50% of quota reached 7,500 lb SWG until 75% of quota reached 5,500 SWG trip limit	"	"		
2006	"	"		6,000 lb SWG trip limit	"	"		Zero bag limit for captain and crew of for-hire vessels
2007	"	"	Feb 15 through Mar 14		"	"		Fish traps prohibited in Gulf EEZ
2008	"	"	"		"	"		Use of circle hooks, venting tools, and dehooking devices required.

2009	"	2 gag limit within 4 grouper aggregate	Feb 1 through Mar 31		"	1.32 mp gw gag	2.06 mp gw	Edges time/area closure established. Federally permitted vessels must adhere to the more restrictive of state/federal regulations when in state waters.
2010	"	"	"	Grouper/Tilefish IFQ system implemented	closed season discontinued	1.41 mp gw gag	2.14 mp gw	
2011	"	"	Jan 1 through Sep 15 Nov 16 through Dec 31			0.43 mp gw gag	2.20 mp gw	
2012	22" TL commercial 22" TL recreational	"	Jan 1 through Jun 30 Nov 1 through Dec 31			0.567 mp gw gag	1.031 mp gw	Gag rebuilding plan established.
2013	"	"	Jan 1 through Jun 30 Dec 3 through Dec 31			0.708 mp gw gag	1.287 mp gw	
2014	"	"	"			0.835 mp gw gag	1.519 mp gw	
2015 (if no ACTION)	"	"	"			0.939 mp gw gag	1.708 mp gw	

The Reef Fish Fishery Management Plan and environmental impact statement (EIS) were implemented in November 1984. The regulations, designed to rebuild declining reef fish stocks, included prohibitions on the use of fish traps, roller trawls, and powerhead-equipped spear guns within an inshore stressed area and directed the National Marine Fisheries Service (NMFS) to develop data reporting requirements in the reef fish fishery.

In July 1985, the Florida Marine Fisheries Commission (now Florida Fish and Wildlife Conservation Commission - FWCC) established a Florida state regulation to set a minimum size limit of 18 inches total length for red grouper, gag, yellowfin grouper, Nassau grouper, and jewfish (goliath grouper). In December 1986, the FWCC set a state recreational bag limit of five grouper per person per day, with an off-the-water possession limit of 10 per person, for any combination of groupers excluding rock hind and red hind.

Amendments

Amendment 1 (EA/RIR/IRFA), implemented in 1990, set objectives to stabilize long-term population levels of all reef fish species by establishing a survival rate of biomass into the stock of spawning age fish to achieve at least 20% spawning stock biomass per recruit (SSBR) by January 1, 2000. Among the grouper management measures implemented were:

- Set a 20-inch total length minimum size limit on red grouper, Nassau grouper, yellowfin grouper, black grouper, and gag;
- Set a 50-inch total length (TL) minimum size limit on goliath grouper (jewfish);
- Set a five-grouper recreational daily bag limit;
- Set an 11.0 million pound (mp) whole weight (ww) commercial quota for grouper, with the commercial quota divided into a 9.2 mp ww shallow-water grouper quota and a 1.8 mp ww deep-water grouper quota. Shallow-water grouper were defined as black grouper, gag, red grouper, Nassau grouper, yellowfin grouper, yellowmouth grouper, rock hind, red hind, speckled hind, and scamp. Scamp would be applied to the deep-water grouper quota once the shallow-water grouper quota was filled. Deep-water grouper were defined as misty grouper, snowy grouper, yellowedge grouper, warsaw grouper, and scamp once the shallow-water grouper quota was filled. Goliath grouper were not included in the quotas;
- Allowed a two-day possession limit for charter vessels and headboats on trips that extend beyond 24 hours, provided the vessel has two licensed operators aboard as required by the U.S. Coast Guard, and each passenger can provide a receipt to verify the length of the trip. All other fishermen fishing under a bag limit were limited to a single day possession limit;
- Established a framework procedure for specification of total allowable catch (TAC) to allow for annual management changes;
- Established a longline and buoy gear boundary at approximately the 50-fathom depth contour west of Cape San Blas, Florida, and the 20-fathom depth contour east of Cape San Blas, inshore of which the directed harvest of reef fish with longlines and buoy gear was prohibited, and the retention of reef fish captured incidentally in other longline operations (e.g., sharks) was limited to the recreational daily bag limit. Subsequent

changes to the longline/buoy boundary could be made through the framework procedure for specification of TAC;

- Limited trawl vessels (other than vessels operating in the unsorted groundfish fishery) to the recreational size and daily bag limits of reef fish;
- Established fish trap permits, allowing up to a maximum of 100 fish traps per permit holder;
- Prohibited the use of entangling nets for directed harvest of reef fish. Retention of reef fish caught in entangling nets for other fisheries was limited to the recreational daily bag limit;
- Established the fishing year to be January 1 through December 31;
- Extended the stressed area to the entire Gulf coast; and
- Established a commercial reef fish vessel permit.

Amendment 2 (EA/RIR/IRFA), implemented in 1990, prohibited the harvest of goliath grouper to provide complete protection for this species in federal waters in response to indications that the population abundance throughout its range was greatly depressed. The harvest prohibition was initially implemented by emergency rule.

Amendment 3 (EA/RIR/IRFA), implemented in July 1991, provided additional flexibility in the annual framework procedure for specifying TAC by allowing the target date for rebuilding an overfished stock to be changed. It revised the fishery management plan's (FMPs) primary objective from a 20% SSBR target to a 20% spawning potential ratio (SPR). The amendment also transferred speckled hind from the shallow-water grouper quota category to the deep-water grouper quota category.

Amendment 4 (EA/RIR/IRFA), implemented in May 1992, established a moratorium on the issuance of new commercial reef fish permits for a maximum period of three years. Amendment 4 also changed the time of year TAC is specified from April to August and included additional species in the reef fish management unit.

Amendment 5 (SEIS/RIR/IRFA), implemented in February 1994, established a fish trap endorsement for vessel permits of permittees who had logbook landings of reef fish from fish traps in 1991 or 1992 through November 19, 1992, and established a three-year moratorium during which those endorsements would be non-transferable. The amendment also required that traps must be returned to shore at the end of each fishing trip; that each trap must be individually buoyed, or if fished in a trawl (several traps connected by a submerged line) a floating buoy is required at each end of the trawl; and prohibited the possession of magnesium pop-up devices. The amendment also created a special management zone with gear restrictions off the Alabama coast, created a framework procedure for establishing future special management zones, required that all finfish except for oceanic migratory species be landed with head and fins attached, and closed the region of Riley's Hump (near Dry Tortugas, Florida) to all fishing during May and June to protect mutton snapper spawning aggregations.

Amendment 6 (EA/RIR/IRFA), implemented in June 1993, extended the provisions of an emergency rule for red snapper endorsements for the remainder of 1993 and 1994, and allowed

the red snapper trip limits for qualifying and non-qualifying permitted vessels to be changed under the framework procedure for specification of TAC.

Amendment 7 (EA/RIR/IRFA), implemented in February 1994, established reef fish dealer permitting and record keeping requirements, allowed transfer of fish trap permits and endorsements between immediate family members during the fish trap permit moratorium, and allowed transfer of other reef fish permits or endorsements in the event of the death or disability of the person who was the qualifier for the permit or endorsement. A proposed provision of this amendment that would have required permitted vessels to sell harvested reef fish only to permitted dealers was disapproved by the Secretary of Commerce and was not implemented.

Amendment 8 (EA/RIR/IRFA), proposed to be implemented in 1996, would have established an individual transferable quota system in the commercial red snapper fishery. A final rule was published in November 1995 to implement the system effective April 1, 1996, but the individual transferable quota system was not implemented. The Sustainable Fisheries Act of 1996 repealed the system and placed a moratorium on any new individual fishing quota program until after October 1, 2000.

Amendment 9 (EA/RIR/IRFA), implemented in July 1994, provided for collection of red snapper landings and eligibility data from commercial fishermen for the years 1990 through 1992 to qualify for shares under the individual transferable quota system in **Amendment 8**. This amendment also extended the reef fish permit moratorium and red snapper endorsement system through December 31, 1995, in order to continue the existing interim management regime until longer term measures could be implemented.

Rejected Amendment 10 was developed in 1994 but was not submitted to NMFS. **Amendment 5** had established a deadline to qualify for fish trap endorsements of November 19, 1992, but the final rule implementing the endorsements and three-year moratorium did not take effect until February 7, 1994. In the interim, NMFS continued to process applications for fish trap permits, and neither NMFS nor the Council provided public notification of the impending moratorium. On February 7, 1994, 421 vessels that had been issued fish trap tags on or before February 7 became ineligible to continue in the fish trap fishery, of which 54 of those vessels had fish trap landings between November 19, 1992 and February 7, 1994. Amendment 10 was drafted to consider changing the endorsement eligibility requirement to allow those vessels with trap landings through February 7, 1994 to qualify. However, in July 1994 the Council voted to reject the amendment.

Amendment 11 (EA/RIR/IRFA) was partially approved by NMFS and implemented in January 1996. The six approved provisions were: (1) limit sale of Gulf reef fish by permitted vessels to permitted reef fish dealers; (2) require that permitted reef fish dealers purchase reef fish caught in Gulf federal waters only from permitted vessels; (3) allow transfer of reef fish permits and fish trap endorsements in the event of death or disability; (4) implement a new reef fish permit moratorium for no more than five years or until December 31, 2000, while the Council considers limited access for the reef fish fishery; (5) allow permit transfers to other persons with vessels by vessel owners (not operators) who qualified for their reef fish permit; and, (6) allow a one-time transfer of existing fish trap endorsements to permitted reef fish vessels whose owners have

landed reef fish from fish traps in federal waters, as reported on logbooks received by the Science and Research Director of NMFS from November 20, 1992 through February 6, 1994. NMFS disapproved a proposal to redefine optimum yield from 20% SPR (the same level as overfishing) to an SPR corresponding to a fishing mortality rate of $F_{0.1}$ until an alternative operational definition that optimizes ecological, economic, and social benefits to the Nation could be developed. In April 1997, the Council resubmitted the optimum yield definition with a new proposal to redefine optimum yield as 30% SPR. The resubmission document was disapproved by NMFS.

Amendment 12 (EA/RIR/IRFA), implemented in January 1997, reduced the bag limit for greater amberjack to 1 fish and established a 20-fish aggregate bag limit for reef fish species for which there is no other bag limit.

Amendment 13 (EA/RIR/IRFA), implemented in September 1996, further extended the red snapper endorsement system through the remainder of 1996 and, if necessary, through 1997, in order to give the Council time to develop a permanent limited access system that was in compliance with the new provisions of the Magnuson-Stevens Act.

Amendment 14 (EA/RIR/IRFA), implemented in March and April 1997, provided for a ten-year phase-out for the fish trap fishery; allowed transfer of fish trap endorsements for the first two years and thereafter only upon death or disability of the endorsement holder, to another vessel owned by the same entity, or to any of the 56 individuals who were fishing traps after November 19, 1992 and were excluded by the moratorium; and prohibited the use of fish traps west of Cape San Blas, Florida. The amendment also provided the Regional Administrator (RA) of NMFS with authority to reopen a fishery prematurely closed before the allocation was reached, and modified the provisions for transfer of commercial reef fish vessel permits. In addition, the amendment prohibited the harvest or possession of Nassau grouper in the Gulf Exclusive Economic Zone (EEZ), consistent with similar prohibitions in Florida state waters, the south Atlantic EEZ, and the Caribbean EEZ.

Amendment 15 (EA/RIR/IRFA), implemented in January 1998, prohibited harvest of reef fish from traps other than permitted reef fish traps, stone crab traps, or spiny lobster traps, and closed the commercial greater amberjack fishery Gulf-wide during the months of March, April, and May.

Amendment 16A (EA/RIR/IRFA), submitted to NMFS in June 1998, was partially approved and implemented on January 10, 2000. The approved measures provided: (1) the possession of reef fish exhibiting the condition of trap rash on board any vessel with a reef fish permit that is fishing spiny lobster or stone crab traps is prima facie evidence of illegal trap use and is prohibited except for vessels possessing a valid fish trap endorsement; (2) NMFS establish a system design, implementation schedule, and protocol to require implementation of a vessel monitoring system (VMS) for vessels engaged in the fish trap fishery, with the cost of the vessel equipment, installation, and maintenance to be paid or arranged by the owners as appropriate; and, (3) fish trap vessels submit trip initiation and trip termination reports. Prior to implementing this additional reporting requirement, there will be a one-month fish trap

inspection/compliance/education period, at a time determined by the RA and published in the *Federal Register*. During this window of opportunity, fish trap fishermen will be required to have an appointment with NMFS law enforcement for the purpose of having their trap gear, permits, and vessels available for inspection. The disapproved measure was a proposal to prohibit fish traps south of 25.05 degrees north latitude beginning February 7, 2001. The status quo 10-year phase-out of fish traps in areas in the Gulf EEZ was therefore maintained.

Amendment 16B (EA/RIR/IRFA), implemented in November 1999 set a recreational daily bag limit of one speckled hind and one warsaw grouper per vessel, with the prohibition on the sale of these species when caught under the bag limit.

Generic Sustainable Fisheries Act Amendment (EA/RIR/IRFA), partially approved and implemented in November 1999, set the Maximum Fishing Mortality Threshold (MFMT) for most reef fish stocks at $F_{30\% SPR}$. Estimates of maximum sustainable yield, Minimum Stock Size Threshold (MSST), and optimum yield were disapproved because they were based on SPR proxies rather than biomass based estimates.

Amendment 17 (EA/RIR/IRFA), was submitted to NMFS in September 1999, and was implemented on August 10, 2000. This amendment extended the commercial reef fish permit moratorium for another five years, from its previous expiration date of December 31, 2000 to December 31, 2005, unless replaced sooner by a comprehensive controlled access system. The purpose of the moratorium is to provide a stable environment in the fishery necessary for evaluation and development of a more comprehensive controlled access system for the entire commercial reef fish fishery.

Amendment 18A (EA/RIR/IRFA) was implemented on September 8, 2006, except for VMS requirements which were implemented May 6, 2007. Amendment 18A addresses the following: (1) prohibits vessels from retaining reef fish caught under recreational bag/possession limits when commercial quantities of Gulf reef fish are aboard, (2) adjusts the maximum crew size on charter vessels that also have a commercial reef fish permit and a United States Coast Guard certificate of inspection (COI) to allow the minimum crew size specified by the COI when the vessel is fishing commercially for more than 12 hours, (3) prohibits the use of reef fish for bait except for sand perch or dwarf sand perch, (4) requires devices and protocols for the safe release in incidentally caught endangered sea turtle species and smalltooth sawfish, (5) updates the TAC procedure to incorporate the Southeast Data Assessment and Review (SEDAR) assessment methodology, (6) changes the permit application process to an annual procedure and simplifies income qualification documentation requirements, and (7) requires electronic VMS aboard vessels with federal reef fish permits, including vessels with both commercial and charter vessel permits.

Amendment 19 (FSEIS/RIR/IRFA), also known as the Generic Amendment Addressing the Establishment of the Tortugas Marine Reserves, or Generic Essential Fish Habitat (EFH) Amendment 2, was implemented on August 19, 2002. This amendment establishes two marine reserves off the Dry Tortugas where fishing for any species and anchoring by fishing vessels is prohibited.

Amendment 20 (EA/RIR/IRFA), implemented July 2003, established a three-year moratorium on the issuance of charter and headboat vessel permits in the recreational for-hire reef fish and coastal migratory pelagic fisheries in the Gulf EEZ.

Amendment 21 (EA/RIR/IRFA), implemented in July 2003, continued the Steamboat Lumps and Madison-Swanson reserves for an additional six years, until June 2010. In combination with the initial four-year period (June 2000-June 2004), this allowed a total of ten years in which to evaluate the effects of these reserves and to provide protection to a portion of the gag spawning aggregations.

Amendment 22 (SEIS/RIR/IRFA), implemented July 5, 2005, specified bycatch reporting methodologies for the reef fish fishery.

Amendment 23 (SEIS/RIR/IRFA), implemented July 8, 2005, established a rebuilding plan for vermilion snapper, including an 11 inch total length minimum size limit, a 10-fish vermilion snapper bag limit within the 20-reef fish aggregate bag limit, and an April 22 through May 31 closed season for the commercial fishery.

Amendment 24 (EA/RIR/IRFA), implemented on August 17, 2005, replaced the commercial reef fish permit moratorium that was set to expire on December 31, 2005 with a permanent limited access system.

Amendment 25 (SEIS/RIR/IRFA), implemented on June 15, 2006, replaced the reef fish for-hire permit moratorium that expired in June 2006 with a permanent limited access system.

Amendment 26 (SEIS/RIR/IRFA), implemented on January 1, 2007, established an individual fishing quota (IFQ) system for the commercial red snapper fishery.

Amendment 27 (SEIS/RIR/IRFA), implemented February 28, 2008, except for reef fish bycatch reduction measures that became effective on June 1, 2008. This amendment addressed overfishing and stock rebuilding for red snapper. It also required the use of non-stainless steel circle hooks when using natural baits to fish for Gulf reef fish effective June 1, 2008, and required the use of venting tools and dehooking devices when participating in the commercial or recreational reef fish fisheries effective June 1, 2008.

Amendment 28 is currently under development. It is intended to address grouper allocation issues.

Amendment 29 (EA/RIR/IRFA), implemented January 1, 2010, established an IFQ system for the commercial grouper and tilefish fisheries.

Amendment 30A (SEIS/RIR/IRFA), implemented August 2008, was developed to stop overfishing of gray triggerfish and greater amberjack. The amendment established ACLs and accountability measures (AMs) for greater amberjack and gray triggerfish. For greater amberjack, it modified the rebuilding plan, increased the recreational minimum size limit, set a zero bag limit for captain and crew of for-hire vessels, and set commercial and recreational

quotas. For gray triggerfish, it increased the commercial and recreational minimum size limit and set a commercial quota.

Amendment 30B (FEIS/RIR/IRFA), implemented May 2009, proposed to end overfishing of gag, revise red grouper management measures as a result of changes in the stock condition, establish ACLs and AMs for gag and red grouper, manage shallow-water grouper to achieve optimum yield, and improve the effectiveness of federal management measures. The amendment (1) defined the gag minimum stock size threshold and optimum yield; (2) set interim allocations of gag and red grouper between recreational and commercial fisheries; (3) made adjustments to the gag and red grouper TACs to reflect the current status of these stocks; (4) established ACLs and AMs for the commercial and recreational red grouper fisheries, commercial and recreational gag fisheries, and commercial aggregate shallow-water grouper fishery; (5) adjusted recreational grouper bag limits and seasons; (6) adjusted commercial grouper quotas; (7) reduced the red grouper commercial minimum size limit; (8) replaced the one month commercial grouper closed season with a four month seasonal area closure at the Edges, a 390 square nautical mile area in the dominant gag spawning grounds; (9) eliminated the end date for the Madison-Swanson and Steamboat Lumps marine reserves; and (10) required that vessels with federal commercial or charter reef fish permits comply with the more restrictive of state or federal reef fish regulations when fishing in state waters.

Amendment 31 (FEIS/RIR/IRFA), implemented May 26, 2010, established additional restrictions on the use of bottom longline gear in the eastern Gulf of Mexico in order to reduce bycatch of endangered sea turtles, particularly loggerhead sea turtles. The amendment (1) prohibited the use of bottom longline gear shoreward of a line approximating the 35-fathom contour from June through August; (2) reduced the number of longline vessels operating in the fishery through an endorsement provided only to vessel permits with a demonstrated history of landings, on average, of at least 40,000 pounds of reef fish annually with fish traps or longline gear during 1999-2007; and (3) restricted the total number of hooks that may be possessed onboard each reef fish bottom longline vessel to 1,000, only 750 of which may be rigged for fishing. The boundary line was initially moved from 20 to 50 fathoms by emergency rule effective May 18, 2009. That rule was replaced on October 16, 2009 by a rule under the Endangered Species Act moving the boundary to 35 fathoms and implementing the maximum hook provisions.

Amendment 32 (EIS/RIR/RFA), implemented May 26, 2010, established a rebuilding plan for gag that would rebuild the stock in 10 years or less. ACL and ACT for gag and red grouper were set through 2015 based on the procedure used in Amendment 30B. The stock-ACL was set at the yield corresponding to the annual estimate of maximum sustainable yield, and the stock-ACT was set at the yield corresponding to optimum yield. The stock ACL and ACT were then allocated to the recreational and commercial sectors respectively using the allocations adopted in Amendment 30B. The commercial gag ACT was reduced by an additional 14% to account for dead discards as a result of insufficient gag IFQ shares that had not been accounted for in the assessment. This adjusted ACT became the commercial gag quota. In addition, the amendment revised the use of multi-use IFQ shares and reduced the commercial gag minimum size limit to 22 inches total length. The amendment set the recreational gag season as July 1 through October 31, with a 22 inch total length minimum size limit and a 2-fish gag limit within the 4-fish

aggregate grouper bag limit. The amendment also implemented overage adjustments for the gag recreational sector while the stock was under a rebuilding plan.

Proposed **Amendment 33** considered the establishment of an IFQ program for additional reef fish species. A scoping document was prepared, but at the April 2012 Council meeting the Council voted to cease working on the document and requested that supporters of the proposed IFQ program contact the council to provide a rationale for why the program should go forward.

Amendment 34 (EA/RIR/RFA) to the Reef Fish Fishery Management Plan was approved by the Gulf of Mexico Fishery Management Council in February 2012, and implemented November 19, 2012. The amendment addresses crew size limits for dually permitted vessels. Dually permitted vessels are vessels with both a charter for-hire permit and a commercial reef fish permit. The amendment eliminates the earned income qualification requirement for the renewal of commercial reef fish permits and increases the maximum crew size from three to four.

Amendment 35 (EA/RIR/RFA) was implemented December 13, 2012. A 2009 greater amberjack stock assessment update showed that the stock remained overfished and continued to experience overfishing. This amendment set the ACL at 1,780,000 pounds ww and established an ACT of 1,539,000 pounds ww. The amendment also established a 2,000-pound commercial trip limit.

Proposed **Amendment 36**, currently under development, proposes modifications to the red snapper IFQ program.

Amendment 37 (EA/RIR/RFA) was implemented May 9, 2013 for the setting of gray triggerfish ACL and ACT, and June 10, 2013 for other gray triggerfish management measures. It modified the gray triggerfish rebuilding plan based on a 2011 gray triggerfish update assessment, which determined that the stock was not rebuilding on target. This amendment reduced the commercial and recreational annual catch limits to 64,100 and 241,200 pounds ww respectively, and reduced the commercial and recreational annual catch targets to 60,900 and 217,100 pounds ww respectively. To meet the necessary reductions, a fixed closed season from June 1 through July 31 was established for the commercial and recreational sectors. In addition, this amendment established a commercial trip limit of 12 gray triggerfish, and a recreational bag limit of 2 gray triggerfish per angler bag limit within the 20 reef fish aggregate. The recreational accountability measures were modified by establishing an in-season closure authority based on the recreational annual catch target, and an overage adjustment to reduce the gray triggerfish annual catch limit and annual catch target by the amount of the overage. This overage adjustment applies only while gray triggerfish is overfished.

Amendment 38 (EA/RIR/RFA) was implemented March 1, 2013. It revised the post-season recreational accountability measure that reduces the length of the recreational season for all shallow-water grouper in the year following a year in which the ACL for gag or red grouper is exceeded. The modified accountability measure reduces the recreational season of only the species for which the ACL was exceeded. Additionally, the reef fish framework procedure was modified to include the addition of accountability measures to the list of items that can be changed through the standard framework procedure. This allows for faster implementation of

measures designed to maintain harvest at or below the ACL. General language was added to the framework to accommodate future changes in naming of the Council's advisory committees and panels.

Proposed **Amendment 39**, currently under development, proposes the establishment of a regional management program for recreational harvest of red snapper.

Amendment 40 (EIS/RIR/RFA) was submitted to NMFS on December 19, 2014 and is currently under review. It proposes to separate the recreational red snapper sector into private angling and federal for-hire components. Each component would have an allocation of the recreational red snapper quota. Under the preferred alternative, the private angling component would receive 57.7% of the recreational quota, and the federal for-hire component would receive 42.3% of the quota. The provisions of this amendment would sunset three years after implementation.

Regulatory Amendments, Emergency and Interim Rules

A July 1991 regulatory amendment, implemented November 12, 1991, provided a one-time increase in the 1991 quota for shallow-water grouper from 9.2 mp to 9.9 mp to provide the commercial fishery an opportunity to harvest 0.7 mp that was not harvested in 1990 [56 FR 58188].

A November 1991 regulatory amendment, implemented June 22, 1992, raised the 1992 commercial quota for shallow-water grouper to 9.8 mp after a red grouper stock assessment indicated that the red grouper SPR was substantially above the Council's minimum target of 20% [57 FR 21751].

An August 1999 regulatory amendment, implemented June 19, 2000, increased the commercial size limit for gag and black grouper from 20 to 24 inches TL, increased the recreational size limit for gag from 20 to 22 inches TL, prohibited commercial sale of gag, black, and red grouper each year from February 15 to March 15 (during the peak of gag spawning season), and established two marine reserves (Steamboat Lumps and Madison-Swanson) that are closed year-round to fishing for all species under the Council's jurisdiction [65 FR 31827].

An emergency rule, published February 15, 2005, established a series of trip limits for the commercial grouper fishery in order to extend the commercial fishing season. The trip limit was initially set at 10,000 pounds gutted-weight (gw). If on or before August 1 the fishery is estimated to have landed more than 50% of either the shallow-water grouper or the red grouper quota, then a 7,500 pound gw trip limit takes effect; and if on or before October 1 the fishery is estimated to have landed more than 75% of either the shallow-water grouper or the red grouper quota, then a 5,500 pound gw trip limit takes effect [70 FR 8037].

An interim rule, published July 25, 2005, proposed for the period August 9, 2005 through January 23, 2006, a temporary reduction in the recreational red grouper bag limit from two to one fish per person per day, in the aggregate grouper bag limit from five to three grouper per day, and a closure of the recreational fishery, from November – December 2005, for all grouper

species [70 FR 42510]. These measures were proposed in response to an overharvest of the recreational allocation of red grouper under the Secretarial Amendment 1 red grouper rebuilding plan. The closed season was applied to all grouper in order to prevent effort shifting from red grouper to other grouper species and an increased bycatch mortality of incidentally caught red grouper. However, the rule was challenged by organizations representing recreational fishing interests. On October 31, 2005, a U.S. District Court judge ruled that an interim rule to end overfishing can only be applied to the species that is undergoing overfishing. Consequently, the reduction in the aggregate grouper bag limit and the application of the closed season to all grouper were overturned. The reduction in the red grouper bag limit to one per person and the November-December 2005 recreational closed season on red grouper only were allowed to proceed. The approved measures were subsequently extended through July 22, 2006 by a temporary rule extension published January 19, 2006 [71 FR 3018].

An October 2005 regulatory amendment, implemented January 1, 2006, established a 6,000 pound gw aggregate deep-water grouper and shallow-water grouper trip limit for the commercial grouper fishery, replacing the 10,000/7,500/5,500 step-down trip limit that had been implemented by emergency rule for 2005 [70 FR 77057].

A March 2006 regulatory amendment (GMFMC 2005a), implemented July 15, 2006, established a recreational red grouper bag limit of one fish per person per day as part of the five grouper per person aggregate bag limit, and prohibited for-hire vessel captains and crews from retaining bag limits of any grouper while under charter [71 FR 34534]. An additional provision established a recreational closed season for red grouper, gag and black grouper from February 15 to March 15 each year (matching a previously established commercial closed season) beginning with the 2007 season.

An interim rule was implemented on January 1, 2009, at the request of the Council to reduce overfishing of gag pending implementation of permanent rules under Amendment 30B. Measures in the temporary rule: (1) established a two-fish gag recreational bag limit (recreational grouper aggregate bag limit remained at five fish); (2) adjusted the recreational closed season for gag to February 1 through March 31 (the recreational closed season for red and black groupers remained February 15 to March 15); (3) established a 1.32 mp commercial quota for gag; and (4) required operators of federally permitted Gulf commercial and for-hire reef fish vessels to comply with the more restrictive of federal or state reef fish regulations when fishing in state waters for red snapper, greater amberjack, gray triggerfish, and gag [71 FR 66878].

An emergency rule was implemented May 18, 2009 through October 28, 2009 prohibiting the use of bottom longline gear to harvest reef fish east of 85°30' W longitude in the portion of the EEZ shoreward of the coordinates established to approximate a line following the 50-fathom (91.4-m) contour as long as the 2009 deep-water grouper and tilefish quotas are unfilled. After the quotas have been filled, the use of bottom longline gear to harvest reef fish in water of all depths east of 85°30' W longitude are prohibited [74 FR 20229].

A rule under the Endangered Species Act was implemented October 16, 2009 that prohibits bottom longlining for Gulf reef fish east of 85°30' W longitude (near Cape San Blas, Florida) shoreward of the 35-fathom depth contour, and it restricts the number of hooks on board to 1,000

hooks per vessel with no more than 750 hooks being fished or rigged for fishing at any given time. The rule replaced the 50 fathom boundary emergency rule in order to relieve social and economic hardship on longline fishermen who were prevented from fishing for shallow-water grouper by the emergency rule, and to keep fishing restrictions consistent with the Amendment 31 actions in place while proposed Amendment 31 is reviewed. The rule was implemented after a Biological Opinion was completed by NMFS on the continued authorization of the Gulf reef fish fishery, as managed under the Reef Fish FMP. That opinion, which considered the proposed actions in Amendment 31, concluded that the continued authorization of the Gulf reef fish fishery was likely to adversely affect sea turtles and sawfish, but was not likely to jeopardize the continued existence of any listed species. An Incidental Take Statement was issued specifying the amount and extent of anticipated take on a three-year basis, along with reasonable and prudent measures and associated terms and conditions deemed necessary and appropriate to minimize the impact of these takes [74 FR 53889].

In response to an uncontrolled oil spill resulting from the explosion on April 20, 2010 and subsequent sinking of the Deepwater Horizon oil rig approximately 36 nautical miles (41 statute miles) off the Louisiana coast, NMFS issued an emergency rule to temporarily close a portion of the Gulf of Mexico EEZ to all fishing [75 FR 24822]. The initial closed area extended from approximately the mouth of the Mississippi River to south of Pensacola, Florida and covered an area of 6,817 square statute miles. The coordinates of the closed area were subsequently modified periodically in response to changes in the size and location of the area affected by the spill. At its largest size on June 1, 2010, the closed area covered 88,522 square statute miles, or approximately 37 percent of the Gulf of Mexico EEZ. This closure was implemented for public safety.

An August 2010 regulatory amendment, implemented January 1, 2011, reduced the TAC for red grouper from 7.57 mp gw to 5.68 mp gw, based on the optimum yield projection from a March 2010 re-run of the projections from the 2009 red grouper update assessment. Although the stock was found to be neither overfished nor undergoing overfishing, the update assessment found that spawning stock biomass levels had decreased since 2005, apparently due to an episodic mortality even in 2005 which appeared to be related to an extensive red tide that year. Based on the 76%:34% commercial and recreational allocation of red grouper, the commercial quota was reduced from 5.75 to 4.32 mp gw, and the recreational allocation was reduced from 1.82 to 1.36 mp gw. No changes were made to the recreational fishing regulations as the recreational landings were already below the adjusted allocation in recent years.

On August 11, 2009, the Council was notified by NMFS that the Gulf of Mexico gag stock was both overfished and undergoing overfishing based on the results of the 2009 update stock assessment. Because management measures from Amendment 32 which address these issues could not be completed in time, an interim rule was published on December 1, 2010 [75 FR 74654], to reduce gag landings consistent with ending overfishing. This interim rule implemented conservative management measures while a rerun of the update stock assessment was being completed. At issue was the treatment of dead discarded fish in the assessment. The rule reduced the commercial quota to 100,000 pounds gutted weight, suspended the use of red grouper multi-use individual fishing quota allocation so it would not be used to harvest gag, and to temporarily halted the recreational harvest of gag until recreational fishing management

measures being developed in Amendment 32 could be implemented to allow harvest at the appropriate levels.

The gag 2009 update stock assessment was rerun in December 2010 addressing the problems with discards identified earlier in 2010. This assessment was reviewed in January 2011 by the Council's Scientific and Statistical Committee and presented to the Council at their February 2011 meeting. The assessment indicated that the gag commercial quota implemented in the December 1, 2010, interim rule could be increased and that a longer recreational season could be implemented. In response, the Council requested an interim rule while they continued to work on long-term measures including a gag rebuilding plan in Amendment 32. The interim rule set the commercial gag quota at 430,000 pounds gutted weight (including the 100,000 pounds previously allowed) for the 2011 fishing year, and temporarily suspended the use of red grouper multi-use IFQ allocation so it cannot be used to harvest gag. It also set a two-month recreational gag fishing season from September 16 through November 15. This temporary rule was effective from June 1, 2011 through November 27, 2011, and was extended for another 186 days or until Amendment 32 was implemented [76 FR 31874].

This August 2011 Red Grouper Regulatory Amendment, implemented November 2, 2011, increased the 2011 red grouper TAC to 6.88 million pounds and allowed the TAC to increase from 2012 to 2015. The increases in TAC were contingent upon the TAC not being exceeded in previous years. If TAC is exceeded in a given year, it will remain at that year's level until the effects of the overage are evaluated by the Scientific and Statistical Committee. The amendment also increased the red grouper bag limit to 4 fish per person.

A March 2012 regulatory amendment, implemented in May 2012, set the 2012 and 2013 quotas for commercial and recreational red snapper harvest. The quotas could be increased because a recent stock assessment showed that overfishing has ended. The red snapper allowable catch increased from 7.185 mp ww weight in 2011 to the following:

	2012	2013
Overall Quota	8.080 mp ww	8.690 mp ww
Commercial Allocation	(51%) 4.121 mp ww	4.432 mp ww
Recreational Allocation	(49%) 3.959 mp ww	4.258 mp ww

If the 2012 overall quota was exceeded, the 2013 quota increase would require further scientific review and potential modification by the Gulf of Mexico Fishery Management Council. The regulatory amendment also eliminated the fixed recreational red snapper closed season of October 1 – December 31. By eliminating the closure date, NOAA Fisheries Service can reopen the recreational harvest for red snapper if any remaining quota is available, without the delay of additional rulemaking.

A December 2012 framework action (GMFMC 2012), implemented July 5, 2013, revised the recreational gag open season. It would still open on July 1, but instead of closing on October 31 it would close on the date when the ACT is projected to be reached. This framework action also modified the February 1 through March 31 recreational closed season on shallow-water grouper to apply only on waters beyond the 20-fathom boundary. In waters shoreward of 20 fathoms,

recreational shallow-water grouper fishing would remain open except for gag, which is subject to a separate closed season. This modified closed season took effect with the 2014 calendar year.

A March 2013 red snapper framework action increased the red snapper quotas from 4.121 mp commercial and 3.959 mp recreational to 4.315 mp commercial and 4.145 mp recreational. This action was projected to result in a 27-day recreational season, beginning June 1.

An April 2013 framework action established a 10-vermilion snapper recreational bag limit within the 20-reef fish aggregate, increased the Gulf yellowtail snapper ACL from 725,000 lb round weight to 901,125 lb round weight, and removed the requirement to have onboard and use venting tools when releasing reef fish. It was effective September 3, 2013.

A June 2013 framework action modified the frequency of headboat reporting to be on a weekly basis (or intervals shorter than a week if notified by the SRD) via electronic reporting, and due by 11:59 p.m., local time, the Sunday following a reporting week. If no fishing activity occurs during a reporting week, an electronic report so stating must be submitted for that week. It was effective March 14, 2014.

A July 2013 framework action further increased the 2013 quotas for commercial and recreational harvest of red snapper in the Gulf of Mexico based on updated landings estimates, and set the timing for a supplemental recreational fishing season for red snapper. The updated quotas were to and overall 11.0 mp ww for 2013. The commercial and recreational sector quotas were based on the current 51% commercial (5.610 mp) and 49% recreational (5.390 mp) allocation of red snapper.

A framework action submitted to NMFS in October 2014 was approved for implementation on April 20, 2015. The action establishes a 2015 recreational red snapper annual catch target (ACT) by applying a 20% buffer to the recreational quota. The framework action also establishes a recreational quota overage adjustment where, while red snapper is under a rebuilding program, if the recreational red snapper quota is exceeded, the overage would be deducted from the recreational red snapper quota in the following season unless the best scientific information available determines that a greater, lesser, or no overage adjustment is necessary. The ACT would also be adjusted to maintain the established percent buffer.

A framework action submitted to NMFS in December 2014 proposes a reduction in the recreational red grouper bag limit to 2 fish per day within the 4-fish aggregate grouper bag limit. It also proposes to eliminate the accountability measure that automatically reduced the red grouper bag limit in the subsequent season if the Recreational C is exceeded in the current season. This framework action is currently under review by NMFS.

Secretarial Amendments

Secretarial Amendment 1 established a rebuilding plan, a 5.31 mp gw commercial quota, and a 1.25 mp gw recreational target catch level for red grouper. The amendment also reduced the commercial quota for shallow-water grouper from 9.35 to 8.8 mp gw and reduced the commercial quota for deep-water grouper from 1.35 to 1.02 mp gw. The recreational bag limit

for red grouper was reduced to two fish per person per day. Rulemaking from this amendment was effective July 15, 2004 [69 FR 33315]. In this amendment bottom longlines were considered for movement out to 50 fathoms which had also been considered under Reef Fish Amendment 18.

Secretarial Amendment 2 was approved on July 3, 2003 [68 FR 39900] and specified a greater amberjack maximum sustainable yield as the yield associated with $F_{30\% SPR}$ (proxy for F_{MSY}) when the stock is at equilibrium, optimum yield as the yield associated with an $F_{40\% SPR}$ when the stock is at equilibrium, maximum fishing mortality threshold equal to $F_{30\% SPR}$, and minimum stock size threshold equal to $(1-M)*B_{MSY}$ or 75% of B_{MSY} . It also set a rebuilding plan limiting the greater amberjack harvest to 2.9 MP for 2003-2005, 5.2 MP for 2006-2008, 7.0 MP for 2009-2011, and 7.9 mp for 2012. This was expected to rebuild the stock in seven years. Regulations implemented in 1997 and 1998 (Amendments 12 and 15) were deemed sufficient to comply with the rebuilding plan so no new regulations were implemented. No rulemaking was developed from this amendment

Control Date Notices

Control date notices are used to inform fishermen that a license limitation system or other method of limiting access to a particular fishery or fishing method is under consideration. If a program to limit access is established, anyone not participating in the fishery or using the fishing method by the published control date may be ineligible for initial access to participate in the fishery or to use that fishing method. However, a person who does not receive an initial eligibility may be able to enter the fishery or fishing method after the limited access system is established by transfer of the eligibility from a current participant, provided the limited access system allows such transfer. Publication of a control date does not obligate the Council to use that date as an initial eligibility criteria. A different date could be used, and additional qualification criteria could be established. The announcement of a control date is primarily intended to discourage entry into the fishery or use of a particular gear based on economic speculation during the Council's deliberation on the issues. The following summarizes control dates that have been established for the Reef Fish FMP. A reference to the full *Federal Register* notice is included with each summary.

November 1, 1989 – Anyone entering the commercial reef fish fishery in the Gulf and South Atlantic after November 1, 1989, may not be assured of future access to the reef fish resource if a management regime is developed and implemented that limits the number of participants in the fishery [54 FR 46755].

November 18, 1998 – The Council is considering whether there is a need to impose additional management measures limiting entry into the recreational-for-hire (i.e., charter vessel and headboat) fisheries for reef fish and coastal migratory pelagic fish in the EEZ of the Gulf and, if there is a need, what management measures should be imposed. Possible measures include the establishment of a limited entry program to control participation or effort in the recreational-for-hire fisheries for reef fish and coastal migratory pelagic [63 FR 64031] (In Amendment 20 to the Reef Fish FMP, a qualifying date of March 29, 2001, was adopted).

July 12, 2000 – The Council is considering whether there is a need to limit participation by gear type in the commercial reef fish fisheries in the exclusive economic zone of the Gulf and, if there is a need, what management measures should be imposed to accomplish this. Possible measures include modifications to the existing limited entry program to control fishery participation, or effort, based on gear type, such as a requirement for a gear endorsement on the commercial reef fish vessel permit for the appropriate gear. Gear types which may be included are longlines, buoy gear, handlines, rod-and-reel, bandit gear, spear fishing gear, and powerheads used with spears [65 FR 42978].

October 15, 2004 – the Council is considering the establishment of an individual fishing quota program to control participation or effort in the commercial grouper fisheries of the Gulf. If an individual fishing quota program is established, the Council is considering October 15, 2004, as a possible control date regarding the eligibility of catch histories in the commercial grouper fishery [69 FR 67106].

December 31, 2008 – the Council voted to establish a control date for all Gulf commercial reef fish vessel permits. The control date will allow the Council to evaluate fishery participation and address any level of overcapacity. The establishment of this control date does not commit the Council or NMFS to any particular management regime or criteria for entry into this fishery. Fishermen would not be guaranteed future participation in the fishery regardless of their entry date or intensity of participation in the fishery before or after the control date under consideration.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 - Modifications to the Gag Grouper Annual Catch Limits and Annual Catch Targets

All weights are in million pounds gutted weight. The stock ACL is allocated 61% recreational, 39% commercial.

Alternative 1. No Action. Maintain the acceptable biological catch (ABC), annual catch limit (ACL), and annual catch target (ACT) at the existing 2015 level.

Year	ABC/Stock ACL	Recreational		Commercial	
		ACL	ACT	ACL	ACT/Quota
2015+	3.12	1.903	1.708	1.217	0.939

Alternative 2. Set ACL and ACT based upon SSC recommendations for ABC, 2015-2017. Set the stock ACL = ABC for each year. Set the recreational ACT buffer at 8% based on the ACL/ACT control rule, and do not use a commercial ACT.

Year	ABC/Stock ACL	Recreational		Commercial	
		ACL	ACT	ACL/Quota	ACT
2015	5.21	3.18	2.93	2.03	none
2016	4.75	2.90	2.67	1.85	none
2017+	4.57	2.79	2.57	1.78	none

Alternative 3. Set ACL and ACT based upon SSC recommendations for ABC, 2015-2017. Set a constant ACL at the lowest ABC recommended by the SSC. Set the recreational ACT buffer at 8% based on the ACL/ACT control rule, and do not use a commercial ACT.

Year	ABC/Stock ACL	Recreational		Commercial	
		ACL	ACT	ACL/Quota	ACT
2015+	4.57	2.79	2.57	1.78	none

Alternative 4. Set ACL and ACT based upon equilibrium optimum yield. Set the recreational ACT buffer at 8% based on the ACL/ACT control rule, and do not use a commercial ACT.

Year	ABC/Stock ACL	Recreational		Commercial	
		ACL	ACT	ACL/Quota	ACT
2015+	4.46	2.72	2.50	1.74	none

Discussion: The Council's Scientific and Statistical Committee (SSC) reviewed the SEDAR 33 gag benchmark assessment (SEDAR 33 2014) in June 2014. Based on the results of the assessment, the SSC concluded that the gag stock was neither overfished nor undergoing overfishing. Therefore, a rebuilding plan is no longer needed. **Alternatives 2 and 3** are based on maintaining the stock at or above its maximum sustainable yield (MSY) level, while

Alternative 4 is based on maintaining the stock at or above its optimum yield (OY) level. The OY is defined as the yield when fishing at a fishing mortality rate equal to 75% of the MSY fishing rate. An analysis of fishing at OY indicates that, at equilibrium, stocks will produce between 95% and 98% of the MSY yield while maintaining the spawning stock biomass level between 127% and 131% of the MSY biomass level (Restrepo et al. 1998).

In **Alternative 1**, the ACLs and ACTs were established under Amendment 32 (GMFMC 2011a), prior to the adoption of the Generic ACL/AM Amendment (GMFMC 2011b), and are based partially on a different procedure than used today which was established in Amendment 30B (GMFMC 2008). Under the Amendment 30B procedure, the sector-ACL was set at the sector-specific allocation of ABC, as is done today. The ACT was set at the sector-specific allocation of the yield corresponding to F_{OY} . Both sectors received an ACL and an ACT. The grouper-tilefish IFQ program began in 2010. Due to the limited amount of gag IFQ allocation available in the initial years of the gag rebuilding plan, gag bycatch and discards from fishermen targeting red grouper or other fish were considered to be higher than assumed in the assessment projections. Consequently, Amendment 32 (implemented in 2011) added an additional 14% buffer to the commercial ACT to explicitly account for dead discards by the commercial sector that were not accounted for in the assessment analyses. This resulted in the commercial ACT shown in **Alternative 1**. This ACT is also the current commercial quota.

Alternatives 2, 3, and 4 do not include a commercial ACT. Unlike the earlier assessment, the SEDAR 33 benchmark assessment for gag did account for all sources of discard mortality, negating the need for a supplemental buffer. In addition, commercial quotas for species managed under the grouper-tilefish IFQ program have never been exceeded, and gag is no longer overfished. Under the ACL/ACT control rule adopted in 2012 (GMFMC 2011b), this results in a buffer of 0%; thus no reduction from the ACL is recommended. Since establishing a commercial ACT is no longer needed (if it was established, it would be set equal the ACL), **Alternatives 2-4** would eliminate the commercial ACT, and set the commercial quota equal to the ACL. If it becomes necessary to reinstate a commercial ACT in the future, it can be done under the generic framework procedure.

2.2 Action 2 – Modifications to the Recreational Gag Grouper Fishing Season

Alternative 1: No action. The recreational gag season will remain July 1 through December 2 (147 days) unless shortened due to a projection that the annual catch target (ACT) will be reached sooner.

Alternative 2: Eliminate the December 3-31 fixed closed season. The recreational gag season will open on July 1 and will remain open through the end of the year or until a projection that the ACT will be reached sooner.

Alternative 3: Retain a single season that will remain open until the date that the ACT is projected to be reached. (The offshore closed season of February 1 through March 31 in waters beyond 20 fathoms will remain in effect for all shallow-water grouper including gag.) The opening date for the season will be determined based on projecting backward from December 31 until the date on which the following ACT is projected to be reached. This opening date would remain in place each year until modified by subsequent rulemaking:

Option 3a: 2016 ACT (2.67 mp gw)

Option 3b: 2017 ACT (2.57 mp gw)

Option 3c: Equilibrium optimum yield ACT (2.50 mp gw)

Alternative 4: Establish a recreational split season. (Regardless of season dates, the offshore closed season of February 1 through March 31 in waters beyond 20 fathoms will remain in effect for all shallow-water grouper including gag.)

The Council is asked to comment on what options to consider under Alternative 4 including:

What opening dates to consider for each sub-season

Should the first sub-season be based on

- a. A fixed number of days (subject to in-season closure), or
- b. A fixed percentage of the recreational ACT (subject to in-season closure)

with remaining ACT to be taken in the second sub-season.

Discussion: There is currently a closed season for all shallow-water grouper from February 1 through March 31 of each year in offshore waters beyond a series of boundary lines that approximate the 20-fathom depth contour (GMFMC 2012). During this period, recreational harvest of shallow-water grouper (red, black, gag, yellowfin, yellowmouth, and scamp) is prohibited. Shoreward of this boundary, harvest of shallow-water grouper is allowed, except for gag which is under a January 1 through June 30 closed season. If the open season for gag is modified to include days from February or March, that opening will apply only shoreward of the 20 fathom boundary during those days. Beyond 20 fathoms, harvest would continue to be closed to all shallow-water grouper including gag.

Alternative 1 leaves the recreational gag season at its current dates of July 1 through December 2. Preliminary landings estimates for 2014 indicate that the recreational sector caught 870,720 pounds of gag, just 54% of the ACT. Depending upon the selection of a preferred alternative in Action 1, the ACT for 2015-2017 will increase by between 43% and 67%. It is unlikely that the recreational sector will be able to catch its allocation under this alternative.

Alternative 2 eliminates the December 3-31 fixed closed season. A December 2012 framework action adjusted the recreational season to close on the date when NMFS projects the ACT will be reached. For 2013, NMFS projected that the ACT would be reached on December 2. This closed date was established as a fixed closed season rather than one that could be adjusted each year in response to new ACT projections. Consequently, the recreational gag season continued to close on December 3 regardless of whether the ACT was reached. This alternative removes that fixed closed date and allows the season to remain open for any length of time up to December 31 or until the ACT is projected to be reached. The intent of this alternative is that the closure date will be reevaluated each year. This alternative can be selected in combination with other alternatives.

Alternative 3 would create single season for the gag recreational sector. This alternative cannot be implemented in time for the 2015 recreational season due to the amount of time needed to approve and implement a framework action, so the analysis considers implementation will occur in 2016. The opening date would initially be determined by calculating how many days would be needed to catch the recreational ACT by December 31, and would remain in place each year unless modified by subsequent rulemaking. For example, if an initial determination is made that a May 10 opening would allow the ACT to be taken by December 31, that would become the opening date from that point onward. The ACT will decline in future years under some of the Action 1 alternatives, and therefore, an opening date that will allow the season to remain open through the end of the year in 2016 may result in an ACT closure in 2017.

Option 3a would result in a starting date based on the 2016 ACT (in **Alternative 2 of Action 1**). This would allow the earliest opening date, but would increase the possibility of an ACT closure in subsequent years. **Option 3b** would result in a starting date based on the 2017 ACT (in **Alternative 2 of Action 1** or the ACT in **Alternative 3 of Action 1**). This would result in a later starting date than **Alternative 1**, and it increases the possibility of unharvested ACT in 2016, but increases the possibility of the season remaining open through the end of the year in subsequent years. If **Alternative 3 in Action 1** is selected, this would be the most appropriate option. **Option 3c** would result in a starting date based on the equilibrium ACT (**Alternative 4 of Action 1**). This would result in a later starting date than the other options. For any alternative other than **Alternative 4 in Action 1**, this is likely to result in unharvested ACT, but this would be the most appropriate option if **Alternative 4 in Action 1** is selected.

Under all options in **Alternative 3**, if the starting date results in an open season during the February 1 – March 31 shallow-water closed season, the shallow-water closed season would still apply to gag in waters beyond the 20-fathom contour. However, in waters shallower than 20 fathoms, the recreational gag season would open in accordance with the opening date.

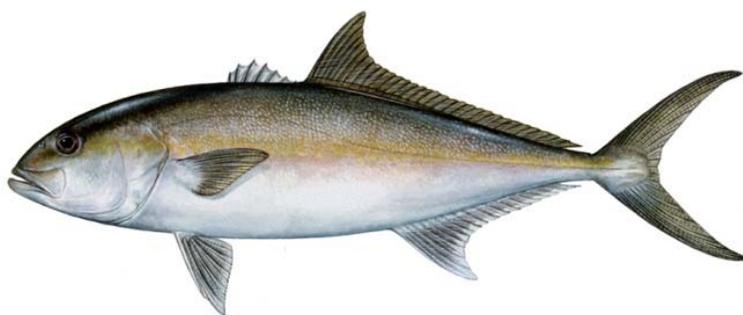
Alternative 4 would create a recreational split season. The Council is requested to provide guidance to staff on what opening dates to consider and on how to structure this alternative. The first sub-season could be based on a fixed number of days, or on a fixed percentage of the ACT. If based on a percentage, NMFS would calculate the first sub-season length prior to the season opening. In either case, the second sub-season would remain open for any remaining ACT. If harvest in sub-season 1 exceeds its projected catch, there would be a shorter second sub-season to adjust for the overharvest. Conversely, if harvest in the first sub-season is less than projected, the second sub-season would be extended to adjust for the underharvest. If the entire ACT is taken in the first sub-season, there would be no second sub-season, and the first sub-season could be subject to an ACT closure. There should be enough separation between the first and second sub-seasons to allow NMFS to gather preliminary landings for the first sub-season. This means at least 45 days from the end of the MRIP wave in which the first sub-season occurs.

Under all scenarios in **Alternative 4**, if the open season dates result in an open season during the February 1 – March 31 shallow-water closed season, the shallow-water closed season would still apply to gag in waters beyond the 20-fathom contour. However, in waters shallower than 20 fathoms, the recreational gag season would open in accordance with the open season dates.

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Modifications to Greater Amberjack Allowable Harvest and Management Measures



AP

Framework Action to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico including Draft Environmental Assessment, Regulatory Impact Review, and Regulatory Flexibility Act Analysis

March 2015



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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	Acceptable biological catch
ACL	Annual catch limit
ACT	Annual catch target
AMs	Accountability measures
ALS	accumulated landings system
BMSY	Stock biomass level capable of producing an equilibrium yield of MSY
Council	Gulf of Mexico Fishery Management Council
CS	consumer surplus
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential fish habitat
EIS	Environmental impact statement
ELMR	Estuarine living marine resources
ESA	Endangered Species Act
FL	fork length
FMSY	Fishing mortality rate corresponding to an equilibrium yield of MSY
F _{30% SPR}	Fishing mortality corresponding to 30% spawning potential ratio
FMP	Fishery Management Plan
GMFMC	Gulf of Mexico Fishery Management Council
HAPC	Habitat area of particular concern
IRFA	Initial regulatory flexibility analysis
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MFMT	Maximum fishing mortality threshold
MMPA	Marine Mammal Protection Act
mp	million pounds
MRFSS	Marine Recreational Fisheries Survey and Statistics
MRIP	Marine Recreational Information Program
MSST	Minimum stock size threshold
MSY	Maximum sustainable yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries	Same as NMFS
NOR	net operating revenues
NOS	National Ocean Service
NS1	National Standard 1 guidelines
OFL	Overfishing level
OY	Optimum yield
PS	Producer surplus
RIR	Regulatory impact review
SAV	Submerged aquatic vegetation
Secretary	Secretary of Commerce
SEDAR	Southeast Data, Assessment and Review
SEFSC	Southeast Fisheries Science Center

SERO	Southeast Regional Office
SSBR	Spawning stock biomass per recruit
SSC	Scientific and Statistical Committee
SPR	Spawning potential ratio
TAC	Total allowable catch
TPWD	Texas Parks and Wildlife Department
ww	whole weight
YPR	Yield per recruit

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CHAPTER 1. INTRODUCTION

1.1 Background

The greater amberjack stock assessment was completed and reviewed by the Scientific and Statistical Committee (SSC) at their June 2014 meeting. The SSC accepted the 2014 Southeast Data, Assessment and Review (SEDAR) greater amberjack assessment as the best scientific information available. The SSC concluded that greater amberjack was overfished and experiencing overfishing and the stock did not meet the 10-year rebuilding plan that ended in 2012. The National Standard 1 guidelines state that when a stock has exceeded its maximum rebuilding time and is not yet rebuilt, the yield should be set at the yield corresponding to $F_{REBUILD}$ or to 75% of maximum fishing mortality threshold (MFMT), whichever is less. A target rebuild date is required to calculate $F_{REBUILD}$ but has not been specified by the Gulf of Mexico Fishery Management Council (Council). Based on this information, the SSC used the Acceptable Biological Catch (ABC) Control Rule to establish the overfishing limit (OFL) and ABC for a time period of four years beginning in 2015 equivalent to 75% of MFMT.

Secretarial Amendment 2 (GMFMC 2003) to the Reef Fish Fishery Management Plan (FMP) established a rebuilding plan for greater amberjack based on a stock assessment conducted in 2000 (Turner et al. 2000). That assessment determined that the greater amberjack stock was overfished and undergoing overfishing as of 1998. Management measures to reduce the recreational bag limit from three to one fish were implemented in January 1997 and the commercial seasonal closure from March through May were implemented in January 1998; however, these closures were not incorporated into the 2000 assessment. The projected effects of these management measures were expected to eliminate overfishing; therefore, no new management measures to further restrict effort were implemented.

In 2006, an updated stock assessment was completed which determined the greater amberjack stock was not recovering at the rate previously projected. The stock was declared to be overfished and experiencing overfishing (SEDAR 9 2006). The Council and National Marine Fisheries Service (NMFS) developed and implemented Amendment 30A in 2008 in response to the stock assessment results and the requirement to end overfishing and rebuild the stock by 2012 (GMFMC 2008). The minimum reduction required to rebuild the stock by 2012 was 40% of current fish mortality. The total allowable catch (TAC) implemented in Amendment 30A was 1,871,000 lbs whole weight for 2008 through 2010 (GMFMC 2008). Amendment 30A also established quotas for the recreational and commercial sectors equal to 1,368,000 and 503,000 lbs, respectively. Amendment 30A also implemented sector-specific accountability measures such that if either sector exceeds its allocated portion of the TAC, the Regional Administrator will close that sector for the remainder of the year. Additionally, if a sector's landings exceed that sector's share of the TAC, the Regional Administrator will reduce the fishing season by the amount of time necessary to account for the overage in the following fishing year. The Greater Amberjack 2010 SEDAR 9 update stock assessment also determined that the stock remained overfished and was continuing to experience overfishing. In December 2012, Amendment 35 (GMFMC 2012) reduced the stock's annual catch limit (ACL), or quota (previously called the TAC), to 1,780,000 lbs in an effort to end overfishing and rebuild the stock. The commercial

ACL equal to 481,000 lbs, and a recreational ACL equal to 1,299,000 lbs, were also established based on the interim sector allocation established in Amendment 30A (GMFMC 2008).

The greater amberjack stock ACL has been exceeded twice in the last four years. Therefore, this document includes a range of alternatives for adjusting the stock ACL, as well as recreational and commercial management measures to end overfishing and rebuild the stock.

Landings Data

Table 1.1.1. Commercial and recreational landings of greater amberjack (pounds whole weight) from 2002 to 2013.

Year	Headboat	Charter	Private	Recreational Total	Commercial	Grand Total
2002	160,636	1,114,754	857,969	2,133,359	703,303	2,836,662
2003	199,347	1,072,018	1,630,455	2,901,820	857,125	3,758,945
2004	108,769	1,068,819	1,214,641	2,392,230	871,016	3,263,246
2005	61,281	365,893	1,089,984	1,517,158	662,285	2,179,443
2006	79,892	1,030,943	589,348	1,700,183	566,384	2,266,567
2007	59,436	516,253	291,797	867,485	589,235	1,456,720
2008	54,544	478,614	785,504	1,318,662	439,176	1,757,838
2009	103,191	653,160	723,955	1,480,306	601,446	2,081,752
2010	53,203	460,740	711,279	1,225,222	534,095	1,759,317
2011	62,835	583,813	303,351	949,999	508,489	1,458,488
2012	99,680	546,086	592,952	1,238,719	307,921	1,546,640
2013	73,246	604,626	938,757	1,616,629	457,821	2,074,450

Source: Southeast Fisheries Science Center recreational (8/5/2014) and commercial (7/10/2014) ACL datasets. Recreational landings exclude Monroe County, Florida.

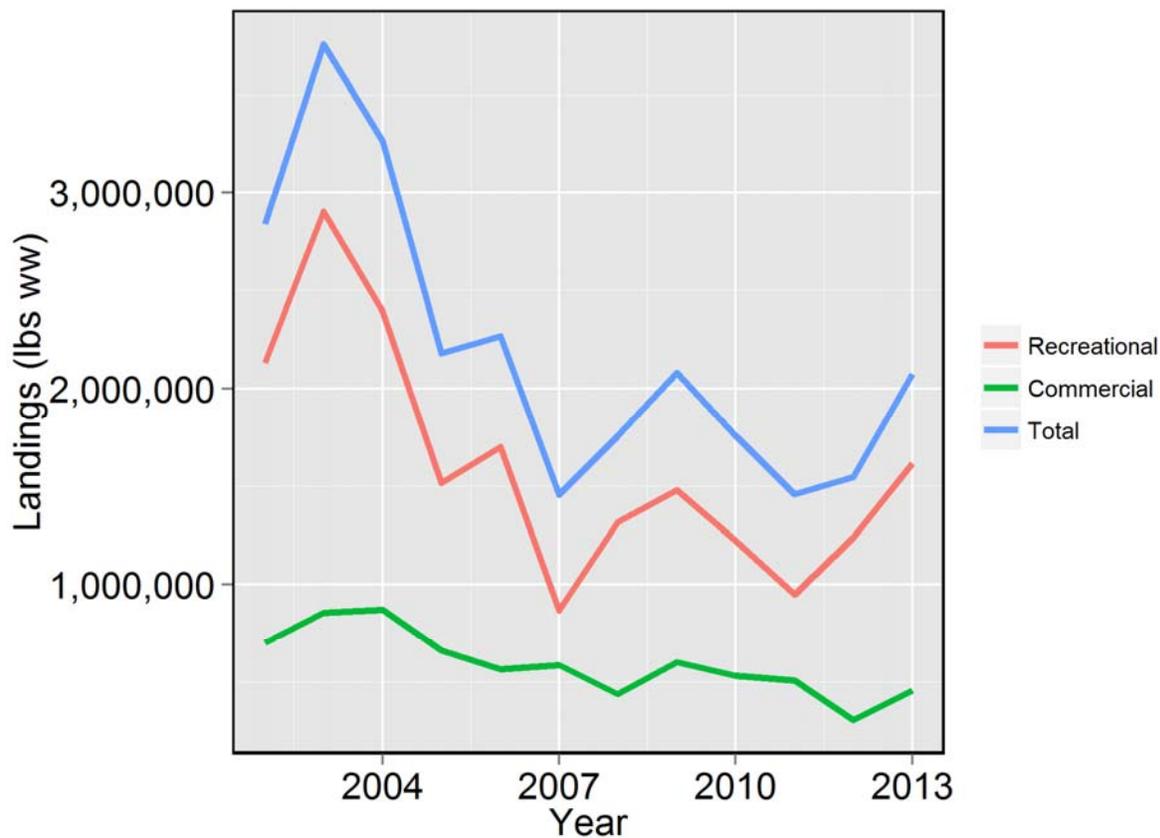


Figure 1.1.1. Recreational, commercial, and total landings in pounds whole weight of greater amberjack from 2002 through 2013. Recreational landings were estimated (AB1) from the MRIP, TPWD, and Southeast Headboat Surveys. Source: SEFSC recreational (8/5/2014) and commercial (7/10/2014) ACL datasets.

1.2 Purpose and Need

The purpose of this amendment is to modify the ACL and the annual catch target (ACT), incorporate updated stock status information from the 2014 stock assessment, modify management measures for the recreational size limit and seasons, and commercial trip limit in order to end the overfishing and rebuild the greater amberjack stock in the Gulf of Mexico. The need for this amendment is that the current acceptable biological catch (ABC) of 1,780,000 pounds established in Amendment 35 to the Reef Fish FMP exceeds the 1,720,000 pound ABC recommendation for 2015 (GMFMC 2012). In addition section 600.310(g)(3) of the National Standard 1 ACL and accountability measure (AM) guidelines states that the system of ACLs and AMs should be re-evaluated, and modified if necessary, if catch exceeds the ACL for a given stock or stock complex more than once in the last four years.

1.3 History of Management

The Reef Fish FMP [with its associated environmental impact statement (EIS)] was implemented in November 1984. The original list of species included in the management unit consisted of snappers, groupers, and sea basses. Gray triggerfish and *Seriola* species, including greater amberjack, were in a second list of species included in the fishery, but not in the management unit. The species in this list were not considered to be target species because they were generally taken incidentally to the directed fishery for species in the management unit. Their inclusion in the Reef Fish FMP was for purposes of data collection, and their take was not regulated.

Amendment 1 [with its associated environmental assessment (EA), regulatory impact review (RIR), and initial regulatory flexibility analysis (IRFA)] to the Reef Fish FMP, implemented in 1990, added greater amberjack and lesser amberjack to the list of species in the management unit. It set a greater amberjack recreational minimum size limit of 28 inches fork length (FL) and a three-fish recreational bag limit, and a commercial minimum size limit of 36 inches FL. This amendment set as a primary objective of the FMP the stabilization of long-term population levels of all reef fish species by establishing a survival rate of biomass into the stock of spawning age to achieve at least 20% spawning stock biomass per recruit (SSBR), relative to the SSBR that would occur with no fishing. A framework procedure for specification of TAC was created to allow for annual management changes. This amendment also established a commercial vessel reef fish permit as a requirement for harvest in excess of the bag limit and for the sale of reef fish.

Amendment 4 (with its associated EA and RIR), implemented in May 1992, added the remaining *Seriola* species (banded rudderfish and almaco jack) to the management unit, and established a moratorium on the issuance of new commercial reef fish vessel permits for a maximum period of three years.

Amendment 5 (with its associated supplemental EIS, RIR, and IRFA), implemented in February 1994, required that all finfish except for oceanic migratory species be landed with head and fins attached, and closed the region of Riley's Hump (near Dry Tortugas, Florida) to all fishing during May and June to protect mutton snapper spawning aggregations.

Amendment 12 (with its associated EA and RIR), submitted in December 1995 and implemented in January 1997, reduced the greater amberjack bag limit from three fish to one fish per person, and created an aggregate bag limit of 20 reef fish for all reef fish species not having a bag limit (including lesser amberjack, banded rudderfish, almaco jack and gray triggerfish). NOAA Fisheries Service disapproved proposed provisions to include lesser amberjack and banded rudderfish along with greater amberjack in an aggregate one-fish bag limit and to establish a 28-inch FL minimum size limit for those species.

Amendment 15 (with its associated EA, RIR, and IRFA), implemented in January 1998, closed the commercial sector for greater amberjack Gulf-wide during the months of March, April, and May. A regulatory amendment in August 1999 (with its associated EA, RIR, and IRFA) closed two areas (i.e., create two marine reserves), 115 and 104 square nautical miles respectively, year-round to all fishing under the jurisdiction of the Council with a four-year sunset closure.

Generic Sustainable Fisheries Act Amendment (with its associated EA, RIR, and IRFA), partially approved and implemented in November 1999, set the MFMT for greater amberjack at $F_{30\% SPR}$. Estimates of MSY, MSST, and OY were disapproved because they were based on spawning potential ratio (SPR) proxies rather than biomass-based estimates.

Amendment 16B (with its associated EA, RIR, and IRFA), implemented in November 1999, set a slot limit of 14 to 22 inches FL for banded rudderfish and lesser amberjack for both the commercial and recreational fisheries, and an aggregate recreational bag limit of five fish for banded rudderfish and lesser amberjack.

Secretarial Amendment 2, implemented in July, 2003 for greater amberjack, specified MSY as the yield associated with $F_{30\% SPR}$ (proxy for F_{MSY}) when the stock is at equilibrium, OY as the yield associated with an $F_{40\% SPR}$ when the stock is at equilibrium, MFMT equal to $F_{30\% SPR}$, and MSST equal to $(1-M)*B_{MSY}$ or 75% of B_{MSY} . It also set a rebuilding plan limiting the harvest to 2.9 mp for 2003-2005, 5.2 mp for 2006-2008, 7,000,000 lbs for 2009-2011, and for 7,900,000 pounds for 2012. This was expected to rebuild the stock in seven years. Regulations implemented in 1997 and 1998 (Amendments 12 and 15 to the Reef Fish FMP) were deemed sufficient to comply with the rebuilding plan so no new regulations were implemented.

Amendment 30A implemented August 2008, was developed to stop overfishing of gray triggerfish and greater amberjack. The amendment established annual catch limits and accountability measures for greater amberjack and gray triggerfish. For greater amberjack, the rebuilding plan was modified, increasing the recreational minimum size limit to 30 inches FL, implementing a zero bag limit for captain and crew of for-hire vessels, and set commercial and recreational quotas.

Temporary Rule implemented in June 2010, specified the greater amberjack accountability measures for annual catch limits for the 2010 fishing season. The accountability measures developed in Amendment 30A required the commercial and recreational quotas for greater amberjack to be reduced to compensate for the harvest being exceeded in 2009. The commercial quota was reduced from 503,000 lbs whole weight to 373,072 lbs, while the recreational harvest was reduced from 1,368,000 lbs to 1,243,184 lbs.

Regulatory Amendment implemented in June 2011, specified the greater amberjack recreational closed season from June 1 – July 31 (76 FR 23904). The intended effect of this final rule was to mitigate the social and economic impacts associated with implementing in-season closures. As well as allowing the recreational sector to have the ability to fish for at least one targeted and prized fish species such as red snapper.

Amendment 35

In response to a 2010 update stock assessment, the Council approved Amendment 35 to the Reef Fish FMP on October 4, 2012. The final rule that became effective on December 13, 2012, implemented a new annual catch limit (ACL) equal to the acceptable biological catch at 1,780,000 pounds, which was less than the current annual catch limit of 1,830,000 lbs. Reducing the stock ACL by 18% from no action was expected to end overfishing; however, whether

overfishing has ended would remain unknown until completion of the next benchmark assessment, in 2013. The rule also established a commercial trip limit of 2,000 lbs ww throughout the fishing year. The commercial trip limit was anticipated to provide a longer fishing season for the commercial sector. The annual commercial closed season will be March 1 through May 31, and re-opens on June 1, as long as the annual catch target has not been exceeded or is projected to be exceeded. The Council also considered bag limits and closed season management measures for the recreational fishing sector but did not alter any recreational management measures.

Table 1.3.1. Summary of recent annual commercial landings relative to management targets (pounds whole weight).

Year	Commercial ACT	Commercial ACL	Stock OFL	Commercial Harvest	Harvest - ACL	Closure date
2008	503,000		MFMT	439,176	-63,824	
2009	503,000		MFMT	601,446	98,446	11/7/2009
2010	503,000 (373,072)		MFMT	534,095	161,023	10/28/2010
2011	503,000 (342,091)		MFMT	508,489	166,398	6/18/2011
2012	503,000 (237,438)	503,000 (237,438)	2,380,000	307,921	70,483	3/1/2012
2013	338,157	481,000 (410,157)	2,380,000	457,821	47,654	7/1/2013
2014	409,000	481,000	2,380,000			8/25/2014

Note: The accountability measures implemented in Amendment 30A (GMFMC 2008) require that annual commercial harvest exceeding the commercial ACL be deducted from the commercial ACL in the subsequent calendar year. In these cases, the adjusted commercial ACL values are indicated in parentheses. Also, these overage adjustments are made on preliminary landings as final landings are not completed by the beginning of the subsequent calendar year. This may result in minor deviations from the final overage (if any) and the overage deduction.

Table 1.3.2. Summary of recent annual recreational landings relative to management targets (pounds whole weight).

Year	Recreational ACT	Recreational ACL	Stock ACL	Stock OFL	Recreational Harvest	Harvest-ACL	Closure date
2008		1,368,000	1,871,000	MFMT	1,318,662	-49,338	
2009		1,368,000	1,871,000	MFMT	1,480,306	112,306	10/24/09
2010		1,368,000 (1,243,184)	1,871,000	MFMT	1,225,222	-17,962	
2011	1,368,000	1,368,000 (1,315,224)	1,871,000	MFMT	949,999	-365,225	
2012	1,299,000	1,368,000	1,780,000	2,380,000	1,238,719	-129,281	
2013	1,299,000	1,299,000	1,780,000	2,380,000	1,616,629	317,629	
2014	888,839	1,299,000 (1,063,538)	1,780,000	2,380,000			8/25/14

Note: The accountability measures implemented in Amendment 30A (GMFMC 2008) requires that annual recreational harvest exceeding the recreational ACL be deducted from the recreational ACL in the subsequent calendar year. In these cases, the adjusted recreational ACL values are indicated in parentheses. Also, these overage adjustments are made on preliminary landings as final landings are not available at the beginning of the subsequent fishing year. This results in minor deviations from the final overage (if any) and the overage deduction.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 - Modifications to the Greater Amberjack Annual Catch Limits and Annual Catch Targets

Note: Commercially harvested greater amberjack are typically landed gutted rather than whole. However, the management alternatives in this action are stated in whole weight consistent with current federal regulations and sector allocations. A reminder was published July 29, 2014 (FB14-55) clarifying that one pound gutted weight is equivalent to 1.04 pounds whole weight using the standard conversion.

Alternative 1: Maintain the current acceptable biological catch (ABC), annual catch limit (ACL), and annual catch target (ACT)(quota).

Year	ABC/Stock ACL	Recreational ACL	ACT	Commercial ACL	ACT
2014	1,780,000	1,299,000	1,130,000	481,000	409,000

Alternative 2: Use the ABC schedule recommended by the Scientific and Statistical Committee (SSC) from 2015 to 2018.

Option a: Apply ACL/ACT Control Rule:

Commercial Buffer = 15%

Recreational Buffer = 13%

Year	Recreational			Commercial	
	ABC/Stock ACL	ACL	ACT	ACL	ACT
2015	1,720,000	1,255,600	1,092,372	464,400	394,740
2016	2,230,000	1,627,900	1,416,273	602,100	511,785
2017	2,490,000	1,817,700	1,581,399	672,300	571,455
2018	2,620,000	1,912,600	1,663,962	707,400	601,290

Option b: Apply a 20% buffer to set the ACL and ACT for 2015-2018.

Year	Recreational			Commercial	
	ABC/Stock ACL	ACL	ACT	ACL	ACT
2015	1,720,000	1,255,600	1,004,480	464,400	371,520
2016	2,230,000	1,627,900	1,302,320	602,100	481,680
2017	2,490,000	1,817,700	1,454,160	672,300	537,840
2018	2,620,000	1,912,600	1,530,080	707,400	565,920

Alternative 3: Set a constant ABC at the level recommended the Scientific and Statistical Committee (SSC) for 2015.

Option a: Apply ACL/ACT Control Rule:

Commercial Buffer = 15%

Recreational Buffer = 13%

Year	Recreational			Commercial	
	ABC/Stock ACL	ACL	ACT	ACL	ACT
2015 +	1,720,000	1,255,600	1,092,372	464,400	394,740

Option b: Use a 20% buffer to set the ACL and ACT for 2015-2018

Year	Recreational			Commercial	
	ABC/Stock ACL	ACL	ACT	ACL	ACT
2015 +	1,720,000	1,255,600	1,004,480	464,400	371,520

Alternative 4: Set the stock ACL at zero (i.e., no allowable harvest).

Discussion:

The SEDAR 33 (2014) stock assessment determined that the greater amberjack stock remains overfished and is experiencing overfishing (as of 2012, terminal year of data in the assessment). The status determination criteria used to make these determinations were established in Secretarial Amendment 2 (GMFMC 2003) and are defined as follows: maximum sustainable yield (MSY) is the yield associated with $F_{30\% SPR}$ (proxy for MSY) when the stock is at equilibrium; optimum yield (OY) is the yield associated with an $F_{40\% SPR}$ when the stock is at equilibrium; maximum fishing mortality threshold (MFMT) is equal to $F_{30\% SPR}$; and minimum stock size threshold (MSST) is equal to $(1-M) \cdot B_{MSY}$, or 75% of biomass at maximum sustainable yield (B_{MSY}). Natural mortality (M) equals 0.25 for greater amberjack.

Action 1 includes alternatives to modify the acceptable biological catch (ABC), annual catch limit (ACL), and annual catch target (ACT)(quota) for greater amberjack based on the SEDAR 33 stock assessment (2014) and subsequent Scientific and Statistical Committee (SSC) review including recommendations for the ABC. Amendment 35 (GMFMC 2012) established a stock ABC of 1,780,000 lbs, which exceeds the current ABC recommendation of 1,720,000 lbs for 2015. The ABC established in Amendment 35 was set using Tier 3b of the ABC control rule, where the ABC was set at the mean of recent landings. The SSC adopted this procedure as the projections from the stock assessment were unstable and highly uncertain (SEDAR 9 update 2010).

The SSC used the Acceptable Biological Catch (ABC) Control Rule to establish the overfishing limit (OFL) and ABC for a time period of four years beginning in 2015 equivalent to 75% of MFMT. This is consistent with the NS1 Guidelines.

An additional goal of this framework action is to re-evaluate the systems of ACLs and AMs as both the recreational and commercial sectors have exceeded their ACLs and ACTs (quotas) in the last four years. The National Standard 1 guidelines section 600.310 (g)(3) states “If catch exceeds the ACL for a given stock or stock complex more than once in the last four years, the system of ACLs and AMs should be re-evaluated, and modified if necessary, to improve its performance and effectiveness.”

Alternative 1 (no action) would retain the current ABC, equivalent to the stock ACL. Based on the greater amberjack SEDAR 33 Update (2014) and the SSC's recommendations for the ABC, the ACL would be exceeding the ABC in 2015 (albeit only by 60,000 lbs). Therefore, this alternative is inconsistent with National Standard 1 guideline. However, the current ABC is below the SSC's recommendation beyond for 2016 through 2018 and would be expected to rebuild the stock (i.e., SSB to SPR 30%) by 2019.

Alternative 2 would set the stock ACL equal to the ABC recommended by the SSC from 2015 through 2018 and is projected rebuild the stock (i.e., SSB to SPR 30%) by 2020. Based on the allocation (73% recreational and 27% commercial), the respective sector ACLs would be 1,255,600 lbs ww for the recreational sector (2015) and 464,400 lbs ww for the commercial sector (2015). **Alternative 2** would also establish a new stock ACL that is 60,000 lbs below the current stock ACL in 2015, followed by increases each year from 2016 through 2018. However, at the August 2014 SSC meeting, the SSC discussed the harvest projections from SEDAR 33 (2014) and the ABC schedule recommended at the previous SSC meeting in June 2014. The additional discussion occurred because 1) the stock remains overfished and continues to experience overfishing, 2) the previous 10-year rebuilding plan was not met, and 3) the stock biomass has been relatively stable (at overfished levels) for a long period while experiencing harvest levels below what is currently projected to rebuild the stock in upcoming years. The SSC discussed that historical stock assessment model projections were quite uncertain, and retrospectively, were overly optimistic about the productivity of the stock. A SSC member noted that the current SEDAR 33 stock assessment differed in terms of modeling environment and approach from previous assessments and the current SS3 modeling environment allowed a length structured assessment with uncertainty in both lengths and landings. These are substantial improvements over previous stock assessments and should add reliability to the results and projections relative to previous assessments of greater amberjack.

Greater amberjack are currently managed toward harvesting the ACT (i.e., quota). This strategy provides a management buffer between the ACT and ACL, ultimately reducing the likelihood of exceeding the ACL and triggering AMs. The Council established an ACL/ACT Control Rule in the Generic ACL/AM Amendment (GMFMC 2011). The Council developed the ACL/ACT Control Rule so it could objectively and efficiently assign catch limits and targets that take into account management uncertainty (GMFMC 2011). The rule uses different levels of information about catch levels, sector overages, stock management practices, and data quality to assign levels of reduction for either sector ACLs or ACTs.

Alternative 2 includes two options. **Option a** would apply the ACL/ACT Control Rule that results in a buffer of 15% for the commercial sector (i.e., management target), and the recreational ACT would result from applying a 13% buffer to the sector's ACL, to accommodate uncertainty in the effectiveness of the management strategy to constrain catch.

Option b would not use the ACL/ACT Control Rule and instead apply a 20% buffer, reducing the ACL by 20% to establish the ACT, or management target. The rationale for **Option b** is that recreational harvest has previously exceeded the sector ACL and this would increase both the buffer and the likelihood of rebuilding the stock to target biomass levels.

Both **Alternatives 2** and **3** include **Options a** and **b**, and propose the same ACLs and ACTs for the year 2015. However, **Alternative 3** does not allow for increases in the ACL and ACT in subsequent years (2016 - 2018) as compared to **Alternative 2**. **Alternative 3** is projected rebuild the stock (i.e., SSB to SPR 30%) by 2019. **Alternative 3, Option a** would apply the ACL/ACT Control Rule corresponding to a 15% commercial buffer and a 13% recreational buffer for each year 2015 to 2018 inclusive. **Alternative 3, Option b** would apply a constant 20% buffer between the ACL and ACT from 2015 through 2018.

Alternative 4 would set the stock ACL and stock ACT at zero and is a reasonable alternative given that this stock is overfished and experiencing overfishing despite previous management efforts to rebuild the stock within the ten year rebuilding plan. **Alternative 4** is projected to rebuild the stock by 2017. However, this alternative will have the greatest short-term, negative socio-economic impacts.

Post-season accountability measures (AMs) such as overage adjustments would only occur if the respective sector ACL was exceeded. Any ACL overage by a sector would then reduce the respective sector's ACL and ACT the following year, by the amount of the sector ACL overage.

Both **Alternative 2** and **Alternative 3** (including **Options**) under consideration would retain the same ABC. **Option a** under **Alternatives 2** and **3** would maintain an ACT (commercial sector buffer =15% and the recreational buffer =13%) where the buffer is established using the ACL/ACT control rule. This would retain an ACT value as the "target" yet AMs would not be triggered unless the ACL was exceeded. **Options b** under **Alternatives 2 and 3** would also establish an ACT value as the "target" yet with larger buffers (5% larger commercial; 7% larger recreational) than **Option a** under either **Alternative 2 or 3**. **Option b** under either alternative would reduce the likelihood of exceeding the ACL and aid in preventing overages that have occurred frequently in the management of this species. However, if the buffer is too large, it could prevent the fishery from landing the allowable catch.

2.2 Action 2 - Recreational Management Measures

Action 2.1: Modify the Recreational Minimum Size Limit for Greater Amberjack

Alternative 1: No Action – do not modify the current recreational minimum size limit of 30 inches fork length (FL).

Alternative 2: Modify the minimum size limit for greater amberjack to 32 inches FL.

Alternative 3: Modify the minimum size limit for greater amberjack to 34 inches FL.

Alternative 4: Modify the minimum size limit for greater amberjack to 36 inches FL.

Discussion:

Action 2 includes alternatives to increase the recreational minimum size limit for greater amberjack. **Alternative 1** would maintain the current 30-inch fork length (FL) recreational minimum size limit. Based on recreational landings in 2009-2010, the most frequently landed size of greater amberjack was 31 inches FL (Figure 2.2.1). A 30-inch FL greater amberjack is approximately two years old and likely has not reached sexual maturity (Figure 2.2.2). At the current 30-inch FL minimum size limit, 11% (95% confidence interval (0 - 23%)) of the females in the population have achieved reproductive maturity (Table 2.2.1).

Alternative 2 would modify the minimum size limit for greater amberjack to 32 inches FL. At 32 inches FL, 45% of females (95% confidence interval (23 - 66%)) are reproductively mature. **Alternative 3** would modify the minimum size limit for greater amberjack to 34 inches FL. At 34 inches FL, 85% of females (95% confidence interval (69 - 100%)) are reproductively mature. **Alternative 4** would modify the minimum size limit for greater amberjack to 36 inches FL. At 36 inches FL, 97% of females (95% confidence interval (92 - 100%)) are reproductively mature. For **Alternative 3** or **Alternative 4**, greater than 50% of female greater amberjack are estimated to be reproductively mature and **Alternative 4** would be consistent with the commercial sector's minimum size limit.

As minimum size limits increase from 30 inches FL, dead discards are estimated to increase and subsequent estimates of changes in harvest and dead discards for various minimum size limits could be calculated. Dead discard mortality is estimated at 20% and is used to estimate increases in total dead discards with various minimum size limits consistent with SEDAR 33 (2014) SEDAR 9 Update (2010).

Spawning potential ratio (SPR) (Figure 2.2.3) and yield-per-recruit (YPR) (Figure 2.2.4) were calculated for a range of fishing mortality rates for three different minimum size limits following SERO-LAPP-2011-4. The calculations incorporated discard selectivity and discard mortality for sub-legal fish and harvest selectivity within 2 inches of the minimum size limit. SPR and YPR calculations were updated with SEDAR 33 (2014) parameter estimates of length-weight

conversion, von Bertalanffy growth model, length at maturity model, natural mortality, fishing mortality, and discard mortality.

SPR addresses the spawning potential of the stock relative to the stock with no fishing mortality. The largest minimum size limit considered (**Alternative 4**; 36 inches FL) resulted in the largest spawning potential for the stock. YPR addresses the fishing mortality rate that produces the maximum yield of the fishery. The smallest minimum size considered (**Alternative 1**; 30 inches FL) resulted in the largest yield of the fishery. Thus, the SPR and YPR results reveal a trade-off between SPR and YPR. If the management goal is to achieve a higher SPR, then increasing the minimum size would be beneficial; however, this results in less YPR. If the management goal is to maximize yield then the current minimum size limit of 30 inches FL appears appropriate.

The SPR and YPR analysis presented herein only takes into account growth and mortality. Recruitment is assumed to be constant which is likely unrealistic since recruitment varies over time based on changing stock size and environmental conditions. Thus, there is uncertainty associated with these results. Also, this analysis does not address the issue of determining a fishing mortality rate that will produce a maximum yield that is likely to be sustainable.

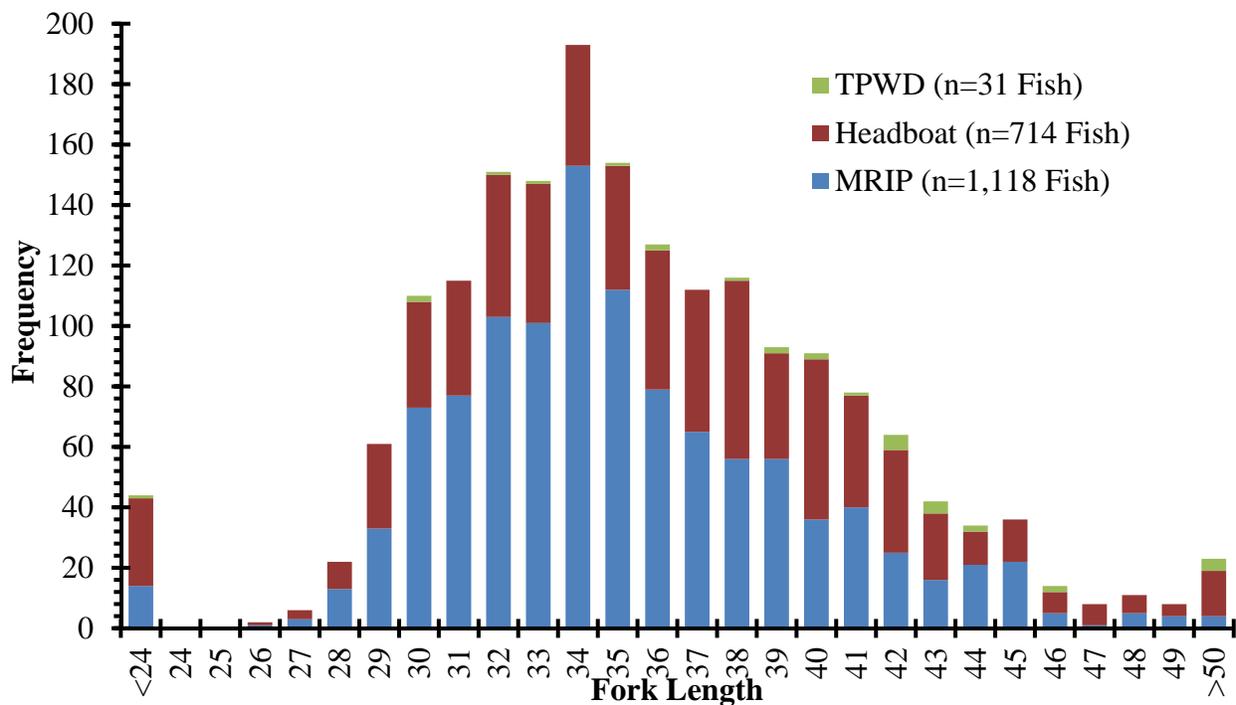


Figure 2.2.1. Size frequency distribution of recreational greater amberjack landings in 2012-2013 in the Gulf of Mexico. The current minimum size limit is 30 inches FL. Note: Landings in blue = Marine Recreational Information Program (MRIP), red = Southeast Headboat Survey, and green = Texas Parks and Wildlife Division. Source: SERO 2014.

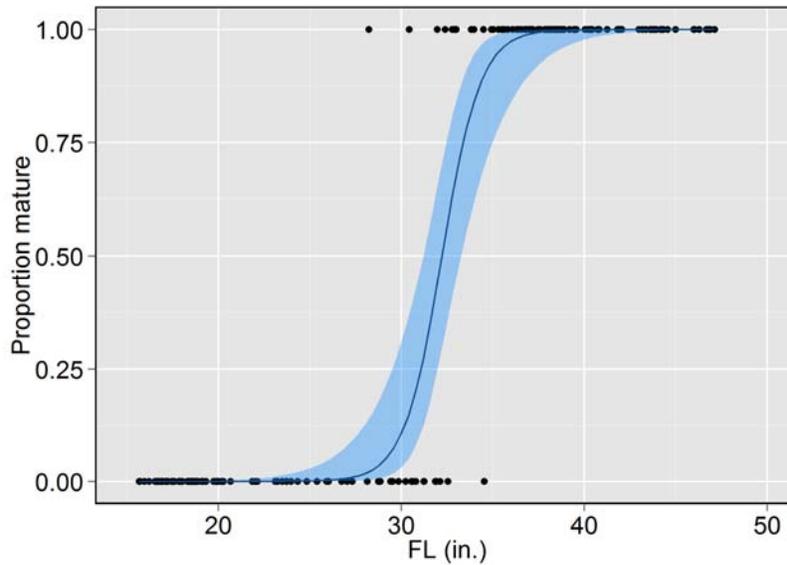


Figure 2.2.2. Proportion of mature females by length for greater amberjack in the Gulf of Mexico. Solid line represents the logistic regression model, blue shaded region represents 95% confidence interval. Filled black circles are individual samples that were noted as mature or immature. Source: D. Murie, personal communication and SERO 2014.

Table 2.2.1. Proportion of mature females at selected lengths for greater amberjack in the Gulf of Mexico. At each selected length, the proportion of mature females is estimated using logistic regression. The 95% lower (LCL) and upper (UCL) confidence limits are also provided.

Proportion of mature females			
Fork length (FL, in inches)	Proportion mature	LCL	UCL
30	0.11	0.00	0.23
32	0.45	0.23	0.66
34	0.85	0.69	1.00
36	0.97	0.92	1.00

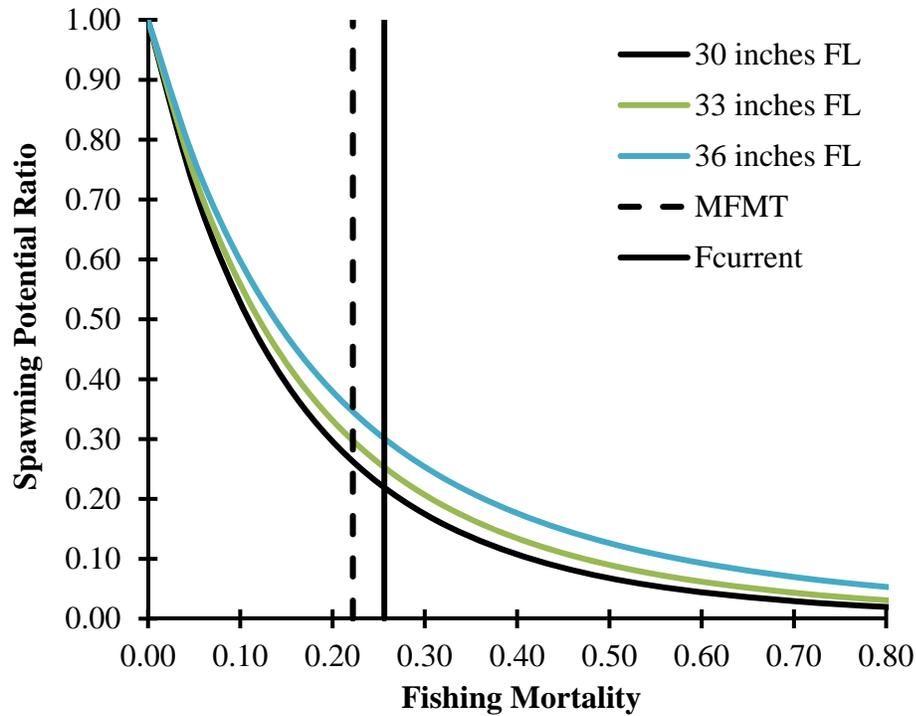


Figure 2.2.3. Gulf of Mexico greater amberjack spawning potential ratio plotted against fishing mortality rates for three different minimum size limits. The black bar represents the current fishing mortality rate ($F_{\text{current}} = 0.256$) and the dashed line represents the Maximum Fishing Mortality Threshold ($\text{MFMT} = 0.222$) as stated in SEDAR 33 (2014).

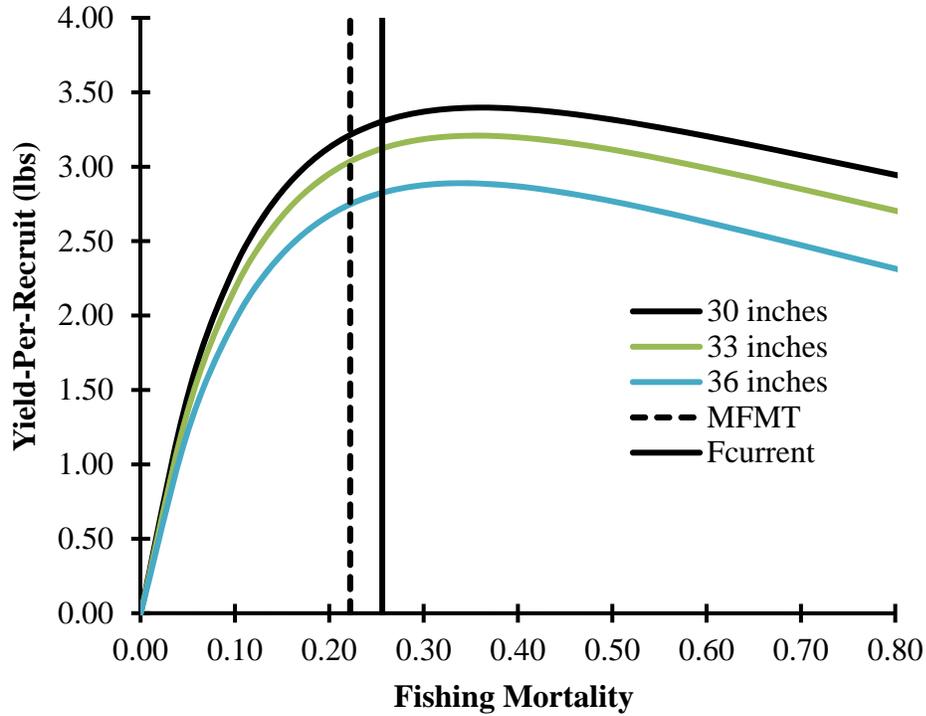


Figure 2.2.4. Gulf of Mexico greater amberjack yield-per-recruit (YPR) plotted against fishing mortality rates for three different minimum size limits. The black bar represents the current fishing mortality rate ($F_{\text{current}} = 0.256$) and the dashed line represents the Maximum Fishing Mortality Threshold (MFMT = 0.222) as stated in SEDAR 33 (2014).

Action 2.2: Modify the Recreational Closed Seasons for Greater Amberjack

Alternative 1: No Action – do not modify the current June 1 - July 31 recreational closed season.

Alternative 2: Eliminate the closed season and open January 1 until the ACT is harvested.

Alternative 3: Modify the recreational seasonal closure to March 1 - May 31.

Alternative 4: Modify the recreational seasonal closures to January 1 – May 31 and November 1 – December 31.

Discussion:

Minimum size limits are one of many management measures that can be used to achieve the management goal of 30% SPR. Another measure the Council is considering is modification to the recreational closed season. The primary reason for a fixed recreational closed season is to eliminate in-season quota closures in the fall, which can be very disruptive to the reef fish fishery.

Alternative 1 would maintain the current fixed closed season June 1-July 31. The rationale for this fixed recreational closed season was to eliminate in-season quota closures and allow one highly targeted species to be open when the other was closed (red snapper and greater amberjack). In addition, by establishing a fixed closed season the fishery is more likely to stay open through the remainder of the calendar year.

Alternative 2 would eliminate the fixed closed season (June 1-July 31) and the fishing season for greater amberjack would open January 1 until the ACT is projected to be met. This was the structure of the recreational fishing season until the implementation of the 2010 Regulatory Amendment (GMFMC 2010b) which established a fixed closed season June 1-July 31, 2011.

Alternative 3 would eliminate the fixed closed season (June 1-July 31) and establish a recreational fixed closed season from March 1-May 31. This alternative would be consistent with the commercial fixed closed season and would also protect greater amberjack during peak spawning.

Alternative 4 would eliminate the fixed closed season (June 1-July 31) and establish recreational fixed closed seasons from January 1-May 31 and from November 1-December 31 providing protection for spawning greater amberjack and allowing recreational fishing effort to occur throughout the summer into early fall (September-October).

Action 2.1 and **Action 2.2** consider management alternatives to 1) achieve the ACT selected in Action 1 and; 2) consider changes in minimum size limits and or closed seasons to maximize benefits from the greater amberjack stock while ending overfishing and allowing for rebuilding of the stock. A recreational decision tool was developed to evaluate combinations of size limits and closed seasons on the total removals of the stock (catch + dead discards) as well as the number of days required to harvest the ACT (catch, not including dead discards). This permits evaluation of tradeoffs in management alternatives to maximize benefits (e.g., season length) and minimize negative attributes (e.g., dead discards). The estimated season length for combinations of minimum size limits (**Action 2.1**, Alternatives 1 -4) and recreational closed seasons (**Action 2.2**, **Alternatives 1 -4**) are presented in Table 2.2.1. These estimates are restricted to calendar year 2015 as some alternatives include constant ACT values and uncertainty increases with each successive year of the projection. As such, the number of days presented in Table 2.2.1 represents the best estimate and are considered useful in a comparative sense. The combinations yielding the longest season length include a 36-inch FL minimum size limit and a closed season during June and July when harvest rates are typically greatest. The split season closure (**Alternative 4**) is predicted to yield the shortest fishing season of all the alternatives considered, as the closed seasons occur in relatively low-effort periods, thus requiring longer closed seasons to achieve the same level of harvest reductions.

Table 2.2.2. Recreational sector season length in days under selected closed seasons (Action 2.2), minimum size limits (Action 2.1), and ACT options (Action 1).

Closed Seasons	Size Limit	ACT Alt 1	ACT Alt 2		ACT Alt 3	
		13% buffer	13% buffer	20% buffer	13% buffer	20% buffer
June 1 - July 31	30	182	179	172	179	172
January 1 until ACT harvested	30	190	187	181	187	181
March 1 to May 31	30	145	142	135	142	135
January 1 – May 31 and November 1 – December 31	30	97	92	85	92	85
June 1 - July 31	32	196	191	180	191	180
January 1 until ACT harvested	32	199	195	188	195	188
March 1 to May 31	32	152	149	142	149	142
January 1 – May 31 and November 1 – December 31	32	108	102	91	102	91
June 1 - July 31	34	215	209	196	209	196
January 1 until ACT harvested	34	211	208	200	208	200
March 1 to May 31	34	168	162	150	162	150
January 1 – May 31 and November 1 – December 31	34	123	118	104	118	104
June 1 - July 31	36	258	237	222	237	222
January 1 until ACT harvested	36	227	224	215	224	215
March 1 to May 31	36	192	185	170	185	170
January 1 – May 31 and November 1 – December 31	36	147	140	125	140	125

2.3 Action 3 - Commercial Management Measures

Alternative 1: No Action – Maintain the 1,923-lb gutted weight trip limit (2,000-lb whole weight trip limit) for greater amberjack. Note: The current regulation is specified in pounds whole weight.

Alternative 2: Establish a 1,500-lb gutted weight trip limit (1,560-lb whole weight trip limit) for greater amberjack.

Alternative 3: Establish a 1,000-lb gutted weight trip limit (1,040-lb whole weight trip limit) for greater amberjack.

Alternative 4: Establish a 750-lb gutted weight trip limit (780-lb whole weight trip limit) for greater amberjack.

Alternative 5: Establish a 500-lb gutted weight trip limit (520-lb whole weight trip limit) for greater amberjack.

Discussion:

Commercially harvested greater amberjack are typically landed gutted rather than whole. As such, the management alternatives are stated in gutted weight (gw) with equivalent whole weight (ww) conversions noted in parentheses. However, the federal regulations are currently provided in whole weight. A reminder was published July 29, 2014 (FB14-55) clarifying that 2,000 lbs ww is equivalent to 1,923 lbs gw using the standard conversion.

Action 3 includes alternatives to reduce commercial trip limits for greater amberjack. A 1,923-lb gw (2,000 lbs ww) commercial trip limit was established in Amendment 35 (GMFMC 2012) in an effort to reduce harvest rates and prevent ACL overages. Greater amberjack are currently managed toward harvesting the ACT. This strategy provides a management buffer between the ACT and ACL, ultimately reducing the likelihood of exceeding the ACL and triggering AMs. Prior to implementation of the commercial trip limit, the commercial ACL was exceeded each year from 2009 to 2012. While the trip limit moderately reduced the average poundage landed per trip, the commercial ACT and ACL were also exceeded in 2013. If the commercial ACT and ACL are reduced from status quo to meet the objectives of the rebuilding plan (i.e., Action 1), an additional reduction to the commercial trip limit could reduce the likelihood of exceeding the ACL. **Alternative 1** would retain the 1,923-lb gutted weight (2,000 lbs whole weight) commercial trip limit. **Alternatives 2-5** would reduce the commercial greater amberjack trip limit to 1,500 lbs gw (**Alternative 2**); 1,000 lbs gw (**Alternative 3**), 750 lbs gw (**Alternative 4**), and 500 lbs gw (**Alternative 5**), respectively. The reduced trip limits are expected to reduce the rate of harvest and the likelihood of exceeding the ACT and extend the season length. This could be an effective management measure to achieve harvest targets and prevent triggering of AMs (i.e., exceeding the ACL).

To estimate season lengths necessary to harvest the commercial ACT, a decision tool was developed to compare **Alternatives 1-5**. Estimates are restricted to fishing year 2015 as projection uncertainty increases with each subsequent year estimated. These season lengths are reported as a range since they are dependent upon the ACT value selected in Action 1.

Alternative 1 (1,923 gw trip limit) would provide the shortest season among the alternatives, such that the season is projected to range from 75 to 82 days, assuming a January 1, 2015 opening date (Table 2.3.2). **Alternative 2** would slow the overall harvest rate of the fleet by restraining trip harvest to 1,500 lbs gw and the projected season length ranges from 83 to 91 days. **Alternative 3** would enact a 1,000-lb gw trip limit with a projected season length ranging from 110 to 123 days. **Alternative 4** (750-lb gw trip limit) would require 140 to 157 days to harvest the ACT. **Alternative 5** (500-lb trip limit) is the smallest trip limit under consideration and would require 207 to 233 days to harvest the ACT. In all cases, **Alternative 5** would have the longest season length at the expense of the smallest allowable harvest per trip.

Table 2.3.1. Total greater amberjack commercial landings (2008 - 2013). The commercial ACL was exceeded each year from 2009 to 2013. A 2,000-lb ww trip limit was implemented in December 2012, (fully implemented in 2013). Note, the ACL was adjusted for prior year overages in some years as explained in Table 1.3.1.

Year	Total Landings (ww)	ACL (ww)	Closure Date
2008	439,176	503,000	
2009	601,446	503,000	11/7/2009
2010	534,095	373,072	10/28/2010
2011	508,489	342,091	6/18/2011
2012	307,921	314,734	3/1/2012
2013	457,821	410,157	7/1/2013

Table 2.3.2. Estimated commercial season length (i.e., days open) under five management alternatives. The table represents the number of fishing necessary to harvest the ACT as specified in Action 1. The color scale ranges from yellow (i.e., fewest days) to green (i.e., most days).

Action 3 Alternatives	Action 1 Alternatives					
	Trip Limit (lbs gw)	Alternative 1	Alternative 2		Alternative 3	
			15% buffer	20% buffer	15% buffer	20% buffer
Alt. 1	1923* (status quo)	82	79	75	79	75
Alt. 2	1500	91	87	83	87	83
Alt.3	1000	123	118	110	118	110
Alt. 4	750	157	151	140	151	140
Alt. 5	500	233	223	207	223	207

*2000-lb ww

CHAPTER 3. AFFECTED ENVIRONMENT

3.1 Description of the Physical Environment

The Gulf of Mexico (Gulf) has a total area of approximately 600,000 square miles (1.5 million km²), including state waters (Gore 1992). It is a semi-enclosed, oceanic basin connected to the Atlantic Ocean by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel (Figure 3.1.1). Oceanographic conditions are affected by the Loop Current, discharge of freshwater into the northern Gulf, and a semi-permanent, anti-cyclonic gyre in the western Gulf. The Gulf includes both temperate and tropical waters (McEachran and Fechhelm 2005). Mean annual sea surface temperatures ranged from 73 through 83° F (23-28° C) including bays and bayous (Figure 3.1.1) between 1982 and 2009, according to satellite-derived measurements (NODC 2012: <http://accession.nodc.noaa.gov/0072888>). In general, mean sea surface temperature increases from north to south with large seasonal variations in shallow waters.

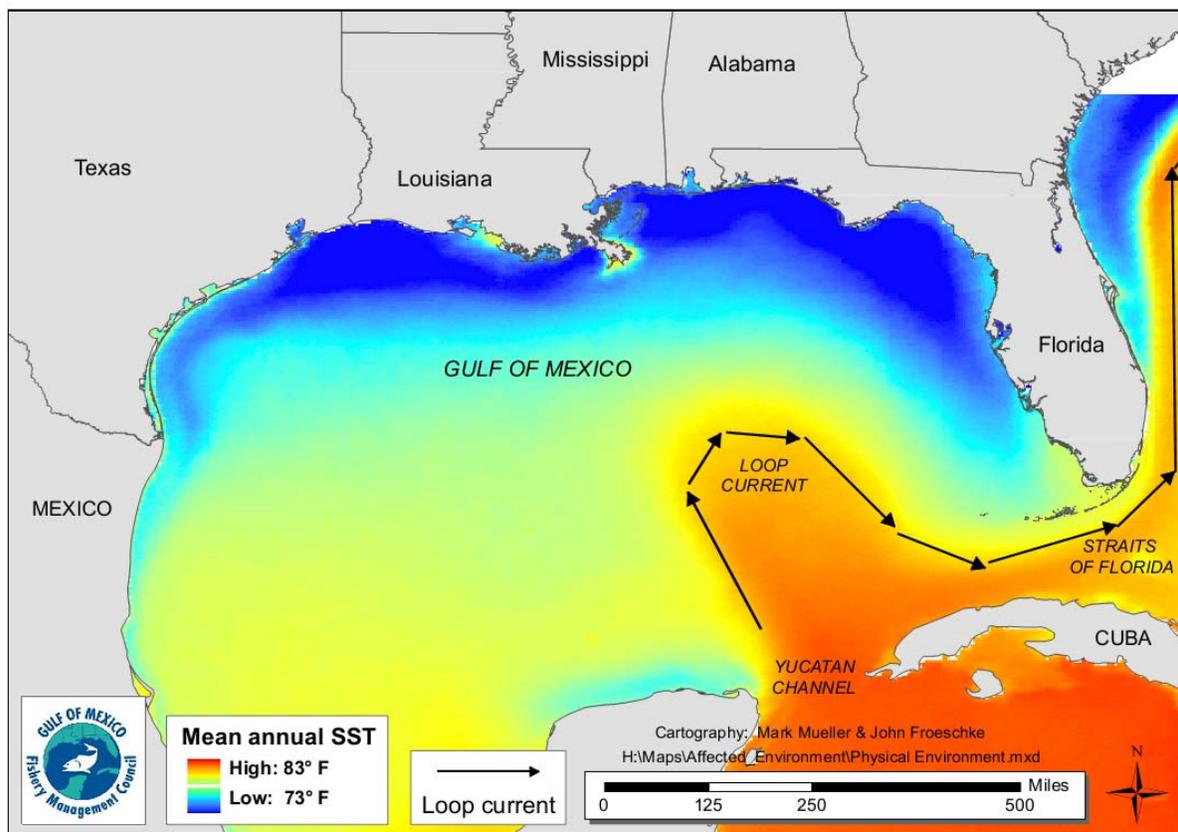


Figure 3.1.1. Mean annual sea surface temperature derived from the Advanced Very High Resolution Radiometer Pathfinder Version 5 sea surface temperature data set (<http://pathfinder.nodc.noaa.gov>).

The physical environment for Gulf reef fish is detailed in the Generic Essential Fish Habitat (EFH) Amendment (GMFMC 2004a) and the Generic Annual Catch Limit

(ACL)/Accountability Measure (AM) Amendment (GMFMC 2011) which are hereby incorporated by reference.

Habitat Areas of Particular Concern (HAPC)

Generic Amendment 3 (GMFMC 2005) for addressing EFH, HAPC, and adverse effects of fishing in the following fishery management plans of the Gulf Reef Fish Resources, Red Drum, and Coastal Migratory Pelagics is hereby incorporated by reference.

Environmental Sites of Special Interest Relevant to Reef Fish, Red Drum, Coastal Migratory Pelagics, Spiny Lobster, Red Drum, and Coral and Coral Reefs (Figure 3.1.2)

Longline/Buoy Gear Area Closure – Permanent closure to use of these gears for reef fish harvest inshore of 20 fathoms (36.6 meters) off the Florida shelf and inshore of 50 fathoms (91.4 meters) for the remainder of the Gulf, and encompasses 72,300 square nautical miles (nm²) or 133,344 km² (GMFMC 1989). Bottom longline gear is prohibited inshore of 35 fathoms (54.3 meters) during the months of June through August in the eastern Gulf (GMFMC 2009), but is not depicted in Figure 3.2.1.

Madison-Swanson and Steamboat Lumps Marine Reserves - No-take marine reserves (total area is 219 nm² or 405 km²) sited based on gag spawning aggregation areas where all fishing is prohibited except surface trolling from May through October (GMFMC 1999; 2003).

The Edges Marine Reserve – All fishing is prohibited in this area (390 nm² or 1,338 km²) from January through April and possession of any fish species is prohibited, except for such possession aboard a vessel in transit with fishing gear stowed as specified. The provisions of this do not apply to highly migratory species (GMFMC 2008).

Tortugas North and South Marine Reserves – No-take marine reserves (185 nm²) cooperatively implemented by the state of Florida, National Ocean Service, the Gulf of Mexico Fishery Management Council (Council), and the National Park Service in Generic Amendment 2 Establishing the Tortugas Marine Reserves (GMFMC 2001).

Reef and bank areas designated as Habitat Areas of Particular Concern (HAPCs) in the northwestern Gulf include – East and West Flower Garden Banks, Stetson Bank, Sonnier Bank, MacNeil Bank, 29 Fathom, Rankin Bright Bank, Geyer Bank, McGrail Bank, Bouma Bank, Rezak Sidner Bank, Alderice Bank, and Jakkula Bank – pristine coral areas protected by preventing the use of some fishing gear that interacts with the bottom and prohibited use of anchors (totaling 263.2 nm² or 487.4 km²). Subsequently, three of these areas were established as marine sanctuaries (i.e., East and West Flower Garden Banks and Stetson Bank). Bottom anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots on coral reefs are prohibited in the East and West Flower Garden Banks, McGrail Bank, and on significant coral resources on Stetson Bank (GMFMC 2005). A weak link in the tickler chain of bottom trawls on all habitats throughout the EEZ is required. A weak link is defined as a length or section of the tickler chain that has a breaking strength less than the chain itself and is easily seen as such when visually inspected. An education program for the protection of coral reefs

when using various fishing gears in coral reef areas for recreational and commercial fishermen was also developed.

Florida Middle Grounds HAPC - Pristine soft coral area (348 nm² or 644.5 km²) that is protected by prohibiting the following gear types: bottom longlines, trawls, dredges, pots and traps (GMFMC and SAFMC 1982).

Pulley Ridge HAPC - A portion of the HAPC (2,300 nm² or 4,259 km²) where deepwater hermatypic coral reefs are found is closed to anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots (GMFMC 2005).

Alabama Special Management Zone – For vessels operating as a charter vessel or headboat, a vessel that does not have a commercial permit for Gulf reef fish, or a vessel with such a permit fishing for Gulf reef fish, fishing is limited to hook-and-line gear with no more than three hooks. Nonconforming gear is restricted to recreational bag limits, or for reef fish without a bag limit, to 5% by weight of all fish aboard.

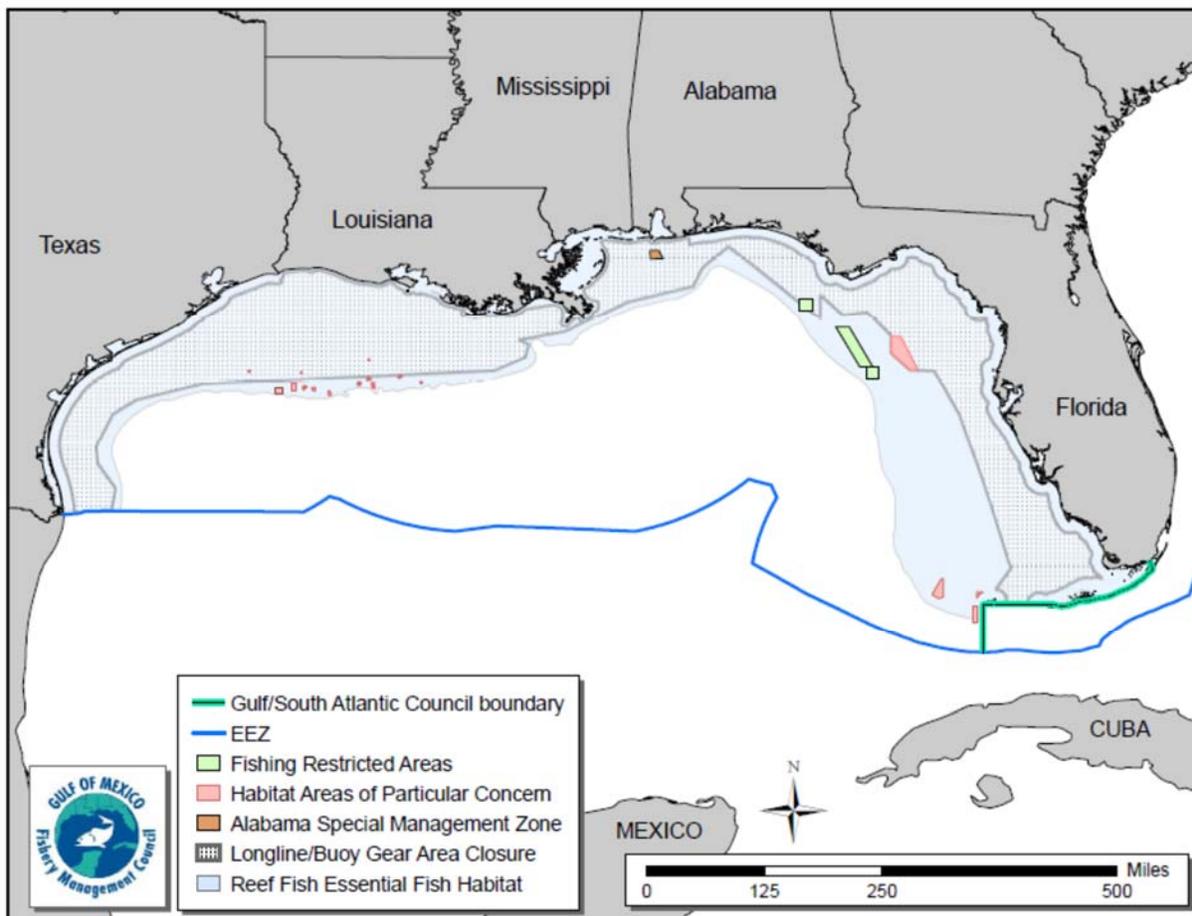


Figure 3.1.2. Map of most fishery management closed areas in the Gulf.

Deepwater Horizon MC252

The Deepwater Horizon MC252 oil spill in 2010 affected at least one-third of the Gulf area from western Louisiana east to the Florida Panhandle and south to the Campeche Bank in Mexico. The impacts of the Deepwater Horizon MC252 oil spill on the physical environment are expected to be significant and may be long-term. Oil was dispersed on the surface, and because of the heavy use of dispersants (both at the surface and at the wellhead), oil was also documented as being suspended within the water column, some even deeper than the location of the broken well head. Floating and suspended oil washed onto shore in several areas of the Gulf as were non-floating tar balls. Whereas suspended and floating oil degrades over time, tar balls are persistent in the environment and can be transported hundreds of miles.

Surface or submerged oil during the Deepwater Horizon MC252 event could have restricted the normal processes of atmospheric oxygen mixing into and replenishing oxygen concentrations in the water column, thus affecting the long-standing hypoxic zone located west of the Mississippi River on the Louisiana continental shelf. In addition, microbes in the water that break down oil and dispersant also consume oxygen, which could lead to further oxygen depletion. Zooplankton that feed on algae could also be negatively impacted, thus allowing more of the hypoxia-fueling algae to grow.

3.2 Description of the Biological/Ecological Environment

Greater Amberjack Life History and Biology

Recent studies conducted in the south Atlantic have consistently estimated that greater amberjack peak spawning occurs in April and May (Sedberry et al. 2006; Harris et al. 2007); whereas, studies conducted in the Gulf have consistently estimated that peak spawning occurs a month earlier during March and April (Wells and Rooker 2002; Murie and Parkyn 2008).

Early studies on greater amberjack conducted in south Florida indicated that maximum gonad development occurred in the spring months (Burch 1979). Studies in the 1990s on greater amberjack in the Gulf estimated the spawning season off Louisiana peaked in April-June based on increased gonad weight (Beasley 1993) and in May and June by Thompson et al. (1991). Wells and Rooker (2002) conducted studies in the northwestern Gulf on larval and juvenile fish associated with floating *Sargassum* spp. Based on the size and season larvae and juvenile greater amberjack were captured, peak spawning season occurred in March and April.

Sedberry et al. (2006) documented greater amberjack spawning in the south Atlantic on both the middle and outer shelf as well as on upper-slope reefs from 49 - 709 ft (15 - 216 m) depth, but spawning females were found at deeper depths from 148 - 400 ft (45 - 122 m). They collected spawning females from January to June, and estimated peak spawning occurred in April and May. Harris et al. (2007) completed a fishery-dependent and fishery-independent study on greater amberjack reproductive biology in the southeastern U.S. Atlantic from 2000 - 2004. Greater amberjack in spawning condition were captured from North Carolina to the Florida Keys; however, spawning was concentrated in areas off south Florida and the Florida Keys.

Harris et al. (2007) documented evidence of spawning from January - June with peak spawning during April and May. Female greater amberjack were significantly larger than males (Harris 2004; Harris et al. 2007). For males, the size at which 50% of individuals were mature was 25 inches fork length (FL) (644 mm FL) and for females was 29 inches FL (733 mm FL). They estimated a spawning season of approximately 73 days off south Florida, with a spawning period of 5 days, estimating that an individual female could spawn as frequently as 14 times during the season. Female fecundity increased with size, but was essentially constant throughout the spawning season. Greater amberjack are extremely fecund releasing 18 to 59 million eggs per female in a single spawning season (Harris et al. 2007).

Murie and Parkyn (2008) completed a recent study on reproductive biology of greater amberjack throughout the Gulf using fishery-dependent as well as fishery-independent data from 1989 - 2008. They also found females were significantly larger than males but that peak spawning occurred during March and April, and by May, they documented low gonad weights indicating spawning was ending. For females, 50% of individuals were mature at 35 inches FL (900 mm FL), larger than what Harris et al. (2007) documented off south Florida (Burch 1979).

Harris et al. (2007) suggested that there are known spawning aggregations of greater amberjack targeted by fishers in the south Atlantic, however, no direct evidence of this was presented. Observations by SCUBA divers in Belize documented greater amberjack in pair courtship when they were in a school of approximately 120 fish (Graham and Castellanos 2005). However, no aggregation or indication of spawning aggregations was discussed by the Murie and Parkyn (2008) Gulf study or in any other earlier Gulf studies.

After spawning, eggs and larvae of greater amberjack are pelagic. Smaller juvenile greater amberjack less than 1 inch standard length (SL) (20 mm SL) were found associated with pelagic *Sargassum* spp. mats (Bortone et al. 1977; Wells and Rooker 2004). Juveniles then shift to demersal habitats (5 - 6 months), where they congregate around reefs, rocky outcrops, and wrecks (GMFMC 2004a). Greater amberjack are only seasonally abundant in certain parts of their range, thus they likely utilize a variety of habitats and/or areas each year throughout their range. Greater amberjack have been documented on artificial structures as well as natural reefs (Ingram and Patterson 2001). Greater amberjack in the Gulf have been reported to live as long as 15 years and commonly reach sizes greater than 40 inches FL (1,016 mm FL) (Manooch and Potts 1997).

Status of the Greater Amberjack Stock

See Section 1.1 under the Introduction.

General Information on Reef Fish Species

The National Ocean Service (NOS) collaborated with the National Marine Fisheries Service (NMFS) and the Gulf of Mexico Fishery Management Council (Council) to develop distributions of reef fish (and other species) in the Gulf (SEA 1998). The NOS staff obtained fishery-independent data sets for the Gulf, including Southeast Area Monitoring and Assessment Program (SEAMAP), and state trawl surveys. Data from the Estuarine Living Marine Resources

(ELMR) Program contain information on the relative abundance of specific species (highly abundant, abundant, common, rare, not found, and no data) for a series of estuaries, by five life stages (adult, spawning, egg, larvae, and juvenile) and month for five seasonal salinity zones (0-0.5, 0.5-5, 5-15, 15-25, and >25 parts per million). The NOS staff analyzed these data to determine relative abundance of the mapped species by estuary, salinity zone, and month. For some species not in the ELMR database, distribution was classified as only observed or not observed for adult, juvenile, and spawning stages.

In general, reef fish are widely distributed in the Gulf, occupying both pelagic and benthic habitats during their life cycle. Habitat types and life history stages are summarized in Table 3.2.1 and can be found in more detail in GMFMC (2004a). In general, both eggs and larval stages are planktonic. Larvae feed on zooplankton and phytoplankton. Exceptions to these generalizations include gray triggerfish that lay their eggs in depressions in the sandy bottom, and gray snapper where larvae are found around submerged aquatic vegetation (SAV). Juvenile and adult reef fish are typically demersal, and are usually associated with bottom topographies on the continental shelf less than 328 ft (100 m) which have high relief, i.e., coral reefs, artificial reefs, rocky hard-bottom substrates, ledges and caves, sloping soft-bottom areas, and limestone outcroppings. However, several species are found over sand and soft-bottom substrates. Juvenile red snapper are common on mud bottoms in the northern Gulf, particularly off Texas through Alabama. Also, some juvenile snappers (e.g. mutton, gray, red, lane, and yellowtail snappers) and groupers (e.g. goliath, red, gag, and yellowfin groupers) have been documented in inshore seagrass beds, mangrove estuaries, lagoons, and larger bay systems (GMFMC 1981). More detail on hard bottom substrate and coral can be found in the fishery management plan (FMP) for Corals and Coral Reefs (GMFMC and SAFMC 1982).

Table 3.2.1. Summary of habitat use by life history stage for species in the FMP for Reef Fish Resources of the Gulf. This table was adapted from Table 3.2.7 in the final draft of the Council’s Generic EFH Amendment (GMFMC 2004a) and consolidated in this amendment.

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Red snapper	Pelagic	Pelagic	Hard bottoms, Sand/ shell bottoms, Soft bottoms	Hard bottoms, Sand/ shell bottoms, Soft bottoms	Hard bottoms, Reefs	Sand/ shell bottoms
Queen snapper	Pelagic	Pelagic	Unknown	Unknown	Hard bottoms	
Mutton snapper	Reefs	Reefs	Mangroves, Reefs, SAV, Emergent marshes	Mangroves, Reefs, SAV, Emergent marshes	Reefs, SAV	Shoals/ Banks, Shelf edge/slope
Blackfin snapper	Pelagic		Hard bottoms	Hard bottoms	Hard bottoms, Shelf edge/slope	Hard bottoms, Shelf edge/slope
Cubera snapper	Pelagic		Mangroves, Emergent marshes, SAV	Mangroves, Emergent marshes, SAV	Mangroves, Reefs	Reefs
Gray snapper	Pelagic, Reefs	Pelagic, Reefs	Mangroves, Emergent marshes, Seagrasses	Mangroves, Emergent marshes, SAV	Emergent marshes, Hard bottoms, Reefs, Sand/ shell bottoms, Soft bottoms	
Lane snapper	Pelagic		Mangroves, Reefs, Sand/ shell bottoms, SAV, Soft bottoms	Mangroves, Reefs, Sand/ shell bottoms, SAV, Soft bottoms	Reefs, Sand/ shell bottoms, Shoals/ Banks	Shelf edge/slope
Silk snapper	Unknown	Unknown	Unknown	Unknown	Shelf edge	
Yellowtail snapper	Pelagic		Mangroves, SAV, Soft bottoms	Reefs	Hard bottoms, Reefs, Shoals/ Banks	
Wenchman	Pelagic	Pelagic			Hard bottoms, Shelf edge/slope	Shelf edge/slope

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Vermilion snapper	Pelagic		Hard bottoms, Reefs	Hard bottoms, Reefs	Hard bottoms, Reefs	
Gray triggerfish	Reefs	Drift algae, <i>Sargassum</i>	Drift algae, <i>Sargassum</i>	Drift algae, Reefs, <i>Sargassum</i>	Reefs, Sand/ shell bottoms	Reefs, Sand/ shell bottoms
Greater amberjack	Pelagic	Pelagic	Drift algae	Drift algae	Pelagic, Reefs	Pelagic
Lesser amberjack			Drift algae	Drift algae	Hard bottoms	Hard bottoms
Almaco jack	Pelagic		Drift algae	Drift algae	Pelagic	Pelagic
Banded rudderfish		Pelagic	Drift algae	Drift algae	Pelagic	Pelagic
Hogfish			SAV	SAV	Hard bottoms, Reefs	Reefs
Blueline tilefish	Pelagic	Pelagic			Hard bottoms, Sand/ shell bottoms, Shelf edge/slope, Soft bottoms	
Tilefish (golden)	Pelagic, Shelf edge/slope	Pelagic	Hard bottoms, Shelf edge/slope, Soft bottoms	Hard bottoms, Shelf edge/slope, Soft bottoms	Hard bottoms, Shelf edge/slope, Soft bottoms	
Goldface tilefish	Unknown					
Speckled hind	Pelagic	Pelagic			Hard bottoms, Reefs	Shelf edge/slope
Yellowedge grouper	Pelagic	Pelagic		Hard bottoms	Hard bottoms	
Goliath grouper	Pelagic	Pelagic	Mangroves, Reefs, SAV	Hard bottoms, Mangroves, Reefs, SAV	Hard bottoms, Shoals/ Banks, Reefs	Reefs, Hard bottoms

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Red grouper	Pelagic	Pelagic	Hard bottoms, Reefs, SAV	Hard bottoms, Reefs	Hard bottoms, Reefs	
Warsaw grouper	Pelagic	Pelagic		Reefs	Hard bottoms, Shelf edge/slope	
Snowy grouper	Pelagic	Pelagic	Reefs	Reefs	Hard bottoms, Reefs, Shelf edge/slope	
Black grouper	Pelagic	Pelagic	SAV	Hard bottoms, Reefs	Hard bottoms, Mangroves, Reefs	
Yellowmouth grouper	Pelagic	Pelagic	Mangroves	Mangroves, Reefs	Hard bottoms, Reefs	
Gag	Pelagic	Pelagic	SAV	Hard bottoms, Reefs, SAV	Hard bottoms, Reefs	
Scamp	Pelagic	Pelagic	Hard bottoms, Mangroves, Reefs	Hard bottoms, Mangroves, Reefs	Hard bottoms, Reefs	Reefs, Shelf edge/slope
Yellowfin grouper			SAV	Hard bottoms, SAV	Hard bottoms, Reefs	Hard bottoms

Status of Reef Fish Stocks

The Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico (Reef Fish FMP) currently encompasses 31 species (Table 3.2.2). Eleven other species were removed from the Reef Fish FMP in 2012 by the Council in their Generic ACL/AM Amendment. Stock assessments and stock assessment reviews may be found on the Council (www.gulfcouncil.org) and SEDAR (<http://www.sefsc.noaa.gov/sedar>) websites and have been conducted for 13 species:

- red snapper (SEDAR 7 2005; SEDAR 7 Update 2009; SEDAR 31 2013)
- vermilion snapper (Porch and Cass-Calay 2001; SEDAR 9 2006a; SEDAR 9 Update 2011b; SEDAR Update 2014)
- yellowtail snapper (Muller et al. 2003; SEDAR 3 2003)
- mutton snapper (SEDAR 15A 2008)
- gray triggerfish (Valle et al. 2001; SEDAR 9 2006b; SEDAR 9 Update 2011c and 2014)
- greater amberjack (Turner et al. 2000; SEDAR 9 2006c; SEDAR 9 Update 2010, SEDAR 33 2014)
- hogfish (Ault et al. 2003; SEDAR 6 2004a, SEDAR 37 2013)
- red grouper (NMFS 2002; SEDAR 12 2007; SEDAR 12 Update 2009)
- gag grouper (Turner et al. 2001; SEDAR 10 2006; SEDAR 10 Update 2009, SEDAR 33 2014)
- black grouper (SEDAR 19 2010)
- yellowedge grouper (Cass-Calay and Bahnick 2002; SEDAR 22 2011a)
- tilefish (golden) (SEDAR 22 2011b)
- goliath grouper (Porch et al. 2003; SEDAR 6 2004b; SEDAR 23 2011)

Utilizing the most current stock assessment information, the Gulf of Mexico fourth quarter report of the 2014 Status of U.S. Fisheries

(<http://www.nmfs.noaa.gov/sfa/statusoffisheries/2011/fourth/Q4%202011%20FSSI%20and%20nonFSSI%20StockStatus.pdf>) classifies the 13 species as follows:

Overfished and Experiencing Overfishing:

- greater amberjack
- gray triggerfish

Not Overfished or Experiencing Overfishing:

- red snapper – most current stock assessment (SEDAR 31 2013)
- yellowtail snapper
- yellowedge grouper
- vermilion snapper
- black grouper
- red grouper
- gag grouper
- mutton snapper– not reflected in the 2011 Status of the Stocks
- hogfish – may be experiencing growth overfishing

Unknown:

- goliath grouper – benchmarks do not reflect appropriate stock dynamics
- snowy grouper
- speckled hind
- warsaw grouper
- yellowfin grouper
- SCAMP
- yellowmouth grouper
- cubera snapper
- gray snapper
- lane snapper
- queen snapper
- blackfin snapper
- silk snapper
- wenchman
- jacks complex (lesser amberjack, banded rudderfish)
- tilefish (golden) – insufficient data

Table 3.2.2. Species of the Reef Fish FMP grouped by family.

**Note: Goliath grouper is a protected grouper.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Stock Status</u>
Family Balistidae – Triggerfishes		
gray triggerfish	<i>Balistes capricus</i>	Overfished, overfishing
Family Carangidae – Jacks		
greater amberjack	<i>Seriola dumerili</i>	Overfished, overfishing
lesser amberjack	<i>Seriola fasciata</i>	Unknown
almaco jack	<i>Seriola rivoliana</i>	Unknown
banded rudderfish	<i>Seriola zonata</i>	Unknown
Family Labridae – Wrasses		
Hogfish	<i>Lachnolaimus maximus</i>	Not overfished, no overfishing
Family Malacanthidae – Tilefishes		
Tilefish (golden)	<i>Lopholatilus chamaeleonticeps</i>	Unknown
blueline tilefish	<i>Caulolatilus microps</i>	Unknown
goldface tilefish	<i>Caulolatilus chrysops</i>	Unknown
Family Serranidae – Groupers		
Gag	<i>Mycteroperca microlepis</i>	Overfished, overfishing
red grouper	<i>Epinephelus morio</i>	Not overfished, no overfishing
Scamp	<i>Mycteroperca phenax</i>	Unknown
black grouper	<i>Mycteroperca bonaci</i>	Not overfished, no overfishing
yellowedge grouper	<i>Epinephelus flavolimbatus</i>	Not overfished, no overfishing
snowy grouper	<i>Epinephelus niveatus</i>	Unknown
speckled hind	<i>Epinephelus drummondhayi</i>	Unknown
yellowmouth grouper	<i>Mycteroperca interstitialis</i>	Unknown
yellowfin grouper	<i>Mycteroperca venenosa</i>	Unknown
warsaw grouper	<i>Epinephelus nigritus</i>	Unknown
**goliath grouper	<i>Epinephelus itajara</i>	Unknown, not overfishing
Family Lutjanidae – Snappers		
queen snapper	<i>Etelis oculatus</i>	Unknown
mutton snapper	<i>Lutjanus analis</i>	Unknown
blackfin snapper	<i>Lutjanus buccanella</i>	Unknown
red snapper	<i>Lutjanus campechanus</i>	Overfished, no overfishing
cupera snapper	<i>Lutjanus cyanopterus</i>	Unknown
gray snapper	<i>Lutjanus griseus</i>	Unknown
lane snapper	<i>Lutjanus synagris</i>	Unknown
silk snapper	<i>Lutjanus vivanus</i>	Unknown
yellowtail snapper	<i>Ocyurus chrysurus</i>	Not overfished, no overfishing
vermillion snapper	<i>Rhomboplites aurorubens</i>	Not overfished, no overfishing
Wenchman	<i>Pristipomoides aquilonaris</i>	Unknown

Protected Species

There are 28 different species of marine mammals that can or are known to occur in the Gulf of Mexico. All 28 species are protected under the Marine Mammal Protection Act (MMPA) and six are also listed as endangered under the Endangered Species Act (ESA) (i.e., sperm, sei, fin, blue, humpback and North Atlantic right whales). Other species protected under the ESA occurring in the Gulf include five sea turtle species (Kemp's Ridley, loggerhead, green, leatherback, and hawksbill); two fish species (Gulf sturgeon and smalltooth sawfish), and two coral species (elkhorn coral and staghorn coral). Information on the distribution, biology, and abundance of these protected species in the Gulf is included in Generic EFH Amendment (GMFMC 2004a) and the February 2005, October 2009, and September 2011 ESA biological opinions on the reef fish fishery (NMFS 2005; NMFS 2009; NMFS 2011). Marine Mammal Stock Assessment Reports and additional information are also available on the NMFS Office of Protected Species website: <http://www.nmfs.noaa.gov/pr/species/>.

The MMPA 2015 Proposed List of Fisheries (79 FR 14418) considers vertical line gear and longline gear as Category III gears. These gears are the dominant gear used in the Gulf reef fish fishery - vertical line (90%) and longline (5.4%) gear. This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from any fishery is less than or equal to 1% of the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. Dolphins are the only species documented as interacting with these fisheries. Bottlenose dolphins prey upon on the bait, catch, and/or released discards of fish from the reef fish fishery. They are also a common predator around reef fish vessels, feeding on the discards.

All five species of sea turtles are adversely affected by the Gulf reef fish fishery. Incidental captures are relatively infrequent, but occur in all commercial and recreational hook-and-line components of the reef fishery. Loggerhead sea turtles are by far the most frequently incidentally caught sea turtles. Captured sea turtles can be released alive or can be found dead upon retrieval of the gear as a result of forced submergence. Sea turtles released alive may later succumb to injuries sustained at the time of capture or from exacerbated trauma from fishing hooks or lines that were ingested, entangling, or otherwise still attached when they were released. Sea turtle release gear and handling protocols are required in the commercial and for-hire reef fish fisheries to minimize post-release mortality.

NMFS has conducted specific analyses (Section 7 consultations) to evaluate potential effects from the Gulf reef fish fishery on species and critical habitats protected under the ESA. On September 30, 2011, the Protected Resources Division released a biological opinion (Opinion), which concluded that the continued operation of the Gulf reef fish fishery is not likely to jeopardize the continued existence of sea turtles (loggerhead, Kemp's ridley, green, hawksbill, and leatherback) or smalltooth sawfish (NMFS 2011a). The Opinion also concluded that other ESA-listed species are not likely to be adversely affected by the Reef Fish FMP. An incidental take statement was issued specifying the amount and extent of anticipated take, along with reasonable and prudent measures and associated terms and conditions deemed necessary and appropriate to minimize the impact of these takes. The Council addressed further measures to reduce take in the reef fish fishery's longline component in Amendment 31 (GMFMC 2009).

Subsequent to the completion of the biological opinion, NMFS published final rules listing 20 new coral species (September 10, 2014), and designating critical habitat for the Northwest Atlantic Ocean distinct population segment of loggerhead sea turtles (July 10, 2014). NMFS addressed these changes in a series of consultation memoranda. In a consultation memorandum dated October 7, 2014, NMFS assessed the continued operation of the Gulf reef fish fishery's potential impact on the newly-listed coral species occurring in the Gulf (3 species of *Orbicella* and *Mycetophyllia ferox*) and concluded the fishery is not likely to adversely affect any of the protected coral species. Similarly, in a consultation memorandum dated September 16, 2014, NMFS assessed the continued authorization of South Atlantic and Gulf of Mexico fisheries' potential impacts on loggerhead critical habitat and concluded the Gulf reef fish fishery is not likely to adversely affect the newly designated critical habitat.

Smalltooth sawfish also interact with the Gulf reef fish fishery, but to a much lesser extent. Smalltooth sawfish primarily occur in the Gulf of Mexico off peninsular Florida. Incidental captures in the commercial and recreational hook-and-line components of the reef fish fishery are rare events, with only eight smalltooth sawfish estimated to be incidentally caught every three years, and none are expected to result in mortality (NMFS 2011). Fishermen in this fishery are required to follow smalltooth sawfish safe handling guidelines. The long, toothed rostrum of the smalltooth sawfish causes this species to be particularly vulnerable to entanglement in fishing gear.

3.3 Description of the Economic Environment

A description of the greater amberjack stock is provided in Section 1.1. Additional details on the fishery for greater amberjack are provided in Amendment 30A to the Reef Fish FMP (GMFMC 2008) and Regulatory Framework Action to the Reef Fish FMP (Greater Amberjack Recreational Fishing Closure) (GMFMC 2011), and are incorporated herein by reference. The following section contains updated information on the economic environment of the greater amberjack fishery.

3.3.1 Economic Description of the Commercial Sector

The major source of data summarized in this description is the Federal Logbook System (FLS), supplemented by average prices calculated from the NMFS Accumulated Landings System (ALS) and price indices taken from the Bureau of Labor Statistics. Inflation adjusted revenues and prices are reported in real^[NC1] 2013 dollars. Landings are expressed in gutted weight to match the method for collecting ex-vessel price information. The gutted to whole weight conversion rate is 1.04.

Landings, Value, and Effort

The number of vessels that landed greater amberjack each year decreased rapidly from 2009 through 2012 and increased modestly in 2013 (Table 3.3.1). The number of trips on which greater amberjack was landed, as well as landings of greater amberjack and landings of other species jointly caught with greater amberjack, exhibited similar trends during this time period. The number of non-greater amberjack trips taken by vessels that landed at least one pound of greater amberjack during the year, as well as landings on those trips, fluctuated from 2009 through 2013. On average (2009 through 2013), vessels that landed greater amberjack took 4.6 times as many non-greater amberjack trips as greater amberjack trips. Greater amberjack landings for those vessels accounted for only 4.7% of all species landings from all trips.

Table 3.3.1. Number of vessels, number of trips and landings by year.

Year	Number of vessels that caught GOM greater amberjack (> 0 lbs)	Number of trips that caught GOM greater amberjack	GOM greater amberjack landings (lbs gutted wt)	Other species' landings jointly caught with GOM greater amberjack (lbs gutted wt)	Number of GOM trips that only caught other species	Other species' landings on GOM trips without greater amberjack (lbs gutted wt)
2009	320	1,148	477,778	3,064,904	3,909	7,975,844
2010	222	634	472,090	1,617,077	2,379	5,484,925
2011	191	524	445,027	1,155,942	3,030	6,686,227
2012	142	314	270,223	692,299	2,458	5,698,505
2013	179	489	346,442	1,146,752	2,593	6,984,252
Average	211	622	402,312	1,535,395	2,874	6,565,951

Source: NMFS SEFSC Coastal Fisheries Logbook.

Ex-vessel revenues by year for greater amberjack and non-greater amberjack species are presented in Table 3.3.2. On average (2009 through 2013), greater amberjack revenues accounted for about 1.9% of total revenues earned by vessels that landed at least one pound of greater amberjack. On trips in which greater amberjack was harvested (2009 through 2013), species other than greater amberjack accounted for the majority of revenues on average. Total dockside revenue for vessels that landed greater amberjack fluctuated from 2009 through 2013 but did not change that much overall, whereas average total dockside revenue per vessel increased steadily.

Table 3.3.2. Number of vessels and ex-vessel revenues by year (2013 dollars)*.

Year	Number of vessels that caught GOM greater amberjack (> 0 lbs)	Dockside revenue from GOM greater amberjack only	Dockside revenue from 'other species' jointly caught with GOM greater amberjack only	Dockside revenue from 'other species' caught on GOM trips without greater amberjack	Total dockside revenue	Average total dockside revenue per vessel
2009	320	\$599,315	\$8,680,032	\$22,974,684	\$32,254,031	\$100,794
2010	222	\$545,065	\$5,121,735	\$17,469,806	\$23,136,606	\$104,219
2011	191	\$559,961	\$3,599,690	\$20,876,537	\$25,036,187	\$131,080
2012	142	\$337,302	\$2,141,370	\$18,128,951	\$20,607,623	\$145,124
2013	179	\$510,558	\$4,128,833	\$25,410,189	\$30,049,580	\$167,875
Average	211	\$510,440	\$4,734,332	\$20,972,033	\$26,216,806	\$129,818

Source: NMFS SEFSC Coastal Fisheries Logbook for landings and NMFS Accumulated Landings System for prices.

*Revenues converted to 2013 dollars using the 2013 annual Consumer Price Index (CPI) for all US urban consumers provided by the Bureau of Labor and Statistics (BLS).

Given the only commercial management measure being considered in this framework action is a trip limit, it's useful to analyze the amount of recent effort and the number of vessels that would have been non-compliant had each proposed trip limit Alternative been in place historically. This provides empirical estimates of the proportion of total effort and vessels likely to be affected by the commercial trip limits if the revised trip limit is implemented. Table 3.3.3 presents the average number of trips with landings in excess of each trip limit Alternative and average number of vessels that took such trips (2009-2013)¹. About 14% of greater amberjack trips on average had landings in excess of the 1,500-lb trip limit. 28% of those trips had greater amberjack landings in excess of the 500-lb trip limit Alternative from 2009 through 2013. Fifteen percent of greater amberjack vessels reported landings in excess of the 1,500-lb trip limit

¹ The status quo 2,000-lb trip limit implemented in 2013 is excluded from this table since averaging across years with non-consistent trip limits could be misleading and since it does not provide additional information in terms of potential displaced effort. About 11% of GAJ vessels, however, did report trip-level landings in excess of the 2000-lb trip limit in 2013. These trips accounted for 8% of all GAJ trips taken in 2013. Anecdotal evidence suggests many fishermen misinterpreted the trip limit as being in gutted weight rather than whole weight. The data supports this as well, showing a large drop in non-compliant vessels and trips when gutted weight is substituted for whole weight (19 vessels to 8 vessels and 38 trips to 10 trips respectively). NMFS released a bulletin on July 29, 2014 that reminded commercial reef fish fishermen that the trip limit is in whole weight and provided the gutted weight conversion.

Alternative and 31% of greater amberjack vessels reported landings in excess of the 500-lb trip limit on average (2009-2013). Lower trip limits may reduce profits and the severity of such impacts will be based on the overall dependence a vessel has on greater amberjack and the vessel's ability to substitute other species revenue. On average (2009-2013), there were three (3) or fewer vessels that both derived the majority of their revenues from greater amberjack and took a trip with landings in excess of each trip limit Alternative. It seems likely that these vessels would be the most severely impacted by a reduction in trip limits, though it is not possible to quantify the magnitude of such impacts given the uncertainty of future revenues, costs and behavioral responses of the fishermen. If trip limits successfully extend the greater amberjack season, some vessels, especially those that do not experience large reductions in their trip-level landings, may benefit from the opportunity to take additional trips. Other vessels may experience a decline in trip-level revenues to the point where it is no longer profitable to fish for greater amberjack.

Table 3.3.3. Number of trips with landings in excess of each trip limit Alternative and number of vessels that took such trips (2009-2013 Average).

	Trip Limit (lbs, ww)		
	500	1,000	1,500
Number of trips with greater amberjack landings in excess of each trip limit Alternative (percent of total greater amberjack trips)	176 (28%)	115 (18%)	87 (14%)
Number of vessels that took a trip with greater amberjack landings in excess of each trip limit Alternative (percent of total greater amberjack vessels)	66 (31%)	41 (20%)	32 (15%)

Source: NMFS SEFSC Coastal Fisheries Logbook.

Imports

Imports of seafood products compete in the domestic seafood market and have in fact dominated many segments of the seafood market. Imports aid in determining the price for domestic seafood products and tend to set the price in the dominant market segments.. Seafood imports have downstream effects on the local fish market. At the harvest level for reef fish in general and greater amberjack in particular, imports affect the returns to fishermen through the ex-vessel prices they receive for their landings. As substitutes to domestic production of reef fish, including greater amberjack, imports tend to cushion the adverse economic effects on consumers resulting from a reduction in domestic landings. The following describes the imports of fish products which directly compete with domestic harvest of reef fish, including greater amberjack.

Imports² of fresh snapper ranged from 21.5 million pounds product weight (pw) in 2009 to 23.2 million pounds pw in 2013 with minor fluctuations in between. Total revenue from fresh snapper imports increased steadily from \$53.6 million (2013 dollars³) in 2009 to a five-year high of \$67.9 million in 2013. Imports of fresh snappers primarily originated in Mexico, Central America, or South America, and entered the U.S. through the port of Miami. Imports of fresh snapper were highest on average (2009 through 2013) during the months March through May.

Imports of frozen snapper were substantially less than imports of fresh snapper from 2009 through 2013. The annual value of frozen snapper imports ranged from \$17.2 million (2013 dollars) to \$26.7 million during the time period, with a peak in 2011. Imports of frozen snapper primarily originated in South America (especially Brazil), Indonesia, and Mexico. The majority of frozen snapper imports entered the U.S. through the ports of Miami and New York. Imports of frozen snappers tended to be lowest during March, April and May when fresh snapper imports were the highest.

Imports of fresh grouper ranged from 8.3 million pounds pw worth \$23.7 million (2013 dollars) in 2009 to 10 million pounds pw worth \$36.2 million in 2013 with minor fluctuations in between. The bulk of fresh grouper imports originated in Mexico and entered the U.S. through Miami. From 2009 through 2013 fresh grouper imports were lowest on average during the month of March and higher the rest of the year, with a peak in July.

Imports of frozen grouper were minimal and stable from 2009 through 2013, ranging from 1 million pounds pw worth \$2.1 million (2013 dollars) to 2 million pounds pw worth \$3.5 million. Frozen grouper imports generally originated in Mexico and to a lesser extent, Asia and entered the U.S. through Miami and Tampa. There was an inverse relationship in monthly landings between frozen and fresh groupers, with average imports being the highest in March for frozen grouper and lower during other months.

Business Activity

The commercial harvest and subsequent sales and consumption of fish generates business activity as fishermen expend funds to harvest the fish and consumers spend money on goods and services, such as greater amberjack purchased at a local fish market and served during restaurant visits. These expenditures spur additional business activity in the region(s) where the harvest and purchases are made, such as jobs in local fish markets, grocers, restaurants, and fishing supply establishments. In the absence of the availability of a given species for purchase, consumers would spend their money on substitute goods and services. As a result, the analysis presented below represents a distributional analysis only; that is, it only shows how economic effects may be distributed through regional markets and should not be interpreted to represent the impacts if these species are not available for harvest or purchase.

² NOAA Fisheries Service purchases fisheries trade data from the Foreign Trade Division of the U.S. Census Bureau. Data are available for download at <http://www.st.nmfs.noaa.gov/st1/trade/index.html>.

³ Converted to 2013 dollars using the 2013 annual Consumer Price Index (CPI) for all US urban consumers provided by the Bureau of Labor and Statistics (BLS).

Estimates of the U.S. average annual business activity associated with the commercial harvest of greater amberjack, and all species harvested by the vessels that harvested these greater amberjack, were derived using the model developed for and applied in NMFS (2011) and are provided in Table 3.3.4. This business activity is characterized as full-time equivalent jobs, income impacts (wages, salaries, and self-employed income), and output (sales) impacts (gross business sales). Income impacts should not be added to output (sales) impacts because this would result in double counting. It should be noted that the results provided should be interpreted with caution and demonstrate the limitations of these types of assessments. These results are based on average relationships developed through the analysis of many fishing operations that harvest many different species. Separate models to address individual species are not available. For example, the results provided here apply to a general reef fish category rather than just greater amberjack, and a harvester job is “generated” for approximately every \$44,000 in ex-vessel revenue. These results contrast with the information provided in Section 3.3.1. which shows an average of 211 harvesters (vessels) with recorded landings of greater amberjack.

Table 3.3.4. Average annual business activity (2009 through 2013) associated with the commercial harvest of greater amberjack and the harvest of all species by vessels that landed greater amberjack. All monetary estimates are in 2013 dollars.

Species	Average Ex-vessel Value (\$ thousands)	Total Jobs	Harvester Jobs	Output (Sales) Impacts (\$ thousands)	Income Impacts (\$ thousands)
Greater amberjack	\$510	89	12	\$6,721	\$2,864
All species on all trips made by vessels that landed greater than one pound of greater amberjack in a year.	\$26,217	4,566	596	\$345,184	\$147,114

3.3.2 Economic Description of the Recreational Sector

The Gulf recreational sector is comprised of the private and for-hire modes. The private mode includes anglers fishing from shore (all land-based structures) and private/rental boats. The for-hire mode is composed of charter boats and headboats (also called partyboats). Charter boats generally carry fewer passengers and charge a fee on an entire vessel basis, whereas headboats carry more passengers and payment is per person. The type of service, from a vessel- or passenger-size perspective, affects the flexibility to search different fishing locations during the course of a trip and target different species since larger concentrations of fish are required to satisfy larger groups of anglers.

Landings

The recreational sector has been allocated 73% of the greater amberjack stock ACL each year since the implementation of Amendment 30A in August 2008 (GMFMC 2008). Recreational harvests of greater amberjack declined from 2009 through 2011 and increased from 2011 to a five-year high in 2013 (Table 3.3.5.).

Table 3.3.5. Recreational landings (lbs ww) and percent distribution of greater amberjack and reef fish, 2009 - 2013.

	Greater Amberjack (pounds ww)	Reef Fish (pounds ww)	Percent of Reef Fish*
2009	1,480,306	12,866,823	11.5%
2010	1,225,222	8,472,155	14.5%
2011	949,999	9,938,318	9.6%
2012	1,238,719	13,099,518	9.5%
2013	1,616,629	20,379,130	7.9%
Average	1,302,175	12,951,189	10.1%

Source: SEFSC MRIP ACL datasets (Aug 2014).

* Species managed under the Reef Fish FMP; see <http://www.gulfcouncil.org/>.

From 2009 through 2013, recreational landings of greater amberjack in west Florida were consistently higher than landings in any other state, accounting for over 75% of total Gulf-wide landings on average (Table 3.3.2. 2). Yearly landings fluctuated for all states.

Table 3.3.6. Recreational landings (lbs ww) and percent distribution of greater amberjack across all modes, by state, 2009 - 2013.

	AL	AL/FLW*	FLW	LA	LA/MS**	MS	TX
	Landings (pounds ww)						
2009	43,661	57,566	950,852	359,595	27,246	20,344	21,043
2010	85,833	33,860	1,002,601	78,238	2,485	0	22,205
2011	64,394	39,201	810,525	9,253	7,986	0	18,640
2012	58,005	66,054	924,292	151,875	10,390	0	28,103
2013	216,865	0	1,172,107	178,308	7,262	12,358	29,729
Avg	93,752	39,336	972,075	155,454	11,074	6,540	23,944
	Percent Distributions						
2009	2.9%	3.9%	64.2%	24.3%	1.8%	1.4%	1.4%
2010	7.0%	2.8%	81.8%	6.4%	0.2%	0.0%	1.8%
2011	6.8%	4.1%	85.3%	1.0%	0.8%	0.0%	2.0%
2012	4.7%	5.3%	74.6%	12.3%	0.8%	0.0%	2.3%
2013	13.4%	0.0%	72.5%	11.0%	0.4%	0.8%	1.8%
Avg	7.0%	3.2%	75.7%	11.0%	0.8%	0.4%	1.9%

Source: SEFSC MRIP ACL datasets (Aug 2014).

* Headboat landings are estimated jointly for west Florida and Alabama through 2012.

** Heaboat landings data from Louisiana and Mississippi are combined for confidentiality purposes.

The majority of recreational greater amberjack landings (93.9%) from 2009 through 2013 were reported by the private and charter vessel modes (Table 3.3.7). During this time period, average landings were about 15% higher for private vessels than charter vessels. Charter landings were, however, almost double those of the private mode in 2011. Headboat landings were consistently much lower than both charter and private modes, accounting for only 6.1% on average (2009 through 2013). There were no landings reported from shore for greater amberjack.

Table 3.3.7. Recreational landings (lbs ww) and percent distribution of greater amberjack across all states, by mode, 2009 - 2013.

	Landings (pounds ww)				Percent Distribution			
	Charter boat	Headboat	Private	Shore	Charter boat	Headboat	Private	Shore
2009	653,160	103,191	723,955	0	44.1%	7.0%	48.9%	0.0%
2010	460,740	53,203	711,279	0	37.6%	4.3%	58.1%	0.0%
2011	583,813	62,835	303,351	0	61.5%	6.6%	31.9%	0.0%
2012	546,086	99,680	592,952	0	44.1%	8.0%	47.9%	0.0%
2013	604,626	73,246	938,757	0	37.4%	4.5%	58.1%	0.0%
Avg	569,685	78,431	654,059	0	44.9%	6.1%	49.0%	0.0%

Source: SEFSC MRIP ACL datasets (Aug 2014).

As seen in Table 3.3.8, over the period 2009-2013, greater amberjack recreational landings generally started low at the beginning of each year, peaked in May through August, then tapered back down till the end of the year. Prior to the implementation of the June through July seasonal closure beginning in 2011, the majority of landings occurred during May through August. Following the implementation of the seasonal closure in 2011, the distribution of monthly landings changed somewhat, with a higher average percentage of annual landings occurring in March, April, September, and October.

Table 3.3.8. Recreational landings (lbs ww) and percent distribution of greater amberjack, by month, 2009-2013.

	Jan	Feb	Mar	Apr	May	Jun*	Jul*	Aug	Sep	Oct	Nov	Dec
Landings (pounds ww)												
2009	95,126	85,920	40,854	39,536	339,464	328,513	230,162	230,162	44,466	45,948	77	79
2010	36,884	33,314	139,968	135,452	268,592	259,928	44,175	44,175	96,715	99,938	32,123	33,194
2011	32,421	29,283	52,927	51,220	196,240	-	-	247,109	144,619	149,440	22,987	23,753
2012	63,811	59,694	197,159	190,799	236,256	-	-	165,023	97,960	101,225	62,356	64,435
2013	15,284	13,805	199,921	193,472	293,793	-	-	404,001	225,802	233,328	18,306	18,916
Avg	48,705	44,403	126,166	122,096	266,869	NA**	NA**	218,094	121,912	125,976	27,170	28,075
Percent Distribution												
2009	6.4%	5.8%	2.8%	2.7%	22.9%	22.2%	15.5%	15.5%	3.0%	3.1%	0.0%	0.0%
2010	3.0%	2.7%	11.4%	11.1%	21.9%	21.2%	3.6%	3.6%	7.9%	8.2%	2.6%	2.7%
2011	3.4%	3.1%	5.6%	5.4%	20.7%	-	-	26.0%	15.2%	15.7%	2.4%	2.5%
2012	5.2%	4.8%	15.9%	15.4%	19.1%	-	-	13.3%	7.9%	8.2%	5.0%	5.2%
2013	0.9%	0.9%	12.4%	12.0%	18.2%	-	-	25.0%	14.0%	14.4%	1.1%	1.2%
Avg	3.8%	3.5%	9.6%	9.3%	20.6%	NA**	NA**	16.7%	9.6%	9.9%	2.2%	2.3%

Source: SEFSC MRIP ACL datasets (Aug 2014).

Note: Landings in each wave are assumed uniformly distributed across open months.

*A June 1st through July 31 closure was implemented in 2011.

** Averages for June and July are not applicable due to the closures. The average percent distribution row will not sum to 100% as a result.

Angler Effort

Recreational effort derived from the Marine Recreational Information Program (MRIP) database can be characterized in terms of the number of trips as follows:

- Target effort - The number of individual angler trips, regardless of duration, where the intercepted angler indicated that the species or a species in the species group was targeted as either the first or the second primary target for the trip. The species did not have to be caught.

- Catch effort - The number of individual angler trips, regardless of duration and target intent, where the individual species or a species in the species group was caught. The fish did not have to be kept.
- Total recreational trips - The total estimated number of recreational trips in the Gulf, regardless of target intent or catch success.

A target trip may be considered an angler’s revealed preference for a certain species, and thus may carry more relevant information when assessing the economic effects of regulations on the subject species than the other two measures of recreational effort. Given the subject nature of this amendment, the following discussion focuses on target trips for greater amberjack.

On average, greater amberjack target trips⁴ accounted for 3.3% of target reef fish trips and target reef fish trips accounted for 5.6% of total angler trips for the years 2009 through 2013 in the Gulf (Table 3.3.9). This excludes headboat trips and trips from Texas, for which target data is unavailable. Both greater amberjack and reef fish target trips were at five-year highs in 2013 following a period of reduced effort starting in 2010. The reduction in effort in 2010 could be due in part to the Deepwater Horizon oil spill and associated closures (see Section 3.2.1). There is a subtle downward trend from 2009 through 2013 in the percent of reef fish target trips made up of greater amberjack target trips.

Table 3.3.9. Target trips for greater amberjack and reef fish, 2009 -2013.

	Greater Amberjack Target Trips*		Reef Fish Target Trips*	
	Trips	Percent ¹	Trips	Percent ²
2009	48,972	3.6%	1,351,092	6.0%
2010	31,195	3.4%	906,060	4.4%
2011	36,208	3.8%	958,092	4.3%
2012	35,222	3.2%	1,112,276	4.9%
2013	50,719	2.5%	2,053,975	8.2%
Average	40,463	3.3%	1,276,299	5.6%

Source: MRIP database, NOAA Fisheries, NMFS, SERO.

* Target data for headboats and the state of Texas are unavailable and are not included.

¹Percent of reef fish target trips. ²Percent of total angler trips.

On average, the highest number of estimated greater amberjack target trips for the Gulf occurred in Florida (81.3%), followed by Alabama (10.7%) and Louisiana (7.7%) (Table 3.3.10).

Mississippi recorded greater amberjack target effort in 2009, but not in subsequent years. The number of target trips in Florida decreased substantially in 2010, increased gradually from 2010

⁴ Monroe County, FL is excluded from all target effort metrics to be consistent with greater amberjack landings post-stratification. This potentially underestimates total reef fish target effort in the Gulf, since not all species in the reef fish complex require post-stratification.

through 2012 and then rose quickly in 2013 to a five-year high. Target effort in Alabama fluctuated with a peak in 2011. The number of target trips in Louisiana dropped drastically in 2010 and 2011, then increased heavily in 2012 and 2013, but did not return to 2009 levels. As discussed earlier, it may be likely that the severe declines in target effort in Louisiana during 2010 and 2011 were due in part to the 2010 oil spill. The potential impact of the oil spill is not, however, apparent for Alabama, which experienced increases in the number of estimated target trips in 2010 and 2011.

Table 3.3.10. Greater amberjack target trips and percent distribution across all modes by state, 2009 - 2013.

	Greater Amberjack Target Trips*				Percent Distribution			
	AL	FLW	LA	MS	AL	FLW	LA	MS
2009	1,838	38,053	8,437	644	3.8%	77.7%	17.2%	1.3%
2010	3,758	26,466	970	-	12.0%	84.8%	3.1%	0.0%
2011	7,874	28,148	186	-	21.7%	77.7%	0.5%	0.0%
2012	2,341	30,229	2,652	-	6.6%	85.8%	7.5%	0.0%
2013	4,748	40,820	5,152	-	9.4%	80.5%	10.2%	0.0%
Average	4,112	32,743	3,479	129	10.7%	81.3%	7.7%	0.3%

Source: MRIP database, NOAA Fisheries, NMFS, SERO.

* Target data for headboats and the state of Texas are unavailable and are not included.

On average, approximately 75% of the estimated target trips for greater amberjack were recorded by anglers in private boats and the rest, by charter vessels (Table 3.3.11). No greater amberjack target trips were recorded by the shore-mode anglers. The number of private angler target trips decreased annually to a five-year low in 2011, then increased annually through 2013, almost returning to 2009 levels. The estimated number of target trips for charter anglers fluctuated with a peak in 2011.

Table 3.3.11. Greater amberjack target trips and percent distribution across all states, 2009 - 2013.

	Greater Amberjack Target Trips*			Percent Distribution		
	Shore	Charter	Private	Shore	Charter	Private
2009	0	8,294	40,679	0.0%	16.9%	83.1%
2010	0	5,534	25,661	0.0%	17.7%	82.3%
2011	0	15,165	21,043	0.0%	41.9%	58.1%
2012	0	9,427	25,795	0.0%	26.8%	73.2%
2013	0	11,168	39,551	0.0%	22.0%	78.0%
Average	0	9,918	30,546	0.0%	25.1%	74.9%

Source: MRIP database, NOAA Fisheries, NMFS, SERO.

* Target data for headboats and the state of Texas are unavailable and are not included.

On average, target effort for greater amberjack was concentrated most heavily in the months March through May and August through September (Table 3.3.12). Target effort was low or

zero in June and July following the implementation of the seasonal closure in 2011. The monthly distribution of target effort generally coincided with the monthly distribution of landings.

Table 3.3.12. Greater amberjack target trips and percent distribution across all modes and states, by month, 2009 - 2013.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Greater Amberjack Target Trips*												
2009	772	7,062	809	7,275	4,584	19,461	4,819	2,165	1445	0	580	0
2010	0	1810	5,437	150	9,974	342	2,007	888	3,214	3,653	3,721	0
2011	0	0	1,737	2,785	5,501	0	0	14,653	7447	1409	0	2,675
2012	1,851	262	5,107	9,337	3,032	441	0	8,205	1,862	1,103	1309	2712
2013	50	3,363	13,497	0	11,986	0	1,348	9,263	6,683	1,478	1,241	1,811
Avg	535	2,499	5,317	3,909	7,015	4,049	1,635	7,035	4,130	1,529	1,370	1,440
Percent Distribution												
2009	1.6%	14.4%	1.7%	14.9%	9.4%	39.7%	9.8%	4.4%	3.0%	0.0%	1.2%	0.0%
2010	0.0%	5.8%	17.4%	0.5%	32.0%	1.1%	6.4%	2.8%	10.3%	11.7%	11.9%	0.0%
2011	0.0%	0.0%	4.8%	7.7%	15.2%	0.0%	0.0%	40.5%	20.6%	3.9%	0.0%	7.4%
2012	5.3%	0.7%	14.5%	26.5%	8.6%	1.3%	0.0%	23.3%	5.3%	3.1%	3.7%	7.7%
2013	0.1%	6.6%	26.6%	0.0%	23.6%	0.0%	2.7%	18.3%	13.2%	2.9%	2.4%	3.6%
Avg	1.4%	5.5%	13.0%	9.9%	17.8%	8.4%	3.8%	17.9%	10.5%	4.3%	3.9%	3.7%

Source: MRIP database, NOAA Fisheries, NMFS, SERO.

* Target data for headboats and the state of Texas are unavailable and are not included.

Note: There are some target trips shown during the June through July closure implemented in 2011. This is likely due to a small number of intercepted angler trips with high sample weights that either targeted greater amberjack for catch and release purposes or mistakenly reported greater amberjack as one of their primary targets.

Similar analysis of recreational effort is not possible for the headboat mode because headboat data are not collected at the angler level. Estimates of effort by the headboat mode are provided in terms of angler days, or the number of standardized 12-hour fishing days that account for the different half-, three-quarter-, and full-day fishing trips by headboats. The stationary “fishing for demersal species” nature of headboat fishing, as opposed to trolling, suggests that most, if not all, headboat trips and, hence, angler days, are demersal or reef fish trips by intent. In a study of the for-hire fishing industry in the Gulf, Sutton et al. (1999) found that the mean percentage of

time spent targeting greater amberjack for the entire year for all party boat (headboat) operators in the Gulf was 5.10%⁵.

The distribution of headboat effort (angler days) by geographic area is presented in Table 3.3.13. For purposes of data collection, the headboat data collection program divides the Gulf into several areas. In Table 3.3.13, FLW refers to areas in Florida from the Dry Tortugas through the Florida Middle Grounds, FL-AL covers northwest Florida and Alabama, MS refers to the entire coastline of Mississippi, LA refers to the entire coastline of Louisiana, and TX includes areas in Texas from Sabine Pass-Freeport south to Port Isabel. On average, the area from the Dry Tortugas through the Florida Middle Grounds accounted for 40.2% of total headboat angler days in the Gulf, followed by northwest Florida through Alabama (33.2%), Texas (25.2%), Louisiana (<1%) and Mississippi (<1%). Western Florida, Northwest Florida through Alabama, and Texas all experienced declines in angler days in 2010, but then saw steady increases to five-year highs in 2013. In Louisiana, the number of headboat angler days dropped precipitously in 2010, increased in 2011, but then decreased again in 2012 and 2013. In Mississippi, the number of angler days increased substantially in 2011 and then remained mostly stable through 2013.

Table 3.3.13. Headboat angler days and percent distribution, by state, 2009 - 2013.

	Angler Days					Percent Distribution				
	FLW	FL-AL*	LA	TX	MS**	FLW	FL-AL	LA	TX	MS
2009	76,815	65,623	3268	50,737	-	39.1%	33.4%	1.7%	25.8%	-
2010	70,424	40,594	217	47,154	498	44.3%	25.5%	0.1%	29.7%	0.3%
2011	79,722	77,303	1,886	47,284	1,771	38.3%	37.2%	0.9%	22.7%	0.9%
2012	84,205	77,770	1,839	51,776	1,841	38.7%	35.8%	0.8%	23.8%	0.8%
2013	94,752	80,048	1,579	55,749	1,827	40.5%	34.2%	0.7%	23.8%	0.8%
Average	81,184	68,268	1,758	50,540	1,484	40.2%	33.2%	0.8%	25.2%	0.7%

Source: NMFS Southeast Region Headboat Survey (SRHS).

*For 2013, SRHS data was reported separately for NW Florida and Alabama, but has been combined here for consistency with previous years.

** No headboats in Mississippi were included in the SRHS in 2009.

Headboat effort in terms of angler days for the entire Gulf was concentrated most heavily during the summer months of June through August on average (2009 through 2013) (Table 3.3.14). The monthly trend in angler days was very similar across years, building gradually from January through May, rising sharply to a peak in June and July, dropping rapidly through September, increasing slightly in October, then tapering through December.

⁵ No newer studies have been identified which discuss greater amberjack targeting behavior of headboats in the Gulf.

Table 3.3.14. Headboat angler days and percent distribution, by month, 2009 - 2013.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Headboat Angler Days												
2009	7,611	8,525	14,444	15,513	17,089	36,749	38,955	25,060	9,201	9,745	6,889	6,662
2010	4,962	5,709	13,186	18,077	14,029	26,495	22,616	14,378	8,759	16,328	9,488	4,860
2011	5,242	9,174	16,378	17,626	16,148	39,775	42,089	22,513	10,766	12,609	8,514	7,132
2012	7,924	9,364	18,326	16,404	17,708	39,662	46,468	21,440	12,629	13,281	7,135	7,090
2013	8,630	9,576	16,759	16,426	17,150	47,791	38,304	27,610	12,697	21,256	8,654	9,102
Avg	6,874	8,470	15,819	16,809	16,425	38,094	37,686	22,200	10,810	14,644	8,136	6,969
Percent Distribution												
2009	3.9%	4.3%	7.4%	7.9%	8.7%	18.7%	19.8%	12.8%	4.7%	5.0%	3.5%	3.4%
2010	3.1%	3.6%	8.3%	11.4%	8.8%	16.7%	14.2%	9.0%	5.5%	10.3%	6.0%	3.1%
2011	2.5%	4.4%	7.9%	8.5%	7.8%	19.1%	20.2%	10.8%	5.2%	6.1%	4.1%	3.4%
2012	3.6%	4.3%	8.4%	7.5%	8.1%	18.2%	21.4%	9.9%	5.8%	6.1%	3.3%	3.3%
2013	3.7%	4.1%	7.2%	7.0%	7.3%	20.4%	16.4%	11.8%	5.4%	9.1%	3.7%	3.9%
Avg	3.4%	4.1%	7.8%	8.5%	8.2%	18.6%	18.4%	10.9%	5.3%	7.3%	4.1%	3.4%

Source: NMFS Southeast Region Headboat Survey (SRHS).

Permits

For-hire vessels are required to have a Charter/Headboat for Reef Fish permit (for-hire permit) to fish for or possess reef fish species in the Gulf EEZ (a similar, but separate, permit is required for coastal migratory pelagic species). This sector is currently under a permit limitation program since June, 2006. On September 22, 2014, there were 1,195 valid (non-expired) or renewable⁶ Gulf for-hire permits.

For 2009 through 2013, an average of 1,364 for-hire vessels were permitted to harvest reef fish in the Gulf (Table 3.3.15). Florida, with an average of 819 permitted vessels, was the foremost homeport state of for-hire vessels, followed by Texas (222), Alabama (147), Louisiana (111), and Mississippi (48). An average of 17 vessels had homeports in states outside the Gulf.

⁶ A renewable permit is an expired permit that may not be actively fished, but is renewable for up to one year after expiration.

The total number of Gulf reef fish for-hire permits steadily declined from 2009 through 2013 (Table 3.3.15). Florida was the driving force behind this trend, though there were similar trends in Mississippi, Texas, and all non-Gulf states combined. Alabama and Louisiana saw modest increases in the number of for-hire permitted vessels during the time period.

Table 3.3.15. Number of vessels with a Gulf for-hire permit by homeport state, 2009- 2013.

	FL	AL	MS	LA	TX	OTHERS	TOTAL
2009	871	143	50	103	232	18	1,417
2010	840	142	50	103	229	21	1,385
2011	810	143	48	116	219	17	1,353
2012	792	151	46	116	214	17	1,336
2013	783	155	45	115	215	14	1,327
Average	819	147	48	111	222	17	1364

Source: Southeast Permits Database, NOAA Fisheries, SERO.

Based on permits data alone, it is not possible to distinguish headboats from charter boats, but the 2013 headboat survey program included 70 headboats in the Gulf. The majority of headboats were located in Florida (37), followed by Texas (16), Alabama (9), Mississippi (5), and Louisiana (3) (K. Brennen, NMFS SEFSC, pers. comm.)⁷.

There are no specific federal permitting requirements for recreational anglers to fish for or harvest reef fish, including greater amberjack. Instead, anglers are required to possess either a state recreational fishing permit that authorizes saltwater fishing in general, or be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions. As a result, it is not possible to identify with available data how many individual anglers would be expected to be affected by this proposed amendment.

Economic Value

Participation, effort, and harvest are indicators of the value of saltwater recreational fishing. However, a more specific indicator of value is the satisfaction that anglers experience over and above their costs of fishing. The monetary value of this satisfaction is referred to as consumer surplus (CS). The value or benefit derived from the recreational experience is dependent on several quality determinants, which include fish size, catch success rate, and the number of fish kept. These variables help determine the value of a fishing trip and influence total demand for recreational fishing trips. Haab et al. (2012) estimated the CS (willingness to pay (WTP) per fish) for snapper in the Southeastern U.S. using four separate econometric modeling techniques. The finite mixture model, which takes into account variation in the preferences of fishermen, had the best prediction rates of the four models and as such was selected for this analysis⁸. The WTP

⁷ Sixty-seven vessels were registered in the SHRS as of April 8, 2014.

⁸ Haab et al. (2012) did not explicitly account for endogenous stratification and avidity bias in the MRFSS data which could potentially inflate the estimates. The WTP estimates from the four models used in their study ranged from \$9-\$25 (2000 dollars) and the one that was selected for use here was at the bottom of the range, so the bias may not be that big of an issue. In addition, given its popularity as a sport fish, greater amberjack may be more valuable to anglers than many of the other snapper species included in the model.

per snapper estimated by this model is \$12.18 (2013 dollars)⁹. Although this estimate is not specific to greater amberjack, their study did include the amberjack genus as part of the snapper group. This value may seem low and may be strongly influenced by the pooling effect inherent to the model in which it was estimated. For comparison purposes, the estimated value of the consumer surplus for catching and keeping a second grouper on an angler trip is approximately \$102 (values updated to 2013 dollars), and decreases thereafter (approximately \$68 for a third grouper, \$50 for a fourth grouper, and \$39 for a fifth grouper) (Carter and Liese 2012). Values by specific grouper species are not available.

The foregoing estimates of economic value should not be confused with economic impacts associated with recreational fishing expenditures. Although expenditures for a specific good or service may represent a proxy or lower bound of value (a person would not logically pay more for something than it was worth to them), they do not represent the net value (benefits minus cost), nor the change in value associated with a change in the fishing experience.

While anglers receive economic value as measured by the CS associated with fishing, for-hire businesses receive value from the services they provide. Producer surplus (PS) is the measure of the economic value these operations receive. The PS is the difference between the revenue a business receives for a good or service, such as a charter or headboat trip, and the cost the business incurs to provide that good or service. Estimates of the PS associated with for-hire trips are not available. However, proxy values in the form of net operating revenues (NOR)¹⁰ were generated for the charter and headboat operations. The estimated NOR values are \$158.06 (2013 dollars) per charter angler trip and \$51.96 (2013 dollars) per headboat angler trip (D. Carter and C. Liese, NMFS SEFSC, pers. comm.)¹¹.

Business Activity

The desire for recreational fishing generates economic activity as consumers spend their income on various goods and services needed for recreational fishing. This spurs economic activity in the region where recreational fishing occurs. It should be clearly noted that, in the absence of the opportunity to fish, the income would presumably be spent on other goods and services and these expenditures would similarly generate economic activity in the region where the expenditure occurs. As such, the analysis below represents a distributional analysis only.

Estimates of the business activity (economic impacts) associated with recreational angling for greater amberjack were derived using average impact coefficients for recreational angling for all species, as derived from an add-on survey to the MRFSS to collect economic expenditure information, as described and utilized in NMFS (2011). Estimates of the average expenditures

⁹ Converted to 2013 dollars using the 2013 annual Consumer Price Index (CPI) for all US urban consumers provided by the Bureau of Labor and Statistics (BLS).

¹⁰ Net operating revenues are trip revenues minus trip-based variable costs and do not include fixed costs. These represent the total returns used to pay all labor wages, returns to capital, and owner profits.

¹¹ Estimates were converted to 2013 dollars using the 2013 June CPI for all US urban consumers provided by the BLS.

by recreational anglers are also provided in NMFS (2011) and are incorporated herein by reference.

Recreational fishing generates business activity (economic impacts). Business activity for the recreational sector is characterized in the form of full-time equivalent jobs, output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Estimates of the average greater amberjack target effort (2009-2013) and associated business activity (2013 dollars) are provided in Table 3.3.16. The average impact coefficients, or multipliers, used in the model are invariant to the “type” of effort and can therefore be directly used to measure the impact of other effort measures such as greater amberjack catch trips. To calculate the multipliers from Table 3.3.16, simply divide the desired impact measure (output impact, value-added impact, or jobs) associated with a given state and mode by the number of target trips for that state and mode.

The estimates provided in Table 3.3.16 only apply at the state-level. These numbers should not be added across the region. Addition of the state-level estimates to produce a regional (or national) total could either under- or over-estimate the actual amount of total business activity because of the complex relationship between different jurisdictions and the expenditure/impact multipliers. Neither regional nor national estimates are available at this time.

Florida clearly received the greatest level of economic impact from greater amberjack in comparison to the other Gulf states, which is not surprising given the majority of greater amberjack target trips are estimated to be taken by Florida anglers (Table 3.3.16). Although not shown in Table 3.3.16, Florida also had the highest multipliers for all impact measures associated with the charter mode. Louisiana had the highest multipliers for output impact and value-added impact for the private angler mode and was tied with Alabama for the highest jobs impact multiplier for the private angler mode.

Estimates of the business activity associated with headboat effort are not available. Headboat vessels are not covered in the MRFSS/MRIP, so, in addition to the absence of estimates of target effort, estimation of the appropriate business activity coefficients for headboat effort has not been conducted.

Table 3.3.16. Summary of greater amberjack target trips (2009-2013 average) and associated business activity (2013 dollars). Output and value added impacts are not additive.

	Alabama	West Florida	Louisiana	Mississippi	Texas
Shore Mode					
Target Trips	0	0	0	0	*
Output Impact	\$0	\$0	\$0	\$0	*
Value Added Impact	\$0	\$0	\$0	\$0	*
Jobs	0	0	0	0	*
Private/Rental Mode					
Target Trips	3,098	24,401	2,918	129	*
Output Impact	\$167,403	\$1,319,539	\$220,547	\$4,533	*
Value Added Impact	\$90,593	\$747,195	\$105,982	\$2,306	*
Jobs	2	11	2	0	*
Charter Mode					
Target Trips	1,014	8,342	561	0	*
Output Impact	\$648,122	\$6,117,419	\$271,425	\$0	*
Value Added Impact	\$443,540	\$4,089,823	\$186,638	\$0	*
Jobs	6	54	2	0	*
All Modes					
Target Trips	4,112	32,743	3,479	129	*
Output Impact	\$815,525	\$7,436,958	\$491,972	\$4,533	*
Value Added Impact	\$534,133	\$4,837,018	\$292,619	\$2,306	*
Jobs	8	65	4	0	*

*Because target information is unavailable, associated business activity cannot be calculated.

Source: effort data from MRIP, economic impact results calculated by NMFS SERO using the model developed for NMFS (2011).

3.4 Description of the Social Environment

A description of the social environment including analysis of communities engaged in reef fish fishing, was provided in Amendment 35 (GMFMC 2012) and is incorporated here by reference. This section provides a summary of that information and is updated where possible.

Greater amberjack is fished throughout the Gulf although landings are greatest in Florida. The majority of greater amberjack is landed by the recreational sector (72.4% from 2002 – 2013 with a range of 59.6% to 80.1%) and 27.6% is landed by the commercial sector (range of 19.9% to 40.4% from 2002 - 2013, Table 1.1.1). For the purpose of setting quotas, the Council selected an interim allocation at 73% recreational: 27% commercial in Amendment 30A (GMFMC 2008). The low commercial value and one fish recreational bag limit likely restricts greater amberjack from being a directed fishery. Rather than directed fishing trips, greater amberjack is an important component to a multi-species fishery for both commercial and recreational fishermen. Because of this multi-species fishing practice, it is difficult to discuss greater amberjack fishing separate from its broader context within commercial and recreational fishing for reef fish.

3.4.1 Fishing Communities

Recreational Fishing Communities

The available information concerning targeted trips within the recreational sector (private and for-hire vessels) shows that only a small proportion of recreational trips target greater amberjack. Excluding headboats and Texas, for which target data are not available, on average, 3.3% of all reef fish trips target greater amberjack, and on average, 5.6% of all private angler trips target reef fish, generally (Table 3.3.9). The low proportion of trips directed at catching greater amberjack is due in part to the one fish bag limit and 30 inch fork length minimum size limit. Because of their large size, greater amberjack is often a trip's trophy catch, making it an important part to a multi-species fishing trip. Greater amberjack is also an important component in recreational tournaments.

By state, the majority of greater amberjack caught by recreational anglers is landed in Florida, followed by Louisiana, Alabama, Texas, and Mississippi (Table 3.3.6). By mode, anglers fishing from private vessels represent on average 49% of the recreational landings, followed closely by charter boats (44.9%); headboats represent on average 6.1% of the recreational landings (Table 3.3.7). Landings for the recreational sector are not available by species at the community level; therefore, it is difficult to identify communities as dependent on recreational fishing for greater amberjack.

Because limited data are available concerning how recreational fishing communities are engaged and reliant on specific species, a set of indices were created using secondary data from permit and infrastructure information for the southeast recreational fishing sector at the community level (Jepson and Colburn 2013; Jacob et al. 2013). Using a principal component and single solution factor analysis, each community receives a factor score for each index to compare to other communities. With a selected group of communities that may have greater amberjack fishing activity, factor scores of both engagement and reliance were plotted onto bar graphs. Factor

scores are denoted by colored bars and are standardized, therefore the mean is zero. Two thresholds of one and ½ standard deviation above the mean are plotted onto the graphs to help determine a threshold for significance. Figure 3.4.1 identifies the recreational communities that are engaged and reliant upon fishing in general. Using thresholds of fishing dependence of ½ standard deviation and one standard deviation, Figure 3.4.1 suggests that several communities are substantially engaged in recreational fishing. Because the analysis used discrete geo-political boundaries, Panama City and Panama City Beach had separate values for the associated variables. Calculated independently, each still ranked high enough to appear in the top 16 list suggesting a greater importance for recreational fishing in that area.

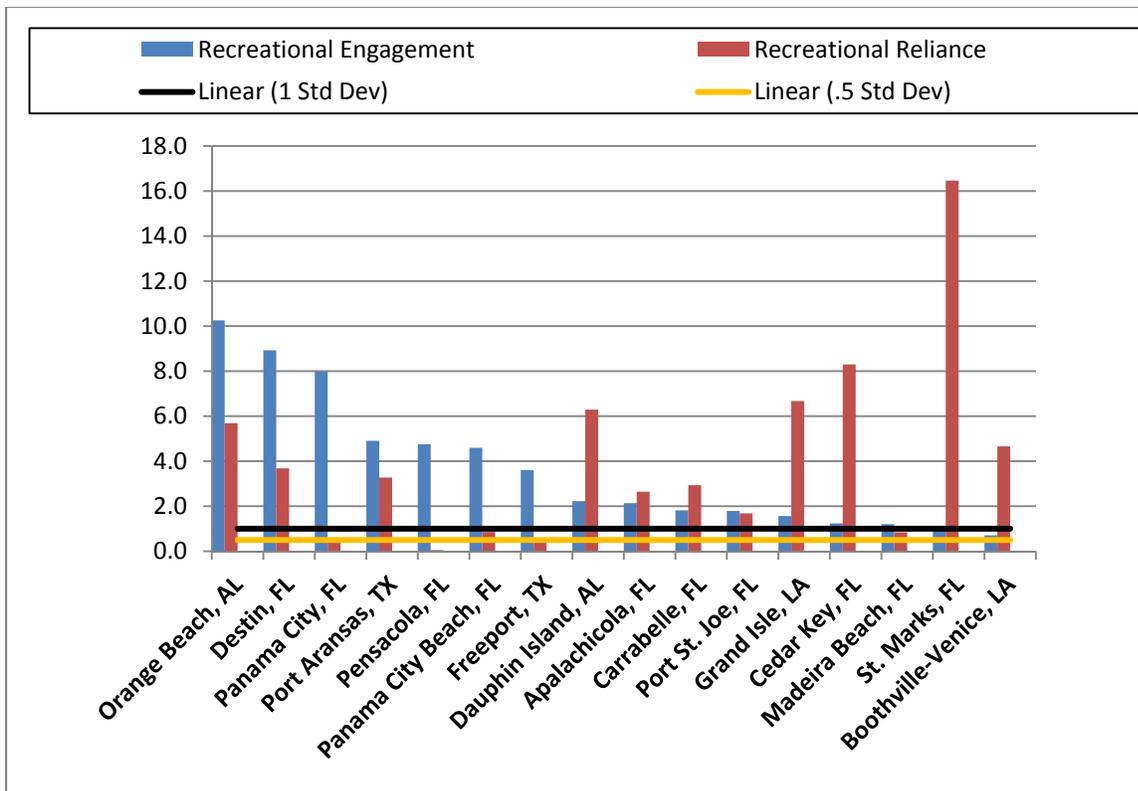


Figure 3.4.1. Top 16 recreational fishing communities’ engagement and reliance. Source: SERO Social indicators database (2012).

Commercial Fishing

Most commercially landed greater amberjack is caught using vertical line alongside other target species, as opposed to being the primary target species. This is partly due to its relatively low economic value (approximately \$1/pound) and large minimum size limit (36 inch fork length). A small percentage of commercial vessels direct trips toward greater amberjack and may land thousands of pounds in a single trip. Other commercial vessels may direct effort toward greater amberjack during part of a multi-day trip.

The communities in which the majority of commercial greater amberjack landings are made has remained relatively unchanged since Amendment 35 (GMFMC 2008), with the exception of a

decline in landings now made in Texas. Average landings from 2001-2010 showed landings concentrated in fewer communities in the Houston-Galveston area of Texas, Louisiana, and the Florida Panhandle, and numerous separate communities concentrated together, each with smaller amounts of landings along the west central coast of Florida. This suggests a different social organization of commercial fishing infrastructure between Florida and Texas (GMFMC 2008).

Figure 3.4.2 shows the communities with the most landings of greater amberjack in 2012 in the Gulf. These data are reported by dealers, the address for which may not correspond to the actual landing site or vessel homeport. Furthermore, Panama City and Destin, both in the Florida Panhandle, rank within the top 10 communities. Although place is one way of defining a community, a community is not defined by discrete geo-political boundaries alone. Social relationships, information exchanges, and economic interactions reflect shared interests that overlap place-based boundaries.

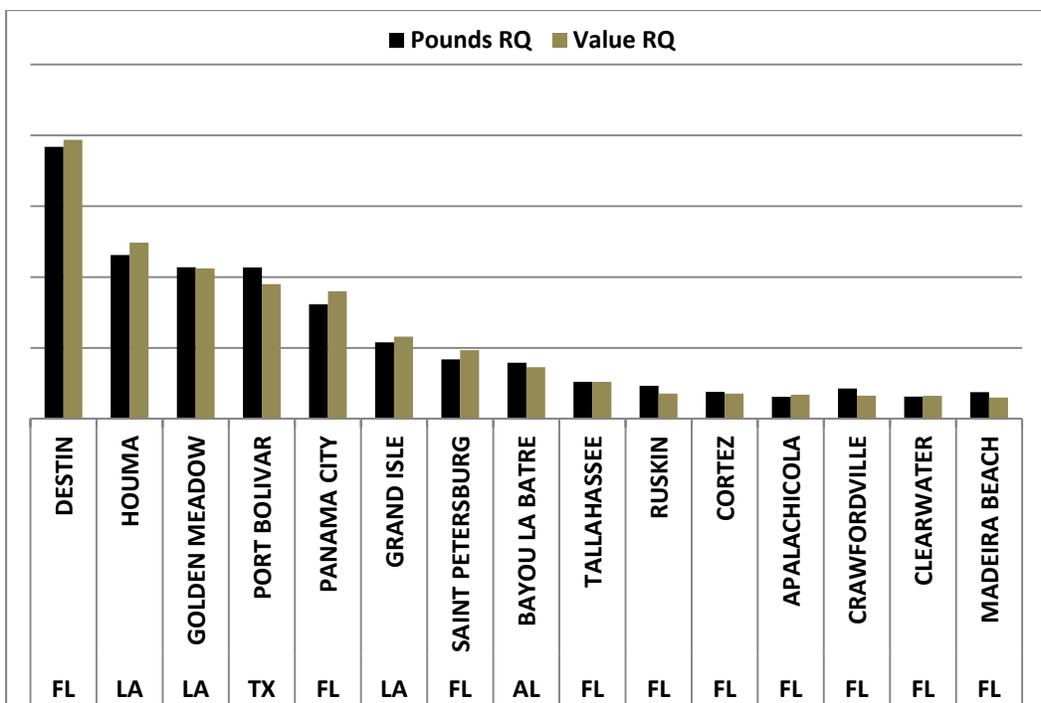


Figure 3.4.2. Proportion of greater amberjack commercial landings (value and pounds) for 15 Gulf communities out of total pounds and landings of greater amberjack in the Gulf (2012). Source: Accumulated landings system (ALS) dealer reports.

Importance of Greater Amberjack to Communities

Figure 3.4.1 identifies the top Gulf communities engaged and reliant on recreational fishing generally (i.e., not specific to greater amberjack). Figure 3.4.2 identifies the Gulf communities with the greatest amount of commercial greater amberjack. While these communities had the most greater amberjack landed by pounds, this does not necessarily reflect the importance of greater amberjack in relation to other landed species in those communities. No data are available for the proportion of recreational landings of greater amberjack by community, but these data are

available for the commercial sector. Commercial landings include many species that may not be caught by the recreational sector such as shrimp and tilefish, while recreational landings would include other species such as red drum and spotted sea trout. Therefore, it cannot be assumed that the proportion of commercial greater amberjack landings among other species in a community would be similar to its proportion among recreational landings within the same community. These data should also be considered in terms of the difference between the commercial and recreational sectors' interim allocation of the quota.

Comparing the communities of recreational importance and those with greater amounts of greater amberjack commercial landings, Destin and Panama City, Florida rank high for both. Collectively, these communities represented approximately 28% of the commercial greater amberjack landings in the Gulf in 2009 (GMFMC 2008). But within each community, greater amberjack represents a very small proportion of total commercial landings (Figure 3.4.3).

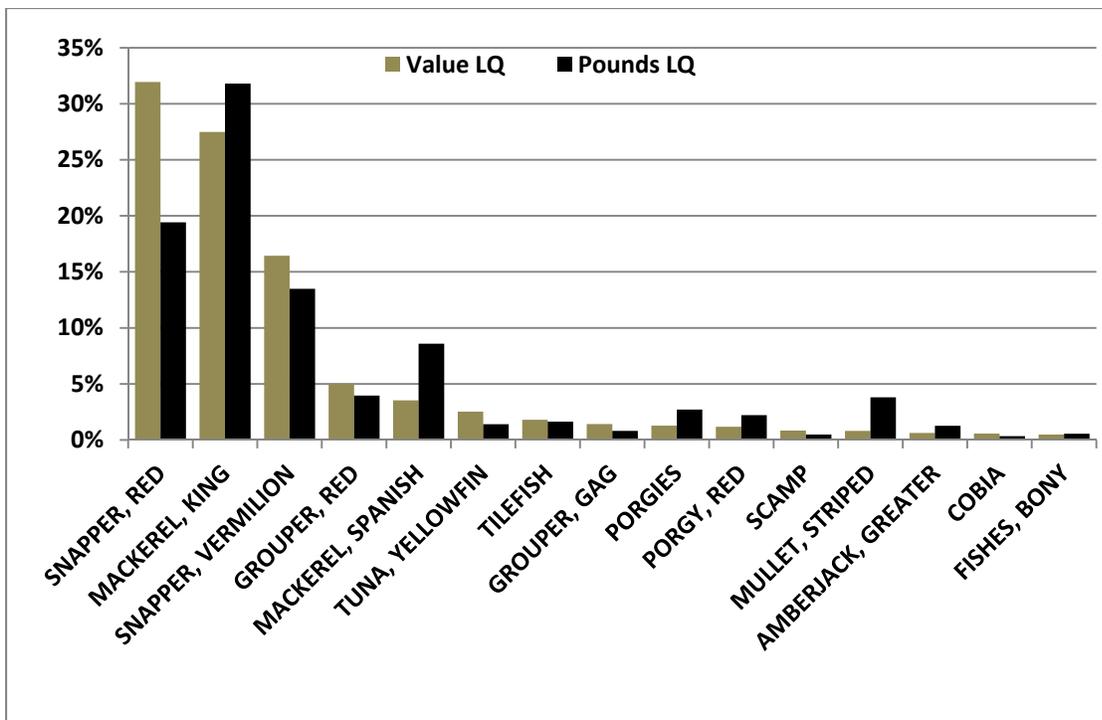


Figure 3.4.3. Proportion (local quotient, lq) of commercial landings and value for top 15 species in 2012 out of total landings and value for all commercial species landed in Destin, FL. Source: ALS dealer reports 2012.

In 2009, Destin ranked fifth for commercial greater amberjack landings with 12% of the total value and 10% of the total pounds Gulf-wide. Yet among all commercially landed species in Destin that year, greater amberjack represented less than 5% of all commercial landings. King and cero mackerels (37%), vermilion snapper (22%), and red snapper (9%) represented the top three commercial species by weight landed in Destin in 2009. In 2012, Destin ranked first Gulf-wide for commercial greater amberjack landings, yet greater amberjack represented approximately 1% of the total weight and value among all commercial landings. The top three

species landed in Destin remained unchanged since 2009, although their proportion by weight and value compared to all other landed species has increased (Figure 3.4.3).

Individually, Panama City and Panama City Beach each ranked among the top 10 recreational fishing communities based on the fishing involvement analysis provided above suggesting a higher level of involvement across geo-political boundaries. Panama City ranked third in 2009 for highest landings Gulf-wide, and fifth in 2012. Following a similar pattern for greater amberjack, it makes up a very small proportion of total commercial landings in the community; less than 5% in 2009 (GMFMC 2012), and 1% in 2012. Vermilion snapper, yellowfin tuna, and red snapper represent the top three commercial species by weight landed in Panama City (ALS 2012). Gulf-wide, Houma ranked second in terms of commercial greater amberjack landings in 2012, with a large increase in its proportion of landings since 2009, when Houma ranked eighth with 3.5% of the total weight and value. Within Houma, greater amberjack represents about 1% of all commercial landings, which are dominated by oysters, with 65% of total value.

For both sectors it is difficult to speak of community reliance on greater amberjack; rather, greater amberjack is an important component to commercial reef fish fishing. Although the communities described ranked among the top communities for commercial landings of greater amberjack throughout the Gulf, greater amberjack represents a small proportion of total landings within each community. Regulatory effort constraints play a part tight restrictions, and additional restrictions are proposed in this amendment to further reduce harvest, to comply with a revised rebuilding plan. Nevertheless, while landings are proportionally low compared with other species in each community, greater amberjack consistently ranks within the top 15 species in commercial communities.¹² This supports its status as an important component in the reef fish complex, rather than a primary target species. Rather than engaging in directed trips, greater amberjack is generally targeted during trips along with other species. It is an important trophy and meat fish, prized for both its size and fighting behavior, making for a thrilling fishing experience.

Landings at the community level are not available for the recreational sector, thus a comparable analysis is not possible. Recreational landings information is needed at the community level to evaluate these communities' engagement and reliance with greater amberjack compared with other landed species.

3.4.2 Environmental Justice Considerations

The proposed actions could be expected to affect fishermen and associated industries in numerous communities along the Gulf coast. Persons employed in greater amberjack fishing and associated businesses and communities along the Gulf coast would be expected to be affected by this proposed action. However, information on the race and income status for groups at the different participation levels (vessel owners, crew, dealers, processors, employees, employees of associated support industries, etc.) is not available. Although information is available concerning communities overall status with regard to minorities and poverty (e.g., census data), such information is not available specific to fishermen and those involved in the industries and

¹² Except for Apalachicola, Florida, which ranks among the communities with the most landings, but within the community, it represents less than 1% of landings by weight and value.

activities, themselves. To help assess whether any environmental justice concerns arise from the actions in this framework, a suite of indices were created to examine the social vulnerability of coastal communities. The three indices are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified through the literature as being important components that contribute to a community’s vulnerability. Indicators such as increased poverty rates for different groups, more single female-headed households and households with children under the age of five, disruptions such as higher separation rates, higher crime rates, and unemployment all are signs of populations experiencing vulnerabilities. Again, for those communities that exceed the threshold it would be expected that they would exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change.

As depicted in Figure 3.4.4, several commercial fishing communities exceed the threshold of ½ standard deviation above the mean for at least one of the social vulnerability indices: Bayou La Batre, Alabama; Apalachicola, Panama City, and Ruskin, Florida; Golden Meadow, Grand Isle, and Houma, Louisiana. It would be expected that these communities may exhibit vulnerabilities to social or economic disruption because of regulatory change, including those proposed in this framework action. Those communities that exhibit several index scores exceeding the threshold would be the most vulnerable. These include Bayou La Batre, Alabama; Apalachicola and Ruskin, Florida; and Golden Meadow, Louisiana. Social effects resulting from action taken in this plan amendment are likely to be greatest in these communities.

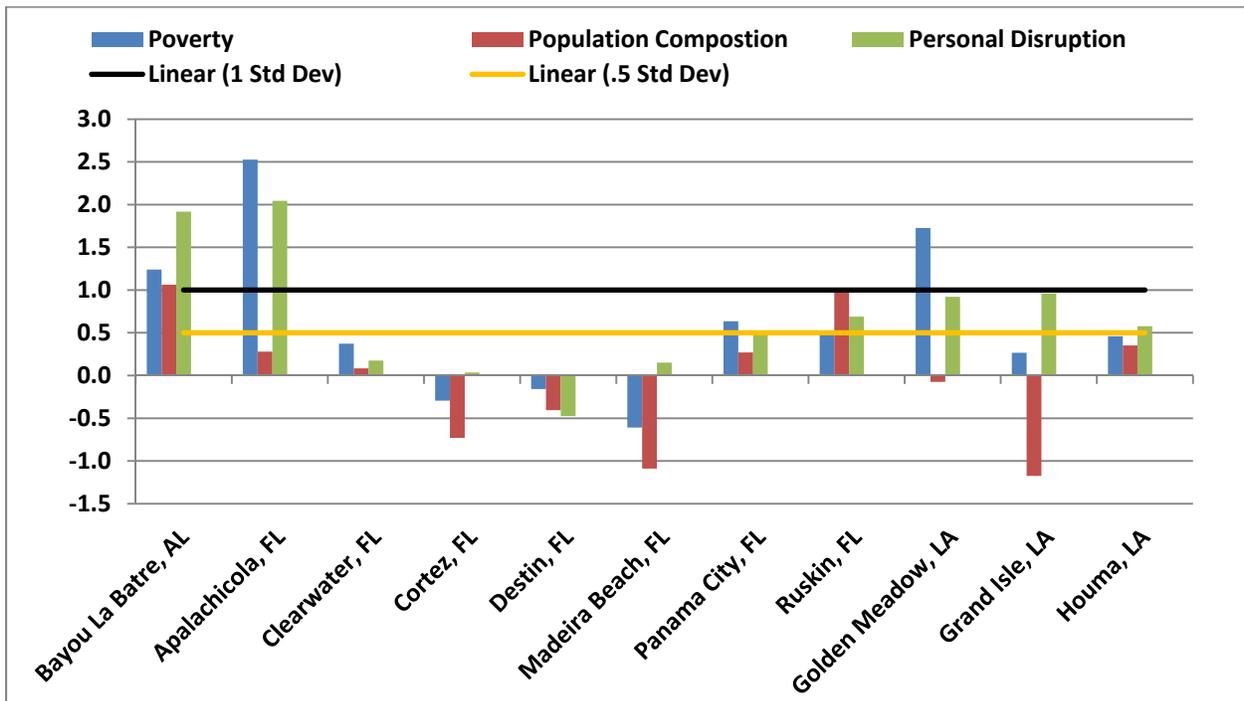


Figure 3.4.4. Social vulnerability indices for selected greater amberjack commercial fishing communities. Source: Southeast Regional Office, Social indicators database (2012).

Figure 3.4.5 provides the social vulnerability of recreationally engaged communities in terms of the same three indices: poverty, population composition, and personal disruptions. Again, for those communities that exceed the thresholds it would be expected that they would exhibit vulnerabilities to sudden changes or social disruption that might result from regulatory change. Three communities exceed the threshold of one standard deviation above the mean for two of the indices (Freeport, Texas; Apalachicola and Carrabelle, Florida), and would be the communities most likely to exhibit vulnerabilities to social or economic disruption due to regulatory change.

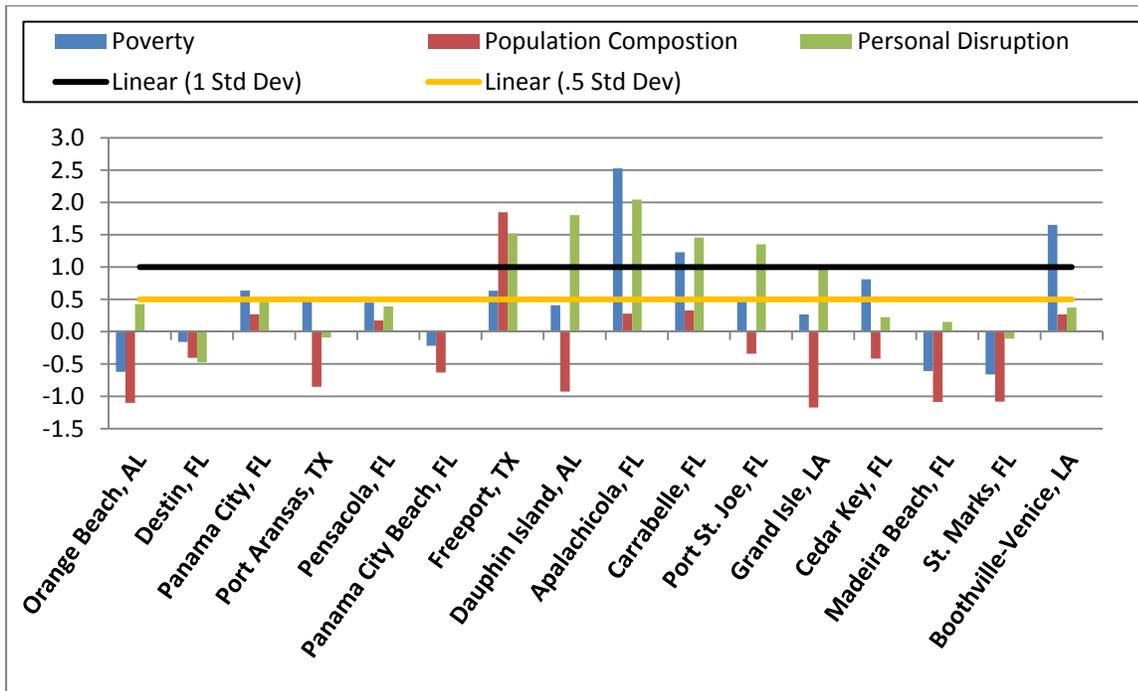


Figure 3.4.5. Social vulnerability indices for recreational fishing communities. Source: Southeast Regional Office, Social indicators database (2012).

People in these communities may be affected by fishing regulations in two ways: participation and employment. Although these communities may have the greatest potential for EJ concerns, no data are available on the race and income status for those involved in the local fishing industry (employment), or for their dependence on greater amberjack specifically (participation). The fishery is primarily recreational (73%) and requires boat access. Greater amberjack does not represent a substantial proportion of landings in the primary fishing communities, thus no EJ concerns are expected to arise in these communities as a result of the actions in this amendment. There are no known claims for customary usage or subsistence consumption of greater amberjack by any Gulf population including tribes or indigenous groups. Although no EJ issues have been identified, the absence of potential EJ concerns cannot be assumed.

The proposed actions would decrease the amount of greater amberjack available for harvest by both the commercial and recreational sectors, and would adopt additional restrictions on both sectors to constrain the harvest of greater amberjack. The effects resulting from these actions are addressed in the sections discussing social effects in Sections 4.1, 4.2, and 4.3.

3.5 Description of the Administrative Environment

3.5.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the EEZ. The EEZ is defined as an area extending 200 nautical miles from the seaward boundary of each of the coastal states. The Magnuson-Stevens Act also claims authority over U.S. anadromous species and continental shelf resources that occur beyond the EEZ.

Responsibility for federal fishery management decision-making is divided between the Secretary of Commerce (Secretary) and eight regional fishery management councils that represent the expertise and interests of constituent states. Regional councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for promulgating regulations to implement proposed plans and amendments after ensuring management measures are consistent with the Magnuson-Stevens Act and with other applicable laws summarized in Section 10. In most cases, the Secretary has delegated this authority to NOAA Fisheries Service.

The Council is responsible for fishery resources in federal waters of the Gulf of Mexico. These waters extend to 200 nautical miles offshore from the nine-mile seaward boundary of the states of Florida and Texas, and the three-mile seaward boundary of the states of Alabama, Mississippi, and Louisiana. The length of the Gulf of Mexico coastline is approximately 1,631 miles. Florida has the longest coastline of 770 miles along its Gulf coast, followed by Louisiana (397 miles), Texas (361 miles), Alabama (53 miles), and Mississippi (44 miles).

The Council consists of seventeen voting members: 11 public members appointed by the Secretary; one each from the fishery agencies of Texas, Louisiana, Mississippi, Alabama, and Florida; and one from NOAA Fisheries Service. The public is also involved in the fishery management process through participation on advisory panels and through publically open Council meetings, with some exceptions for discussing internal administrative matters. The regulatory process is also in accordance with the Administrative Procedures Act, in the form of “notice and comment” rulemaking, which provides extensive opportunity for public scrutiny and comment, and requires consideration of and response to those comments.

Regulations contained within FMPs are enforced through actions of the NOAA’s Office of Law Enforcement, the U.S. Coast Guard, and various state authorities. To better coordinate enforcement activities, federal and state enforcement agencies have developed cooperative agreements to enforce the Magnuson-Stevens Act. These activities are being coordinated by the Council’s Law Enforcement Advisory Panel and the Gulf States Marine Fisheries Commission’s Law Enforcement Committee have developed a two year “Gulf Cooperative Law Enforcement Strategic Plan – 2011 - 2012.”

3.5.2 State Fishery Management

The purpose of state representation at the Council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters. The state governments of Texas, Louisiana, Mississippi, Alabama, and Florida have the authority to manage their respective state fisheries. Each of the five Gulf of Mexico states exercises legislative and regulatory authority over their states' natural resources through discrete administrative units. Although each agency is the primary administrative body with respect to the states' natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources. A more detailed description of each state's primary regulatory agency for marine resources is provided in Amendment 22 (GMFMC 2004b).

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1 Action 1 - Modifications to the Greater Amberjack Annual Catch Limits and Annual Catch Targets

Direct and Indirect Effects on the Physical Environment

Impacts of these alternatives on the physical environment would depend on the resulting reduction in the level of fishing effort by the commercial and recreational sectors. The commercial sector is currently allocated 27% of the stock annual catch limit (ACL) and the recreational sector is currently allocated 73% of the stock ACL. Using greater amberjack landings history from 2001 - 2010, commercial longlines landed 10% of the greater amberjack and vertical lines (i.e., electric reel, bandit rig, hook and line, and trolling) landed 68% of the greater amberjack, while 22% of the landings were from unclassified gear types and dive gears (SEFSC Commercial ACL Data Set July 2014). Landings by trolling and diving with a spear were low and infrequent compared to hand and electric vertical lines in the commercial sector. The recreational sector (headboat, charter, and private modes) primarily uses hand lines sometimes electric reels to fish for reef fish including greater amberjack. When recreational fishers are targeting greater amberjack they often use large live baits and the attached weights and hooks may or may not touch the bottom depending on the structure type and fisher experience level. Recreational fishers also harvest greater amberjack with spear and powerhead gear.

Longlines

Longline gear is deployed over hard bottom habitats using weights to keep the gear in direct contact with the bottom. The potential for this gear to adversely impact the bottom depends on the type of habitat it is set on, the presence or absence of currents and the behavior of fish after being hooked. In addition, this gear upon retrieval can abrade, snag, and dislodge smaller rocks, corals, and sessile invertebrates (Hamilton 2000; Barnette 2001). Direct underwater observations of longline gear in the Pacific halibut fishery by High (1998) noted that the gear could sweep across the bottom. A study that directly observed deployed longline gear (Atlantic tilefish fishery) found there was no evidence that the gear shifted significantly, even when set in currents. Lack of gear shifting even in strong currents was attributed to setting anchors at either end of the longline to prevent movement (Grimes et al. 1982). Based on the direct observations, it is logical to assume that bottom longline gear would have a minor impact on sandy or muddy habitat areas. However, due to the vertical relief that hardbottom and coral reef habitats provide, it would be expected that bottom longline gear may become entangled, resulting in potential negative impacts to habitat (Barnette 2001).

Vertical lines

Concentrations of many managed reef fish species are higher on hard bottom areas than on sand or mud bottoms, thus vertical line gear fishing generally occurs over hard bottom areas (GMFMC 2004a). Vertical lines include multi-hook lines known as bandit gear, handlines, and

rod-and-reels. Vertical-line gear is less likely to contact the bottom than longlines, but still has the potential to snag and entangle bottom structures and cause attached organism such as soft corals and sponges to tear off or be abraded (Barnette 2001). In using bandit gear, a weighted line is lowered to the bottom, and then the lead is raised slightly off the bottom (Siebenaler and Brady 1952). The gear is in direct contact with the bottom for only a short period of time. Barnette (2001) suggests that physical impacts may include entanglement and minor degradation of benthic species from line abrasion and the use of weights (sinkers).

Anchor damage is also associated with vertical-line fishing vessels, particularly by the recreational sector where fishermen may repeatedly visit well marked or known fishing locations. Hamilton (2000) points out that “favorite” fishing areas such as reefs are targeted and revisited multiple times, particularly with the advent of global positioning technology. The cumulative effects of repeated anchoring could damage the hard bottom areas where fishing for greater amberjack and other reef fish occurs. The for-hire sector and commercial sector that uses vertical line gear are typically known to anchor more frequently over the reef sites.

Spear and Powerhead

Spearguns are used by both the recreational and commercial sector to harvest greater amberjack, but represent a relatively minor component of both. Barnette (2001) summarizes a previous study that concluded spearfishing on reef habitat may result in some coral breakage. In addition, there could be some impacts from divers touching coral with hands or from re-suspension of sediment by fins (Barnette 2001).

Alternative 4 would not allow harvest of greater amberjack until another stock assessment has been completed and would provide the greatest benefit to the physical environment. However, it is unknown how much closing greater amberjack harvest would reduce the number of non-targeted recreational fishing trips (i.e., fishers leaving the dock to harvest other reef fish) and resulting effort. Target trips (i.e., fishers leaving the dock with the intent to target greater amberjack for harvest) would be eliminated, but it can only be speculated as by how much during a complete closure. Further, fishing for other reef fish will occur even if greater amberjack is closed. It is expected that under **Alternative 4** would impact the physical environment less than no action.

Alternative 3 is expected to provide greater positive benefits to the physical environment compared to **Alternative 1** (no action) and **Alternative 2**, because it sets a constant ABC, ACL and ACT beginning in 2015. **Alternative 3, Option b.** is expected to provide greater positive benefits to the physical environment compared to **Option a.**, due to the 20% reduction in the stock ACT compared a 15% commercial buffer and 13% recreational buffer in **Option a.**

Direct and Indirect Effects on the Biological/Ecological Environment

Management actions that directly impact the biological and ecological environment include fishing mortality and the resulting population size, life history characteristics, and the role of the species within its habitat. Removal of fish from the population through fishing reduces the overall population size and reproductive potential. **Alternative 4** would allow zero harvest of

greater amberjack until another stock assessment has been completed and would provide the greatest benefit to the biological environment. However, it is unknown how much closing greater amberjack harvest would reduce the number of non-targeted recreational fishing trips (i.e., fishers leaving the dock to harvest other reef fish) and resulting effort. Target trips (i.e., fishers leaving the dock with the intent to target greater amberjack for harvest) are expected to be reduced, but it can only be speculated as to how much during a complete closure. Further the commercial sector would still fish for other reef fish even if greater amberjack is closed. It is expected that under **Alternative 4** the commercial sector would impact that physical environment less than or similarly to no action.

Alternative 3 is expected to provide greater positive benefits to the biological environment compared to **Alternative 1** (no action) and **Alternative 2**, because it sets a constant ABC, ACL and ACT beginning in 2015. **Alternative 3, Option a**, is expected to provide greater positive benefits to the biological environment compared to **Option b**, due to the 20% reduction in the stock ACT compared to a 15% commercial buffer and 13% recreational buffer in **Option a**.

Direct and Indirect Effects on the Economic Environment

Modifications to greater amberjack stock ACLs and associated sector specific ACLs and ACTs (commercial and recreational) considered in this framework action would be expected to result in short and longer term effects on the economic environment. In general, although smaller ACLs and associated ACTs are expected to result in diminished economic benefits in the short run, they would be expected to result in faster rebuilding of the greater amberjack stock, thereby resulting in greater economic benefits in the longer term. Conversely, larger ACLs and associated ACTs would be expected to result in increased economic benefits in the short run but could result in smaller long term economic benefits due to slower rebuilding of the stock. Estimates of expected effects on the economic environment provided in this section are based on sector specific decision tools developed by NMFS (SERO, 2015). The assumptions, data and methods used to derive these estimates are detailed in SERO (2015). For the commercial and recreational sectors, it is not noted that, due to data and model limitations, the decision tools only provide estimated effects on the economic environment for 2015. For subsequent years, a qualitative discussion of the economic effects expected to result from the management alternatives is provided.

Alternative 1, which would maintain the current greater amberjack stock ACL and associated commercial and recreational ACLs and ACTs. **Alternative 1** (no action) is not expected to affect recreational or commercial fishing for greater amberjack and would therefore not be expected to result in effects to the economic environment.

Alternative 2 would base the greater amberjack stock ACL on the schedule recommended by the SSC for the 2015-2018 time interval. Relative to the no action alternative (**Alternative 1**), **Alternative 2** would reduce the stock ACL by 60,000 lbs ww in 2015 but gradually increase the stock ACL in subsequent years. Between 2015 and 2018, the greater amberjack stock ACL would increase from 1.72 mp ww in 2015 to 2.62 mp ww in 2018. To set the commercial and recreational ACTs, **Alternative 2-Option a** would apply a 15% buffer to the commercial ACL and a 13% buffer to the recreational ACL, respectively.

Alternative 2-Option b would set the commercial and recreational ACTs by applying a 20% buffer to the respective ACLs.

The 2015 commercial greater amberjack season is estimated at 79 days and 75 days for **Alternative 2-Option a** and **Alternative 2-Option b**, respectively (Table 2.3.2). For **Alternative 2-Option a** and **Alternative 2-Option b**, expected economic losses, as proxied by decreases in ex-vessel value relative to status quo, are estimated at approximately \$26,174 and \$61,073 (in 2013 dollars), respectively. Economic effects expected to result from **Alternative 2** beyond 2015 cannot be quantified due to data and model limitations. However, based on planned increases in stock ACLs and associated commercial ACLs and ACTs, it is expected that economic benefits expected to result from ACL increases between 2016 and 2018 would more than offset economic losses estimated for 2015. Therefore, net economic effects under **Alternative 2** are expected to be positive. Furthermore, based on a longer estimated season in 2015 and smaller estimated economic loss, it is expected that **Alternative 2-Option a** would yield greater net economic benefits than **Alternative 2-Option b**.

The 2015 recreational greater amberjack season is estimated at 179 days and 172 days for **Alternative 2-Option a** and **Alternative 2-Option b**, respectively (Table 2.2.2). For **Alternative 2-Option a** and **Alternative 2-Option b**, losses in consumer surplus to anglers are estimated at approximately \$19,679 and \$65,597 (in 2013 dollars), respectively. If it is assumed that, in response to the shortening of the recreational greater amberjack season expected to result from decreases in the recreational greater amberjack ACL and associated ACT, some charter trips targeting greater amberjack are eliminated, charter for-hire operators would be adversely impacted. Negative economic effects would stem from losses in producer surplus to charter for-hire operators. For **Alternative 2-Option a** and **Alternative 2-Option b**, losses in producer surplus (approximated by net operating revenues) are estimated at \$47,552 and \$158,507 (in 2013 dollars), respectively. Therefore, total losses in economic value to the recreational sector expected to result in 2015 from **Alternative 2-Option a** and **Alternative 2-Option b** would range for \$19,679 to \$67,231 and from \$65,597 to 224,104 (in 2013 dollars), respectively. Economic effects expected to result from **Alternative 2** beyond 2015 cannot be quantified due to data and model limitations. However, based on proposed increases in recreational ACLs and ACTs, and resultant additional recreational fishing days it is expected that increases in economic value expected to result from ACL increases between 2016 and 2018 would outweigh economic losses estimated for 2015. Therefore, net economic effects under **Alternative 2** are expected to be positive relative to **Alternative 1** (status quo). Furthermore, based on a longer estimated recreational season in 2015 and smaller estimated economic loss, it is expected that **Alternative 2-Option a** would yield greater net economic benefits than **Alternative 2-Option b**.

Alternative 3 would set constant greater amberjack stock ACL and associated recreational and commercial ACLs and ACTs for 2015 and subsequent years. To determine the commercial and recreational ACTs, **Alternative 3-Option a** would apply a 15% buffer to the commercial ACL and a 13% buffer to the recreational ACL, respectively. **Alternative 3-Option b** would apply a 20% buffer to the commercial and recreational ACLs to determine the commercial and recreational ACTs, respectively. Economic losses to the commercial and recreational sectors expected to result in 2015 from **Alternative 3** would be similar to 2015 losses in ex-vessel revenues to the commercial sector and losses in economic value to the recreational sector estimated under

Alternative 2. Beyond 2015, although unquantifiable due to data and model limitations, additional losses in ex-vessel value to the commercial sector and in economic value to the recreational sector would be expected to occur due to the decreases in stock and sector specific ACLs, commercial and recreational ACTs, and resultant decreases in commercial and recreational season lengths relative to **Alternative 1** (status quo). Compared to **Alternative 3-Option a**, aforementioned decreases are expected to be greater under **Alternative 3-Option b**. Therefore, for the 2015-2018 time interval, **Alternative 3-Option b** would be expected to result in greater economic losses than **Alternative 3-Option a**.

Alternative 4 would set the greater amberjack stock ACL at zero and therefore would not allow any greater amberjack landings between 2015 and 2018. Although unquantifiable for the 2015-2018 time interval, **Alternative 4** would be expected to result in losses in ex-vessel revenues to the commercial sector, losses in consumer surplus to anglers and in producer surplus to for-hire operators relative to **Alternative 1**. Among the alternative modifications to the greater amberjack ACLs and ACTs, **Alternative 4**, which would eliminate most economic activities associated with the greater amberjack segment of the reef fish fishery would be the worst from an economics standpoint. The recreational sector may still gain some limited benefits from catch and release activities. The commercial sector would forgo all profits derivable from this segment of the reef fish fishery. The remaining alternatives could be ranked from most to least beneficial as follows: **Alternative 2** then **Alternative 1**, and **Alternative 3**.

Following the discussion relative to the effects on the economic environment expected to result from modifications to the recreational closed season (Section 4.2.2), the expected combined economic effects of recreational measures proposed in this framework action are discussed. Similarly, a discussion of combined effects of commercial measures considered is provided following the discussion relative to commercial trip limit changes (Section 4.3.3).

Direct and Indirect Effects on the Social Environment

This action will affect the human environment relevant to how much the quotas are lowered from the current quotas (**Alternative 1**, no action). **Alternatives 2-4** propose quota reductions from **Alternative 1** for the years 2015-2018. In general, social impacts can be expected in proportion to the decrease in quotas as fishing behavior and resource usage is restricted from current levels of fishing activity. The selection of **Alternative 1** conflicts with the requirement of the Magnuson-Stevens Act to revise the rebuilding plan. Although **Alternative 1**, would result in the least negative social effects by not reducing the quotas, this alternative would allow a level of fishing producing a yield above what the new rebuilding plan will allow.

Alternative 2 and **Alternative 3** would modify the rebuilding plan using different approaches to configuring the quota. The method used to determine the quota does not result in social effects; rather, negative social effects would arise from (and be in proportion to) the reduction in how much people are allowed to catch. During a season, when the quota is met, retention of greater amberjack is prohibited for the rest of the year. Further, in the event landings exceed the stock ACL, the following season's sector ACLs are reduced for a sector that exceeded its quota, by the amount of its sector overage. This measure would result in negative social effects in the subsequent fishing season. Thus, maximum social benefits would result at the point that the total

catch comes closest to meeting but not exceeding the quota (the ACL, which triggers the overage adjustment).

For the year 2015, the proposed quota is the same for both **Alternative 2** and **Alternative 3**, which is 60,000 lbs lower than the stock ACL of **Alternative 1**. By sector, this would reduce the commercial ACL by 16,600 lbs, and the recreational ACL by 43,400 lbs. Subsequently, the increasing annual yields under **Alternative 2** would allow a greater total harvest (2016-2018) compared with **Alternative 3**, which maintains the 2015 quota. The decrease to the commercial sector could be nearly filled by eight vessels making a full trip limit. Although those trips may not be made in a single day, in-season closures may not be effective at adjusting the season to account for the small decrease in allowable harvest. For the recreational sector, the 43,400-lb reduction represents 3.34% of the sector's ACL. The proposed quota increases subsequent to 2015 (**Alternative 2**) would increase the quota above the current quota, which is also **Alternative 1**. Thus, although both **Alternative 2** and **3** propose small decreases to the 2015 quota resulting in some minimal negative effects, however, the quota increases in subsequent years proposed in **Alternative 2** would result in greater social benefits than either **Alternative 1** or **Alternative 3**.

The same **Options a and b** are provided under both **Alternative 2** and **3**, which propose different buffers for setting the ACT. **Options a** propose a 15% buffer for the commercial sector's ACL and a 13% buffer on the recreational sector's ACL and are equivalent to the sectors' buffers to the ACL in **Alternative 1**. The management target (the ACT) is used to project the length of the fishing season, which will be closed when the ACT is projected to be reached. The buffer reduces the likeliness that the ACL will be exceeded, which would reduce the following year's quota. For the commercial sector, the 15% buffer does not appear to have been successful, with the effects compounded by the quota overage adjustment. For the recreational sector, landings have exceeded the sector's ACL twice, in 2009 (prior to the use of an ACT) and 2013.

Options b would increase the buffer for setting each sector's ACT to 20%, an increase of 7% to the recreational buffer and 5% to the commercial buffer. **Options b** propose larger buffers for both sectors than **Options a**, and while they are intended to avoid the long-term negative effects from quota overage adjustments, selecting the most conservative harvest target would require corresponding management measures to be more conservative. This would result in undesirable management measures contributing to broad negative social effects.

The complete closure of the harvest of greater amberjack (**Alternative 4**), would result in the greatest negative social impacts. Although these impacts might be ameliorated in the long-term if the stock were to rebuild faster, the rebuilding projections do not support that result. Further, for the majority of fishermen of both sectors, greater amberjack is caught alongside other species, rather than targeted on directed trips. This means that a complete closure is not likely to affect effort greatly as the majority of trips would still occur. Even under a complete closure, a substantial amount would still be caught and discarded on non-targeted trips, still contributing to mortality. Social effects would also result from a further erosion of trust in federal fishery management if such an extreme reduction to the catch limit were to be adopted. By prohibiting all landings by both the commercial and recreational sector, **Alternative 4** would result in the

greatest social impacts among the alternatives and is the least desirable for the social environment.

Direct and Indirect Effects on the Administrative Environment

Alternative 1 maintains the current commercial and recreational ACLs and ACTs at the 2014 level, or until the next stock assessment is completed and is not expected to alter the administrative burden. **Alternatives 2a** and **2b**, would set the commercial and recreational ACLs using the ACL/ACT Control buffer recommended by the SSC for 2015-2018. **Alternative 2a and 2b** would be expected to have more administrative burden than that of **Alternatives 3a** and **3b**, due to the annual ACLs and ACTs fluctuating in **Alternative 2a** and **2b**. **Alternative 3, Option a and b**, would set the commercial and recreational ACLs using the ACL/ACT Control Rule buffer recommended by the SSC from the constant rate for 2015. **Alternative 4** would set the stock ACL at zero and would be expected to have more administrative burden than **Alternative 1**, the status quo.

4.2 Action 2 - Recreational Management Measures

4.2.1 Action 2.1 - Modifications to the Recreational Minimum Size Limit for Greater Amberjack

Direct and Indirect Effects on the Physical Environment

Adjusting the minimum size limit could have indirect effects on the physical environment. Increasing the minimum size limit for greater amberjack could result in recreational fishers staying on a particular reef site for a longer period of time to catch a legal sized greater amberjack, thus potentially increasing gear interactions with the substrate. However, recreational fisher behavior is largely unknown based on management changes to greater amberjack minimum size limits. Therefore, no difference in impacts to the physical environment is expected from **Alternative 1** compared to **Alternatives 2, 3, and 4**. [NS2]

Direct and Indirect Effects on the Biological/Ecological Environment

There are several management strategies the Council can use to meet the goals necessary to reduce landings to keep harvest levels less than the stock ACL. One recreational measure they are considering is increasing the recreational minimum size limit (**Action 2.1**). **Action 2.1, Alternative 1** would maintain the 30 inch fork length (FL) minimum size limit. Based on theoretical analysis comparing yield-per-recruit (YPR) and spawning potential ratio (SPR) it was estimated that increasing the minimum size limit will provide greater spawning potential; whereas, maintaining the 30 inch FL minimum size limit would result in higher yield. **Action 2.1** alternatives consider increasing the minimum size limit by as much as 6 inches. The biological consequences of increasing the minimum size limit by various amounts were evaluated relative to changes in YPR, SPR, and bycatch. Change in YPR and SPR were summarized in Appendix 12.4.3 of Amendment 35 to the Reef Fish FMP (GMFMC 2012). Reproductive studies by Murie

and Parkyn (2008) estimated at the 30 inch FL minimum size limit (**Alternative 1**), less than 11% of the female greater amberjack in the population have reached sexual maturity.

Alternative 2 would modify the minimum size limit for greater amberjack to 32 inches FL. At 32 inches FL 45% of females are reproductively mature. **Alternative 3** would modify the minimum size limit for greater amberjack to 34 inches FL. At 34 inches FL 85% of females are reproductively mature. **Alternative 4** would modify the minimum size limit for greater amberjack to 36 inches FL. At 36 inches FL 97% of females are reproductively mature.

Alternative 4 is expected to provide the greatest biological benefits to the resource, because a majority of female greater amberjack would be reproductively mature at this size. **Alternative 4** would also be consistent with the commercial sector's minimum size limit. **Alternative 3** would increase the minimum size limit to 34 inches FL and **Alternative 2** would increase the minimum size limit to 32 inches FL. These alternatives are expected to provide greater biological benefits to the resource than **Alternative 1**; however, benefits may diminish if release mortality increases with increases in fish size.

As minimum size limits increase from 30 inches FL, dead discards are estimated to increase and subsequent estimates of changes in harvest and dead discards for various minimum size limits could be calculated. Dead discard mortality is estimated at 20% and would be used to estimate increases in total dead discards with various minimum size limits consistent with SEDAR 33 (2014) and the SEDAR 9 Update (2010).

The Council and Reef Fish Advisory Panel have stated concerns about bycatch mortality of greater amberjack if the minimum size limit is increased. There were also concerns about whether or not the minimum size limit would sufficiently slow the rate of harvest and increase bycatch. To address these concerns, the decision model (SERO-LAPP 2015-01) was used to evaluate how the rate of harvest and dead discards would change with increases to the minimum size limit. **Alternative 1** is expected to result in the lowest level of dead discards followed (in ascending order) by **Alternatives 2, 3, and 4**, respectively.

The YPR and SPR analyses summarized in Figure 2.2.3 and Figure 2.2.4 evaluated minimum size limits ranging from 30 to 36 inches FL. These analyses showed YPR was maximized at 30 inches FL (Figure 2.2.4). Spawning potential was maximized at 36 inches FL and increasing the minimum size limit from 30 to 36 inches increases SPR (**Alternative 4**). The YPR/SPR analysis results revealed a tradeoff between fishery performance yield and spawning potential. Although increasing the minimum size limit appears to provide biological benefits other management measures (e.g., seasonal closures, constraining harvest to the sector ACL) could also control the rate of fishing mortality in order to achieve higher SPR and YPR. The Council discussed over multiple meetings the biological trade-offs of increasing the minimum size limit on bycatch, YPR, and SPR.

Direct and Indirect Effects on the Economic Environment

This action considers increases in the recreational size limit for greater amberjack. **Alternatives 2, 3, and 4** would increase the size limit to 32, 34, and 36 inches FL, respectively. **Alternative 1** (no action), which would maintain the current 30 inch size limit is not expected to affect recreational fishing for greater amberjack and would therefore not be expected to result in effects

to the economic environment. Effects on the economic environment, measured in changes in economic value to the recreational sector were derived from the recreational decision tool developed by SERO (2015). As discussed in Section 3.3.2, changes in consumer surplus are determined based on a consumer surplus of \$12.18 (2013 dollars) per greater amberjack. Changes in producer surplus were based on net operating revenues of \$158.06 (2013 dollars) per charter angler trip. The changes in economic value, i.e., changes in consumer surplus and producer surplus, would stem from changes in season length resulting from alternative size limits. It is noted that the decision tool used to estimated changes in economic value to the recreational sector does not account for potential changes in the quality of recreational trips due to size limit modifications. Table 4.2.1.1 provides estimated season length in 2015 and associated changes in consumer surplus, producer surplus and economic value for alternative greater amberjack recreational size limits.

Table 4.2.1.1. Estimated 2015 season length, changes in consumer surplus (CS), producer surplus (PS) and economic value (EV) for alternative greater amberjack recreational size limits. Season length in days; CS, PS and EV in 2013 dollars; size limits in inches.

	Size Limit	Season Length	Changes in		
			CS	PS	EV
Alternative 1	30	182	---	---	---
Alternative 2	32	196	\$2,224.35	\$10,457.77	\$12,682.12
Alternative 3	34	215	\$5,289.48	\$24,650.46	\$29,939.94
Alternative 4	36	258	\$9,498.14	\$93,782.73	\$103,280.87

Source: SERO-LAPP 2015-01

In general, relative to the status quo size limit, a greater size limit would be expected to result in a longer recreational greater amberjack fishing season. **Alternative 4**, which would increase the size limit the most relative to status quo, would be expected to result in the longest recreational greater amberjack fishing season followed by **Alternative 3** then **Alternative 2**. This ordinal ranking of the alternatives would be expected to hold when comparing changes in consumer surplus and in producer surplus (assuming that additional charter for-hire trips targeting greater amberjack are created). As expected, greatest changes in consumer surplus and in producer surplus would be expected to result from **Alternative 4**. Although the recreational decision tool cannot estimate season length and changes in consumer surplus, producer surplus and economic value, greater size limits would be expected to result in longer recreational seasons and greater changes in economic value beyond 2015. Therefore, the ordinal ranking of the alternatives would be expected to hold beyond 2015. Following the discussion relative to the effects on the economic environment expected to result from modifications to the recreational closed season (Section 4.2.2), the expected combined economic effects of recreational measures proposed in this framework action are discussed.

Direct and Indirect Effects on the Social Environment

Impacts can be expected from increasing the recreational minimum size limit if fishermen find it difficult to land a legal size fish, making the fishing experience less satisfying. Additional effects are not expected from maintaining the 30-inch FL minimum size (**Alternative 1**). Among landings in 2009-2010, the most frequently landed greater amberjack was 31 inches FL. In general, fewer fish are caught of the largest sizes (Figure 2.2.1). Short-term impacts can be expected from an increase in the minimum size limit due to a reduction in harvest and the impacts would correspond in severity with the estimated harvest reduction. Discarding fish due to regulations can negatively affect the fishing experience especially if the fish appears unable to survive. Figure 2.2.1 provides the frequency at which different sizes of greater amberjack are landed. The most frequently caught greater amberjack in 2012-2013 was 34 inches FL (Figure 2.2.1). Increasing the minimum size to 32 inches FL (**Alternative 2**) is estimated to reduce harvest the least among **Alternatives 2-4**, but would also affect the fewest anglers by allowing the retention of a smaller size fish. Increasing the minimum size to 34 inches FL (**Alternative 3**) would reduce harvest more than Alternative 2, but would allow anglers to retain the most frequently landed size of greater amberjack. An increase to 36 inches FL (**Alternative 4**) could reduce harvest the most and also impact the most fishing trips. Thus, fishermen would be most impacted by an increase in the minimum size limit to 36 inches FL (**Alternative 4**). Furthermore, increases in harvest reductions would coincide with increases in dead discards. Throwing back dead fish is perceived as wasteful and is frustrating for fishermen.

On the other hand, social benefits are expected to accrue in the long term if a larger minimum size helps to rebuild the stock. Of 30-inch FL females, 11% are estimated to have achieved reproductive maturity. Thus, an increase in the minimum size limit would mean fewer removals of fish that have not reached reproductive maturity, benefitting the stock by increasing the spawning potential ratio. If the larger minimum size limit aids in rebuilding the stock and the quota is increased then it would be expected to benefit the fishermen, businesses, and fishing communities that harvest greater amberjack. Increasing the size limit to 34 inches FL (**Alternative 3**) or 36 inches FL (**Alternative 4**) could reduce the length of the season closure needed to reduce harvest (Table 2.2.2), allowing fishermen to harvest larger greater amberjack year-round. Furthermore, many recreational fishermen support and often encourage management measures designed to protect the biological needs of a species, including closed seasons during spawning times, and size limits that maximize reproductive potential. It should be noted that an increase to 36 inches FL would make the minimum size limit consistent with that of the commercial sector.

Direct and Indirect Effects on the Administrative Environment

The alternatives in Action 2.1 are expected to have positive impacts to the biological environment with minimal impacts to the administrative environment compared to no action. **Alternative 1** the status quo would have the least impact on the administrative environment, because the current minimum size limit is 30 inches FL for the recreational sector. **Alternatives 2, 3, and 4** are expected to have similar impacts on the administrative environment because they would be modified from no action.

Any change to the regulations would create the additional burden on the administrative environment in the beginning; however, after the regulations are in effect **Alternatives 2, 3, and 4** are not expected to have additional impacts on the administrative environment.

4.2.2 Action 2.2 - Modifications to the Recreational Closed Season for Greater Amberjack

Direct and Indirect Effects on the Physical Environment

It is unknown how many recreational anglers leave the dock intending to target greater amberjack, or how fishing behavior would change based on the various alternatives for closed seasons. The following comparison of alternatives is based on the number of available fishing days under each alternative. This comparison does not take into account fishing during the closed season or effort shifting outside of the closed season. The impacts to the physical environment may be underestimated in this analysis if there is increased effort shifting outside the closed season. Physical impacts to the environment could occur when gear such as weights, hooks, and anchors hit and damage the substrate and surrounding habitat. Recreational fishers typically use rod and reel or spears to harvest greater amberjack; see Chapter 4.1.1.1 for a comparison of gear types and impacts to the physical environment. The four Alternatives for the Action 2.2 the recreational closed season are dependent upon the ACL buffer that is selected as the preferred. **Alternative 4** has proposed closure dates of January 1 - May 31, and a November - December closure. **Alternative 4** would likely have the greatest positive impacts on the physical environment because the recreational season is the shortest under this alternative with 91-108 open fishing days, depending upon the buffer selected. **Alternative 1** would likely result in a 172-182 day fishing season, **Alternative 2** would likely result in a 181-190 day fishing season, and **Alternative 3** would likely result in a 135-145 day fishing season. The following alternatives are listed in order from greatest positive benefits to least expected positive benefits to the physical environment; **Alternative 4, 3, 1, 2**. The analysis for the various closed seasons and their associated buffers can be found on Table 2.2.2.

Direct and Indirect Effects on the Biological/Ecological Environment

Action 2.2 would modify the recreational closed season for greater amberjack. As the greater amberjack stock rebuilds **Alternative 1**, the status quo may not constrain harvest enough to prevent an in-season recreational fishing closure. **Alternative 1** and **Alternative 2** would be expected to have the greatest negative biological impact to the greater amberjack stock as the harvest during the spawning season would remain open. **Alternatives 3** and **4** have the peak spawning season closure (March-May) and would have less impact to the stock than **Alternatives 1** and **2** with respect to the spawning season. However, **Alternatives 3** and **4** would be open during peak recreational harvest which increases the likelihood of the ACL being harvested or exceeded. In Amendment 35 (GMFMC 2012) the Council determined that restricting landings by the additional amount projected for **Alternative 1** (June-July) provides greater biological benefit to rebuilding the stock than by providing a spawning season closure, which has unquantified benefits. **Alternative 3** allows a greater quantity of fish to be caught, increasing the likelihood of exceeding the recreational quota.

Based on spawning season for greater amberjack **Alternatives 3** and **4** may provide the greatest benefits to the resource and biological environment (Murie and Parkyn 2008). Both alternatives would close the recreational fishing season during peak spawning (March - May). Closing

recreational fishing during the months of March - May would be consistent with the current commercial fixed closed season. However, little information exists to suggest that closing the greater amberjack recreational sector during the spawning period would provide greater biological benefits to the stock compared to closing them during months of peak recreational fishing effort (May - August), which reduces harvest to a greater extent than a March – May closure (**Alternative 3**). Similarly, it is unknown if greater amberjack are more susceptible to fishing mortality during the spawning season. A study by Harris et al. (2007) suggested spawning aggregations of greater amberjack were targeted by fishers in the South Atlantic, but no evidence of this was presented. Diver observations in Belize documented greater amberjack in pair courtship while in schools of 120 fish (Graham and Castellanos 2005). It is unknown if fishers target these schools or aggregations of greater amberjack more heavily during spawning than at other times of the year; therefore, **Alternatives 3** and **4** are expected to provide positive benefits to the resource by protecting them during spawning if they are being targeted more heavily.

Direct and Indirect Effects on the Economic Environment

This action considers alternatives to the current June 1 to July 31 annual recreational greater amberjack closure. **Alternative 2** would eliminate the closed season and open the greater amberjack recreational fishing season January 1 until the ACT is reached. **Alternatives 3** and **4** would modify the closure to March 1-May 31 and to January 1-May 31 and November 1-December 31, respectively. **Alternative 1** (no action), which would maintain the current June 1 to July 31 annual recreational greater amberjack closure is not expected to affect recreational fishing for greater amberjack and would therefore not be expected to result in effects to the economic environment. Effects on the economic environment, measured in changes in economic value to the recreational sector were derived from the recreational decision tool developed by SERO (2015). The changes in economic value, i.e., changes in consumer surplus and producer surplus, would stem from changes in season length resulting from alternative closed season size limits. Modifying the seasonal closure would alter the distribution of harvests (and possibly total harvests) and associated economic values. It is noted that the decision tool used to estimate changes in economic value to the recreational sector does not account for potential effort shifts during the open months. Table 4.2.2.1 provides estimated season length in 2015 and associated changes in consumer surplus, producer surplus and economic value for alternative greater amberjack recreational closed seasons.

Table 4.2.2.1. Estimated 2015 season length, changes in consumer surplus (CS), producer surplus (PS) and economic value (EV) for alternative greater amberjack recreational season closures. Season length in days; CS, PS and EV in 2013 dollars.

	Closed Seasons	Season Length	Changes in		
			CS	PS	EV
Alternative 1	6/1-7/31	182	---	---	---
Alternative 2	None	190	-\$3,433.62	\$191,190.91	\$187,757.29
Alternative 3	3/1-5/31	145	\$19,088.62	-\$10,970.76	\$8,117.86
Alternative 4	1/1-5/31 and 11/1- 12/31	97	\$20,831.96	\$7,928.47	\$28,760.43

Source: SERO-LAPP 2015-01

Relative to **Alternative 1** (no action), **Alternative 2**, which would result in the longest recreational season in 2015, would be expected to result in the greatest changes in economic value, i.e., the sum of the changes in consumer surplus and producer surplus. **Alternative 2** would not set a closed season but would let the season run until the recreational ACT is met. **Alternative 3**, which would establish a March 1 to May 32 closed season would be expected to result in the smallest change in economic value. Although the decision tool does not allow to quantify changes in economic value due to season closures beyond 2015, it is assumed that positive net economic effects would continue to result from all proposed season closures.

Combined effects of recreational measures (changes in ACL and ACT, in size limit and season closures

For 2015, recreational season lengths, changes in economic value to the recreational sector that would be expected to result from the modifications to the recreational greater amberjack ACL and ACT (Action 1), modifications to the minimum recreational size limit (Action 2.1) and changes to the seasonal closures (Action 2.2) are provided in Table 4.2.2.2 and Table 4.2.2.3, respectively.

Table 4.2.2.2 Recreational season lengths by recreational ACT and size limit. Season lengths in days; size limits in inches

Closed Seasons	Size Limit	Modifications to ACL and ACT		
		ACT Alt 1	ACT Alt 2	
			13% buffer	20% buffer
June 1 - July 31	30	182	179	172
none	30	190	187	181
March 1 to May 31	30	145	142	135
January 1 – May 31 and Nov 1 – Dec 31	30	97	92	85
June 1 - July 31	32	196	191	180
none	32	199	195	188
March 1 to May 31	32	152	149	142
January 1 – May 31 and Nov 1 – Dec 31	32	108	102	91
June 1 - July 31	34	215	209	196
none	34	211	208	200
March 1 to May 31	34	168	162	150
January 1 – May 31 and Nov 1 – Dec 31	34	123	118	104
June 1 - July 31	36	258	237	222
none	36	227	224	215
March 1 to May 31	36	192	185	170
January 1 – May 31 and Nov 1 – Dec 31	36	147	140	125

Source: SERO-LAPP 2015-01

Table 4.2.2.3: Estimated 2015 changes in economic value for alternative greater amberjack recreational season closures and recreational ACTs. Size limit in inches, economic values in 2013 dollars.

Closed Seasons	Size Limit	Modifications to ACL and ACT		
		ACT Alt 1	ACT Alt 2	
			13% buffer	20% buffer
June 1 - July 31	30	-----	-\$67,231.30	-\$224,104.32
none	30	\$187,757.29	\$120,133.86	-\$15,113.01
March 1 to May 31	30	\$8,117.86	-\$59,113.43	-\$215,986.45
January 1 – May 31 and Nov 1 – Dec 31	30	\$28,760.43	\$6,412.66	-\$150,460.36
June 1 - July 31	32	\$12,682.12	-\$8,755.41	-\$91,280.53
none	32	\$338,109.33	\$249,687.09	\$94,948.16
March 1 to May 31	32	\$100,495.42	\$34,589.09	-\$119,192.33
January 1 – May 31 and Nov 1 – Dec 31	32	\$36,792.10	\$11,067.05	-\$53,776.79
June 1 - July 31	34	\$29,939.94	\$5,135.22	-\$47,551.16
none	34	\$528,823.57	\$464,154.66	\$291,704.23
March 1 to May 31	34	\$113,972.70	\$89,655.91	\$6,174.69
January 1 – May 31 and Nov 1 – Dec 31	34	\$45,323.27	\$24,896.63	-\$31,842.55
June 1 - July 31	36	\$103,280.87	\$29,615.21	-\$25,865.76
none	36	\$782,951.66	\$720,491.19	\$533,109.76
March 1 to May 31	36	\$132,222.84	\$106,331.72	\$51,956.07
January 1 – May 31 and Nov 1 – Dec 31	36	\$66,521.16	\$40,630.04	-\$14,850.92

Source: SERO-LAPP 2015-01

As previously discussed, reductions in recreational ACLs and ACTs would be expected to result in adverse economic effects to the recreational sector. Conversely, larger minimum size limits would be expected to result in longer fishing seasons and increased economic value. Finally, alternative closed season may be expected to result in increased or decreased economic value based on the temporal distribution of harvests and the total amount harvested by the recreational sector. For 2015, the net economic effects expected to result from recreational ACL and ACT changes (Action 1), size limit changes (Action 2.1) and season closure modifications (Action 2.2) would depend of the relative magnitude of the economic effects on the recreational sector of the proposed alternatives. Noting that Action 1- Alternative 1 is not a viable alternative because it would exceed

the recommended stock ACL, the combination that would be expected to result in the greatest net economic benefits in 2015 would set a 13% buffer on the recreational ACL (Action 1-Alternatives 2 or 3 – Option a), eliminate the closed season (Action 2.1-Alternative 2) and establish a 36 inch minimum size limit (Action 2.2-Alternative 2). Conversely, the combination that would be expected to result in the greatest loss in economic value to the recreational sector would set a 20% buffer on the recreational ACL (Action 1-Alternatives 2 or 3-Option b), maintain the current June 1-July 31 closed season (Action 2.1-Alternative 1) and the current 30-inch minimum recreational size limit.

Direct and Indirect Effects on the Social Environment

The fixed closed season for greater amberjack during the months of June and July (also **Alternative 1**) was intended to avoid in-season closures and allow for fishing this large trophy fish when red snapper harvest is closed. Modifications to the recreational closed season for greater amberjack were evaluated and not adopted in Amendment 35 (GMFMC 2012). The issue is being evaluated again as the rebuilding plan goals have not been met, requiring further reductions to harvests.

The June through July closed season (**Alternative 1**) was originally implemented (GMFMC 2008) to reduce fishing effort for greater amberjack and avoid in-season closures. A fixed closed season allows private recreational fishermen and for-hire operators the ability to schedule fishing trips with more certainty. An in-season closure is disruptive to planning fishing trips because the date of the closure is not known in advance. Impacts would arise from in-season closures if planned fishing trips must be cancelled. Also, at the time, this fixed closed season would allow greater amberjack to remain open when red snapper fishing is closed. Thus, at the time of Amendment 35 (GMFMC 2012), the red snapper season was 47 days long; for 77% of the fixed greater amberjack closure, the red snapper season was open. This is a benefit for recreational fishermen who prefer to have one of the two trophy fish open throughout the year. The length of the federal red snapper season has since become progressively shorter, such that for most of June and all of July 2014, fishing for both red snapper and greater amberjack was closed in federal waters. Although the Council recommended an increase to the red snapper quota for 2015, projections for the recreational red snapper season lengths are not yet available.

Eliminating the fixed closed season (**Alternative 2**) would open the recreational sector from January 1 until the ACT is filled. This alternative could negatively affect both for-hire operators, their angler passengers, and private recreational fishermen as the closure date for the sector would be announced with little notice. Without a fixed closed season, the ACT under **Alternative 2 or 3, Option a** (13% buffer) is expected to be met in approximately 187 days. This makes it probable that the greater amberjack and red snapper seasons would close at approximately the same time and neither greater amberjack nor red snapper would be open throughout the fall.

Alternative 3 would modify the recreational season closure for greater amberjack to March 1 through May 31 which coincides with the peak spawning season and the commercial sector's closed season. Closing the season at this time could provide benefits to the stock thereby benefiting fishermen in the long term. Among the management tools that constrain effort,

anglers generally support closed seasons during spawning times, recognizing the resulting conservation benefits. However, red snapper is also closed at this time meaning that negative impacts may accrue to fishermen by prohibiting access to one of the trophy species or the other on a year-round basis. On the other hand, as with the benefits described for **Alternative 1**, a fixed closed season reduces the likelihood of an in-season closure and enables the scheduling of fishing trips. **Alternative 3** is not expected to reduce effort sufficiently to avoid an in-season closure. Depending on the alternative and option selected in Action 1, the season length will likely be between 142 and 170 days, meaning the closure proposed in **Alternative 3** will be insufficient to prevent a closing before the end of the year. **Alternative 3** could provide benefits to anglers who prefer to have red snapper and greater amberjack open at the same time. Some anglers may prefer to take fewer fishing trips due to the costs (e.g., fuel) of multiple trips to target species at different times of the year. However, since recreational fishermen often target multiple species at one time, this may not include as much of a benefit unless private anglers are interested in targeting greater amberjack and red snapper specifically.

Alternative 4 would modify the recreational seasonal closure so that the season is open from June 1 - October 31, five months in duration. As with **Alternative 1** and **Alternative 3**, benefits could accrue to fishermen by establishing a fixed closure that enables the scheduling of fishing trips and avoids the likelihood of an in-season closure. The season would also be open throughout the summer and into early fall when fishing participation (effort) is greatest. As with **Alternatives 2** and **3**, the red snapper recreational season in federal waters would coincide with this alternative, meaning both trophy species would be open at the same time. This would be expected to provide benefits to those fishermen who prefer to target both species on summer trips. This is not as desirable for for-hire operators who have expressed support for having one of the two trophy species open when the other is closed. Thus, there was no consensus among the recreational sector concerning the best time for the season closure. Conversely, this alternative could provide long term benefits because part of the closure would occur during the peak spawning time of March through April, improving protection for spawning greater amberjack which could help toward meeting the rebuilding plan goals.

Direct and Indirect Effects on the Administrative Environment

The alternatives in **Action 2.2** are expected to have positive biological and physical impacts on their respective environments and create nominal differences in the direct and indirect impacts on the administrative environment. **Alternative 1** would have the least impact on the administrative environment, because the current fixed closed season June 1 - July 31 is already established for the recreational sector (GMFMC 2011b). **Alternatives 2, 3, and 4** are expected to have similar impacts on the administrative environment because they would be modified from no action. **Alternative 2** is expected to create the greatest burden on the administrative environment because all fixed closed seasons would be removed. Landings for the recreational sector would need to be closely monitored and enforced when the quota was projected to be reached so that it is not exceeded. Managing the recreational sector without a fixed closed season has resulted in overages in the past. An additional, level of public information and broadcasts by radio and press releases may be necessary to inform stakeholders when the fishery is closed, because it could be a different month and day each year based on natural changes in the resource and shifts in effort.

4.3 Action 3 - Commercial Management Measures

Direct and Indirect Effects on the Physical Environment

Direct effects to the physical environment resulting from commercial fishing include physical damage to habitat associated with anchoring, longline snags on the bottom, and hook-and-line abrading the bottom and potentially tearing off attached organisms as discussed in Section 4.1.1. Sixty-eight percent of the greater amberjack commercial landings from 2004 - 2013 were caught using vertical line gear including bandit gear, electric reels, and trolling (SEFSC Commercial ACL Data Set 2014).

Greater amberjack are primarily caught in the water column above structure. During greater amberjack commercial fishing the hook and line gear is unlikely to contact bottom habitat or cause any damage. However, anchoring over wrecks or other structure to fish for greater amberjack may have a negative effect on those structures and surrounding benthic habitat. Commercial longline vessels captured 10% of the total commercial greater amberjack landed from 2001 - 2010. However, bottom longlines are not used to target greater amberjack and typically catch the fish while setting and retrieving the gear so effort with this gear type should not be affected by a reduction in the sector ACL. Additionally, to use longline gear, an endorsement is required as implemented in Amendment 31 (GMFMC 2009). Spearfishing and other unclassified gear, including unclassified diving gear, accounted for an estimated 22% of the commercial harvest from 2004 - 2013. There are several existing habitat areas of particular concern, marine sanctuaries, and marine reserves in the Gulf of Mexico providing additional protection to greater amberjack habitat and help reduce impacts to the physical environment (see Section 3.1).

Action 3, Alternative 1, the no action alternative, would maintain the current 2,000 pound whole weight (lbs) trip limit. **Alternative 1** provides the commercial sector with a 75-82 day fishing season. A range of days are provided as the estimate is dependent upon the preferred alternative selected in **Action 1**. The in-season management measures developed to adhere to the sector ACL would be to close the sector when the ACT or quota has been reached. This closure is not expected to vary the fishing effort and would not have any additional direct or in-direct effects on the physical environment. The commercial sector uses similar gear to catch the different reef fish species including greater amberjack. Thus, fishing effort would continue even if greater amberjack is closed.

Alternative 2 would decrease the commercial trip limit to 1,500 lbs which is projected to provide a commercial fishing season between 83-91 days. **Alternative 3** would decrease the commercial trip limit to 1,000 lbs. and is projected to provide a commercial fishing season of 110-123 days. **Alternative 4** would decrease the commercial trip limit to 750 lbs and is projected to provide a commercial fishing season between 140-157 days. **Alternative 5** would decrease the commercial trip limit to 500 lbs which is projected to provide a commercial fishing season between 207-233 days. A lower the commercial trip limit is expected to provide a longer greater amberjack fishing season and is not anticipated to shift any fishing effort or methods because less than 5% of trips exclusively target greater amberjack (SEFSC Commercial Logbook 2011). Therefore, **Alternatives 2 - 5** would be beneficial but would only have minimal effects on the

physical environment relative to **Alternative 1**. Table 2.3.2 analysis the five alternatives depending on the ACL selected buffer. The difference among the five alternatives on direct and indirect effects to the environment is expected to be minimal.

Direct and Indirect Effects on the Biological/Ecological Environment

Management actions that directly impact the biological and ecological environment include fishing mortality and the resulting population size, life history characteristics, and the role of the species within its habitat. Removal of fish from the population through fishing reduces the overall population size and reproductive potential. Benefits associated with ending overfishing and rebuilding the stock include: expanding the size- and age-structure, increasing stock abundance and biomass, and reducing mortality.

Alternative 1, the no action alternative is projected to provide the shortest fishing season but results in the highest number of discards after the season is closed. **Alternatives 2 - 5** would reduce will reduce the number of discards as compared to **Alternative 1** by not implementing the closed season, assuming the commercial sector is still harvesting other reef fish and may incidentally catch greater amberjack. The trip limits are expected to provide positive benefits to the biological and ecological environment by reducing the number of discards by slowing harvest and extending the fishing season. However, for multi-species fisheries, greater amberjack discards will increase after reaching the trip limit. **Alternative 5** would establish the smallest trip limit, but is expected to extend the fishing season the longest reducing discards that may occur during quota closures. Establishing a small trip limit such as (**Alternative 5**) would provide the greatest biological benefits to the resource by slowing harvest that should allow the stock to rebuild faster. It is possible a small trip limit could increase regulatory discards.

Direct and Indirect Effects on the Economic Environment

This action considers reductions to the commercial greater amberjack trip limit from the current 1,923 lbs gw. Reductions proposed would set the trip limit to 1,500 lbs gw (**Alternative 2**), 1,000 lbs gw (**Alternative 3**), 750 lbs (**Alternative 4**) or 500 lbs (**Alternative 5**). **Alternative 1**, the no action alternative, would not affect the commercial harvests of greater amberjack and would therefore not be expected to result in changes to the economic environment.

A reduction in the greater amberjack commercial trip limit would be expected to decrease the amount of harvest per trip. This would directly translate into reductions in ex-vessel revenues per trip and possibly profits assuming a relatively stable operating costs per trip. To the extent that the a trip limit reduction could postpone quota closures to a later date compared to status quo, some of the revenue losses from a trip limit could be recouped by undertaking more trips later in the year. These additional trips would also incur additional fishing costs so that profit per vessel as well as for the entire harvesting industry may remain the same, decrease, or increase. One favorable factor of a trip limit reduction is the possibility to lengthen the season and avoid concentrating landings over a short period of time which could depress prices. A longer fishing season would also afford those who target or catch greater amberjack on a seasonal basis additional opportunities to fish for the species. However, if the trip limit is too low, it may preclude fishermen from harvesting the entirety of the commercial quota, possibly resulting in revenue losses. Given

the limitations of current decision tool, the analysis presented focuses on changes in ex-vessel revenues. For 2015, estimated season lengths and associated changes in ex-vessel revenues relative to **Alternative 1** are provided for each alternative trip limit in Table 4.3.1. Changes in ex-vessel revenues were based on monthly average prices between 2009 and 2013.

Table 4.3.1. Estimated 2015 commercial greater amberjack season length and changes in ex-vessel value by trip limit. Trip limits in pounds gutted weight; season length in days; dollar values in 2013 dollars

	Trip Limit	Season Length	Changes in Ex-Vessel Value
Alternative 1	1,923	82	
Alternative 2	1,500	91	\$3,599.38
Alternative 3	1,000	123	-\$15,365.12
Alternative 4	750	157	-\$32,731.67
Alternative 5	500	233	-\$39,684.14

Source: SERO-LAPP 2015-01

If it is assumed that under status quo commercial fishermen have devised adequate fishing practices, e.g., catch composition, to optimize their fishing operations, sizeable reductions in trip limit would disrupt their customary practices and could be expected to adversely affect their revenues. However, smaller reductions in trip limit may not significantly affect fishing practices and may not adversely impact revenues. As previously noted, smaller trip limits could also reduce the amount of fish available and therefore have a positive effect on market prices. **Alternative 5**, which would establish the smallest trip limit, would be expected to result in the greatest adverse economic effect in 2015, followed by **Alternative 4**, then **Alternative 3**. It is estimated that the trip limit reduction that would be implemented under **Alternative 2** would not be large enough to adversely affect fishing practices and would offer opportunities to prosecute greater amberjack during a larger time period and result in positive economic effects for 2015. Changes in ex-vessel revenues estimated using the decision tool develop by SERO (2015) are expected to range from -\$39,684.11 (**Alternative 5**) to \$3,599 (**Alternative 2**).

Combined commercial measures (ACL and ACT changes and trip limit reduction)

For 2015, commercial season lengths and net economic effects on the commercial sector that would be expected to result from the modifications to the commercial greater amberjack ACL and ACT (Action 1) and reductions in trip limit (Action 3) are provided in Tables 4.3.2 and 4.3.3, respectively.

Table 4.3.2 Commercial season lengths by commercial ACT and trip limit. Season length in days.

Trip Limit	Modifications to ACL and ACT		
	Alternative 1	Alternatives 2 and 3	
		Option a (15% buffer)	Option b (20% buffer)
Alternative 1	82	79	75
Alternative 2 (1,500 lbs)	91	87	83
Alternative 3 (1,000 lbs)	123	118	110
Alternative 4 (750 lbs)	157	151	140
Alternative 5 (500 lbs)	233	223	207

Source: SERO-LAPP 2015-01

Table 4.3.3: 2015 Changes in commercial greater amberjack ex-vessel values by trip limit and by commercial ACTs. Ex-vessel values in 2013 dollars

Trip Limit	Modifications to ACL and ACT		
	Alternative 1	Alternatives 2 and 3	
		Option a (15% buffer)	Option b (20% buffer)
Alternative 1	----	-\$26,174.25	-\$61,073.25
Alternative 2 (1,500 lbs)	\$3,599.38	-\$20,703.19	-\$52,071.39
Alternative 3 (1,000 lbs)	-\$15,365.12	-\$30,831.43	-\$57,007.06
Alternative 4 (750 lbs)	-\$32,731.67	-\$48,799.33	-\$74,922.19
Alternative 5 (500 lbs)	-\$39,684.14	-\$59,739.48	-\$89,210.90

Source: SERO-LAPP 2015-01

As previously discussed, larger trip limit reductions and decreases in ACT would be expected to result in greater adverse economic effects on the commercial sector. Therefore, for 2015, Action 1- Alternatives 2 or 3 (Option b) and Action 3-Alternative 3 would constitute the combination that would be expected to result in the greatest loss in ex-vessel revenues. Beyond 2015, combinations that include a trip limit reduction and ACL and ACT reductions would be expected to result in continued ex-vessel revenue losses. However, the sign and magnitude of economic effects expected to result from combinations that include a trip limit reduction and increases in commercial ACL and ACT are not known. The combined economic effects would be expected to be positive if the increases in commercial ACL and ACT more than offset the adverse economic

effects that would be expected to result from a reduction in trip limit beyond 1,500 lbs gw. Beyond 2015, the establishment of a 1,500 lb trip limit (Action 3-Alternative 3) in conjunction with increases in commercial ACL and ACTs would be expected to result in net positive economic effects because the trip limit reduction would not be large enough to disrupt fishing practices and prevent the commercial sector from harvesting its quota.

Direct and Indirect Effects on the Social Environment

Commercial trip limits in the range of 520 lbs to 2,000 lbs whole weight (ww) were evaluated as an alternative to eliminating the fixed closed season (March through May) in Amendment 35 (GMFMC 2012). A 2,000-lb w trip limit was adopted, which is now **Alternative 1**. With the addition of a 750-lb gw trip limit, the same alternatives are being re-evaluated here,¹³ with the intent of improving progress under the new rebuilding plan. The commercial fixed closed season coincides with the peak spawning season of greater amberjack in the Gulf. The Council selected the largest trip limit (2,000 lbs) from among the alternatives. Although no additional social effects would be expected from maintaining the 2,000-lb trip limit (**Alternative 1**), the commercial sector is regularly exceeding its quota, reduced further each year as a result of prior overages, necessitating some reduction of the commercial harvest as part of the new rebuilding plan.

Modifying commercial trip limits would affect commercial fishermen depending on their existing fishing practice. Although few reef fish fishermen target greater amberjack regularly, those who do would be affected by a further reduction to the trip limit (**Alternatives 2-5**; Table 4.3.4). As discussed in Section 3.4, the majority of commercial fishermen land greater amberjack incidentally, alongside other reef fish as part of a multi-species fishing strategy. The 2,000 lb whole weight trip limit adopted in 2012 was projected to affect approximately 8% of vessels landing greater amberjack at some time during the year based on historical fishing behavior. The remaining alternatives propose to further reduce the trip limit. The number of vessels that make landings in excess of the threshold proposed by each alternative is shown in Table 4.3.4. For each of **Alternatives 2-5**, those involved with those vessels that make landings above each proposed trip limit would be the ones most affected by the alternative selected. The population affected would be the largest under the smallest trip limit (500 lbs; **Alternative 5**).

Table 4.3.4 contains the number of vessels per year that made greater amberjack landings in excess of each of the trip limits proposed by **Alternatives 2-5**. These data reflect the highest landings of each vessel at least once during the year and each vessel likely made numerous trips. The number of vessels with landings greater than each proposed trip limit is a subset of the previous column's maximum landing weight. For example, in 2009, 318 unique vessels landed at least one pound of greater amberjack during the year. Of those 318 vessels, 76 vessels landed more than 500 lbs on a single trip, on at least one trip during the year. The proportion of vessels that made at least a single landing greater than each of the proposed options is shown in Table 4.3.5. The table includes three time frames for comparison: the average number of vessels landing greater than each trip limit for 10 years, 5 years, and a single year (2013). Although the

¹³ The trip limit alternatives in Amendment 35 (GMFMC 2012) were in pounds *whole weight*. Those proposed in this framework action are in pounds *gutted weight*. Alternative 1's, 2,000-lb trip limit equates to 1,923 lbs gutted weight.

number of vessels landing greater amberjack varies each year, the proportion of vessels with landings greater than each trip limit has remained consistent. These data facilitate consideration of the number of vessels that may be impacted by the adoption of each proposed trip limit.

Table 4.3.4. Number of vessels by year with greater amberjack landings greater than the proposed trip limits under Alternatives 2-5.

Year	Number of Vessels					
	1-499 lbs	Alt. 5 ≥ 500 lbs	Alt. 4 ≥750 lbs	Alt. 3 ≥1000 lbs	Alt. 2 ≥1500 lbs	Alt. 1 ≥2000 lbs
1993	530	106	80	64	44	35
1994	566	134	94	66	45	36
1995	509	117	89	66	44	35
1996	509	134	94	74	46	35
1997	491	115	87	69	49	39
1998	446	97	68	52	28	24
1999	467	96	66	55	41	29
2000	464	101	76	60	44	30
2001	455	110	75	54	38	32
2002	465	100	75	57	38	31
2003	492	125	90	70	51	39
2004	468	108	84	65	46	37
2005	447	100	70	58	41	33
2006	360	86	61	48	34	30
2007	287	73	54	41	33	27
2008	314	79	56	41	24	19
2009	318	76	53	43	34	25
2010	222	59	46	36	27	23
2011	191	56	39	35	25	16
2012	143	47	40	37	28	21
2013	178	83	62	53	37	19

Source: Southeast Fisheries Science Center Commercial Logbook (Nov 2014).

Note: The columns contain the number of unique vessels landing greater amberjack. The first column (1-499 lbs) is the total number of vessels landing greater amberjack on at least one trip for the given year. Subsequent columns contain the number of vessels out of the total that landed more greater amberjack than each proposed trip limit on a single trip.

Table 4.3.5. Proportion of vessels with landings of greater amberjack that exceed each proposed trip limit option.

	Number of Vessels					
		Alt. 5	Alt. 4	Alt. 3	Alt. 2	Alt. 1
	1-499 lbs	>= 500 lbs	>=750 lbs	>=1000 lbs	>=1500 lbs	>=2000 lbs
2004-2013 (Average)	292.8	76.7	56.5	45.7	32.9	25
	100%	26%	19%	16%	11%	9%
2009-2013 (Average)	210.4	64.2	48	40.8	30.2	20.8
	100%	31%	23%	19%	14%	10%
2013	178	83	62	53	37	19
	100%	47%	35%	30%	21%	11%

Note: Although the number of vessels landing greater amberjack varies by year (see Table 4.3.4), the proportion of vessels with landings that exceed each trip limit option is fairly consistent.

Generally, greater amberjack is caught by vertical line alongside other reef fish species and makes up only a part of most vessels' landings per trip. On average over the last five years, 24% of vessels would be most impacted by the adoption of a 1,500-lb trip limit (**Alternative 2**); 43% would be impacted by a 1,000-lb trip limit (**Alternative 3**); 66% by a 750-lb trip limit (**Alternative 4**); and the most, 97% of vessels would have to modify their fishing strategy and behavior to avoid exceeding a 500-lb trip limit (**Alternative 5**).

Some vessels may target greater amberjack in a directed trip and land several thousands of pounds. Others conduct directed trips seasonally and yet others direct effort during part of a multi-day fishing trip, and would exceed 2,000 lbs on this day alone. However, it is more common for greater amberjack directed trips to be part of a flexible, multi-species strategy of a subset of vessels rather than a full-time dedicated fishery. It is not likely that any vessel targets greater amberjack full-time. In more recent years, a majority of vessels do not exceed 1,000 lbs on any trip during the year (Table 4.3.5). However, these examples of diversified fishing strategies represent examples of ways fishermen adapt to changing regulations and fishing conditions. Increasing the trip limit will narrow the available fishing options, negatively impacting fishing behavior and practice for some fishermen. Thus, increasing the trip limit is expected to affect a segment of participants in the reef fish fishery, rather than affecting all participants evenly. Vessels will likely continue to fish but their crew will switch effort in as yet unknown ways.

The smaller the trip limit, the longer the fishing season would be expected to remain open. In this way, there is a trade-off between the amount of greater amberjack that can be landed at one time, and the amount of time available to catch those fish. With a 2,000-lb trip limit (**Alternative 1**), the season is expected to remain open for 75-92 days, depending on the buffer selected in Action 1. Smaller trip limits will impact more vessels, but allow the season to remain open longer. With a 1,500-lb trip limit, the season would be expected to be open 84-109 days (**Alternative 2**); a 1,000-lb trip limit may provide a season of 113-148 days (**Alternative 3**); a 750-lb trip limit may provide a season of 145-156 days (**Alternative 4**), and the most restrictive

trip limit, 500 lbs (**Alternative 5**), would be expected to provide the longest fishing season, from 216-273 days. Thus, **Alternative 5** would provide the greatest benefits to fishermen who catch greater amberjack incidentally.

Direct and Indirect Effects on the Administrative Environment

Alternative 1 is not expected to impact the administrative environment because it would not change the current management measures. **Alternative 2 – 5** would be expected to have similar burden on the administrative environment due to the modification of the commercial trip limit. Therefore, **Alternative 1** would have the least adverse effect on the administrative environment.

4.4 Cumulative Effects

The cumulative effects from the greater amberjack rebuilding plan have been analyzed in Amendment 30A (GMFMC 2008a) and Amendment 35 (GMFMC 2012) cumulative effects to the reef fish fishery have been analyzed in Amendments 30B, and 31, and are incorporated here by reference (GMFMC 2008b; 2009). The effects of setting the ACL in this regulatory amendment are similar to the greater amberjack rebuilding plan in Amendment 35 (GMFMC 2012). This analysis found the effects on the biophysical and socioeconomic environments are positive in the long-term, because they would ultimately restore/maintain the stock at a level that allows the maximum benefits in yield and commercial and recreational fishing opportunities to be achieved. However, short-term negative impacts on the socioeconomic environment associated with greater amberjack fishing have occurred and are likely to continue due to the need to limit directed harvest and reduce bycatch mortality. These negative impacts can be minimized by selecting measures that would provide the least disruption to the greater amberjack component of the reef fish fishery while maintaining a stock ACL and sector quotas consistent with the adjusted rebuilding plan.

The cumulative effects from the Deepwater Horizon MC252 oil spill may not be known for several years. If there has been a reduction in spawning success in 2010, the impacts may not begin to manifest themselves until several years later when the fish that would have spawned in 2010 would have become large enough to enter the adult spawning population and be caught by greater amberjack fishers. For greater amberjack, in the recreational sector this occurs at approximately 2 years of age (~ 30 inches FL); whereas, in the commercial sector this occurs at approximately 4 years of age (~36 inches FL). Therefore, a year class failure in 2010 may not be felt by the spawning populations or by harvesters of greater amberjack until 2013 and 2014. The impacts would result in reduced fishing success and reduced spawning potential, and would need to be taken into consideration in the next SEDAR assessment.

There is a large and growing body of literature on past, present, and future impacts of global climate change induced by human activities. Some of the likely effects commonly mentioned are sea level rise, increased frequency of severe weather events, and change in air and water temperatures. The Environmental Protection Agency's climate change web page provides basic background information on these and other measured or anticipated effects. In addition, Intergovernmental Panel on Climate Change has numerous reports addressing their assessments

of climate change (http://www.ipcc.ch/publications_and_data/publications_and_data.shtml). Global climate changes could have significant effects on Gulf of Mexico fisheries; however, the extent of these effects is not known at this time. Possible impacts include temperature changes in coastal and marine ecosystems that can influence organism metabolism and alter ecological processes such as productivity and species interactions; changes in precipitation patterns and a rise in sea level which could change the water balance of coastal ecosystems; altering patterns of wind and water circulation in the ocean environment; and influencing the productivity of critical coastal ecosystems such as wetlands, estuaries, and coral reefs (Kennedy et al. 2002). Modeling of climate change in relation to the northern Gulf of Mexico hypoxic zone may exacerbate attempts to reduce the area affected by these events (Justic et al. 2003). It is unclear how climate change would affect reef fishes, and likely would affect species differently. Climate change can affect factors such as migration, range, larval and juvenile survival, prey availability, and susceptibility to predators. In addition, the distribution of native and exotic species may change with increased water temperature, as may the prevalence of disease in keystone animals such as corals and the occurrence and intensity of toxic algae blooms. Climate change may significantly impact Gulf of Mexico reef fish species in the future, but the level of impacts cannot be quantified at this time, nor is the time frame known in which these impacts would occur. Actions from this amendment are not expected to significantly contribute to climate change through the increase or decrease the carbon footprint from fishing.

The effects of the proposed action are, and will continue to be, monitored through collection of landings data by NOAA Fisheries Service, stock assessments and stock assessment updates, life history studies, economic and social analyses, and other scientific observations. Landings data for the recreational sector in the Gulf of Mexico are collected through NOAA Fisheries Service Marine Recreational Information Program (MRIP), Head Boat Survey, and the Texas Marine Recreational Fishing Survey. Commercial data are collected through trip ticket programs, port samplers, and logbook programs, dealer reporting, as well as the individual fishing quota program (IFQ). Currently, a Update SEDAR assessment of Gulf of Mexico greater amberjack is scheduled for 2016.

There is the potential greater amberjack contaminated with oil from the Deepwater Horizon MC252 incident could be caught. However, federal and state governments have strong systems in place to test and monitor seafood safety and to prohibit harvesting from affected areas, keeping oiled products out of the market. The National Marine Fisheries Service (NMFS) is working closely with the U.S. Food and Drug Administration (FDA) and the States to ensure seafood safety. The first and most important preventive step in protecting the public from potentially contaminated seafood is from NMFS' actions to close fishing and shellfish harvesting areas in federal waters of the Gulf that have been or are likely to be exposed to oil from the spill. In addition, NOAA and FDA are monitoring fish caught just outside of closed areas, and testing them for petroleum compounds, to ensure that the closed areas are sufficiently large so as to prevent the harvest of contaminated fish. NOAA conducts a combination of both sensory analysis (of tissue) and chemical analysis (of water, sediment, and tissue) to determine if seafood is safe. If managers determine that seafood may be affected, the next step is to assess whether seafood is tainted or contaminated to levels that could pose a risk to human health through consumption. So far, fish and macrocrustacean flesh tested from outside the closure and from

closed areas that have subsequently been reopened have passed sensory and chemical analyses as described in Section 4.4.

CHAPTER 5. REGULATORY IMPACT REVIEW

CHAPTER 6. REGULATORY FLEXIBILITY ACT ANALYSIS

CHAPTER 7. LIST OF PREPARERS

Name	Expertise	Responsibility	Agency
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CHAPTER 8. LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS CONSULTED

The following have or will be consulted.

- National Marine Fisheries Service
 - Southeast Fisheries Science Center
 - Southeast Regional Office
 - Protected Resources
 - Habitat Conservation
 - Sustainable Fisheries
- NOAA General Counsel
- U.S. Coast Guard

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APPENDIX A. CONSIDERED BUT REJECTED ALTERNATIVES

APPENDIX B. OTHER APPLICABLE LAW

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.) provides the authority for management of stocks included in fishery management plans in federal waters of the exclusive economic zone. However, management decision-making is also affected by a number of other federal statutes designed to protect the biological and human components of U.S. fisheries, as well as the ecosystems that support those fisheries. Major laws affecting federal fishery management decision-making are summarized below.

Administrative Procedure Act

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (5 U.S.C. Subchapter II), which establishes a “notice and comment” procedure to enable public participation in the rulemaking process. Under the Act, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider, and respond to public comment on those rules before they are finalized. The Act also establishes a 30-day waiting period from the time a final rule is published until it takes effect.

Coastal Zone Management Act

Section 307(c)(1) of the federal Coastal Zone Management Act of 1972 (CZMA), as amended, requires federal activities that affect any land or water use or natural resource of a state’s coastal zone be conducted in a manner consistent, to the maximum extent practicable, with approved state coastal management programs. The requirements for such a consistency determination are set forth in NOAA regulations at 15 CFR part 930, subpart C. According to these regulations and CZMA Section 307(c)(1), when taking an action that affects any land or water use or natural resource of a state’s coastal zone, NMFS is required to provide a consistency determination to the relevant state agency at least 90 days before taking final action.

Upon submission to the Secretary of Commerce, NMFS will determine if this plan amendment is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, Mississippi, and Texas to the maximum extent possible. Their determination will then be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management programs for these states.

Data Quality Act

The Data Quality Act (Public Law 106-443) effective October 1, 2002, requires the government to set standards for the quality of scientific information and statistics used and disseminated by federal agencies. Information includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, cartographic, narrative, or audiovisual forms (includes web dissemination, but not hyperlinks to information that others disseminate; does not include clearly stated opinions).

Specifically, the Act directs the Office of Management and Budget to issue government wide guidelines that “provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies.” Such guidelines have been issued, directing all federal agencies to create and disseminate agency-specific standards to: (1) ensure information quality and develop a pre-dissemination review process; (2) establish administrative mechanisms allowing affected persons to seek and obtain correction of information; and (3) report periodically to Office of Management and Budget on the number and nature of complaints received.

Scientific information and data are key components of fishery management plans (FMPs) and amendments and the use of best available information is the second national standard under the Magnuson-Stevens Act. To be consistent with the Act, FMPs and amendments must be based on the best information available. They should also properly reference all supporting materials and data, and be reviewed by technically competent individuals. With respect to original data generated for FMPs and amendments, it is important to ensure that the data are collected according to documented procedures or in a manner that reflects standard practices accepted by the relevant scientific and technical communities. Data will also undergo quality control prior to being used by the agency and a pre-dissemination review.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. Section 1531 et seq.) requires federal agencies use their authorities to conserve endangered and threatened species. The ESA requires NMFS, when proposing an action for managed stocks that “may affect” critical habitat or endangered or threatened species, to consult with the appropriate administrative agency (itself for most marine species, the U.S. Fish and Wildlife Service (USFWS) for all remaining species) to determine the potential impacts of the proposed action. Consultations are concluded informally when proposed actions may affect but are “not likely to adversely affect” endangered or threatened species or designated critical habitat. Formal consultations, including a biological opinion, are required when proposed actions may affect and are “likely to adversely affect” endangered or threatened species or adversely modify designated critical habitat. If jeopardy or adverse modification is found, the consulting agency is required to suggest reasonable and prudent alternatives. NMFS, as part of the Secretarial review process, will make a determination regarding the potential impacts of the proposed actions.

On September 30, 2011, the Protected Resources Division released a biological opinion which, after analyzing best available data, the current status of the species, environmental baseline (including the impacts of the recent Deepwater Horizon MC 252 oil release event in the northern Gulf of Mexico), effects of the proposed action, and cumulative effects, concluded that the continued operation of the Gulf of Mexico reef fish fishery is also not likely to jeopardize the continued existence of green, hawksbill, Kemp’s ridley, leatherback, or loggerhead sea turtles, nor the continued existence of smalltooth sawfish (NMFS 2011b).

On September 10, 2014, NMFS published a final rule listing as threatened 20 coral species under the Endangered Species Act. Four of the newly listed coral species are found in the Gulf of

Mexico. NMFS concurs with the effects determination that the continued authorization of the Gulf of Mexico Reef Fish Fishery Management Plan (Reef Fish FMP) is not likely to adversely affect the newly listed coral species. On September 10, 2014, NMFS published a final rule (79 FR 53852) listing as threatened 20 coral species under the Endangered Species Act. Four of the newly listed coral species are found in the Gulf of Mexico. In memos dated September 16, 2014, and October 7, 2014, NMFS determined that activities associated with the subject FMP will not adversely affect any of the newly listed coral species. In the October 7, 2014, memo NMFS also determined that although the September 10, 2014, Final Listing Rule provided some new information on the threats facing *Acropora*, none of the information suggested that the previous determinations were no longer valid.

Fish and Wildlife Coordination Act

Fish and Wildlife Coordination Act of 1934 (16 U.S.C. 661-667e) provides the basic authority for the USFWS's involvement in evaluating impacts to fish and wildlife from proposed water resource development projects. It also requires federal agencies that construct, license or permit water resource development projects to first consult with the Service (and NMFS in some instances) and State fish and wildlife agency regarding the impacts on fish and wildlife resources and measures to mitigate these impacts.

The fishery management actions in the Gulf of Mexico are not likely to affect wildlife resources pertaining to water resource development as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, (Public Law 89-665; 16 U.S.C. 470 *et seq.*) is intended to preserve historical and archaeological sites in the United States of America. Section 106 of the NHPA requires federal agencies to evaluate the impact of all federally funded or permitted projects for sites on listed on, or eligible for listing on, the National Register of Historic Places and aims to minimize damage to such places.

Typically, fishery management actions in the Gulf of Mexico are not likely to affect historic places with exception of the *U.S.S. Hatteras*, located in federal waters off Texas, which is listed in the National Register of Historic Places. Greater Amberjack occur off Texas, however the proposed actions are not likely to increase fishing activity above previous years. Thus, no additional impacts to the *U.S.S. Hatteras* would be expected.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas, and on the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce (authority delegated to NMFS) is responsible for the conservation and management of cetaceans and pinnipeds (other than walrus). The Secretary

of the Interior is responsible for walrus, sea and marine otters, polar bears, manatees, and dugongs.

Part of the responsibility that NMFS has under the MMPA involves monitoring populations of marine mammals to make sure that they stay at optimum levels. If a population falls below its optimum level, it is designated as “depleted,” and a conservation plan is developed to guide research and management actions to restore the population to healthy levels.

In 1994, Congress amended the MMPA, to govern the taking of marine mammals incidental to commercial fishing operations. This amendment required the preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction, development and implementation of take-reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fishing activities, and studies of pinniped-fishing activity interactions.

Under section 118 of the MMPA, NMFS must publish, at least annually, a List of Fisheries that places all U.S. commercial fishing activities into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishing activity. The categorization of a fishing activity in the List of Fisheries determines whether participants in that fishing activity may be required to comply with certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. 703) protects migratory birds. The responsibilities of federal agencies to protect migratory birds are set forth in Executive Order 13186. The USFWS is the lead agency for migratory birds. The birds protected under this statute are many of our most common species, as well as birds listed as threatened or endangered. A memorandum of understanding (MOU) between NMFS and the USFWS, as required by Executive Order 13186 (66 FR 3853, January 17, 2001), is to promote the conservation of migratory bird populations. This MOU focuses on avoiding, or where impacts cannot be avoided, minimizing to the extent practicable, adverse impacts on migratory birds and strengthening migratory bird conservation through enhanced collaboration between NMFS and the USFWS by identifying general responsibilities of both agencies and specific areas of cooperation. Given NMFS’ focus on marine resources and ecosystems, this MOU places an emphasis on seabirds, but does not exclude other taxonomic groups of migratory birds.

Typically, fishery management actions in the Gulf of Mexico are not likely to affect migratory birds. The proposed actions are not likely to change the way in which the fishery is prosecuted. Thus, no additional impacts are reasonably expected.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) regulates the collection of public information by federal agencies to ensure the public is not overburdened with information requests, the federal government’s information collection procedures are efficient, and federal

agencies adhere to appropriate rules governing the confidentiality of such information. The Act requires NMFS to obtain approval from the Office of Management and Budget before requesting most types of fishing activity information from the public. None of the alternatives in this amendment are expected to create additional paperwork burdens.

Prime Farmlands Protection and Policy Act

The Farmland Protection and Policy Act of 1981 (7 U.S.C. 4201) was enacted to minimize the loss of prime farmland and unique farmlands as a result of Federal actions by converting these lands to nonagricultural uses. It assures that federal programs are compatible with state and local governments, and private programs and policies to protect farmland.

The fishery management actions in the Gulf of Mexico are not likely to affect farmlands as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

National Wild and Scenic Rivers System

The National Wild and Scenic Rivers System of 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) preserves certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act safeguards the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

The fishery management actions in the Gulf of Mexico are not likely to affect wetland habitats as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

North American Wetlands Conservation Act

The North American Wetlands Conservation Act of 1989 (Public Law 101-233) established a wetlands habitat program, administered by the USFWS, to protect and manage wetland habitats for migratory birds and other wetland wildlife in the United States, Mexico, and Canada.

The fishery management actions in the Gulf of Mexico are not likely to affect wetland habitats as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

Executive Orders (E.O.)

E.O. 12630: Takings

The E.O. on Government Actions and Interference with Constitutionally Protected Property Rights that became effective March 18, 1988, requires each federal agency prepare a Takings Implication Assessment for any of its administrative, regulatory, and legislative policies and actions that affect, or may affect, the use of any real or personal property. Clearance of a regulatory action must include a takings statement and, if appropriate, a Takings Implication

Assessment. The NOAA Office of General Counsel will determine whether a Taking Implication Assessment is necessary for this amendment.

E.O. 12866: Regulatory Planning and Review

E.O. 12866: Regulatory Planning and Review, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, NMFS prepares a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new fishery management plan or significantly amend an existing plan. RIRs provide a comprehensive analysis of the costs and benefits to society of proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Analysis. A regulation is significant if it 1) Has an annual effect on the economy of \$100 million or more or adversely affects in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments and communities; 2) creates a serious inconsistency or otherwise interferes with an action taken or planned by another agency; 3) materially alters the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or 4) raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

E.O. 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

This E.O. mandates that each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions.

E.O. 12962: Recreational Fisheries

This E.O. requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, it establishes a seven-member National Recreational Fisheries Coordination Council (NRFCC) responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management

technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The NRFCC also is responsible for developing, in cooperation with federal agencies, States and Tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the E.O. requires NMFS and the USFWS to develop a joint agency policy for administering the ESA.

E.O. 13089: Coral Reef Protection

The E.O. on Coral Reef Protection requires federal agencies whose actions may affect U.S. coral reef ecosystems to identify those actions, utilize their programs and authorities to protect and enhance the conditions of such ecosystems, and, to the extent permitted by law, ensure actions that they authorize, fund, or carry out do not degrade the condition of that ecosystem. By definition, a U.S. coral reef ecosystem means those species, habitats, and other national resources associated with coral reefs in all maritime areas and zones subject to the jurisdiction or control of the United States (e.g., federal, state, territorial, or commonwealth waters).

Regulations are already in place to limit or reduce habitat impacts within the Flower Garden Banks National Marine Sanctuary. Additionally, NMFS approved and implemented Generic Amendment 3 for Essential Fish Habitat (GMFMC 2005), which established additional habitat areas of particular concern (HAPCs) and gear restrictions to protect corals throughout the Gulf of Mexico. There are no implications to coral reefs by the actions proposed in this amendment.

E.O. 13132: Federalism

The E.O. on Federalism requires agencies in formulating and implementing policies, to be guided by the fundamental Federalism principles. The E.O. serves to guarantee the division of governmental responsibilities between the national government and the states that was intended by the framers of the Constitution. Federalism is rooted in the belief that issues not national in scope or significance are most appropriately addressed by the level of government closest to the people. This E.O. is relevant to FMPs and amendments given the overlapping authorities of NMFS, the states, and local authorities in managing coastal resources, including fisheries, and the need for a clear definition of responsibilities. It is important to recognize those components of the ecosystem over which fishery managers have no direct control and to develop strategies to address them in conjunction with appropriate state, tribes and local entities (international too).

No Federalism issues were identified relative to the action to modify the management of the recreational harvest of greater amberjack. Therefore, consultation with state officials under Executive Order 12612 was not necessary. Consequently, consultation with state officials under Executive Order 12612 remains unnecessary.

E.O. 13158: Marine Protected Areas

This E.O. requires federal agencies to consider whether their proposed action(s) will affect any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural or cultural resource within the protected area. There are several marine protected areas, HAPCs, and gear-restricted

areas in the eastern and northwestern Gulf of Mexico. The existing areas are entirely within federal waters of the Gulf of Mexico. They do not affect any areas reserved by federal, state, territorial, tribal or local jurisdictions.

APPENDIX C. SUMMARIES OF PUBLIC COMMENTS RECEIVED

APPENDIX D. BYCATCH PRACTICABILITY ANALYSIS

Background/Overview

The Gulf of Mexico Fishery Management Council (Council) is required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) §303(a) (11) to establish a standardized bycatch reporting methodology for federal fisheries and to identify and implement conservation and management measures that, to the extent practicable and in the following order: 1) Minimize bycatch, and 2) minimize the mortality of bycatch that cannot be avoided. The Magnuson-Stevens Act defines bycatch as “fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch-and-release fishery management program” (Magnuson-Stevens Act §3(2)). Economic discards are fish that are discarded because they are undesirable to the harvester. This category of discards generally includes certain species, sizes, and/or sexes with low or no market value.

Regulatory discards are fish that are required by regulation to be discarded, but also include fish that may be retained but not sold. NOAA Fisheries Service outlines at 50 CFR §600.350(d) (3) (i) ten factors that should be considered in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable.

Guidance provided at 50 CFR 600.350(d)(3) identifies ten factors to consider in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable. These are:

1. Population effects for the bycatch species.
2. Ecological effects due to changes in the bycatch of that species (effects on other species in the ecosystem).
3. Changes in the bycatch of other species of fish and the resulting population and ecosystem effects.
4. Effects on marine mammals and birds.
5. Changes in fishing, processing, disposal, and marketing costs.
6. Changes in fishing practices and behavior of fishermen.
7. Changes in research, administration, and enforcement costs and management effectiveness.
8. Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources.
9. Changes in the distribution of benefits and costs.
10. Social effects.

The Councils are encouraged to adhere to the precautionary approach outlined in Article 6.5 of the Food and Agriculture Organization of the United Nations Code of Conduct for Responsible Fisheries when uncertain about these factors.

The harvest of greater amberjack is currently regulated with size limits, bag limits, quotas, and seasonal closures. These measures are generally effective in limiting fishing mortality, the size of fish landed, the number of targeted fishing trips, and/or the time fishermen spend pursuing a species. However, these management tools may have the unavoidable adverse effect of creating regulatory discards, which reduces landings. Consequently, the Council is considering in this amendment the practicability of taking additional action to further minimize greater amberjack bycatch, by sector.

Greater Amberjack Release Mortality Rates

Commercial Discard Rates

Greater amberjack discard rates were calculated for the Gulf of Mexico vertical line fishery using both self-reported data (discard coastal logbook) and observer data (SEDAR 33 2014). Total Gulf of Mexico vertical line (handline and electric reel/bandit rig) effort was used along with the calculated discard rates to provide two estimates of total greater amberjack discards from the Gulf of Mexico vertical line fishery. Those calculated discards were also compared with discard estimates calculated for the 2006 greater amberjack assessment (SEDAR 9 2010). Vertical line discards, calculated using the self-reported data, are presented in Table 6.1. Calculation of discards followed the methods used in the 2014 Southeast Data, Assessment and Review (SEDAR) 33 data workshop (SEDAR 33 2014). In that analysis, results from generalized linear models indicated significant differences in discard rates across time period (January - July, August - December) and number of hooks per line fished (1-2, 3-9, >9 hooks). Mean discard rates were calculated for each year, by month, and hooks per line. Total effort was available from the coastal logbook data (a census of landings and effort data from vessels with federal fishing permits). Effort, defined as number of trips, was summed within each year/period/hooks per line. Total discards were calculated for each stratum as: Stratum mean discard rate per trip x the number of stratum total trips. Discards of all strata within a year were summed to provide total yearly discards. Confidence intervals (5% and 95%) were calculated for each stratum specific discard rate. The discard rates at the confidence intervals were also multiplied by total vertical line effort to provide a measure of uncertainty around the discard calculations. Discards were calculated as numbers of discarded fish and were converted to pounds by multiplying by 12.83 pounds, the mean weight of a discarded greater amberjack reported in observer data from years 2002 - 2009. Total weight of discards was also calculated for 20% and 40% discard mortality, following the methods of the SEDAR 33 (2014).

Amendment 1 to the Reef Fish Fishery Management Plan (FMP) implemented a 36-inch fork length commercial minimum size regulation in 1990, thus discarding can be expected for years

1990 and later. To calculate discards for the years 1990 - 2001, the mean discard rate across the years 2002 - 2009 was calculated for each hook per line stratum. Those discard rates were multiplied by total vertical line effort within each year/hooks per line stratum.

The Discard rate was calculated as number of fish discarded per hook-hour fished. Total effort in hook-hours was available from the coastal logbook data. Total discards per year during 2007 - 2009 were calculated as: yearly mean discard rate per hook-hour fished x total hook-hours fished. Yearly discards for the years 1990-2006 were calculated using the mean discard rate across all years, 2007 - 2009, multiplied by the yearly total effort in hook hours. Uncertainty around the yearly calculated discards was determined following the methods described above for self-reported discard analyses. Vertical line discards and the weight of dead discards with 20% and 40% discard mortality are calculated using the observer data are presented in SEDAR 9 (2006c) in Table (3.3.1.1b).

The SEDAR 9 (2006c) stock assessment provides a comparison of yearly total discards of greater amberjack from commercial vertical line vessels calculated using both self-reported discard data and observer data in Table 6.1 and 6.2. Total discards calculated using the same data set for the update assessment, but with the corrected code were less than 500,000 pounds per year. It is also noted that the self-reported discards may be unrealistically low due to a proportion of fishers, as many as 40% of all trips in a year, reporting “no discards” for a trip. Total discards calculated using the observer data, in contrast, were more similar to the SEDAR 9 (2006c) discards than to the 2010 self-reported discards. Commercial vertical line discards calculated using observer reported discard rates were much higher in 2008 than in other years. The 2Bertalanffy009 calculated discards, however, were the fewest of any year of the time series. That large variability between years may have resulted from the small number of hook-hours observed, which, by chance, had either much greater (2008) or lesser (2009) discard rates than both the 2007 rate and the mean rate (SEDAR 9 2006c; Table 3.3.2). During each year of available observer data, the sampling fraction (percent of total effort observed) was less than 1% of the total effort reported to the coastal logbook program. Variability in discards among years prior to 2007 was due to yearly differences in total effort because the mean discard rate was applied to yearly effort during that period.

Numbers of discards were calculated using the mean discard rate. Pounds of discards were calculated by applying the mean weight of a discarded fish to the number of discards. Number of discards assuming a 20% and 40% discard mortality were also calculated. Confidence intervals (CI) were the number of discards calculated by applying the discard rates at the 5% and 95% confidence intervals of the mean rate to total effort.

Table 6.1. Mean headboat, MRIP and TPWD charter and private, and commercial estimates of landings and discards in the U.S. Gulf of Mexico (2009-2013).

Species	HEADBOAT				MRIP CHARTER				MRIP PRIVATE				COMMERCIAL	
	Catch (N)	Landings (N)	Discards (N)	Discards (%)	Catch (N)	Landings (N)	Discards (N)	Discards (%)	Catch (N)	Landings (N)	Discards (N)	Discards (%)	Landings (lbs)	Discards (N)
Almaco jack	2,048	2,005	43	2%	6,574	4,587	1,987	43%	6,720	5,100	1,619	32%	36,277	14
Banded rudderfish	7,160	6,094	1,066	17%	26,874	25,473	1,401	6%	36,731	5,606	31,125	555%	17,549	130
Black grouper	123	42	81	193%	48	5	44	963%	5,359	811	4,548	561%	46,855	7,119
Blackfin snapper	142	138	4	3%	0	0	0		0	0	0		4,698	0
Blueline tilefish	196	195	1	0%	43	43	0	0%	0	0	0		67,901	296
Cobia	1,163	933	231	25%	9,102	4,836	4,265	88%	84,797	28,360	56,437	199%	69,204	0
Cubera snapper	204	197	7	3%	32	11	21	185%	694	505	189	37%	1,307	0
Gag	50,769	7,241	43,528	601%	273,454	38,260	235,195	615%	1,511,705	141,368	1,370,337	969%	620,534	120,066
Golden tilefish	323,148	323,148	0	0%	266,716	260,021	6,694	3%	286,715	209,910	76,804	37%	376,649	2,320
Goldface tilefish	7	7	0	0%	0	0	0		0	0	0		9,056	0
Goliath grouper	3	0	3		0	0	0		0	0	0		0	300
Gray snapper	24,672	22,948	1,724	8%	315,349	159,145	156,204	98%	3,959,312	883,280	3,076,032	348%	155,194	14,093
<i>Gray triggerfish</i>	30,683	10,739	19,943	186%	108,470	36,955	71,514	194%	225,842	80,159	145,683	182%	74,997	7,533
Greater amberjack	7,460	3,554	3,906	110%	68,517	27,535	40,982	149%	196,374	30,965	165,409	534%	481,954	13,525
Hogfish	2,140	1,924	216	11%	8,701	8,262	439	5%	122,430	116,183	6,246	5%	36,203	23
<i>King Mackerel</i>	16,344	16,199	144	1%	112,602	95,477	17,124	18%	274,695	190,576	84,120	44%	3,604,244	39,579
Lane snapper	58,989	54,143	4,845	9%	49,927	37,495	12,432	33%	285,923	100,272	185,651	185%	23,923	1,947
Lesser amberjack	363	286	77	27%	142	142	0	0%	447	167	281	168%	21,190	239
Mutton snapper	418	409	9	2%	426	0	426		3,112	426	2,686	630%	77,736	68
Queen snapper	33	33	0	0%	33	0	33		0	0	0		12,427	0
Red grouper	136,517	8,928	127,589	1429%	557,223	70,392	486,830	692%	1,963,520	152,818	1,810,702	1185%	4,992,180	817,288

Species	HEADBOAT				MRIP CHARTER				MRIP PRIVATE				COMMERCIAL	
	Catch (N)	Landings (N)	Discards (N)	Discards (%)	Catch (N)	Landings (N)	Discards (N)	Discards (%)	Catch (N)	Landings (N)	Discards (N)	Discards (%)	Landings (lbs)	Discards (N)
Red snapper	208,227	112,215	96,011	86%	530,186	166,736	363,451	218%	2,073,714	566,754	1,506,960	266%	3,773,741	226,966
Scamp	4,515	2,515	2,000	80%	15,618	11,832	3,787	32%	50,320	14,248	36,072	253%	246,538	1,126
Silk Snapper	53	53	0	0%	3,495	2,684	811	30%	22,834	22,834	0	0%	38,597	3
Snowy grouper	1,997	100	1,897	1905%	747	723	25	3%	6,358	5,896	462	8%	153,962	224
Spanish Mackerel	2,773	2,749	24	1%	294,725	201,510	93,214	46%	4,000,616	1,762,996	2,237,620	127%	1,506,135	222
Speckled Hind	133	77	56	73%	308	220	89	40%	870	330	539	163%	41,720	56
Vermilion snapper	10,084	0	10,084		0	0	0		0	0	0		2,581,867	5,973
Warsaw grouper	274	113	161	143%	186	176	10	6%	484	484	0	0%	97,402	8
Wenchman	0	0	0		0	0	0		0	0	0		30,465	0
Yellowedge grouper	46	45	1	1%	338	330	8	2%	273	273	0	0%	742,028	218
Yellowfin grouper	0	0	0	0%	19	19	0	0%	781	0	781		1,511	0
Yellowmouth grouper	22	22	1	3%	46	46	0	0%	125	0	125		421	0
Yellowtail snapper	3,787	2,837	950	33%	527	518	9	2%	6,569	3,780	2,789	74%	718,060	91,072

Source: SEFSC ACL Data Set (2014).

In the SEDAR 9 (2006c) evaluation of greater amberjack discard rates, estimates of discards were not made for longline gear. For the 2011 update assessment, this convention was carried forward. As summarized earlier in Section 3.2 (Commercial landings summary by gear), this species is not targeted by longline gear. Future assessments evaluations should continue to examine both the self-reported and observer data to better quantify the levels of greater amberjack discards from commercial longline gear.

Release mortality rate for greater amberjack in the Gulf of Mexico is unreported (SEDAR 9 2006c). Headboat and commercial handline observer studies off North Carolina estimated release mortality rate ranges from 8-9% for greater amberjack (Robert Dixon, pers. comm. in SEDAR 9 2006c); however, sample sizes were small for these studies. Release mortality rates were based on observations of greater amberjack at the surface after release (floating, swimming down etc). The SEDAR 9 (2006c) data workshop panel suggested a minimum release mortality rate for greater amberjack of 10% for vertical line, with actual release mortality potentially higher owing to fish dying after release that did not float at the surface. The SEDAR 9 (2006c) data workshop panel recommended using a range of release mortality rates to evaluate the sensitivity of the SEDAR 9 stock assessment to this parameter. Discard mortality rates of 0, 20, and 40% were used for the assessment, with 20% selected based on the information available.

Greater amberjack are also caught as bycatch in shrimp trawls. The SEDAR 9 (2006c) data workshop panel noted that greater amberjack, at that time, was not on the workup for the observer evaluation program. The Panel further noted that because their abundance in trawls is so low as supported by the average percent occurrence values with (99%) and without (8%) Bycatch Reduction Gear that reliable annual estimate would have been difficult with these statistical estimators, primarily due to the high frequency of zero observations, see SEDAR 9 (2006c Data Workshop Report, Section 3.4.2, page 24, and Table 3.5). In general, estimation results from all the methods where estimations were produced (modified Bayesian and Model 7) indicated large to enormous uncertainty and the SEDAR 9 2006c data workshop panel noted the results seemed unrealistic. Estimates from the Bayesian model were not successful. In addition, assigning size (or age) to estimates of shrimp trawl bycatch was not possible at the time of the SEDAR 9 (2006c) stock assessment, as only a very few observations from the observer study had been measured.

Recreational Discard Rates

Unlike the Marine Recreational Informational Program (MRIP), the SEFSC Headboat survey does not provide estimates of released fish. Because a proportion of the released fish are expected to die, the estimated number of releases is necessary to develop a complete time series of removals for use in subsequent population modeling analysis. Table 6.1 provides mean discard estimates (numbers of fish) from the MRIP survey.

The protocols adopted by the SEDAR 9 (2006c) data workshop panel to quantify discards for the headboat mode were continued for the SEDAR 33 (2014). There were two main recommendations made: 1) Estimate the ratio of headboat releases (B2) to the total catch (A+B1+B2) from MRFSS charterboat mode only (Table 5.3 and Table 5.4) and 2) use this

source (and sector) to estimate headboat releases. The SEDAR 9 (2006c) data workshop panel felt that charterboat and headboat fishing are most similar and the rate of released fish would be most alike. Private boat fishing likely would not be the same as the “for-hire” sector. New information on recreational discards available from self-reported logbooks and also from observer trips was also reviewed for the SEDAR 9 Update (2010).

As in the previous three greater amberjack stock evaluations discards were not estimated for Texas Parks and Wildlife Department source data.

Other Bycatch

Species incidentally encountered by the directed greater amberjack fishery include sea turtles, sea birds, and reef fishes. The primary gears of the Gulf reef fish fishery (longline and handline) are classified in the proposed List of Fisheries for 2015 (79 FR 50589, August 25, 2014) as Category III gear and is unchanged from the 2014 list. This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from any fishery is less than or equal to one percent of the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock, while allowing that stock to reach or maintain its optimum sustainable population.

NMFS has conducted specific analyses (“Section 7 consultations”) to evaluate potential effects from the Gulf reef fish fishery on species and critical habitats protected under the ESA. On September 30, 2011, the Protected Resources Division released a biological opinion (Opinion), which concluded that the continued operation of the Gulf reef fish fishery is not likely to jeopardize the continued existence of sea turtles (loggerhead, Kemp’s ridley, green, hawksbill, and leatherback) or smalltooth sawfish (NMFS 2011). The Opinion also concluded that other ESA-listed species are not likely to be adversely affected by the FMP. An incidental take statement was issued specifying the amount and extent of anticipated take, along with reasonable and prudent measures and associated terms and conditions deemed necessary and appropriate to minimize the impact of these takes. The Council addressed further measures to reduce take in the reef fish fishery’s longline component in Amendment 31 (GMFMC 2009).

Subsequent to the completion of the biological opinion, NMFS published final rules listing 20 new coral species (September 10, 2014), and designating critical habitat for the Northwest Atlantic Ocean distinct population segment of loggerhead sea turtles (July 10, 2014). NMFS addressed these changes in a series of consultation memoranda. In a consultation memorandum dated October 7, 2014, NMFS assessed the continued operation of the Gulf reef fish fishery’s potential impact on the newly-listed coral species occurring in the Gulf and concluded the fishery is not likely to adversely affect any of the protected coral species. Similarly, in a consultation memorandum dated September 16, 2014, NMFS assessed the continued authorization of South Atlantic and Gulf of Mexico fisheries’ potential impacts on loggerhead critical habitat and concluded the Gulf reef fish fishery is not likely to adversely affect the newly designated critical habitat.

Three primary orders of seabirds are represented in the Gulf, Procellariiformes (petrels, albatrosses, and shearwaters), Pelecaniformes (pelicans, gannets and boobies, cormorants, tropic birds, and frigate birds), and Charadriiformes (phalaropes, gulls, terns, noddies, and skimmers) (Clapp et al., 1982; Harrison, 1983) and several species, including: piping plover, least tern, and roseate tern are listed by the U.S. Fish and Wildlife Service as either endangered or threatened. Note the brown pelican and bald eagle had been listed as endangered or threatened, but have subsequently been delisted. Human disturbance of nesting colonies and mortalities from birds being caught on fishhooks and subsequently entangled in monofilament line are primary factors affecting sea birds. Oil or chemical spills, erosion, plant succession, hurricanes, storms, heavy tick infestations, and unpredictable food availability are other threats. There is no evidence that the directed greater amberjack fishery is adversely affecting seabirds. However, interactions, especially with brown pelicans consuming greater amberjack discards and fish before they are landed, are known to occur (SEDAR 7 2005).

Other species of reef fish are also incidentally caught when targeting greater amberjack. In the Gulf, almaco jack and vermilion snapper and some deep-water groupers are incidentally caught as bycatch when harvesting greater amberjack. Deep-water groupers are caught both in the eastern and western Gulf primarily with longline gear (> 80 percent). The deep-water grouper fishery was managed with a 1.207 million pound annual catch limit. From 2004 until the implementation of the grouper/tilefish IFQ program in 2010 (SERO 2012a), the fishery met their quota and closed no later than July 15 each year. Deep-water grouper closures during this time period may have resulted in some additional discards of grouper by longliners targeting greater amberjack. Since the IFQ program was implemented, deep-water grouper species are landed year-round by holders of IFQ allocation and the quota has not been exceeded. It is unknown how increases in closed season discards might have affected the status of reef fish stocks or the change to an IFQ managed sector.

Practicability of current management measures in the directed greater amberjack fishery relative to their impact on bycatch and bycatch mortality.

The harvest of commercial greater amberjack is managed with a 36-inch fork length (FL) minimum size limit, March through May seasonal closure, and gear restrictions. A 30-inch FL minimum size limit and one-fish bag limit are used to manage the recreational harvest of greater amberjack. The following discusses current and proposed management measures with respect to their relative impacts on bycatch.

Size limits

Minimum size limits is estimated to be the greatest source of regulatory discards for most reef fish species. In 1990, a 36-inch fork length (FL) commercial minimum size limit and a 28-inch FL recreational minimum size limit were implemented for greater amberjack. The recreational size limit was increased to a 30-inch FL minimum size limit in August 2008.

Size limits are typically established to reduce fishing mortality, increase yield-per-recruit, and prevent growth overfishing. A negative consequence of increasing the minimum size limit is potential increases in discards. A 1996 - 1999 tagging study of commercially caught greater amberjack in the South Atlantic indicated 41% of all greater amberjack caught were discarded (J. McGovern, Southeast Regional Office, pers. comm.). Reducing the commercial minimum size limit would reduce discards significantly (SERO 2007), but would increase harvest rates and therefore fishing mortality, unless further restrictions are imposed. Increasing the recreational minimum size limit is estimated to increase the proportion of dead discards to landings, but the overall magnitude of dead discards is estimated to be less for higher size limits relative to the status quo because of the reductions in harvest being considered in this amendment. Historical trends indicate dead discards increased after implementation of higher size limits, but quickly declined as the size distribution of greater amberjack adjusted to the new minimum size limit.

A yield-per-recruit analysis has recently been conducted to determine if the legal minimum size limit for greater amberjack is adequately protecting against growth overfishing (SEDAR 9 2006c; Appendix 12.4.3). Greater amberjack spawning conditions are described in Section 3.2 and are hereby incorporated by reference. Increasing the recreational minimum size limit could

potentially benefit spawning potential if the increase does not result in a significant amount of forgone yield due to losses associated with natural and release mortality. Yield-per-recruit analysis did increase for larger minimum size limits, but only when fishing mortality was greater than the fishing mortality rate corresponding to an equilibrium yield of MSY (F_{msy}) ($F=0.33$ from SEDAR 9 Update 2010), but fishing at this rate would result in overfishing based on the estimates in the 2010 SEDAR 9 Update (Appendix 12.4.3). The yield-per-recruit and spawning potential ratio analysis (Appendix 12.4.3) should be used for theoretical purposes as methods the Council could use for management purposes. (http://gulfcouncil.org/resources/SSC_Reports.php).

This amendment includes alternatives to modify the current recreational minimum size limit of 30 inches FL to 32, 34, or 36 inches FL, respectively. Based upon the decision model (SEROLAPP 2015-01), under the assumption of 20% release mortality, the estimated dead discards increase as the minimum size limit increases from 30 inches FL. However, if the minimum size limit is increased, harvest is estimated to slow, because fewer fish are landed so total removals do not increase proportionately. The Council is considering increasing the minimum size limit in Amendment 35 (GMFMC 2012) but opted against it, due to concerns about the quota being caught more quickly if the minimum size was modified (i.e., harvest would not be slowed) as well as potentially increasing bycatch mortality.

Closed Seasons

The March through May commercial greater amberjack season closure was implemented in January 1998. The commercial season closure corresponds to the peak period of spawning (Burch 1979; Thompson et al. 1991; Beasley 1993; Harris et al. 2004). Discards are thought to be minimal during the closed season because commercial fishermen can avoid targeting schools of greater amberjack. A June through July recreational fishing closure was implemented to prevent the quota from being exceeded in 2011. This amendment includes alternatives that would modify the existing June through July recreational closed season to the following: No fixed season closure (i.e., January 1 until the quota is reached), March through May, and a split season closure of January through May and November through December. Implementing a closed season would be expected to increase the number of discards, although the impacts on the stock would be substantially reduced if targeted trips for greater amberjack are eliminated during the closed season as recreational anglers choose to pursue retainable stocks (Reef Fish Amendment 35 Appendix 12.4.1, GMFMC 2012).

Bag Limits

A one-fish greater amberjack recreational bag limit has been in effect since 1997. A restrictive bag limit can encourage discards from high-grading once the bag limit is met. However, the minimum size limit likely plays a more significant role in determining the overall number of recreational discards. During 2003 - 2005, approximately 31% of MRFSS trips landing greater amberjack reported landing one or more greater amberjack per angler (A. Strelcheck, Southeast Regional Office, pers. comm.). This large percentage of trips indicates the potential for discards after the bag limit is met. However, no changes to the bag limit are currently proposed in this amendment for the recreational harvest of greater amberjack.

Allowable Gear

Vertical hook-and-line gear (bandit rigs, manual handlines) is the primary gear used to commercially harvest greater amberjack. Using greater amberjack landings history from 2004 - 2013, commercial vertical line gear (i.e., electric reel, bandit rig, hook and line, and trolling) accounted for 68% of the greater amberjack landings, longlines landed 10% of the greater amberjack and 22% of the landings were from unclassified gear types (SEFSC Commercial ACL Data 2011).

On average, longlines harvest larger greater amberjack than vertical-line gear. Trip Intercept Program data from 2003 - 2005 indicates the average size of greater amberjack caught on longlines was four inches greater than the average size caught on vertical-line gear (43.6 vs. 39.6 inches FL). The difference in size at harvest is evident in size limit analyses for greater amberjack, which indicate greater reductions in harvest occur for vertical-line gear than longlines when comparing similar minimum size limits (SERO 2007). Because the size of landed fish is greater, the number of discards is less on longlines than vertical-line gear because the gear selects for larger fish. McCarthy (2005) estimated vertical-line gear discards of greater amberjack by the commercial fishery during 1993 to 2004, but could not estimate longline discards because of the small number of trips reporting discards. Additionally, little is known on the release mortality rates associated with each of these gears. The SEDAR 33 (2014) assessment assumed a constant 20% release mortality rate for all gears and fisheries. More scientific information is needed to determine the magnitude and release mortality rates for various gears used to commercially harvest greater amberjack. For instance, for commercial red grouper longlines are assumed to have a 45% release mortality rate while vertical-line gear has a 10% release mortality rate. This difference in release mortality rate between gears can be important if one gear discards substantially more fish than the other, but kills a smaller percentage of the fish released.

Rod-and-reel is the primary gear used in the recreational sector. Circle hooks are used by some anglers when targeting greater amberjack. Some greater amberjack are also caught using spears, which do not affect discards or release mortality because all fish caught are killed. Only undersized fish mistakenly killed while spearfishing would contribute to discard mortality.

Recreational discards are primarily due to the recreational size limits and the one-fish greater amberjack bag limit; however, allowable gears can affect release mortality rates. Amendment 27 to the Reef Fish FMP summarizes various research studies examining the effects of circle hooks, hook sizes, venting tools, and dehooking devices on survival of reef fishes after release (GMFMC 2007).

Alternatives being considered to minimize bycatch

Reductions in dead discards can be accomplished either by reducing the number of greater amberjack discarded or reducing the release mortality rate of discards. To reduce the number of discards, management measures must limit fishing effort or change the selectivity of fishing gears in such a way that reduces the harvest of sub-legal fish. To reduce the discard mortality

rate of greater amberjack, sources of release mortality must first be identified (e.g., depth, length, hooking location, surface interval, temperature) and management measures must be imposed to reduce discard mortality rates.

This amendment considers several management measures to reduce greater amberjack mortality. However, discards and discard mortality are anticipated to increase in the management measures. Increasing the recreational minimum size limits and closed season is expected to increase the amount of greater amberjack discards. The commercial trip limit management measure is also expected to increase the amount of greater amberjack discards.

Practicability Analysis

Criterion 1: Population effects for the bycatch species

Bycatch of greater amberjack due to management measures such as fixed closed seasons, in-season closures, and minimum size limits could result in loss of yield. Based on theoretical analysis (Amendment 35, Appendix 13.4.1) increasing the minimum size limit based on current estimates of fishing mortality is expected to reduce yield-per-recruit. Any reductions in bycatch of greater amberjack from the directed fishery must be accounted for in stock assessments and when setting the ACL.

Criterion 2: Ecological effects due to changes in the bycatch of greater amberjack (on other species in the ecosystem)

Relationships among species in marine ecosystems are complex and poorly understood, making the nature and magnitude of ecological effects difficult to predict. The Scientific and Statistical Committee accepted the projections from SEDAR 33 (2014) for the purposes of developing management advice. Greater amberjack are opportunistic predators that feed on benthic and pelagic fishes, squid and crustaceans (GMFMC 2004a). Greater amberjack eggs and larvae are pelagic and smaller juveniles (<1 inch standard length) are found associated with pelagic *Sargassum* spp. mats (Bortone et al. 1977; Wells and Rooker 2004). Juveniles then shift to demersal habitats (5 - 6 months), where they congregate around reefs, rocky outcrops, and wrecks (see Section 3.2). Reductions in bycatch and fishing mortality will allow the greater amberjack stock to increase in abundance, resulting in increased competition for prey with other predators. Consequently, it is possible that forage species and competitor species could decrease in abundance in response to an increase in greater amberjack abundance.

Criterion 3: Changes in the bycatch of other species of fish and invertebrates and the resulting population and ecosystem effects

Population and ecosystem effects resulting from changes in the bycatch of other species of fish and invertebrates are difficult to predict. Fishermen can specifically target greater amberjack while they are schooling. Snappers, groupers, and other reef fishes are commonly caught in association with greater amberjack. Those most commonly caught include: almaco jack

vermilion and deep-water groupers. None of these species are currently undergoing overfishing or being overfished (NMFS 2014 Summary of Stock Status for FSSI) Regulatory discards significantly contribute to fishing mortality in all of these reef fish species, especially deep-water groupers.

Increasing the greater amberjack recreational minimum size limit will increase the proportion of dead discards to landings, but may result in an overall decrease in the magnitude of discards because of the reduction in landings considered in this amendment. Assuming anglers continue to target greater amberjack if the minimum size limits are increased, less effort will be directed at other species thereby providing a small net benefit to those species because of lower fishing mortality and less bycatch.

Criterion 4: Effects on marine mammals and birds

The effects of current management measures on marine mammals and birds are described above. Bycatch minimization measures evaluated in this amendment are not expected to significantly affect marine mammals and birds. There is no information to indicate marine mammals and birds rely on greater amberjack for food, and they are not generally caught by fishers harvesting greater amberjack.

Criterion 5: Changes in fishing, processing, disposal, and marketing costs

Reducing the stock annual catch limit (ACL), recreational management measures and the commercial trip limit will affect costs associated with fishing operations. Modifying recreational seasonal closures for greater amberjack will have direct impacts to recreational anglers. Recreational anglers would incur greater losses in consumer surplus resulting from a seasonal closure when compared to a higher minimum size limit. To the extent that reducing the ACL for greater amberjack, reductions in commercial revenue and recreational consumer surplus would occur. Commercial fishermen will incur losses in revenue due to limiting the amount of harvest per trip. However, a commercial trip limit is expected to increase the duration of the fishing season and thus increase revenues when the fishery has previously been closed. A trip limit is also expected to bring a higher market price due to the fact that market demand remains constant while there is less fish harvested per trip.

Criterion 6: Changes in fishing practices and behavior of fishermen

Increasing the minimum size limit will increase bycatch catch rates, and affect decisions about where to fish. Seasonal closures and trip limits will alter angler effort, at least initially, and may affect decisions about when and where to fish. Shifts or changes in fishing locations and seasons will have an effect on fishing behavior and practices that may potentially affect the bycatch of other reef fish.

Criterion 7: Changes in research, administration, and enforcement costs and management effectiveness

The proposed management measures are not expected to significantly impact administrative costs. Quotas based on stock allocation measures are currently used to regulate the commercial and recreational sectors harvesting greater amberjack. None of the resultant recreational subquotas from this action are expected to diminish regulatory effectiveness. All of these measures will require additional research to determine the magnitude and extent of impacts to bycatch and bycatch mortality. Administrative activities such as quota monitoring and enforcement should not be affected by the proposed management measures.

Criterion 8: Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources

If the minimum size limit for the recreational harvest of greater amberjack is increased it is expected to positively impact the stock by fostering a faster recovery rate, but may have negative social implications. If the closed season is modified to coincide with the spawning season rather than the peak months of fishing effort there may be changes to fishing effort along with social changes.

The establishment of a commercial trip limit is expected to result in positive benefits to the commercial sector. The economic benefits of the commercial trip limit is expected to include an extended fishing season, maintaining higher market prices by not flooding the market with large harvest, and being able to maintain the local market after the traditional tourist season.

Criterion 9: Changes in the distribution of benefits and costs

Bycatch minimization measures that provide an overall net benefit to the stock and increase the rate of recovery will benefit both sectors. Additionally, proposed commercial trip limits would reduce the commercial fishermen ability to harvest larger amounts of greater amberjack per trip. Bycatch minimization measures are intended to provide an overall net benefit to the stock, by reducing mortality associated with bycatch and increasing the rate of stock recovery.

Criterion 10: Social effects

Bycatch is considered wasteful and it reduces overall yield obtained from the fishery. Minimizing bycatch to the extent practicable will increase efficiency, reduce waste, and benefit stock recovery, thereby resulting in net social benefits. In Action 2.1, of the Recreational Management Measures the proposed increase in recreational size limits from 30 inches to 32, 34, or 36 inches FL would narrow the difference between the 36 inch FL commercial minimum size limit. This may be a social benefit as the size limits would be perceived as more fair and equitable to all user groups.

For the reasons set out in the preamble, 50 CFR part 622 is proposed to be amended as follows:

PART 622--FISHERIES OF THE CARIBBEAN, GULF OF MEXICO, AND SOUTH ATLANTIC

1. The authority citation for part 622 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq.*

2. In § 622.34, paragraph (c) is revised to read as follows:

§ 622.34 Seasonal and area closures designed to protect Gulf reef fish.

* * * * *

(c) *Seasonal closure of the recreational sector for greater amberjack.* The recreational sector for greater amberjack in or from the Gulf EEZ is closed from June 1 through July 31^[SSI], each year. During the closure, the bag and possession limit for greater amberjack in or from the Gulf EEZ is zero.

* * * * *

3. In § 622.37, paragraph (c)(4) is revised to read as follows:

§ 622.37 Size Limits.

* * * * *

(c) * * *

(4) *Greater amberjack*--30^[ss2] inches (76 cm), fork length, for a fish taken by a person subject to the bag limit specified in § 622.38(b)(1) and 36 inches (91.4 cm), fork length, for a fish taken by a person not subject to the bag limit.

* * * * *

4. In § 622.39, paragraphs (a)(1)(v) and (a)(2)(ii) are revised to read as follows:

§ 622.39 Quotas.

* * * * *

(a) * * *

(1) * * *

(v) *Greater amberjack*--409,000^[ss3] lb (185,519 kg), round weight.

* * * * *

(2) * * *

(ii) *Recreational quota for greater amberjack*. The recreational quota for greater amberjack is 1,130,000^[ss4] lb (512,559 kg), round weight.

* * * * *

5. In § 622.41, paragraphs (a)(1)(iii) and (a)(2)(iii) are revised to read as follows:

§ 622.41 Annual catch limits (ACLs), annual catch targets (ACTs), and accountability measures (AMs).

(a) * * *

(1) * * *

(iii) The commercial ACL for greater amberjack is 481,000 lb^[ss5] (218,178 kg), round weight.

(2) * * *

(iii) The recreational ACL for greater amberjack is 1,299,000^[ss6] lb (589,216 kg), round weight.

* * * * *

6. In § 622.43, paragraph (a) is revised to read as follows:

§ 622.43 Commercial trip limits.

* * * * *

(a) *Gulf greater amberjack*. Until the quota specified in § 622.39(a)(1)(v) is reached, 2,000^[ss7] lb (907 kg), round weight^[ss8]. See § 622.39(b) for the limitations regarding greater amberjack after the quota is reached.

* * * * *

Modifications to the Red Snapper Individual Fishing Quota Program



RP

Scoping Document for Amendment 36 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

March 2015



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ABBREVIATIONS USED IN THIS DOCUMENT

Council	Gulf of Mexico Fishery Management Council
GT-IFQ	grouper-tilefish individual fishing quota (program)
Gulf	Gulf of Mexico
IFQ	individual fishing quota
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MSY	maximum sustainable yield
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OY	optimum yield
PP	public participant
RS-IFQ	red snapper individual fishing quota (program)

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I. INTRODUCTION

Reef Fish Amendment 26¹ (GMFMC 2006) established the red snapper individual fishing quota (RS-IFQ) program in the Gulf of Mexico (Gulf). The objectives of the program were to reduce overcapitalization in the commercial harvest of red snapper, and to the extent possible, the problems associated with the derby fishery. As mandated by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and by Amendment 26, the Gulf of Mexico Fishery Management Council (Council) and National Marine Fisheries Service (NMFS) collaboratively conducted a 5-year review² of the RS-IFQ program (GMFMC and NMFS 2013), which was formally approved at the April 2013 Council meeting. The Council proceeded to appoint an Ad Hoc Red Snapper IFQ Advisory Panel to assist in recommending improvements to the program by identifying potential changes to the RS-IFQ program (Appendix A). The Council discussed a list of issues as potential modifications to the program at its February and April 2014 meetings and made modifications to the list. At its August 2014 meeting, the Council requested development of this scoping document to begin considering potential modifications to improve the performance of the RS-IFQ program.

This Scoping Document aims to:

- Provide an overview of the Red Snapper IFQ Program including its history, the purpose and need, and program objectives.
- Describe a range of potential changes to the Red Snapper IFQ Program.
- Provide questions to facilitate public feedback regarding the potential changes. Feedback may propose a solution, or offer support or opposition for a potential change or issue, and is most useful when accompanied by supporting rationale.

What is Scoping?

Scoping is the initial stage of the regulatory process in which the Council seeks input from other agencies, organizations, and the public on a management issue. Scoping is the first and best opportunity for the public to make suggestions or to raise issues and concerns before the Council begins developing an amendment, and can be thought of as a brainstorming process. At this early stage, the Council intends to identify the scope of issues to be addressed in the plan amendment, and seeks public input on the preliminary scope of issues. Public input is important in identifying potential impacts, reasonable alternatives, and novel solutions which may improve the performance of the RS-IFQ program. After receiving input obtained during the scoping

¹ Reef Fish Amendment 26 to Establish a Red Snapper Individual Fishing Quota Program: <http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/Amend26031606FINAL.pdf>

² Red Snapper 5-year Review: <http://www.gulfcouncil.org/docs/amendments/Red%20Snapper%205-year%20Review%20FINAL.pdf> The report's conclusion section is provided in Appendix B.

process, the Council will review and refine the potential actions in the development of management options which focus on the significant issues for further consideration. Following development of the actions and alternatives, the public hearing process will begin and the public will have the opportunity to comment on the actions and alternatives under consideration. Public input will continue to be considered as the Council deliberates and chooses the most appropriate action.

Background on Establishing the Red Snapper IFQ Program

Prior to establishing the RS-IFQ program, the Gulf commercial red snapper fleet was overcapitalized, which means the collective harvest capacity of fishery vessels and participants was in excess of that required to efficiently take their share of the total allowable catch (Agar et al. 2014; Leal et al. 2005; Weninger and Waters 2003). This overcapacity caused commercial red snapper regulations to become increasingly restrictive over time, resulting in derby-type conditions where participants compete with each other to harvest as many fish as possible before the quota is met and the fishery is closed (Weninger and Waters 2003). Solis et al. (2014) estimated that about one-fifth of the existing fleet could harvest the current commercial quota.

Derby fishing creates negative social and economic conditions, which include reducing or eliminating considerations about weather conditions in deciding when to fish, adversely affecting safety at sea; flooding the market with fish, which depresses ex-vessel prices and reduces producer surplus; and increasing competition which exacerbates user conflicts (Waters 2001). Further, derby fishing can unnecessarily adversely affect target and non-target stocks by providing participants less flexibility in deciding when, where, and how to fish.

An IFQ program surfaced as a tool with strong potential for effectively addressing the problems for commercial red snapper fishing. Although originally identifying a license limitation program as the preferred management approach, the Council ultimately voted in favor of an IFQ program. This decision was informed by public comments, and was based on the determination an IFQ program would better resolve or reduce chronic problems related to overcapacity and derby conditions. Per the Magnuson-Stevens Act, the adoption of the RS-IFQ program in the Gulf required two referenda among eligible program participants: an initial referendum before development of the amendment and a final referendum before the amendment was submitted to the Secretary of Commerce.

The IFQ program was intended to help the Council address overfishing by reducing the rate of discard mortality that normally increases with increased fishing effort in overcapitalized fisheries (NRC 1999; Leal et al. 2005). IFQs provide the opportunity to better utilize fishing and handling methods, increase economic efficiency, and reduce bycatch of non-targeted species. Improving catch efficiency may also result in a decrease in regulatory discards of red snapper and other reef fish species by allowing fishermen the choice on when and where to fish. Additionally, the slower paced fishing and transferability of quota under the IFQ program supports consolidation of the fishery, allowing fewer fishermen to operate over a longer season.

Amendment 26 evaluated a wide range of alternatives for various IFQ program components related to: program duration; ownership caps and restrictions; initial eligibility requirements; initial allocation of quota shares; appeals; transfer eligibility requirements; adjustments in

commercial quota; enforcement; and administrative fees. The Council's intent was to design an IFQ program that best balances social, economic, and biological tradeoffs, and improves the fishery's ability to achieve fishery goals and objectives, including optimum yield (OY).

Conclusions from the 5-year Review

The original purpose and need defined in Amendment 26 (GMFMC 2006), reads as follows:

The purpose of the IFQ program proposed in this amendment is to reduce overcapacity in the commercial fishery and to eliminate, to the extent possible, the problems associated with derby fishing, in order to assist the Council in achieving OY.

National Standard 1 of the Magnuson-Stevens Act mandates conservation and management measures prevent overfishing and achieve OY from a fishery. OY is defined as the amount of fish that will provide the greatest overall benefit to the nation, particularly with respect to food production and recreational opportunities. OY must take into account the protection of marine ecosystems and is prescribed based on the maximum sustainable yield (MSY) from the fishery, as reduced by any relevant economic, social, or ecological factors. In practice, the commercial sector's share of the quota is equivalent to the sector's share of OY for the red snapper fishery. Commercial harvests that are equal or very close to the quota without exceeding it would be consistent with the prevention of overfishing and achievement of OY mandated by the Magnuson-Stevens Act.

The RS-IFQ program 5-year review (GMFMC and NMFS 2013) evaluated the progress of the program towards achieving its goals and objectives. The performance of the RS-IFQ program in achieving OY was assessed by measuring its ability to constrain harvest at or below the quota while allowing RS-IFQ participants to harvest as much red snapper as possible. Recommendations from the review have been presented to the Council and incorporated into the potential changes included in this scoping document. As part of the process of considering program modifications, the Council may wish to evaluate modifications to continue progress towards the program's goals and objectives, to improve program performance, participant satisfaction, and to continue assisting the Council in achieving OY.

The conclusions of the RS-IFQ program 5-year review³ are:

Participant Consolidation and Overcapacity

Conclusion 1: The RS-IFQ program has had moderate success reducing overcapacity, however economic analyses indicate that additional reductions in fleet capacity are still necessary.

Achievement (or Harvesting) of Optimum Yield

Conclusion 2: The RS-IFQ program has been successful in reducing quota overages, which is consistent with the achievement of OY. Landings have averaged greater than

³ The full supporting summaries for each conclusion are provided in Appendix B. The entire Red Snapper IFQ Program 5-year review may be accessed at <http://www.gulfcouncil.org/docs/amendments/Red%20Snapper%205-year%20Review%20FINAL.pdf>

95% of the commercial quota; however, many inactive accounts remain and account for as much as 1.5% of the commercial quota.

Mitigating the Race to Fish and Safety at Sea

Conclusion 3: The RS-IFQ program was successful at mitigating the race to fish providing fishermen with the opportunity to harvest and land red snapper year-round. Inflation-adjusted share, allocation, and ex-vessel prices increased, indicating that fishermen were successfully maximizing profits and had increased confidence in the RS-IFQ program. Safety at sea has increased and annual mortalities related to fishing have declined since the RS-IFQ implementation. [According to Boen and Keithly (2012),] medium and large shareholders perceive that the RS-IFQ program has improved safety at sea.

Biological Outcomes

Conclusion 4: The implementation of the RS-IFQ program coupled with revisions to the red snapper rebuilding plan and reductions in quota and the commercial size limit, have all contributed to lower commercial fishing mortality rates and reduced discards. The RS-IFQ system has also prevented commercial quota overruns, which were frequent prior to RS-IFQ implementation. Discards continue to be high in the eastern Gulf where a large percentage of legal-sized red snapper are discarded by fishermen due to a lack of allocation.

Social Impacts

Conclusion 5: Large shareholders and western Gulf shareholders are generally more supportive of the RS-IFQ program than small to medium shareholders and those from the eastern Gulf. Entry and participation in the red snapper fishery is now more difficult and costly due to the increased costs of shares and allocation. Consolidation has resulted in less competition for harvest and higher revenues per trip. Crew sizes are smaller, but the ability to hire and keep stable crews has improved. The increase in the number of shareholders not landing any fish has led to perceptions that many are profiting from the program at the expense of hard-working fishermen.

Enforcement and Program Administration

Conclusion 6: RS-IFQ participants are generally satisfied with the IFQ online system and customer service when contacting NMFS and the 24-hour call service for advance landing notifications. Vessel monitoring systems, notification requirements, and random dockside inspections aid enforcement in monitoring program compliance; however, a variety of enforcement violations have been identified. Compliance has improved since RS-IFQ program implementation but additional enforcement efforts may be necessary to deter violations. IFQ program expenses currently exceed the 3% cost recovery collected for program administration, research, and enforcement.

IFQ Program Basics

- An IFQ **share** is a percentage of the red snapper commercial quota assigned to an IFQ participant, or shareholder. IFQ **allocation** refers to the actual pounds of red snapper represented by the shares that is possessed, landed, or sold during a given calendar year.
- At the beginning of each year, allocation is distributed to shareholders based on the share percentage held by the IFQ shareholder and the annual quota. Shares (percentage of the quota) and allocation (pounds available for the year) can be transferred among IFQ program participants; the transfer of shares equates to a sale of ownership of those shares and the transfer of allocation is a onetime transaction for the right to catch the quantity of pounds sold, often referred to as “leasing” by the public.
- **Appendix A** contains a glossary of terms used in the IFQ program.

Grouper-Tilefish IFQ program

In 2010, the multi-species Grouper-Tilefish IFQ program (GT-IFQ) was established. Although the program was established and IFQ shares distributed independently of the RS-IFQ program, both programs use the same web-based monitoring and reporting system. Therefore, the same shareholder, vessel, and dealer accounts are used to participate in both programs (i.e., a fisherman has one IFQ account that can be used for both the RS-IFQ and GT-IFQ programs). Additionally, shareholder accounts may hold and transfer shares and allocation from both programs, as well as land species in both programs. In 2013, of the 399 accounts with shares in the RS-IFQ program, 71% of those accounts also held shares in the GT-IFQ program. In that same year, of the 599 accounts that held red snapper allocation, 79% also held allocation in the GT-IFQ program; of the 368 vessels landing red snapper, 91% also landed grouper or tilefish. In addition, both programs follow the same regulations for landing notifications, offloading, cost-recovery fees, and account status determinations. Thus, while evaluating modifications to the RS-IFQ program, it will be important to consider the potential effects such changes may have on the GT-IFQ program.

Purpose and Need for Reef Fish Amendment 36

The purpose of this action is to consider modifications to improve the performance of the RS-IFQ program. The need is to prevent overfishing; to achieve, on a continuing basis, the optimum yield from federally managed fish stocks; and to rebuild a stock that has been determined to be overfished.

II. SCOPE OF POTENTIAL ACTIONS

The potential changes to the RS-IFQ program presented in this document were initially compiled from three sources: 1) previous Council discussions, 2) the conclusions and recommendations of the RS-IFQ program 5-year review, and 3) recommendations made by the Ad Hoc Red Snapper IFQ Advisory Panel. Administrative changes suggested to date, including changes proposed by the Ad Hoc Red Snapper IFQ Advisory Panel were omitted from this document because they were considered and included in a recently published rule [79 FR 15287, March 19, 2014⁴]. A summary of the administrative changes was discussed at the April 2014 Council meeting.

Per the Magnuson-Stevens Act, the adoption of the RS-IFQ program in the Gulf required two referenda among eligible program participants: an initial referendum before development of the amendment and a final referendum before the amendment was submitted to the Secretary of Commerce. A list of potential changes to the RS-IFQ program generated from the three sources above was submitted to NOAA General Counsel for evaluation as to whether the changes to be considered would trigger referendum requirements. With the exception of the proposal to collect resource rent through auctions, which has been removed from further consideration in this amendment, NOAA General Counsel has determined that no referendum requirements apply to the development of this amendment.

The Council is considering a variety of potential changes to the RS-IFQ program. Some of the issues and potential changes may require multiple actions for the Council to address. These potential changes are organized in the following sections under eight headings. Each section provides background information on the potential changes and identifies challenges to resolving the identified issues. Next, the **Potential Changes** are provided in a bulleted list with additional discussion, followed by **Scoping Questions** to aid the public in providing the Council with input on the potential actions. Suggestions toward identifying a range of alternatives for a potential action may also be particularly useful. Some general questions to consider include:

- What is the issue or problem to be addressed? How could a solution be designed to achieve the intended goal and minimize any unintended consequences?
- How does the potential change or issue fit with the objectives of the program?
- How does the action improve program performance, participant satisfaction, or the achievement of OY?
- How would a change to the RS-IFQ program affect the GT-IFQ program and its participants?

⁴ <http://www.gpo.gov/fdsys/pkg/FR-2014-03-19/pdf/2014-06065.pdf>

1. Program Eligibility Requirements

Amendment 26 evaluated a range of alternatives concerning eligibility requirements for possessing and transferring RS-IFQ shares and allocation. These alternatives ranged from limiting IFQ share and allocation transfers to only commercial reef fish permit holders, to allowing the transfer of RS-IFQ shares and allocation to any U.S. citizen or permanent resident alien. The Council ultimately decided to allow any U.S. citizen or permanent resident alien to participate in the RS-IFQ program after the first five years (January 1, 2012). Only commercial reef fish permit holders could obtain shares and allocation during the first five years of the program giving them the first opportunity to buy shares while initial consolidation occurred.

When the RS-IFQ program began in 2007, and for the first five years of the program, only those entities that possessed a valid Gulf commercial reef fish permit were eligible to participate in the program under the shareholder role. A shareholder account is a RS-IFQ account that may hold shares and/or allocation, and includes accounts that only hold allocation. A shareholder account, vessel account, and valid commercial reef fish permit are needed to harvest red snapper. During those first five years, shareholder accounts that no longer had a valid Gulf commercial reef fish permit could maintain or decrease their shares or allocation, but could not obtain additional shares or allocation, nor harvest red snapper.

Beginning January 1, 2012, all U.S. citizens and permanent resident aliens were eligible to obtain a RS-IFQ shareholder account. At this point, all shareholder accounts can increase their share and allocation holdings, but only those with an associated Gulf commercial reef fish permit can harvest red snapper. Public participant (PP) accounts for the purpose of this document are accounts that do not have an associated Gulf commercial reef fish permit while holding red snapper shares or allocation. These accounts can be divided into two categories: those that participated in the program prior to 2012 (i.e., accounts that previously held Gulf commercial reef fish permits) and those that were created on or after January 1, 2012.

Analysis of public participation

The RS-IFQ database was queried on February 10, 2015 for the current information about PP accounts. At that time, there were 384 accounts with red snapper shares, of which 140 were PP accounts (32%). There were 126 PP accounts created prior to 2012 and 14 PP accounts created after 2012 that subsequently obtained red snapper shares. Of these 140 accounts, only 75 accounts had an active status, 16 had a suspended status (i.e., have not completed an IFQ online account application renewal or renewed their reef fish permit to certify U.S. citizenship), and 49 had an initial status.⁵ The 140 PP accounts with shares collectively held 27.79% red snapper shares. The majority of shares resided in PP accounts that were created before 2012 and had an active status (Tables 1 and 2).

There were 257 allocation transactions from 52 PP accounts from January 1, 2014 through September 11, 2014. PP accounts transferred 1,342,479 lbs of red snapper. Many shareholders

⁵ *Active status* is defined as an account that has been accessed by the account holder and the account holder has certified U.S. citizenship within two years. Accounts are *suspended* if citizenship has not been certified within two years. Accounts with an *initial status* have never been accessed; holders must provide citizenship certification before the account can be accessed.

have multiple accounts and may keep shares in one account without a permit, but transfer quota allocation to accounts with a permit that they fish. All transactions were investigated to find the number of unique account to account transfers. There were 96 unique account transfer pairs, some of which made multiple transactions between the account pair. All unique account transfer pairs were investigated for arms-length transactions. Arms-length transactions, as used here, are defined as transactions where the parties in the transaction are independent of each other (e.g. not being a relative or having an entity in common). To determine arms-length transactions, each account was broken down to the lowest known entity level (e.g. shareholders in a corporation), and then entities were compared between accounts. If any name was in common within the unique pair transaction, the transaction was not considered unique. Judgment calls were made on accounts with similar surnames, but were otherwise different. Of the 96 pairs, 77 pairs were considered arms-length transactions, and these accounted for a majority of pounds transferred (Table 3).

Table 1. Number of PP accounts by type with the associated share percentages.

	Type	Accounts	Shares
Account Creation	Pre-2012	126	24.45%
	2012+	14	3.34%
Account Status	Active	75	25.36%
	Suspended	16	1.97%
	Initial	49	0.46%

Table 2. RS-IFQ shareholdings by entities with and without a commercial reef fish permit.

Year	# of Accounts		% of Shares	
	No Permit	Permit	No Permit	Permit
2007	76	421	14.29	85.72
2008	120	354	12.75	87.26
2009	120	319	13.83	86.18
2010	121	304	15.24	84.77
2011	120	298	18.14	81.87
2012	119	288	21.07	78.94
2013	126	273	24.36	75.65

Table 3. Transactions by arms-length status.

	Between Arms-length Pairs	Between Related pairs
Number of pairs	77	19
Number of transactions	191	66
Total Pounds transferred	969,089 lbs	373,390 lbs

Potential Changes

Two potential changes have been suggested to modify the eligibility requirements for owning shares and landing allocation. These options are compared in Table 4. These options would have opposite effects on the eligibility requirements. **Option a** would restrict those who may purchase RS-IFQ shares, and **Option b** would expand the eligibility requirements of those who may land RS-IFQ shares. **Option a** would require the recipient of future transfers of RS-IFQ shares to possess a commercial reef fish permit. This would end the public sale of shares which began on January 1, 2012. This does not restrict the transfer of allocation which could still be received by any public participant; a commercial reef fish permit would continue to be required to harvest RS-IFQ allocation. At the request of the Council, NMFS published a control date in the *Federal Register* notifying program participants that the requirements for participation may be modified in the future (76 FR 74038, November 30, 2011). A comparable control date was published in the *Federal Register* notifying grouper-tilefish IFQ program participants that participation requirements may be modified in the future (79 FR 72566, December 8, 2014). **Option b** would further expand public participation in the program, by allowing entities without a commercial reef fish permit to land RS-IFQ allocation. Commercial reef fish permits are limited access and under moratorium, thus adoption of this option would require restructuring the commercial sector. Furthermore, this option may conflict with the Council’s intent to not pursue intersector trading at this time.

- **Option a:** Restrict the future transfer of shares to only shareholder accounts that hold a valid commercial reef fish permit.
- **Option b:** Allow accounts with shares but without a commercial reef fish permit to harvest the allocation associated with those shares.

Table 4. Comparison of two potential changes (Options a and b) to program eligibility concerning the requirement to possess a commercial reef fish permit. The highlighted cells note the change from status quo.

	Need a commercial reef fish permit?			
	Pre-2012	Status Quo (2012+)	Potential Action	
			Option a	Option b
Hold Shares	No	No	No	No
Receive Shares	Yes	No	Yes	No
Hold Allocation	No	No	No	No
Receive Allocation	Yes	No	No	No
Land Allocation	Yes	Yes	Yes	No

An additional modification related to program eligibility was suggested for consideration:

- Restrict the ability for shareholders not actively engaged in fishing to transfer their shares and allocation to other shareholders.

This option was suggested in response to the reported practice of shareholders who do not actively fish, but transfer the annual allocation from the shares they hold to other accounts, often for a monetary gain (“leasing”). Shareholders are a unique entity that may be comprised of any

of the following: an individual(s), a business entity, a fish house (dealer/processor), or most recently, a member of the general public who may or may not be associated with the fishery. If the Council pursues addressing this option, it may be difficult to enact the intended policy change given the complexity of the relationships among shareholder accounts (e.g. related accounts, arms-length accounts). As stated above, at this time there is no clear method to distinguish related accounts within the IFQ system.

Scoping Questions

- Should the Council restrict or expand the eligibility requirements for obtaining shares, obtaining allocation, and landing allocation in the RS-IFQ program? How would this affect current participants in the IFQ program?
- How would modifying the eligibility requirements affect progress toward the program objectives (reducing overcapacity and reducing the problems with the derby fishery)?
- Is there a need to address impacts from the recent availability of RS-IFQ shares to the general public?
- Given the multiple participation roles in the RS-IFQ program, how could a regulation be designed to restrict shareholders who are not actively fishing from transferring their allocation?
- Will restricting shareholders who are not actively fishing from transferring their allocation disproportionately affect small shareholders who do not receive enough allocation from shares to effectively harvest their allocation (e.g., a share that results in 5-lbs of red snapper allocation)?
- Will restricting shareholders who are not actively fishing from transferring their allocation change market conditions or reduce the amount of allocation available to participants without shares?

2. Inactive Accounts and Redistribution of IFQ Shares to Address Regulatory Discards

Allocation is the annual poundage of red snapper that corresponds with the proportion of shares held by a shareholder. At the end of each year, there may be un-harvested allocation remaining in shareholders' accounts. An IFQ account is considered active if the account landed, sold, and/or bought allocation in that year.

During the first year of the RS-IFQ program (2007), 29% of accounts (173 accounts) were inactive; these accounts contained 2.6% (78,543 lbs) of the quota. The number of inactive accounts has decreased each year. In 2012, 94 inactive accounts remained containing 2.0% of the quota. More than half of inactive accounts at present are initial accounts that have never been accessed by the user (Table 5).

One of the RS-IFQ 5-year review's conclusions noted the unused allocation in inactive IFQ accounts totaled approximately 1.5% of the quota. In 2014, this amount of unused allocation has decreased, as shareholders have been actively locating the holders of inactive accounts and buying their shares. By early October 2014, 85 inactive accounts remained, in which less than 1% of the quota is held (J. Stephen, SERO, pers. comm.). Resolving these remaining inactive accounts could improve the commercial IFQ program participants' ability to achieve optimum yield, and potentially to address regulatory discards.

Table 5. Accounts with remaining allocation by account status (active or inactive).

Year	Total Accounts			Active Accounts		Inactive Accounts	
	# Accounts	Remaining quota (lbs)	% Quota	No. of Accounts	Remaining quota (lbs)	No. of Accounts	Remaining quota (lbs)
2007	327 (55%)	122,311	4.10%	154	43,768	173	78,543
2008	292 (53%)	59,515	2.70%	124	9,177	168	50,338
2009	242 (46%)	61,318	2.80%	105	19,638	137	41,680
2010	306 (51%)	132,450	4.20%	184	79,299	122	53,151
2011	236 (40%)	62,147	1.90%	134	11,404	102	50,743
2012	216 (36%)	75,626	2.00%	122	20,352	94	55,274
2013	258 (43%)	148,867	2.95%	162	69,057	96	79,810

Note: EOY = end of year. Source: NMFS 2014, Table 16.

Potential Changes

- Allow closure of accounts and redistribution of shares in accounts that have never been activated in the current system, if the accounts are not active by a specified date.
- Redistribute shares from inactive accounts to those with no or small shares or to new entrants to reduce regulatory discards.

- Redistribute shares from inactive accounts to address reduction of regulatory discards through permit banks or NMFS administration (particularly for eastern Gulf shareholders and vessels).
- In the event of future increases to the commercial red snapper quota, consider alternatives to redistribute the quota increases to new entrants and small shareholders.

Scoping Questions

- Should inactive accounts be closed if not activated by a specified date? What date or years should be used to identify inactive shares? Must those years be consecutive?
- What should be done with the shares from inactive accounts? If they should be distributed to new entrants and small shareholders, how could this be accomplished in a fair and equitable manner?
- How should a new entrant be defined? For example, those without shares, or someone who has never established an IFQ account, or someone who has never held a commercial reef fish permit before?
- How could shares held in inactive accounts be redistributed to address regulatory discards? What are the benefits or weaknesses to using a permit bank or NMFS administration for the distribution?
- In the event of future increases to the commercial red snapper quota, should part of this additional quota be retained and redistributed to small shareholders and new entrants? How and to whom should this quota be distributed? What should be the baseline quota above which a redistribution would occur?
- How could quota redistribution be accomplished to reduce regulatory discards in the commercial fishery?

3. Full Retention Requirement to Address Regulatory Discards

As red snapper continue expanding into the eastern Gulf, attention to the issue of regulatory discards (bycatch) has been renewed. Possible options to address regulatory discards include requiring the retention of all commercially caught red snapper and eliminating the minimum size limit. A full retention provision would require commercial fishermen to keep all red snapper they catch. Because there is a finite amount of annual red snapper allocation, this option would require establishing a mechanism by which quota could be obtained to account for these fish. This option would rely on fishermen's compliance, could require electronic monitoring, and could pose challenges for law enforcement. Modifying, or eliminating the minimum size for commercially caught red snapper could potentially reduce the number of regulatory discards, but could create implications for the rebuilding plan. Furthermore, fishermen would still need to obtain available quota as many fish currently discarded are not due to the minimum size limit, but due to a lack of allocation.

Potential Changes

- Eliminate the commercial red snapper minimum size limit.
- Consider the full retention of commercially caught red snapper.

Scoping Questions

- How would fishing behavior change as a result of removing the minimum size limit, or requiring the full retention of all red snapper landed?
- What regulatory and monitoring requirements would be necessary for a full retention provision to be adopted and enforced?
- How would a requirement for full retention of red snapper affect the ability of the fleet to fish year round?
- How could red snapper allocation be made available to cover the full retention of red snapper?
- What are other possible solutions to reduce regulatory discards of red snapper?

4. Caps on the use or possession of IFQ Shares and Allocation

This issue addresses the consolidation of shares within the RS-IFQ program and considers whether upper limits should be imposed on the amount of IFQ allocation an entity may possess, or the amount of IFQ allocation a vessel may land. Although there is a cap on the amount of shares that may be held by a single entity, there is no cap to the amount of RS-IFQ allocation that may be held or used by an individual or entity, or the amount of allocation that may be harvested by an individual vessel. Although the purchase of RS-IFQ shares has been available to any U.S. citizen or permanent resident alien since January 1, 2012, red snapper allocation may only be harvested by a vessel with a commercial reef fish permit.

Reducing overcapacity was a primary goal of the RS-IFQ program. As noted in Amendment 26, eliminating the derby-like fishing conditions and reducing overcapacity was anticipated to result in slower paced fishing activity, supporting fewer fishermen, operating over a longer season (GMFMC 2006). Consolidation of shareholdings has occurred, with nearly a 25% reduction in the number of accounts holding shares since the start of the program. Since 2007, the number of shareholder accounts holding large (>1.5%) and medium (0.1-1.5%) amounts of shares has remained similar, whereas the number of small shareholder accounts has been greatly reduced (Table 6; GMFMC and NMFS 2013).

The structure of the RS-IFQ program has allowed for the emergence of a new participation role of brokers, who buy and sell allocation but do not land red snapper. The number of individuals in this category has increased since the implementation of the program, resulting in an apparent shift in how people participate. Annually, between 20-27% of all accounts only trade allocation and do not land allocation; however, many of these accounts are related (i.e., same permit holders) to other IFQ accounts that do land red snapper.

Table 6. Number of accounts by shareholding size.

Year	Small <0.05%	Medium 0.05- 1.4999%	Large ≥ 1.5%	Total
Initial	415	125	14	554
2007	368	112	17	497
2008	346	111	17	474
2009	313	108	18	439
2010	297	109	19	425
2011	284	116	18	418
2012	273	117	17	407
2013	261	120	18	399

Note: Except for the Initial row, all numbers were based on the last day of the year. “Initial” numbers were at the start of the program (1/1/2007). Source: Table 1 in NMFS 2014.

The Boen and Keithly (2012) survey found the RS-IFQ program had a reported positive impact on the financial position by large and medium shareholders, whereas those with small shareholdings expressed the opposite opinion. Most shareholders agreed that the RS-IFQ

program made it more difficult for others to enter the fishery. Share consolidation and an increase in the number of shareholders not landing any fish have led to the perception that many people are profiting simply by transferring (“leasing”) allocation and not fishing. The costs to go fishing have also increased for some fishermen because shareholders are now charging captains and crew costs associated with the purchase of allocation.

National Standard 4 specifies that “if it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be ... carried out in such manner that no particular...entity acquires an excessive share of such privileges.” Limiting the amount of shares an individual or entity may own is intended to limit share consolidation, as the concentration of share holdings by a relatively small number of entities could result in market power.

Amendment 26 addressed ownership caps and restrictions on IFQ share certificates. The preferred alternative established an ownership cap such that no person shall own IFQ shares in excess of the maximum percentage issued to a recipient at the time of the initial apportionment of IFQ shares. This resulted in an IFQ share ownership cap set at 6.0203% of the commercial quota.

In the GT-IFQ program, share caps were established for each of the five categories of shares, based on the maximum shares issued to an entity for each category at the time of initial apportionment. These range from a share cap of 2.5% of gag grouper shares, to 14.7% of deep-water grouper shares. Unlike the RS-IFQ program, the GT-IFQ program established an allocation cap that is set annually equal to the combined sum of the maximum allocations associated with the five share caps.

Potential Changes

- Establish a cap on the amount of RS-IFQ allocation that may be held by an entity.
- Establish a cap on the amount of RS-IFQ allocation that can be landed by a single vessel.
- Limit the amount of shares/allocation non-permitted IFQ accounts may possess.

Scoping Questions

- Should non-permitted IFQ accounts have different caps (shares and/or allocation) than accounts with reef fish permits?
- Does establishing a vessel account landing cap disproportionately affect shareholders who have one vessel versus multiple vessels associated with their account?
- Would an allocation cap be based on the amount an account (shareholder or vessel) can hold cumulatively over the year, or at one point in time?
- Should an allocation cap be larger than the equivalent share cap?
- For participating vessels, would a landing cap be more applicable than an allocation cap for addressing consolidation concerns?

5. Requirements for the Use of Shares and Allocation

Use-it or lose-it provisions are a type of restriction on the sale or transfer of IFQ allocation or shares, which may be crafted to address a particular objective or issue. For example, restrictions could require a shareholder to harvest the allocation distributed to the account to ensure that OY is achieved. Amendment 26 (GMFMC 2006) evaluated alternatives for use-it or lose-it provisions that would have revoked and redistributed shares from accounts using less than 30%, or 50%, of the allotted RS-IFQ shares, over a 3-year, or 5-year, moving average period. Ultimately, the Council selected no action and did not adopt this use-it or lose-it provision.

Other requirements for the use of shares and allocation could be put in place to restrict some aspect of participants' behavior. For example, RS-IFQ shares and allocation are transferable. Some RS-IFQ share and allocation holders do not fish and have limited their participation in the programs to trading IFQ shares and annual allocations or are completely inactive in the program. In public testimony, complaints have been made about such use of IFQ shares and allocation by those who do not actively fish. Alternately, requirements for the use of shares and allocation could be broadened to provide additional flexibility to shareholders, such as in the event of personal hardships, by allowing unused allocation to carry over and be used in the following fishing year.

Even if a requirement for the use of shares or allocation is intended to address a particular issue, IFQ participants may act in a variety of ways that may confound new requirements for the use of shares and allocation. Identification of those who only transfer but do not use IFQ allocation is complex because many entities hold multiple accounts within the IFQ system. For example, many participants hold IFQ shares and allocation in one account that does not have a reef fish permit, and transfer allocation to other associated accounts with a reef fish permit that land red snapper. Likewise, a participant may be a part of multiple accounts (e.g. sole owner, partnership, part of a business that owns an account, etc.). Multiple accounts may confound the issue as participants may use one or more account to hold the shares, while another account harvests the allocation. Some participants may use the multiple accounts in a way to separate their assets (e.g. shares separate from vessels; incorporation of each vessel owned), while others may use it as a means of adding a spouse/partner to an asset that remains separate from the day to day business of fishing. In addition, some dealers also obtain a shareholder account to obtain shares or allocation to be used for vessels that land with that dealer. New requirements for the use of shares and allocation would need to be designed with these multiple types of participation in mind.

The Council has included for consideration a "lease-to-own" provision which would enable fishermen who regularly buy allocation ("leasing") but cannot afford to purchase shares, to earn credit toward owning IFQ shares. IFQ allocation may be transferred multiple times among accounts and is not tracked as individual units in the system. Thus, at the time of landing, it may not be possible to identify the original shareholder who initially transferred that allocation to another account. This inability to track IFQ allocation would confound the ability to credit fishermen who regularly buy allocation. To design such a "lease-to-own" provision would require changes to the online reporting system to track the individual units of allocation for the current quota of 5.04 million pounds.

Potential Changes

- Establish use-it or lose-it provisions.
- Consider placing restrictions on the sale of IFQ allocations and shares.
- Consider adopting a roll-over provision for unused IFQ allocation.
- Consider adopting a lease-to-own provision, such that an entity leasing allocation earns some credit toward ownership of IFQ shares.

Scoping questions

- Should the Council reconsider use-it or lose-it provisions?
- How could a use-it or lose-it provision be enacted given the different types of shareholders (owner-operators, fleet owners, dealers, business entities)?
- What should be the minimum annual percentage (or amount) of a participant's IFQ shares or allocation required to be fished to maintain possession of the corresponding shares?
- Would this disproportionately affect small shareholders who receive a minimum amount of allocation from shares? Should small shareholders be exempted from this requirement? If so, would should be the maximum amount of exempt quota shares?
- If a use-it or lose-it provision is adopted, what time frame should be used?
- How would a lease-to-own provision be tracked, as individual units of allocation are not identified in the system?

6. Mid-Year Quota Changes

Although the red snapper quota has been increasing in recent years, it is possible that a quota decrease could occur at some time, such as following a stock assessment. Because RS-IFQ allocation is distributed at the beginning of the year, it would not be possible to reduce the amount of allocation distributed later in the year, should the need for a mid-season quota reduction occur. Because most IFQ program participants use their quota throughout the year, withholding some predetermined proportion would not prevent fishermen from beginning harvest. On the other hand, not knowing whether the remainder of a shareholder's quota will be released during the year could introduce seasonal inefficiencies in fishing operations.

Potential Changes

- Withhold distribution of some portion of a shareholder's allocation at the beginning of the year if a mid-year quota reduction is expected.

Scoping Questions

- Should the Council consider delaying the full distribution of an IFQ participant's allocation at the beginning of the year if a mid-year quota reduction is expected?
- Would a quota withholding be annual, or only during prescribed conditions, such as while the stock is under a rebuilding plan, or if preliminary results of a stock assessment are expected to result in a quota decrease?
- What proportion of a shareholder's allocation should be withheld at the beginning of the year? Would this disproportionately affect small, medium, or large shareholders? Should allocation only be withheld from accounts that hold a certain amount of shares or pounds of allocation? How would this amount be determined?
- How would a late release of quota affect the industry (derby-like conditions, effect on market value, etc.)? What would be the economic impact on prices should additional allocation be released later in the year?

7. Enforcement of all Reef Fish Landings

The use of vessel monitoring systems (VMS) for all commercial reef fish trips became mandatory on May 6, 2007, shortly after implementation of the RS-IFQ program. Hail-in requirements, VMS, and random dockside enforcement are used to ensure compliance with IFQ program regulations. Regulations are jointly enforced by NOAA Office of Law Enforcement, the U.S. Coast Guard, and state enforcement agents through joint enforcement agreements.

When harvesting red snapper and other IFQ species, vessels are required to have a Gulf commercial reef fish permit and to notify NMFS before leaving port (“hail out”). While at-sea, vessels are monitored using the VMS. When returning to port, vessels landing IFQ species must “hail-in”, and provide an advance landing notification (3-12 hours prior to landing)⁶ indicating the landing time and location, the intended dealer, and the estimated pounds landed. The hail-out is accomplished through the VMS, while the hail-in may be completed through the VMS, phone, or internet. Landing may occur at any time but fish may not be offloaded between 6 p.m. and 6 a.m., local time. A landing transaction report is completed by the IFQ dealer and validated by the fisherman. The landing transaction includes the date, time, and location of transaction; weight and actual ex-vessel value of fish landed and sold; and the identities of the shareholder account, vessel, and dealer. All landings data are updated on a real-time basis as landing transactions are processed.

Although compliance has improved since RS-IFQ program implementation, one of the Red Snapper 5-year review conclusions noted additional enforcement efforts may be necessary to deter violations. In discussions, it has been suggested to extend the hail-in requirement to all commercial reef fish trips, in addition to those landing IFQ species. By extending the requirement to all commercial reef fish trips, law enforcement and port agents can be alerted in advance of trips returning to port and can meet vessels to inspect landings. Such a provision would also reduce illegal harvest of IFQ species that may not be reported or reported as another species (e.g., vermilion snapper). Based on fisherman surveys in 2011, Porter et al. (2013) concluded compliance had improved under catch share management, but increased enforcement efforts may be justified to ensure compliance benefits continue. IFQ program staff have made several enhancements to auditing of landing notifications and transactions in the past several years to aid enforcement and enhance compliance with reporting (GMFMC and NMFS 2013). Requiring all commercial reef fish vessels to hail-in prior to landing would be expected to improve the enforcement of IFQ species.

Potential Changes

- Require all vessels with a commercial reef fish permit to hail-in prior to landing, even if they are not in possession of IFQ species.

Scoping questions:

- Should the hail-in requirement be extended to all commercial vessels landing any reef fish species?

⁶ As of October 27, 2014, this landings notification will be extended to 3-24 hours prior to landing.

- What options or alternatives should be evaluated and considered regarding a VMS hail-in for all commercial reef fish trips?
- What would be the potential benefits or impacts of requiring all commercial vessels landing reef fish to hail-in?

8. Additional Issues to Address

The potential changes addressed in this scoping document are preliminary. Through the Council process, some will likely be removed or modified, and others added. Potential changes could address any aspect of the RS-IFQ program, including but not limited to program functioning, administration, social conflicts, and participant satisfaction.

The 5-year review of the GTF-IFQ program is currently underway. Although this scoping document addresses the RS-IFQ program specifically, public comment is welcome with regard to potential improvements to the GTF-IFQ program. It is important to note that both the RS-IFQ and GT-IFQ programs are managed under a common reporting system. This means that changes made to one program could affect the other program. It is possible that future IFQ program reviews could be combined to evaluate all reef fish species managed under IFQs.

Scoping Questions

- Are there additional issues to address to improve the functioning and performance of the RS-IFQ program?
- Are there proposed actions for the RS-IFQ program that should be applied to the G-TF IFQ program?

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APPENDIX A. INDIVIDUAL FISHING QUOTA PROGRAM GLOSSARY

Active Account –An account, in which the allocation holder has landed, bought, and/or sold allocation within that year. Accounts activity status changes yearly based on the actions taken by the account.

Advance Landing Notification - A required 3-12 hour advanced landing notification stating the vessel identification, approved landing location, dealer’s business name, time of arrival, and estimated pounds to be landed in each IFQ share category. Landing notifications can be submitted using either a vessel’s VMS unit, through an IFQ entity’s on-line account, or through the IFQ call service. The landing notification is intended to provide law enforcement officers the opportunity to be present at the point of landing so they can monitor and enforce IFQ requirements dockside. For the purpose of these regulations, the term landing means to arrive at the dock, berth, beach, seawall, or ramp. (The advanced landing notification window was expanded to 3-24 hours on October 27, 2014.)

Allocation – Allocation is the actual poundage of red snapper by which an account holder is ensured the opportunity to possess, land, or sell, during a given calendar year. IFQ allocation will be distributed to each IFQ shareholder at the beginning of each calendar year, and expire at the end of each calendar year. Annual IFQ allocation is determined by the amount of the shareholder’s IFQ share and the amount of the annual commercial red snapper quota. Dealer accounts may not possess allocation.

Allocation Transfer – A transfer of allocation (pounds) from one shareholder account to another shareholder account. Through January 1, 2012, allocation can be transferred only to an entity that holds a valid Gulf commercial reef fish permit.

Arms-length Transaction – Transactions where the parties in the transaction are independent of each other (e.g. not being a relative or having an entity in common).

Entity – An individual, business, or association participating in the IFQ program. Each IFQ account is owned by a unique entity.

Gulf of Mexico Commercial Reef Fish Permit Holder – An entity that possesses a valid Gulf commercial reef fish permit and therefore, is eligible to be exempt from bag limits, to fish under a quota, or to sell Gulf reef fish in or from the Gulf Exclusive Economic Zone. There is an eligibility requirement and an annual fee associated with the permit.

IFQ Dealer Endorsement – The IFQ dealer endorsement is a document that a dealer must possess in order to receive Gulf of Mexico red snapper. The dealer endorsement can be downloaded free of charge from the IFQ dealer’s online account.

Inactive Account – An account, in which the allocation holder has neither landed, bought, nor sold allocation within that year, including those who never logged into their account. Accounts activity status changes yearly based on the actions taken by the account.

Initial Account - An account which was never logged into by the account's owner(s) in the current online system, which began in 2010.

Landing Transaction – A landing transaction report that is completed by an IFQ dealer using the online IFQ system. This report includes the date, time, and location of transaction; weight and actual ex-vessel price of red snapper fish landed and sold; and information necessary to identify the fisherman, vessel, and dealer involved in the transaction. The fisherman landing IFQ species must validate the dealer transaction report by entering his unique vessel's personal identification number when the transaction report is submitted. After the dealer submits the report and the information has been verified, the website will send a transaction approval code to the dealer and the allocation holder.

Participant - An individual, business, or other entity that is part of an IFQ entity. For example, John Smith, the participant, may belong to multiple accounts such as John Smith, John and Jane Smith, and ABC Company. Share and allocation caps are tracked at the IFQ participant level and not the IFQ entity level.

Public Participant – A shareholder account that was opened after January 1, 2012, that does not have a permit associated with the account. Public participants may own and trade shares and allocation, but cannot harvest red snapper.

Share – A share is the percentage of the commercial quota assigned to a shareholder account that results in allocation (pounds) equivalent to the share percentage of the quota. Shares are permanent until subsequently transferred. Dealer accounts may not possess shares.

Share Cap – The maximum share allowed to be held by a person, business, or other entity. The share cap prevents one or more IFQ shareholders or entities from purchasing an excessive amount of IFQ shares and monopolizing the red snapper commercial sector.

Share Transfer – A transfer of shares from one shareholder account to another account. A shareholder must initiate the share transfer and the receiver must accept the transfer by using the online IFQ. Through January 1, 2012, shares can be transferred only to an entity that holds a valid Gulf commercial reef fish permit.

Shareholder – An account that holds a percentage of the commercial red snapper quota.

Shareholder Account – A type of IFQ account that may hold shares and/or allocation. This includes accounts that only hold allocation.

APPENDIX B. AD HOC RED SNAPPER IFQ ADVISORY PANEL SUMMARY

Red Snapper IFQ Advisory Panel Meeting Summary Gulf Council Office Tampa, FL November 5-6, 2013

In attendance

Tom Adams
Billy Archer
Buddy Bradham
Jason DeLaCruz
Bob Gill
John Graham
Scott Hickman
Chris Horton
David Krebs
Seth Macinko
Jerry Rouyea
Bob Spaeth
Bill Tucker
David Walker
Mike Whitfield
Troy Williamson
Jim Zubrick

Council and Staff

Doug Boyd
Assane Diagne
Ava Lasseter
Karen Hoak
Carrie Simmons
Steven Atran

Other attendees

Jim Clements
Sue Gerhart
Cathy Gill
Buddy Guindon
Stephen Holiman
Peter Hood
Mike Jepson
Tony Lamberte
Mara Levy
Kristen McConnell
Christina Package
Jessica Stephen
Melissa Thompson
Donny Waters
Wayne Werner

The meeting convened at 9 a.m. The AP appointed Bob Gill as Chair and Scott Hickman as Vice-chair. Assane Diagne reviewed the actions and preferred alternatives from Amendment 26, which established the Red Snapper IFQ program. Jessica Stephen summarized the IFQ program's 5-year review conclusions.

The AP then commented on the 5-year review. Overall, members felt that the program is working well and achieving its goals. The AP discussed whether the program goals should be modified or refined, and whether it is desirable to further reduce overcapacity. It was noted that fewer vessels than the existing fleet can harvest the entire commercial quota, but maximizing economic efficiency is not the goal of the fishery. Other potential goals could address new entrants to replace retiring fishermen, and minimizing discards.

The AP also discussed the 3% recovery fee, with some members wanting IFQ program participants to pay more, and other members pointing out that 3% is the maximum allowable under the Magnuson-Stevens Act, and that the recovery fee was never intended to pay for the program.

Jessica Stephen reviewed the administrative changes NMFS is making to the IFQ programs and gave an overview of the IFQ program structure, to provide context and background information for members of the AP who are not familiar with the program. The AP then reviewed each of the actions from Reef Fish Amendment 26, which established the red snapper IFQ program.

The AP discussed the IFQ program duration and review requirements. Because red snapper is part of a multi-species fishery, members felt the red snapper IFQ program review should be aligned with other IFQ managed species, and passed the following motion:

Motion: That consideration be given to the future consolidation of the red snapper and the grouper/tilefish IFQ program reviews.

Addressing ownership caps, AP members who are IFQ program participants explained that the existing 6% cap reflected the landings of a fleet owner, not an individual fisherman. There was discussion about IFQ shareholders who sell allocation but no longer fish, and concern that putting controls on the market-based system would affect the functioning of the program.

Concerning the eligibility requirements for the transfer of IFQ shares, the AP discussed IFQ shareowners who do not possess a reef fish permit. Some members felt it was important to distinguish the IFQ program as a tool to support the commercial industry rather than being an investment tool. The AP passed the following motion.

Motion: To restrict the future transfer of shares to only those individuals possessing a valid commercial reef fish permit.

Mara Levy reviewed the legal issues and referendum requirements in the Magnuson-Stevens Act which pertain to IFQ programs. It would be necessary to define who would be included in any future referendum.

Following review of the amendment's actions, the AP discussed the conclusions from the red snapper IFQ program 5-year review. The AP noted that discards have decreased in some parts of the Gulf and increased in others. The AP expressed that a full retention fishery is ultimately the direction they need to go in the future, even though the transition has been painful in other regions and it may not be popular in the Gulf. The AP passed the following motion.

Motion: To recommend that the Council consider a regulatory full retention red snapper fishery, with no size limits.

The AP then discussed whether enforcement should be increased at landing sites, and whether the number of approved landing sites should be decreased. No additional recommendations to the 5-year review were made.

The AP reviewed the objectives of the IFQ program. Members discussed the objective to reduce overcapacity, and what vessel capacity the industry should aim for. There has been redirected effort toward other reef fish species, and most vessels target multiple species, not red snapper alone. The AP discussed capping the price at which allocation could be leased, but expressed

concerns that shareowners would modify their behavior and use of allocation in ways unintended by the lease price cap. The AP discussed red snapper discards on vessels without sufficient allocation, and passed the following motion.

Motion: That the Council consider alternatives to allow a fisherman that does not have sufficient allocation to cover bycatch, to acquire the needed allocation prior to taking their next trip.

Next, the AP discussed shares held in accounts that have never been activated, alongside the issue of how to procure quota to provide for discards and new entrants to the fishery. The AP considered developing a type of quota set-aside, and expressed the need for the industry to further discuss these issues. The following motions resulted from the discussion.

Motion: Allow redistribution of shares in accounts that have never been activated since 2010, if the accounts are not active by December 31, 2014.

Motion: That the Council establish a quota bank using the shares from the inactive accounts from the previous motion.

Motion: That the shares from the previous motion be utilized for new entrants, to address discards, and to reduce bycatch.

Motion: The Council should develop a new ad hoc Advisory Panel, primarily of commercial red snapper stakeholders, to develop a plan to address new entrants' participation and bycatch, using future red snapper quota increases.

The AP then reviewed the presentation on administrative changes to the IFQ program. The issues raised here mainly concerned the timing and feasibility of landings and required notifications. Currently, a vessel is required to land within a declared 30 minute window, which some members of the AP felt is too short. Recognizing that modifying the landing time window affects how long enforcement officials must wait at the landing site, the AP passed the following motion.

Motion: 1 hour window to land (e.g., if landing at 5 pm, could land any time between 5-6 pm).

Another issue pertained to the required time limit for dealers to report landing transactions. Some members reported that the time requirement is too restrictive around holiday weekends. Jessica Stephen noted that even if the time period for the transaction was to be extended, fish may not be moved until the dealer submits the landing transaction. The AP then passed the following motion.

Motion: Offloading and landing transaction must occur within 72 hours of landing, excluding holidays and Sundays.

Finally, the issue of offloading after hours was discussed, and the AP passed the following motion.

Motion: If offloading has begun prior to 6 pm, offloading may continue after 6pm if law enforcement authorizes offload after hours

Other issues discussed included support for prohibiting deduction of ice and water weight when completing a landing transaction, and reviewing the number of approved landing locations. The AP then discussed other items outside of their charge.

The AP discussed the potential collection of a resource rent on the commercial red snapper quota but the motion recommending to the Council to consider imposing a resource rent failed. AP members indicated that rents were collected for oil and minerals and that the public should be compensated. It was also indicated that rent collections were not the norm in fisheries and that collections should not be limited to the commercial sector but include all users of the red snapper resource.

A member raised the issue of dual-permitted vessels having a crew size limit when fishing commercially, stating that the rule prohibits these vessels from taking family members fishing. Another member noted that eliminating the crew size restriction would give those with dual-permitted vessels with IFQ shares an unfair advantage. The AP passed the following motion.

Motion: To eliminate the crew size limit for dual permitted vessels fishing under the commercial IFQ system.

The AP then discussed putting additional reef fish species into IFQ programs, noting that effort had been redirected from those species now managed under IFQs, toward these other species. Members felt an IFQ program was important as an effort control for these species. The AP passed the following motion.

Motion: That the Council consider reopening Amendment 33, adding in all applicable reef fish to the IFQ program.

Finally, the AP discussed the concept of “dude fishing”, where passengers pay to experience commercial fishing. There was discussion as to whether this would be considered commercial or charter fishing, as well as safety issues. The AP passed the following motion.

Motion: Request that the Council ask staff to develop a discussion paper on an option for commercial dude trips in the Gulf. A commercial dude trip is where a member of the recreational public goes out on a commercial fishing experience.

The meeting adjourned shortly before noon.

Red Snapper Allocation



Public Hearing Draft for Amendment 28 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

Including Draft Environmental Impact Statement,
Fishery Impact Statement, Regulatory Impact Review,
and Regulatory Flexibility Act Analysis

March 2015



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Gulf of Mexico Reef Fish Amendment 28

Draft Environmental Impact Statement (DEIS) Cover Sheet

Red Snapper Allocation Amendment 28 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico, including a Draft Environmental Impact Statement (DEIS), Fishery Impact Statement, Regulatory Impact Review, and Regulatory Flexibility Act Analysis.

Abstract:

This DEIS is prepared pursuant to the National Environmental Policy Act to assess the environmental impacts associated with a regulatory action. The DEIS analyzes the impacts of a reasonable range of alternatives intended to evaluate changing the current commercial: recreational red snapper allocation of 51:49 percent, respectively. The purpose of this action is to evaluate reallocating, in a fair and equitable manner, red snapper resources between the commercial and recreational sector to increase the net benefits from red snapper fishing.

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
ALS	Accumulated Landings System
AM	accountability measure
Committee	Reef Fish Committee
Council	Gulf of Mexico Fishery Management Council
DEIS	Draft Environmental Impact Statement
EEZ	exclusive economic zone
EFH	Essential Fish Habitat
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
ESA	Endangered Species Act
FMP	Fishery Management Plan
FTE	full-time equivalent
HBS	Southeast Headboat Survey
IFQ	individual fishing quota
LAPP	Limited Access Privilege Program
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MRFSS	Marine Recreational Fisheries Survey and Statistics
MRIP	Marine Recreational Information Program
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	overfishing limit
PDF	probability density function
RFFA	reasonably foreseeable future action
RQ	regional quotient
SAV	submerged aquatic vegetation
SEAMAP	Southeast Area Monitoring and Assessment Program
Secretary	Secretary of Commerce
SEDAR	Southeast Data Assessment and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office of NMFS
SESSC	Socioeconomic Scientific and Statistical Committee
SSBR	spawning stock biomass per recruit
SSC	Scientific and Statistical Committee
SPR	spawning potential ratio
TAC	total allowable catch
TL	total length
TPWD	Texas Parks and Wildlife Department
VEC	valued environmental components
VOC	volatile organic compounds
ww	whole weight

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EXECUTIVE SUMMARY

[To be completed.]

FISHERY IMPACT STATEMENT

[To be completed.]

CHAPTER 1. INTRODUCTION

1.1 Background

The red snapper stock in the Gulf of Mexico (Gulf) has been declared overfished based on the Status of U.S. Fisheries Report to Congress¹ and is in the 14th year of a 32-year rebuilding plan. The Gulf of Mexico Fishery Management Council (Council) has worked toward rebuilding the red snapper stock since 1997 and overfishing was projected to have ended in 2009. Overfishing was not officially declared to end in the Status of U.S. Fisheries Report until 2012 after the new overfishing definition developed in the Generic Annual Catch Limits and Accountability Measures (ACLs/AMs) Amendment was implemented (GMFMC 2011a).

Gulf of Mexico Fishery Management Council

- Responsible for conservation and management of fish stocks
- Consists of 17 voting members: 11 appointed by the Secretary of Commerce; 1 representative from each of the 5 Gulf States, the Southeast Regional Administrator of National Marine Fisheries Service (NMFS); and 4 non-voting members
- Responsible for developing fishery management plans and amendments, and recommends actions to NMFS for implementation

National Marine Fisheries Service

- Responsible for compliance with federal, state, and local laws and regulations
- Responsible for preventing overfishing while achieving optimum yield
- Approves, disapproves, or partially approves Council recommendations
- Implements regulations

Since 2007, the recreational red snapper season length has become progressively shorter (Figure 1.1) and overharvests have occurred in every year but one since 2007 (Figure 2.1.1). The commercial sector has the potential for a year-round season and has consistently harvested below its quota since the implementation of the Individual Fishing Quota (IFQ) program in 2007.

¹ http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/

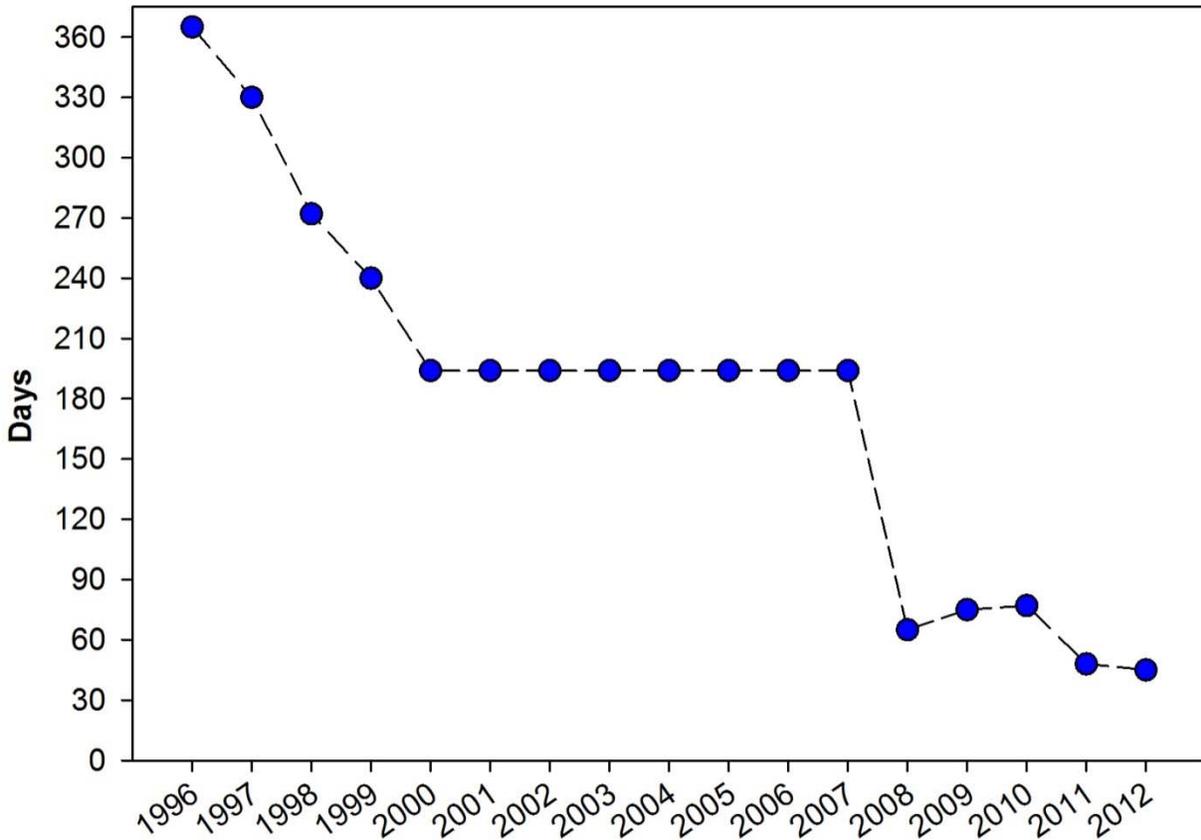


Figure 1.1. Season length (days) that the recreational red snapper season was open from 1996 through 2012 in the Gulf.

Current recreational fishing season length projections are dependent on estimated red snapper average weights and daily catch rates. As the daily catches and average weight of landed red snapper increases the season becomes progressively shorter (NMFS 2012a). Since 2007, when the rebuilding plan was revised, the estimated average weight of red snapper increased from 3.30 to 7.07 lbs whole weight (ww) in 2013 (Table 2.1.3). Following receipt of the 2013 benchmark assessment (SEDAR 31 2013) results, the 8.46 million pound (mp) quota was increased to 11.0 mp, and a supplemental fall recreational season was opened. Thus, the recreational harvest of red snapper was open 42 days in federal waters in 2013. In 2014, the season was open nine days in federal waters.

In January 2013, the Council convened a special meeting of their Reef Fish Committee (Committee) to focus on red snapper management issues. The Committee requested that Amendment 28 focus on red snapper allocation only and decided to address allocation of groupers (i.e., gag, red, and black) in a separate amendment. During the meeting, the Committee discussed and modified the goals and objectives of the Reef Fish FMP, including suggestions for objectives that better focus the purpose and need of this amendment. The requested changes to

the document were discussed and adopted by the Council at the April 2014 meeting (see Section 1.2).

A 2014 update assessment was presented in PowerPoint format at the January 2015 meeting of the SSC . In addition to the updated data through the 2013 terminal year, changes in the stock assessment results are primarily due to updated Marine Resource Information Program (MRIP) protocols causing an increase in landings estimates, while a shift in selectivity to larger, older fish by recreational fisherman led to a new selectivity timeblock in the stock assessment (i.e., for the years 2011-2013). See Section 3.2 for more information on the stock assessment.

The SSC reviewed the assessment and determined the ABC could be increased to 13 mp in 2015 with further increases over the next two years. However, the recreational red snapper landings in the original 2014 update assessment were only available through 2013, so the ABC projections for 2015 and beyond were made assuming that the 2014 landings would equal those in 2013. The 2014 recreational landings were actually less than in 2013. It will be several months before the final landings estimates for 2014 are available, but the Southeast Fisheries Science Center (SEFSC) staff made new projections using the provisional 2014 landings. Due to the landings being lower in 2014 than previously assumed, the SEFSC projections concluded that the 2015 ABC could be set higher than the level set by the SSC. However, there would then need to be subsequent annual reductions in order to adhere to the 2032 rebuilding schedule.

The Council asked the SSC to re-evaluate its ABC recommendations in light of the new information on 2014 landings. The SSC convened via internet webinar on February 19, 2015, and recommended an ABC for 2015-2017 provided in Table 1.1.1. Subsequently, the Council met via internet webinar to make a determination for the 2015-2017 red snapper quotas. The Council then approved a framework action to implement these quotas and the recreational annual catch target (ACT), which are listed in Table 1.1.1.

Table 1.1.1. Gulf of Mexico red snapper acceptable biological catch (ABC), total, commercial, and recreational quotas, and recreational annual catch targets (ACT) for 2015-2017 in million pounds (mp) whole weight.

Year	ABC	Total Quota	Commercial Quota	Recreational Quota	Recreational ACT
2015	14.30 mp	14.30 mp	7.293 mp	7.007 mp	5.605 mp
2016	13.96 mp	13.96 mp	7.120 mp	6.840 mp	5.473 mp
2017+	13.74 mp	13.74 mp	7.007 mp	6.733 mp	5.386 mp

Allocation

In recent years, the Council has expressed its intent to evaluate and possibly adjust the allocation of reef fish resources between the commercial and recreational sectors. These Council discussions have included consideration of comprehensive changes to the structure of the recreational sector and to sector allocations for red snapper and several grouper species.

The Council’s evaluation of the allocations between the commercial and recreational sectors is consistent with NOAA’s Catch Share Policy². The Policy recommends that, for all fishery management plans (FMPs), “the underlying harvest allocations to specific fishery sectors (i.e., commercial and recreational) should be revisited on a regular basis, and the basis for the allocation should include consideration of conservation, economic, and social criteria used in specifying optimum yield and in furtherance of the goals of the underlying FMP” (NOAA’s Catch Share Policy 2010, page iii).

In response to the challenges inherent to allocating limited resources between competing interests, the Council established an Ad Hoc Allocation Committee composed of Council members to assist in drafting an allocation policy that would streamline future allocation decisions. The Council’s allocation policy was adopted in early 2009 and provides principles, guidelines, and suggested methods for allocating fisheries resources between or within sectors. The principles and guidelines developed by the Council are provided in Appendix B. In February 2012, the National Marine Fisheries Service (NMFS) released a technical memorandum on the principles and practice of allocating fishery harvests, which provides additional guidance to the Council (Plummer et al. 2012).

At the Council’s request, the Southeast Fishery Science Center (SEFSC) conducted a study evaluating the economic efficiency of the current allocation of red snapper resources between the commercial and recreational sectors. The study was discussed by the Socioeconomic Scientific and Statistical Committee (SESSC) during its October 2012 meeting. Conclusions of the study and recommendations provided by the SESSC were presented to the Council in October 2012. An economic evaluation of allocation alternatives proposed in this amendment was also requested. Drs. Agar and Carter of the SEFSC conducted the analyses and presented their findings to the SESSC during a November 2013 meeting and a January 2014 follow-up webinar. SESSC recommendations were discussed during the February 2014 Council meeting.

1.3 Purpose and Need

This regulatory action addresses red snapper allocation. Specifically, the purpose of this action is to evaluate reallocating, in a fair and equitable manner, red snapper resources between the commercial and recreational sector to increase the net benefits from red snapper fishing.

The need for the proposed actions is to base sector allocations on the best scientific information available and use the most appropriate allocation method to determine sector allocations, while achieving optimum yield, particularly with respect to food production and recreational opportunities, and rebuilding the red snapper stock.

² http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm

1.4 History of Management

This history of management covers events pertinent to red snapper allocation, setting quotas, and AMs. A complete history of management for the FMP is available on the Council's website: http://www.gulfcouncil.org/fishery_management_plans/reef_fish_management.php and a history of red snapper management through 2006 is presented in Hood et al. (2007). The final rule for the Reef Fish FMP (with its associated environmental impact statement [EIS]) (GMFMC 1981) was effective November 8, 1984, and defined the Reef Fish fishery management unit to include red snapper and other important reef fish.

Currently, the commercial sector fishing for red snapper is regulated by a 13-inch total length (TL) minimum size limit and managed under an individual fishing quota program. Recreational fishing for red snapper is managed with a 16-inch TL minimum size limit, 2-fish bag limit, and a season beginning on June 1 and ending when the recreational quota is projected to be caught. Other reef fish fishery management measures that affect red snapper fishing include permit requirements for the commercial and for-hire sectors as well as season-area closures. These measures are discussed in more detail in Section 3.1.

Red snapper allocation and quotas: The final rule for **Amendment 1** (GMFMC 1989) to the Reef Fish FMP (with its associated environmental assessment (EA), regulatory impact review (RIR) was effective in February 1990. The amendment specified a framework procedure for setting the total allowable catch (TAC) to allow for annual management changes. A part of that specification was to establish a species' allocation. These were based on the percentage of total landings during the base period of 1979-1987. For red snapper, the commercial sector landed 51% and the recreational sector landed 49% of red snapper over the base period, hence the current 51% commercial:49%: recreational allocation. **Amendment 1** also established a commercial quota allowing the Regional Administrator to close commercial red snapper fishing when the quota was caught. The recreational quota was established through a 1997 regulatory amendment (with its associated EA and RIR) (GMFMC 1995) with a final rule effective in October 1997. Prior to 1997, the recreational sector had exceeded its allocation of the red snapper TAC, though the overages were declining through more restrictive recreational management measures (Figure 2.1.1). With the establishment of a recreational quota, the Regional Administrator was authorized to close the recreational season when the quota is reached as required by the Magnuson-Stevens Act.

Red snapper accountability measures: For the commercial sector, an IFQ program was put in place for the 2007 fishing year through **Amendment 26** to the FMP. The program allocates pounds to IFQ shareholders based on the number of shares they have. This program allows shareholders to use their individual allocation as they see fit. Since the program has been in effect, the commercial sector has not exceeded its quota (See Section 3.1).

For the recreational sector, the accountability measure is an in-season closure based on annual projections of the season length. The season begins on June 1, as implemented through **Amendment 27** in 2008. This amendment also put in place the current 16-inch TL minimum size limit, 2-fish bag limit, and zero bag limit for captain and crew of for-hire vessels.

Subsequent to Amendment 27, a series of framework actions and temporary rules have set the season length.

On March 26, 2014 the U. S. District Court for the District of Columbia ruled in favor of the plaintiffs in the case of *Guindon v. Pritzker*, 2014 WL 1274076 (D.D.C. Mar. 26, 2014) and found that the 2013 May Final Rule, June Temporary Rule, and October Final Rule challenged in this action were arbitrary and capricious, and not in accordance with the Magnuson-Stevens Act. The Court found in pertinent part that NMFS failed to require adequate AMs to prohibit the retention of fish after the recreational quota had been harvested, and failed to use the best scientific information available by not using the 2013 MRIP numbers to determine whether there should be a fall season. To address the court's findings, the Council requested NMFS put in place an emergency rule for the 2014 season that set a recreational ACT to base the season length on that was 20% less than the recreational quota (See Section 1.1). The resulting season length was nine days.

Proposed **Amendment 40** was submitted to NMFS in December 2014. This amendment proposes to divide the recreational red snapper quota into two components, with the federal for-hire component allocated 42.3% of the quota and the private angling component allocated 57.7% of the quotas. This division would sunset three calendar years after implementation. Season closures would be determined separately for each component based on the component's annual catch target (ACT). A proposed rule to implement this amendment was published on January 23, 2015 [80 FR 3541], and is currently under review by NMFS.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 – Allocation of Red Snapper

Alternative 1: No Action – Maintain the allocation set in Reef Fish Amendment 1. The commercial and recreational red snapper allocations remain at 51% and 49% of the red snapper quota³, respectively. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 1: Status Quo	2015	14.300	7.293	51.0%	7.007	49.0%
	2016	13.960	7.120	51.0%	6.840	49.0%
	2017	13.740	7.007	51.0%	6.733	49.0%

Reallocation of Quota

Alternative 2: Increase the recreational sector’s allocation by **3 percent**⁴; allocate 48% of the red snapper quota to the commercial sector and 52% of the quota to the recreational sector. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 2: Increase the recreational sector's allocation by 3%	2015	14.300	6.864	48.0%	7.436	52.0%
	2016	13.960	6.701	48.0%	7.259	52.0%
	2017	13.740	6.595	48.0%	7.145	52.0%

Alternative 3: Increase the recreational sector’s allocation by **5 percent**; allocate 46% of the red snapper quota to the commercial sector and 54% of the quota to the recreational sector. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 3: Increase the recreational sector's allocation by 5%	2015	14.300	6.578	46.0%	7.722	54.0%
	2016	13.960	6.422	46.0%	7.538	54.0%
	2017	13.740	6.320	46.0%	7.420	54.0%

³ The red snapper quota (commercial and recreational quotas) is functionally equivalent to a red snapper ACL.

⁴ Unless otherwise indicated, specified percentages refer to percentages of the red snapper quota.

Alternative 4: Increase the recreational sector’s allocation by **10 percent**; allocate 41% of the red snapper quota to the commercial sector and 59% of the quota to the recreational sector. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 4: Increase the recreational sector's allocation by 10%	2015	14.300	5.863	41.0%	8.437	59.0%
	2016	13.960	5.724	41.0%	8.236	59.0%
	2017	13.740	5.633	41.0%	8.107	59.0%

Allocation of Quota Increases

Preferred Alternative 5: If the red snapper quota is less than or equal to 9.12 million pounds (mp), maintain the commercial and recreational red snapper allocations at 51% and 49% of the red snapper quota, respectively. If the red snapper quota is greater than 9.12 mp, allocate 75% of the amount in excess of 9.12 mp to the recreational sector and 25% to the commercial sector. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 5: After RS TAC reaches 9.12 mp, allocate 75% of ACL increases to the recreational sector	2015	14.300	5.946	41.6%	8.354	58.4%
	2016	13.960	5.861	42.0%	8.099	58.0%
	2017	13.740	5.806	42.3%	7.934	57.7%

Alternative 6: If the red snapper quota is less than or equal to 9.12 million pounds (mp), maintain the commercial and recreational red snapper allocations at 51% and 49% of the red snapper quota, respectively. If the red snapper quota is greater than 9.12 mp, allocate 100% of the amount in excess of 9.12 mp to the recreational sector. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 6: After RS TAC reaches 9.12 mp, allocate all ACL increases to the recreational sector	2015	14.300	4.651	32.5%	9.649	67.5%
	2016	13.960	4.651	33.3%	9.309	66.7%
	2017	13.740	4.651	33.9%	9.089	66.1%

Alternative 7: If the red snapper quota is less than or equal to 10.0 million pounds (mp), maintain the commercial and recreational red snapper allocations at 51% and 49% of the red snapper quota, respectively. If the red snapper quota is greater than 10.0 mp, allocate 75% of the amount in excess of 10.0 mp to the recreational sector and 25% to the commercial sector. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 7: After RS TAC reaches 10.0 mp, allocate 75% of ACL increases to the recreational sector	2015	14.300	6.175	43.2%	8.125	56.8%
	2016	13.960	6.090	43.6%	7.870	56.4%
	2017	13.740	6.035	43.9%	7.705	56.1%

Reallocation of Quota based on Changes in Recreational Data

Alternative 8: The increase in allowable harvest (due to changes in recreational data) from the update assessment will be allocated to the recreational sector. The percentage increase for the recreational sector should be that amount attributable to recalibration of MRIP catch estimates. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 8: Allocate increases due to the recalibration of MRIP catch estimates to recreational sector	2015	14.300	6.951	48.6%	7.349	51.4%
	2016	13.960	6.768	48.5%	7.192	51.5%
	2017	13.740	6.645	48.4%	7.095	51.6%

Alternative 9: The increase in allowable harvest (due to changes in recreational data) from the update assessment will be allocated to the recreational sector. The percentage increase in the recreational sector should be that amount attributable to recalibration of MRIP catch estimates and the change in size selectivity. Based on red snapper quotas between 2015 and 2017, resulting allocations to the commercial and recreational sectors are:

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 9: Allocate increases due to the recalibration of MRIP catch estimates and to the change in size selectivity to rec sector	2015	14.300	6.105	42.7%	8.195	57.3%
	2016	13.960	5.911	42.3%	8.049	57.7%
	2017	13.740	5.829	42.4%	7.911	57.6%

Discussion

The Gulf of Mexico Fishery Management Council (Council) initially considered alternatives that increased the allocation above the commercial sector's current 51%. However, in considering the economic analyses conducted by the Southeast Fisheries Science Center (SEFSC) and the loss of fishing opportunities by the recreational sector, the Council concluded that such a reallocation would not meet the purpose and need of this action. Therefore, the Council limited the alternatives to either no action or increasing the recreational sector's allocation above 49%.

Alternative 1 would continue to allocate 49% of the red snapper quota to the recreational sector and 51% to the commercial sector. This allocation was established in 1990 through Reef Fish Amendment 1 (GMFMC 1989) and was based on the historical average red snapper landings by each sector for the base period of 1979-1987. Average percentages landed by each sector for various time series are provided in Table 2.1.1. Annual commercial and recreational red snapper landings between 1986 and 2013 are provided in Table 2.1.2.

Table 2.1.1. Red snapper average percentages landed by the commercial and recreational sectors.

Years	Recreational	Commercial
1986-2013	55.8%	44.2%
1991-2013	58.4%	41.6%
1996-2013	57.1%	42.9%
2001-2013	58.6%	41.4%
2006-2013	60.2%	39.8%

For the recreational and commercial sectors, the differences between the quotas and annual landings are provided in Figure 2.1.1. The Council has had limited success in consistently constraining the amounts harvested by the commercial and recreational sectors to their allotted share of the red snapper quota. As a result, the actual proportions of the aggregate quota harvested by each sector have fluctuated widely over time and consistently departed from the sector allocation set by the Council. Figure 2.1.2 compares the resource allocation established by the Council with the proportions of red snapper landings attributed to the recreational and commercial sectors.

Table 2.1.2. Recreational and commercial red snapper landings, in million pounds whole weight and in percent of the total landings.

Year	Recreational		Commercial	
	Pounds	Percent	Pounds	Percent
1986	3.491	48.55%	3.700	51.45%
1987	2.090	40.51%	3.069	59.49%
1988	3.139	44.22%	3.960	55.78%
1989	2.940	48.69%	3.098	51.31%
1990	1.625	38.00%	2.650	62.00%
1991	2.917	56.86%	2.213	43.14%
1992	4.618	59.79%	3.106	40.21%
1993	7.161	67.97%	3.374	32.03%
1994	6.076	65.35%	3.222	34.65%
1995	5.464	65.06%	2.934	34.94%
1996	5.339	55.31%	4.313	44.69%
1997	6.804	58.59%	4.810	41.41%
1998	4.854	50.91%	4.680	49.09%
1999	4.972	50.49%	4.876	49.51%
2000	4.750	49.55%	4.837	50.45%
2001	5.252	53.18%	4.625	46.82%
2002	6.535	57.76%	4.779	42.24%
2003	6.105	58.07%	4.409	41.93%
2004	6.460	58.14%	4.651	41.86%
2005	4.676	53.31%	4.096	46.69%
2006	4.131	47.05%	4.649	52.95%
2007	5.809	64.82%	3.153	35.18%
2008	4.056	62.24%	2.461	37.76%
2009	5.597	69.46%	2.461	30.54%
2010	2.651	44.09%	3.362	55.91%
2011	6.734	65.40%	3.562	34.60%
2012	7.524	65.29%	4.000	34.71%
2013	9.407	63.53%	5.399	36.47%

Sources: Recreational landings from the Southeast Fisheries Science Center including landings from the Marine Recreational Information Program, Texas Parks and Wildlife Department, and the Southeast Headboat Survey. Commercial landings from the Southeast Data Assessment and Review 31 Data Workshop Report (1990-2006), commercial catch allowances report from the National Marine Fisheries Service /Southeast Regional Office IFQ landings website (2007-2013): <http://sero.nmfs.noaa.gov/sf/ifq/CommercialQuotasCatchAllowanceTable.pdf>. Commercial landings in gutted weight were multiplied by 1.11 to convert to ww.

Table 2.1.3. Recreational red snapper landings, in pounds whole weight and in number of fish.

Year	Recreational Landings		Average Weight
	Pounds	Number	
1986	3,490,842	1,469,588	2.38
1987	2,089,548	1,175,076	1.78
1988	3,139,142	1,412,895	2.22
1989	2,940,340	1,207,466	2.44
1990	1,624,534	725,405	2.24
1991	2,917,126	1,231,079	2.37
1992	4,618,290	1,837,446	2.51
1993	7,161,264	2,496,649	2.87
1994	6,075,760	1,828,077	3.32
1995	5,463,742	1,578,667	3.46
1996	5,338,889	1,348,792	3.96
1997	6,804,229	1,853,371	3.67
1998	4,854,098	1,447,264	3.35
1999	4,972,407	1,210,655	4.11
2000	4,750,106	1,199,578	3.96
2001	5,252,285	1,302,021	4.03
2002	6,535,146	1,676,023	3.90
2003	6,105,444	1,535,670	3.98
2004	6,460,244	1,740,770	3.71
2005	4,675,920	1,209,434	3.87
2006	4,131,131	1,225,413	3.37
2007	5,808,795	1,758,320	3.30
2008	4,055,877	941,241	4.31
2009	5,596,857	1,141,275	4.90
2010	2,650,851	486,791	5.45
2011	6,734,109	1,014,046	6.64
2012	7,524,241	1,058,309	7.11
2013	9,406,637	1,330,445	7.07

Sources: Recreational landings from the Southeast Fisheries Science Center including landings from the Marine Recreational Information Program, Texas Parks and Wildlife Department, and the Southeast Headboat Survey.

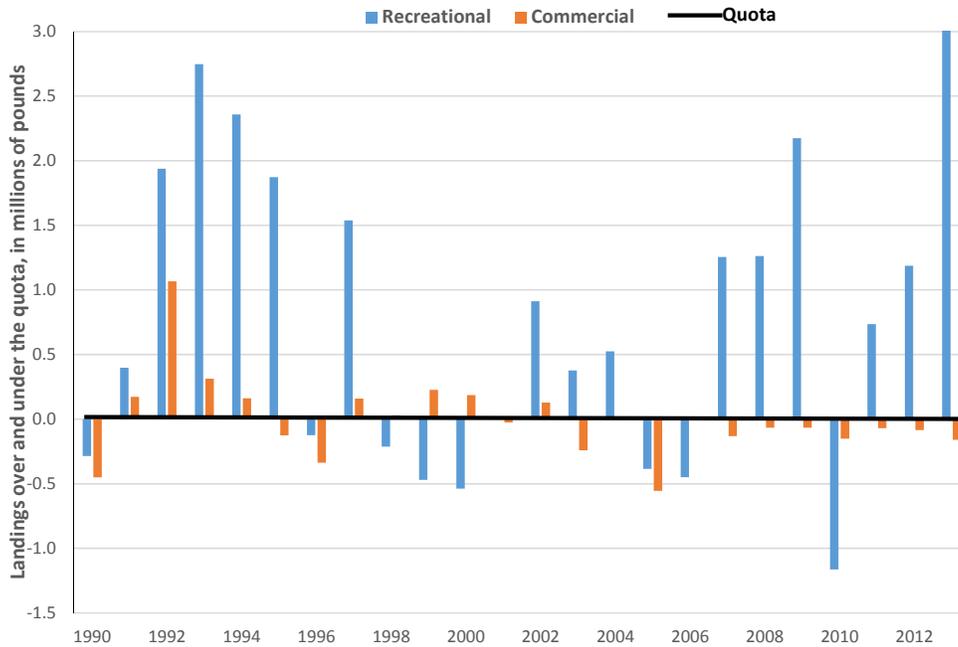


Figure 2.1.1. Differences between annual red snapper landings and quotas by sector, 1990 – 2013. For each sector, positive values indicate that landings are greater than the quota; negative values indicate that landings are less than the quota.

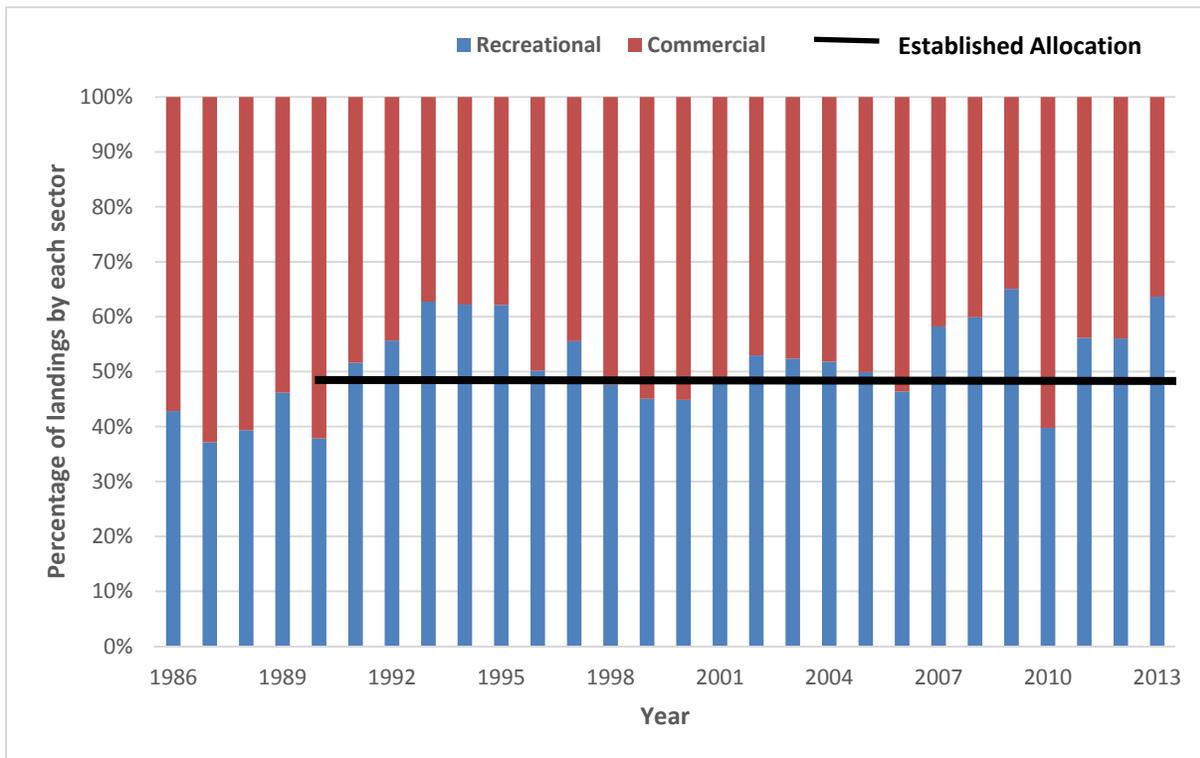


Figure 2.1.2. Comparison between the proportions of red snapper landed by each sector and the commercial/recreational split of the quota (established allocation of 51% and 49% to the commercial and recreational sectors, respectively).

Based on a status quo aggregate red snapper quota of 14.3 million pounds (mp) in 2015, **Alternative 1** would allocate 7.293 mp and 7.007 mp to the commercial and recreational sectors in 2015, respectively. **Alternatives 2, 3, and 4** consider increases to the recreational red snapper allocation by 3%, 5%, and 10% from the status quo (**Alternative 1**), increasing the recreational allocation to 52%, 54%, and 59% of the red snapper quota, respectively. Table 2.1.3 provides a summary of the commercial and recreational red snapper quotas that would result from the alternative allocations included in this action.

Table 2.1.4. Commercial and recreational red snapper allocations (mp, whole weight) based on 2015-2017 red snapper aggregate quotas (total ACLs).

Alternative	Year	Total ACL	Commercial		Recreational	
			ACL	Percent	ACL	Percent
Alternative 1: Status Quo	2015	14.300	7.293	51	7.007	49
	2016	13.960	7.120	51	6.840	49
	2017	13.740	7.007	51	6.733	49
Alternative 2: Increase the recreational sector's allocation by 3%	2015	14.300	6.864	48	7.436	52
	2016	13.960	6.701	48	7.259	52
	2017	13.740	6.595	48	7.145	52
Alternative 3: Increase the recreational sector's allocation by 5%	2015	14.300	6.578	46	7.722	54
	2016	13.960	6.422	46	7.538	54
	2017	13.740	6.320	46	7.420	54
Alternative 4: Increase the recreational sector's allocation by 10%	2015	14.300	5.863	41	8.437	59
	2016	13.960	5.724	41	8.236	59
	2017	13.740	5.633	41	8.107	59
Alternative 5: After RS TAC reaches 9.12 mp, allocate 75% of ACL increases to the recreational sector	2015	14.300	5.946	41.6%	8.354	58.4%
	2016	13.960	5.861	42.0%	8.099	58.0%
	2017	13.740	5.806	42.3%	7.934	57.7%
Alternative 6: After RS TAC reaches 9.12 mp, allocate all ACL increases to the recreational sector	2015	14.300	4.651	32.5%	9.649	67.5%
	2016	13.960	4.651	33.3%	9.309	66.7%
	2017	13.740	4.651	33.9%	9.089	66.1%
Alternative 7: After RS TAC reaches 10.0 mp, allocate 75% of ACL increases to the recreational sector	2015	14.300	6.175	43.2%	8.125	56.8%
	2016	13.960	6.090	43.6%	7.870	56.4%
	2017	13.740	6.035	43.9%	7.705	56.1%
Alternative 8: Allocate increases due to the recalibration of MRIP catch estimates to recreational sector	2015	14.300	6.951	48.6%	7.349	51.4%
	2016	13.960	6.768	48.5%	7.192	51.5%
	2017	13.740	6.645	48.4%	7.095	51.6%
Alternative 9: Allocate increases due to the recalibration of MRIP catch estimates and to the change in size selectivity to rec sector	2015	14.300	6.105	42.7%	8.195	57.3%
	2016	13.960	5.911	42.3%	8.049	57.7%
	2017	13.740	5.829	42.4%	7.911	57.6%

Preferred Alternative 5 would continue to allocate 51% of the red snapper quota to the commercial sector and 49% of the red snapper quota to the recreational sector as long as the aggregate red snapper quota is below or equal to 9.12 mp, which was the total allowable catch from 1996 through 2006. Once the threshold is reached, 75% of quota amounts in excess of 9.12 mp would be allocated to the recreational sector and 25% to the commercial sector.

In 2015, with a red snapper aggregate quota of 14.3 mp, **Preferred Alternative 5** would allocate 5.946 mp and 8.354 mp to the commercial and recreational sectors, respectively. In percentage points, **Preferred Alternative 5** would allocate 41.6% and 58.4% of the red snapper quota to the commercial and recreational sectors in 2015, respectively. Provided the quota is at least 9.12 mp, any increase or decrease from the 14.30 mp aggregate quota will result in different percentages allocated to each sector. For example, with a red snapper quota of 13.74 mp in 2016, **Preferred Alternative 5** would allocate 42.0% and 58.0% of the red snapper quota to the commercial and recreational sectors, respectively

Like **Preferred Alternative 5**, **Alternative 6** would maintain the 51/49 commercial/recreational split of the red snapper quota as long as the red snapper quota is less than or equal to 9.12 mp. However, if the red snapper quota is greater than 9.12 mp, **Alternative 6** would allocate the totality of the quota greater than 9.12 mp to the recreational sector, rather than 75% of the quota above the baseline of 9.12 mp, as in **Preferred Alternative 5**. In 2015, with a red snapper aggregate quota of 14.3 mp, **Alternative 6** would allocate 4.651 mp and 9.649 mp to the commercial and recreational sectors, respectively. In percentage points, **Alternative 6** would allocate 32.5% and 67.5% of the red snapper quota to the commercial and recreational sectors in 2015, respectively. Again, provided the red snapper aggregate quota is at least 9.12 mp, any increase or decrease from the 14.30 mp aggregate quota will result in different percentages allocated to each sector.

Alternative 7 would continue to allocate 51% of the red snapper quota to the commercial sector and 49% of the red snapper quota to the recreational sector as long as the aggregate red snapper quota is below or equal to 10.0 mp. However, if the red snapper quota is greater than 10.0 mp, 75% of quota amounts in excess of 10.0 mp would be allocated to the recreational sector and 25% to the commercial sector.

Based on an aggregate red snapper quota of 14.30 mp in 2015, **Alternative 7** would allocate 6.175 mp and 8.125 mp to the commercial and recreational sectors, respectively. In percentage points, **Alternative 7** would allocate 43.2% and 56.8% of the red snapper quota to the commercial and recreational sectors in 2015, respectively. Provided the quota is at least 10.0 mp, any increase or decrease from the 14.30 mp aggregate quota will result in different percentages allocated to each sector.

Alternative 8 would allocate quota increases due to the recalibration of MRIP catch estimates to the recreational sector. The resulting allocation is therefore determined by first allocating the quota that would result if MRIP catch estimates were not recalibrating according to the status quo percentages (51% commercial and 49% recreational) and second, adding the amount of quota estimated to result from the recalibration to the recreational sector. For 2015 to 2017, the amounts of quota attributable to the MRIP recalibration were derived from projections provided by the SEFSC (Appendix H). Percentages of the red snapper quota allocated to each sector under

Alternative 8 would not be fixed but would fluctuate based on the quota and on the amounts attributed to the recalibration. For 2015, **Alternative 8** would allocate 51.4% and 48.6% of the red snapper quota to the recreational and commercial sectors, respectively. Percentages

In addition to the amount of quota attributable to the recalibration of MRIP catch estimates, **Alternative 9** would allocate the amount of quota attributable to the change in size selectivity to the recreational sector. Amounts of quota due to the change in selectivity were also derived from the projections provided by the SEFSC and included in appendix H. As **Alternative 8**, **Alternative 9** would allocate varying percentages of the red snapper quota to the commercial and recreational sectors. For 2015, **Alternative 9** would allocate 57.3% and 42.7% of the red snapper quota to the recreational and commercial sectors, respectively. Quota amounts and percentages allocated to each sector between 2015 and 2017 are provided in Table 2.1.4.

As illustrated in Figure 2.1.2, the percentages of the red snapper aggregate quota harvested by the commercial and recreational sectors do not reflect the established allocation of 51% and 49% assigned to the commercial and recreational sectors, respectively. Alongside allocation discussions and reallocation decisions, the Council has implemented management measures (accountability measures) intended to reduce the recreational quota overages, thereby minimizing the difference between the proportion of red snapper landings attributed to each sector and the allocation established by the Council.

Recent allocation studies completed by the SEFSC and reviewed by the Socioeconomic Scientific and Statistical Committee (SESSC) have concluded that existing allocations between the commercial and recreational sectors of several reef fish resources, including red snapper, are not economically efficient. In a 2012 study evaluating the economic efficiency of the allocation of red snapper resources, Agar and Carter⁵ compared estimated commercial and recreational marginal willingness to pay for red snapper and indicated that the relative magnitude of the estimates suggests that economic efficiency could potentially be improved by reallocating red snapper resources. The SESSC reviewed and accepted the methodology of the study. The SESSC further stated that although the study results indicated that the marginal value of a recreationally caught red snapper is likely higher than the marginal value of a commercially caught red snapper, given the data used, e.g., data collection time periods (recreational data collected from a 2003 survey; commercial data collected during the last 5 years of the red snapper IFQ program), it cannot specify the potential efficiency gains from possible quota shifts because it does not know how the marginal valuations would change with the switch. The SESSC also indicated that incentive-based approaches to reallocation would be more appropriate for increasing net benefits than mandated allocations. A study evaluating potential changes in net benefits expected to result from alternatives proposed in this amendment is provided in Appendix G.

⁵ Agar and Carter presentation to the SESSC in October 2012 titled “Are the 2012 allocations of red snapper in the Gulf of Mexico economically efficient?”

CHAPTER 3. AFFECTED ENVIRONMENT

The action considered in this environmental impact statement (EIS) would affect commercial and recreational fishing for red snapper in federal and state waters of the Gulf of Mexico (Gulf). Descriptions of the physical, biological, economic, social, and administrative environments were completed in the EISs for Reef Fish Amendments 27/Shrimp Amendment 14 (GMFMC 2007), 30A (GMFMC 2008a), 30B (GMFMC 2008b), 32 (GMFMC 2011b), the Generic Essential Fish Habitat (EFH) Amendment (GMFMC 2004a), and the Generic Annual Catch Limits/Accountability Measures (ACL/AM) Amendment (GMFMC 2011a). Below, information on each of these environments is summarized or updated, as appropriate.

3.1 Description of the Red Snapper Component of the Reef Fish Fishery

A description of the fishery and affected environment relative to red snapper was last fully discussed in joint Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007). This section updates the previous description to include additional information since publication of that EIS.

General Features

Commercial harvest of red snapper from the Gulf began in the mid-1800s (Shipp 2001). In the 1930s, party boats built exclusively for recreational fishing began to appear (Chester 2001). Currently, the commercial sector operates under an individual fishing quota (IFQ) program. In 2011, 362 vessels participated in the IFQ program (NMFS 2012c). The recreational sector operates in the following three modes: charter boats, headboats, and private vessels. In 2012 private vessels accounted for 61.1% of recreational red snapper landings, followed by charter boats (24.8%) and headboats (14.1%). On a state-by-state basis, Florida accounted for the most landings (41.5%), followed by Alabama (28.1%), Louisiana (14.8%), Texas (12.0%), and Mississippi (3.7%) (Table 3.1.1).

Table 3.1.1. Recreational red snapper landings in 2012 by state and mode.

State	Landings (lbs whole weight)				% by State
	Charter	Headboat	Private	All Modes	
FL (west)	641,437	205,114	1,289,253	2,135,804	41.5%
AL	359,469	72,199	1,013,460	1,445,128	28.1%
MS	997	5,894	182,767	189,658	3.7%
LA	236,302	21,999	501,704	760,005	14.8%
TX	39,128	419,671	157,726	616,525	12.0%
Total	1,277,333	724,077	3,144,911	5,147,120	
% by Mode	24.8%	14.1%	61.1%		100%

Source: NMFS 2013a.

The red snapper stock has been found to be in decline or in an overfished condition since the first red snapper stock assessment in 1986 (Parrack and McClellan 1986). The first red snapper rebuilding plan was implemented in 1990 through Amendment 1 (GMFMC 1989). From 1990 through 2009, red snapper harvest was managed through the setting of an annual total allowable catch (TAC). This TAC was allocated with 51% going to the commercial sector and 49% to the recreational sector. Beginning in 2010, TAC was phased out in favor of an ACL as a result of revisions to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The red snapper rebuilding plan has not formally adopted the use of the term ACL. However, by allocating the acceptable biological catch (ABC) between the commercial and recreational sectors, and then setting quotas for each sector that do not exceed those allocations, the terminology and approaches used in the red snapper rebuilding plan are consistent with the use of ACLs. Such alternative terminology is allowed under the guidelines.

Amendment 1 also established a 1990 commercial red snapper quota of 3.1 million pounds (mp) whole weight (ww) (Table 3.1.2). There was no explicit recreational quota or allocation specified in Amendment 1, only a bag limit of 7 fish and a minimum size limit of 13 inches total length. Beginning in 1991, an explicit recreational allocation in pounds was based on 49% of the TAC was specified, and this allocation was specified through Council action until 1997 when the recreational allocation was changed to a quota (Table 3.1.2). Based on the 51:49 commercial to recreational sector allocation, the commercial quota implied a TAC of about 5.2 mp in 1990, followed by explicit TACs of 4.0 mp in 1991 and 1992, 6.0 mp in 1993 through 1995, and 9.12 mp from 1996 through 2006 (Table 3.1.2). The TAC was reduced to 6.5 mp in 2007 and 5.0 mp in 2008 and 2009 as the Gulf of Mexico Fishery Management Council (Council) shifted from a constant catch rebuilding plan to a constant fishing mortality rebuilding plan (GMFMC 2007). Under a constant fishing mortality rate rebuilding plan, the ABC is allowed to increase as the stock rebuilds, thus the ABCs for 2010, 2011, and 2012 were increased to 6.945, 7.530, and 8.080 mp, respectively⁶.

In July 2013, the Council reviewed a new benchmark assessment (SEDAR 31 2013) which showed that the red snapper stock was rebuilding faster than projected, partly due to strong recruitment in some recent years. Initially in 2013, a scheduled increase in the ABC to 8.690 mp was cancelled due to an overharvest in 2012 by the recreational sector. After an analysis of the impacts of the overharvest on the red snapper rebuilding plan, the 2013 ABC was increased to 8.460 mp. However, once the new benchmark assessment was completed, the Scientific and Statistical Committee (SSC) increased the ABC for 2013 to 13.5 mp with the caveat that catch levels would have to be reduced in future years unless recruitment returned to average levels. After incorporating a buffer to reduce the possibility of having to later reduce the quota, the Council further increased the 2013 commercial and recreational quotas to a combined 11.0 mp (5.61 mp and 5.39 mp, respectively) (GMFMC 2013a). The Council plans to maintain the 11.0 mp combined quota for 2014 and 2015 based on SSC recommendations, though a 2014 stock assessment may lead to a revised combined quota for 2015.

⁶ Note the allocation for the commercial and recreational quotas shifted from the TAC to the ABC in 2010.

Table 3.1.2. Red snapper landings and overage/underage by sector, 1986-2013. Landings are in mp ww. Commercial quotas began in 1990. Recreational allocations began in 1991 and recreational quotas began in 1997. Summing the recreational allocation/quota and the commercial quota yields the total allowable catch (TAC) for the years 1991-2009 and the acceptable biological catch (ABC) for 2010-2013.

Year	Recreational			Commercial			Total		
	Allocation Quota	Actual landings	Difference	Quota	Actual landings	Difference	TAC/ABC	Actual landings	Difference
1986	na	3.491	na	na	3.700	na	na	6.470	na
1987	na	2.090	na	na	3.069	na	na	4.883	na
1988	na	3.139	na	na	3.960	na	na	6.528	na
1989	na	2.940	na	na	3.098	na	na	5.754	na
1990	na	1.625	na	3.1	2.650	-0.450	na	4.264	na
1991	1.96	2.917	+0.957	2.04	2.213	+0.173	4.0	5.130	+1.130
1992	1.96	4.618	+2.658	2.04	3.106	+1.066	4.0	7.724	+3.724
1993	2.94	7.161	+4.221	3.06	3.374	+0.314	6.0	10.535	+4.535
1994	2.94	6.076	+3.136	3.06	3.222	+0.162	6.0	9.298	+3.298
1995	2.94	5.464	+2.524	3.06	2.934	-0.126	6.0	8.398	+2.398
1996	4.47	5.339	+0.869	4.65	4.313	-0.337	9.12	9.652	+0.532
1997	4.47	6.804	+2.334	4.65	4.810	+0.160	9.12	11.614	+2.494
1998	4.47	4.854	+0.384	4.65	4.680	+0.030	9.12	9.534	+0.414
1999	4.47	4.972	+0.502	4.65	4.876	+0.226	9.12	9.848	+0.728
2000	4.47	4.750	+0.280	4.65	4.837	+0.187	9.12	9.587	+0.467
2001	4.47	5.252	+0.782	4.65	4.625	-0.025	9.12	9.877	+0.757
2002	4.47	6.535	+2.065	4.65	4.779	+0.129	9.12	11.314	+2.194
2003	4.47	6.105	+1.635	4.65	4.409	-0.241	9.12	10.514	+1.394
2004	4.47	6.460	+1.990	4.65	4.651	+0.001	9.12	11.111	+1.991
2005	4.47	4.676	+0.206	4.65	4.096	-0.554	9.12	8.772	-0.348
2006	4.47	4.131	-0.339	4.65	4.649	-0.001	9.12	8.780	-0.340
2007	3.185	5.809	+2.624	3.315	3.153	-0.162	6.5	8.962	+2.462
2008	2.45	4.056	+1.606	2.55	2.461	-0.089	5.0	6.517	+1.517
2009	2.45	5.597	+3.147	2.55	2.461	-0.089	5.0	8.058	+3.058
2010	3.403	2.651	-0.752	3.542	3.362	-0.180	6.945	6.013	-0.932
2011	3.866	6.734	+2.868	3.664	3.562	-0.102	7.53	10.296	+2.766
2012	3.959	7.524	+3.565	4.121	4.000	-0.121	8.08	11.524	+3.444
2013	5.390	9.407	+4.017	5.610	5.399	-0.211	11.00	14.806	+3.806

Sources: Recreational landings from the Southeast Fisheries Science Center including landings from the Marine Recreational Information Program, Texas Parks and Wildlife Department, and the Southeast Headboat Survey. Commercial landings from the Southeast Data Assessment and Review 31 Data Workshop Report (1990-2006), commercial quotas/catch allowances report from the National Marine Fisheries Service /Southeast Regional Office IFQ landings website (2007-2013): <http://sero.nmfs.noaa.gov/sf/ifq/CommercialQuotasCatchAllowanceTable.pdf>. Commercial quotas/landings in gutted weight were multiplied by 1.11 to convert to ww. Values highlighted in red are those where landings exceeded quotas.

Both the commercial and recreational sectors have had numerous allocation or quota overruns. Table 3.1.2 shows a comparison of quotas and actual harvests from 1990 through 2012. The recreational sector has had allocation/quota overruns in 14 out of 22 years in which an allocation or quota was specified, while the commercial sector has had quota overruns in 10 of 23 years. However, the commercial sector has not had overruns since 2005, including the years 2007 onward when the commercial harvest of red snapper has operated under an IFQ program.

Recreational Sector

Red snapper are an important component of the recreational sector's harvest of reef fish in the Gulf. Red snapper are caught from charter boats, headboats (or party boats), and private anglers fishing primarily from private or rental boats. Red snapper are primarily caught with hook-and-line gear in association with bottom structures. Recreational red snapper harvest allocations since 1991 have been set at 49% of the TAC, or 1.96 mp in 1991 and 1992, 2.94 mp for 1993 through 1995, and 4.47 mp in 1996. In 1997, a 4.47 mp recreational quota was created and it was maintained at this level through 2006. In 2007, the recreational quota was reduced to 3.185 mp. It was reduced again to 2.45 mp in 2008 and 2009. Since 2010, the recreational quota has been increased each year: 3.403 mp in 2010, 3.866 mp in 2011, and 3.959 mp in 2012 (Table 3.1.3).

Before 1984, there were no restrictions on the recreational harvest of red snapper. In November 1984, a 12-inch total length size limit was implemented, but with an allowance for five undersized fish per person. In 1990, the undersized allowance was eliminated, and the recreational sector was managed through bag and size limits with a year-round open season. In 1997, the recreational red snapper allocation was converted into a quota with accompanying quota closure should the sector exceed its quota. Recreational quota closures occurred in 1997, 1998, and 1999, becoming progressively shorter each year even though the quota remained a constant 4.47 mp.

A fixed recreational season of April 21 through October 31 (194 days) was established for 2000 through 2007. However, National Marine Fisheries Service (NMFS) returned to variable length seasons beginning in 2008. Under this management approach, due to a lag in the reporting of recreational catches, catch rates over the course of the season were projected in advance based on past trends and changes in the average size of a recreationally harvested red snapper. The recreational season opened each year on June 1 and closed on the date when the quota was projected to be reached. In 2008, the season length was reduced from 194 days to 65 days in conjunction with a reduction in quota to 2.45 mp. The season length then increased to 75 days in 2009. In 2010, the recreational red snapper season was originally projected to be 53 days. However, due to reduced effort and large emergency area closures resulting from the Deepwater Horizon MC252 oil spill, catches were below projections, and a one-time supplemental season of weekend only openings (Friday, Saturday, and Sunday) was established from October 1 through November 22. This added 24 fishing days to the 2010 season for a total of 77 days. In 2011, the season was reduced to 48 days despite an increase in the quota, due to an increase in the average size of a recreationally harvested fish. In 2012 the season was initially scheduled to be 40 days, but was extended to 46 days to compensate for the loss of fishing days due to storms (Table 3.1.3). For 2013, an increase in the ABC occurred too late to extend the June recreational

season, so the Council requested that NMFS reopen the recreational season on October 1 for whatever number of days would be needed to harvest the additional quota. NMFS estimated that the additional recreational quota would take 14 days to be caught, and therefore announced a supplemental season of October 1 through 14.

Table 3.1.3. Red snapper recreational landings vs. allocation/quota and days open, bag limit, and minimum size limits 1986-2013. Landings are in mp ww. Minimum size limits are in inches total length. Recreational allocations began in 1991, and became quotas in 1997.

Year	Allocation/ Quota	Actual landings	Difference	% over or under	Days open	Bag limit	Minimum size limit
1986	na	3.491	na		365	none	13
1987	na	2.090	na		365	none	13
1988	na	3.139	na		365	none	13
1989	na	2.940	na		365	none	13
1990	na	1.625	na		365	7	13
1991	1.96	2.917	+0.957	+49%	365	7	13
1992	1.96	4.618	+2.658	+136%	365	7	13
1993	2.94	7.161	+4.221	+144%	365	7	13
1994	2.94	6.076	+3.136	+107%	365	7	14
1995	2.94	5.464	+2.524	+86%	365	5	15
1996	4.47	5.339	+0.869	+19%	365	5	15
1997	4.47	6.804	+2.334	+52%	330	5	15
1998	4.47	4.854	+0.384	+9%	272	4	15
1999	4.47	4.972	+0.502	+11%	240	4	15
2000	4.47	4.750	+0.280	+6%	194	4	16
2001	4.47	5.252	+0.782	+17%	194	4	16
2002	4.47	6.535	+2.065	+46%	194	4	16
2003	4.47	6.105	+1.635	+37%	194	4	16
2004	4.47	6.460	+1.990	+45%	194	4	16
2005	4.47	4.676	+0.206	+5%	194	4	16
2006	4.47	4.131	-0.339	-8%	194	2	16
2007	3.185	5.809	+2.624	+82%	194	2	16
2008	2.45	4.056	+1.606	+66%	65	2	16
2009	2.45	5.597	+3.147	+128%	75	2	16
2010	3.403	2.651	-0.752	-22%	53 + 24 = 77	2	16
2011	3.866	6.734	+2.868	+74%	48	2	16
2012	3.959	7.524	+3.565	+90%	46	2	16
2013	5.390	9.407	+4.017	+75%	42	2	16

Sources: Southeast Fisheries Science Center including landings from the Marine Recreational Information Program, Texas Parks and Wildlife Department, and the Southeast Headboat Survey (May 2013). Values highlighted in red are those where landings exceeded quotas.

During the six years when the recreational harvest was an allocation, not a quota (1991 – 1996), actual recreational harvests in pounds of red snapper exceeded the allocation every year except

1996. During the period when the recreational harvest was managed as a quota (1997 – 2012), actual recreational harvest in pounds of red snapper exceeded the quota in 9 out of 16 years, including 5 of the last 6 years (Table 3.1.3). It should also be noted that overages have been quite substantial when they occur (often 30% or greater than the quota) while underages are generally minor (often 12% or less of the quota). Historical recreational landings estimates have recently been revised to reflect changes in methodology under the Marine Recreational Information Program (MRIP).

For-hire vessels have operated under a limited access system with respect to the issuance of new for-hire permits for fishing reef fish or coastal migratory pelagics since 2003. A total of 3,340 reef fish and coastal migratory pelagic charter permits were issued under the moratorium, and they are associated with 1,779 vessels. Of these vessels, 1,561 have both reef fish and coastal migratory pelagics permits, 64 have only reef fish permits, and 154 have only coastal migratory pelagics permits.

Savolainen et al (2012) surveyed the charter and headboat fleets in the Gulf. They found that most charter boat trips occurred in the exclusive economic zone (68%) and targeted rig-reef species (64%; snappers and groupers). Pelagic (mackerel and cobia) trips accounted for 19% of trips. If examined by state, more trips targeted rig-reef species with the exception of Louisiana where rig-reef species and pelagic species had almost the same proportion of trips. In a similar survey conducted in 1998, Holland et al. (1999) found species targeted by Florida charter boat operators were king mackerel (41%), grouper (~37%), snapper (~34%), cobia (25%), and Spanish mackerel (20%). For the rest of the Gulf, Sutton et al. (1999) using the same survey reported that the majority of charter boats targeted snapper (91%), king mackerel (89%), cobia (76%), and tuna (55%).

For headboats, Savolainen et al (2012) reported that most head boats target offshore species and fish in federal waters (81% of trips), largely due to vessel size and consumer demand. On average, 84% of trips targeted rig-reef species, while only 10 % targeted inshore species and 6% pelagic species. Holland et al. (1999) reported approximately 40% of headboats did not target any particular species. The species targeted by the largest proportion of Gulf coast Florida headboats were snapper (60%), grouper (60%) and sharks (20%) with species receiving the largest percentage of effort red grouper (46%), gag 33%), black grouper (20%), and red snapper (7%). For the other Gulf States, Sutton et al. (1999) reported that the majority of headboats targeted snapper (100%), king mackerel (85%), shark (65%), tuna (55%), and amberjack (50%). The species receiving the largest percentage of total effort by headboats in the four-state area were snapper (70%), king mackerel (12%), amberjack (5%), and shark (5%).

Commercial Sector

In the Gulf, red snapper are primarily harvested commercially with hook-and-line and bandit gear, with bandit gear being more prevalent. Longline gear captures a small percentage of total landings (generally < 5%; SEDAR 31 2013). Current regulations prohibit longline gear for the harvest of reef fish inside of 50 fathoms west of Cape San Blas. East of Cape San Blas, longline gear is prohibited for harvest of reef fish inside of 20 fathoms from September through May.

From June through August, the longline boundary is shifted out to 35 fathoms to protect foraging sea turtles.

Between 1990 and 2006, the principal method of managing the commercial sector for red snapper was with quotas set at 51% of TAC and seasonal closures after each year's quota was filled. The result was a race for fish in which fishermen were compelled to fish as quickly as possible to maximize their catch of the overall quota before the season was closed. The fishing year was characterized by short periods of intense fishing activity with large quantities of red snapper landed during the open seasons. The result was short seasons and frequent quota overruns (Table 3.1.4). From 1993 through 2006, trip limits, limited access endorsements, split seasons and partial monthly season openings were implemented in an effort to slow the race for fish. At the beginning of the 1993 season, 131 boats qualified for red snapper endorsements on their reef fish permits that entitled them to land 2,000 lbs of red snapper per trip.

In 2007, an IFQ program was implemented for the commercial red snapper sector. Each vessel that qualified for the program was issued shares of the commercial quota. The amount of shares was based on historical participation. At the beginning of each year, each shareholder is issued allocation in pounds based on the amount of shares they have. Each shareholder is then allowed to harvest or their allocation to other fishermen, or purchase allocation from other fishermen. In addition, shares can be bought and sold. As a result of this program, the commercial red snapper season has not closed since 2007, but a commercial vessel cannot land red snapper unless it has sufficient allocation in its vessel account to cover the landing poundage. Thus, the IFQ program has ended quota overruns (Table 3.1.4). Recently, a 5-year review of the IFQ program was completed (GMFMC 2013b) and the Council is working to determine if changes are needed to the program.

Table 3.1.4. Commercial red snapper harvest vs. days open, by sector, 1986-2012.

Year	Quota	Actual landings	Days Open (days that open or close at noon are counted as half-days) (“+” = split season)
1986	na	3.700	365
1987	na	3.069	365
1988	na	3.960	365
1989	na	3.098	365
1990	3.1	2.650	365
1991	2.04	2.213	235
1992	2.04	3.106	52½ + 42 = 94½
1993	3.06	3.374	94
1994	3.06	3.222	77
1995	3.06	2.934	50 + 1½ = 51½
1996	4.65	4.313	64 + 22 = 86
1997	4.65	4.810	53 + 18 = 71
1998	4.65	4.680	39 + 28 = 67
1999	4.65	4.876	42 + 22 = 64
2000	4.65	4.837	34 + 25 = 59
2001	4.65	4.625	50 + 20 = 70
2002	4.65	4.779	57 + 24 = 81
2003	4.65	4.409	60 + 24 = 84
2004	4.65	4.651	63 + 32 = 95
2005	4.65	4.096	72 + 48 = 120
2006	4.65	4.649	72 + 43 = 115
2007	3.315	3.153	IFQ
2008	2.55	2.461	IFQ
2009	2.55	2.461	IFQ
2010	3.542	3.362	IFQ
2011	3.664	3.562	IFQ
2012	4.121	4.000	IFQ
2013	5.610	5.399	IFQ

Sources: Southeast Data Assessment and Review 31 Data Workshop Report (1990-2011 landings), commercial quotas/catch allowances report from National Marine Fisheries Service/Southeast Regional Office Individual Fishing Quota landings website. Commercial quotas/landings in gutted weight were multiplied by 1.11 to convert to ww. Values highlighted in red are those where landings exceeded quotas.

3.2 Description of the Physical Environment

The Gulf has a total area of approximately 600,000 square miles (1.5 million km²), including state waters (Gore 1992). It is a semi-enclosed, oceanic basin connected to the Atlantic Ocean by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel (Figure 3.2.1). Oceanographic conditions are affected by the Loop Current, discharge of freshwater into the

northern Gulf, and a semi-permanent, anti-cyclonic gyre in the western Gulf. The Gulf includes both temperate and tropical waters (McEachran and Fechhelm 2005). Gulf water temperatures range from 54° F to 84° F (12° C to 29° C) depending on time of year and depth of water. Mean annual sea surface temperatures ranged from 73 ° F through 83° F (23-28° C) including bays and bayous (Figure 3.2.1) between 1982 and 2009, according to satellite-derived measurements (NODC 2012: <http://accession.nodc.noaa.gov/0072888>). In general, mean sea surface temperature increases from north to south with large seasonal variations in shallow waters.

The physical environment for Gulf reef fish, including red snapper, is also detailed in the EIS for the Generic EFH Amendment and the Generic ACL/AM Amendment (refer to GMFMC 2004a; GMFMC 2011a). In general, reef fish are widely distributed in the Gulf, occupying both pelagic and benthic habitats during their life cycle. A planktonic larval stage lives in the water column and feeds on zooplankton and phytoplankton (GMFMC 2004a). Juvenile and adult reef fish are typically demersal and usually associated with bottom topographies on the continental shelf (<100m) which have high relief, i.e., coral reefs, artificial reefs, rocky hard-bottom substrates, ledges and caves, sloping soft-bottom areas, and limestone outcroppings. However, several species are found over sand and soft-bottom substrates. For example, juvenile red snapper are common on mud bottoms in the northern Gulf, particularly off Texas through Alabama. Also, some juvenile snapper (e.g. mutton, gray, red, dog, lane, and yellowtail snappers) and grouper (e.g. Goliath grouper, red, gag, and yellowfin groupers) have been documented in inshore seagrass beds, mangrove estuaries, lagoons, and larger bay systems.

In the Gulf, fish habitat for adult red snapper consists of submarine gullies and depressions; coral reefs, rock outcroppings, and gravel bottoms; oilrigs; and other artificial structures (GMFMC 2004a). Detailed information pertaining to the closures and preserves is provided in the February 2010 Regulatory Amendment (GMFMC 2010).

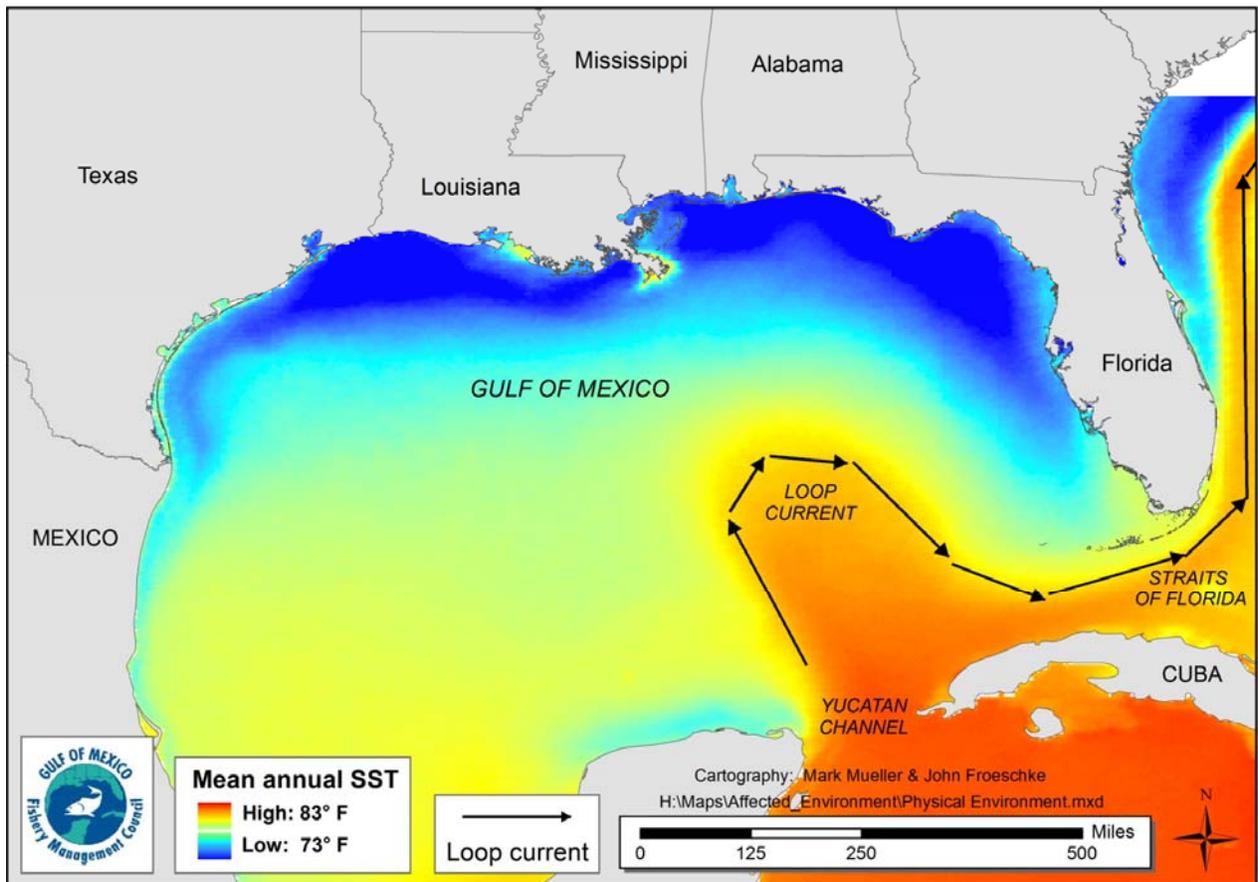


Figure 3.2.1. Physical environment of the Gulf including major feature names and mean annual sea surface temperature as derived from the Advanced Very High Resolution Radiometer Pathfinder Version 5 sea surface temperature data set (<http://accession.nodc.noaa.gov/0072888>)

3.3 Description of the Biological Environment

The biological environment of the Gulf, including the species addressed in this amendment, is described in detail in the final EIS for the Generic EFH Amendment (GMFMC 2004a) and is incorporated here by reference.

Red Snapper Life History and Biology

Red snapper demonstrate the typical reef fish life history pattern (Appendix C). Eggs and larvae are pelagic while juveniles are found associated with bottom features or over barren bottom. Spawning occurs over firm sand bottom with little relief away from reefs during the summer and fall. Most females are mature by age two and almost all are mature by age 5 (Woods et al. 2003). Red snapper have been aged up to 57 years (Wilson and Nieland 2001). In the late 1990s, most caught by the directed fishery were 2- to 4-years old (Wilson and Nieland 2001), but a recently completed stock assessment suggests that the age and size of red snapper in the directed fishery has increased in recent years (SEDAR 31 2013). A more complete description of red snapper life history can be found in the EIS for the Generic EFH Amendment (GMFMC 2004a).

Status of the Red Snapper Stock

Southeast Data Assessment and Review (SEDAR) 31 Benchmark Stock Assessment

Commercial harvest of red snapper from the Gulf began in the mid-1800s (Shipp 2001). In the 1930s, party boats built exclusively for recreational fishing began to appear (Chester 2001). The first stock assessment conducted by NMFS in 1986 suggested that the stock was in decline (Parrack and McLellan 1986) and since 1988 (Goodyear 1988) the stock biomass has been in an overfished condition.

A red snapper update assessment was conducted by the Southeast Fishery Science Center (SEFSC) in 2014 and presented to the SSC in January 2015 SSC⁷. This update assessment was based on the SEDAR 31 benchmark in 2012 and 2013 (SEDAR 31 2013). The primary assessment model selected for the SEDAR 31 Gulf red snapper stock evaluation assessment was Stock Synthesis (Methot 2010). Stock Synthesis is an integrated statistical catch-at-age model which is widely used for stock assessments in the United States and throughout the world. Commercial landings data included commercial handline and longline landings from the accumulated landings system from 1964 through 2011. For landings between 1880 and 1963, previously constructed historical landings were used. Total annual landings from the IFQ program for years 2007-2011 were used to reapportion 2007-2011 accumulated landings system data across strata. Recreational landings data included the MRIP/Marine Recreational Fishery Statistics Survey (MRFSS) from 1981-2011, Southeast Headboat Survey for 1981-2011, and

⁷ The written report for the 2014 red snapper update assessment is in preparation. A version of the PowerPoint presentation describing the assessment was presented to the Council at its January 2015 meeting, and is available at the January 2015 briefing materials on the Council website (<http://www.gulfcouncil.org>) or by going directly to: http://www.gulfcouncil.org/council_meetings/Briefing%20Materials/BB-01-2015/B%20-%202014%20Red%20Snapper%202014%20Update%20Presentation.pdf

Texas Parks and Wildlife Department survey for 1983-2011. For the years 2004-2011, MRIP landings are available. For earlier years, MRFSS data were calibrated to MRIP estimates using a standardized approach for calculating average weight that accounts for species, region, year, state, mode, wave, and area.

Standardized indices of relative abundance from both fishery dependent and independent data sources were included in the model. The fishery dependent indices came from the commercial handline fleet, recreational headboats, and recreational private/for-hire sectors. Fishery independent indices came from the Southeast Area Monitoring and Assessment Program (SEAMAP) bottom trawl survey, SEAMAP reef fish video survey, NMFS bottom longline survey, and the SEAMAP plankton survey.

Red snapper discards in the Gulf were calculated from data collected by the self-reported commercial logbook data and the NMFS Gulf reef fish observer program. In addition to these directed fisheries discards, estimates of red snapper bycatch from the commercial shrimp fleet were also generated.

For the update assessment, the model and methods used were the same as SEDAR 31 except as follows.

1. Because recreational fishermen appear to be selecting for larger and older fish in recent years, a new selectivity timeblock (2011-2013) was added in the model for all recreational fleets to accommodate recent changes in fishing patterns.
2. The Marine Recreational Information Program (MRIP) implemented new data collection methods beginning in March 2013. Due in part to the addition of dockside interviews in late afternoon and evening, which was beyond the time frame previously used, landings data collected under the new methodology appear to be higher than comparable landings in earlier years. An MRIP calibration workshop convened by NMFS in the summer of 2014 developed methods to rescale MRIP estimates from 2004-2012 to account for possible undersampling outside “peak hours”. The “rescaled” MRIP (2004-2013) landings were then used in turn to rescale years prior to 2004 as in SEDAR 31. The east and west portions of the stock were modeled separately. The revised recreational landings are generally 10% to 20% higher than in SEDAR 31, and the revised discards show proportionately higher rates than in SEDAR 31.

The results of the 2014 update assessment indicate that overfishing is not occurring and the stock is continuing to rebuild, but it remains overfished. Based on the assessment, the SSC recommended overfishing limits (OFL) and acceptable biological catch (ABC) for the years 2015-2017. The OFL is the resulting yield when the fishing mortality level is set to the rate that maximizes long-term yield (i.e., fishing at F_{MSY} , which results in attainment of MSY). The ABC was derived by determining a harvest rate ($F_{REBUILD-26\% SPR}$) that would rebuild the stock to a spawning potential ratio (SPR) of 26% of the unfished spawning potential ($B_{26\% SPR}$; a proxy for B_{MSY}) by 2032. To account for uncertainty in the true value of $F_{REBUILD-26\% SPR}$, a probability density function that reflects scientific uncertainty was developed. Based on Tier 1 of the

Council’s ABC control rule (GMFMC 2011a), a P* (acceptable probability of overfishing) of 0.427 was established to determine ABC for each year.

The original SSC recommendations for red snapper OFL and ABC were based on projections that assumed harvest in 2014 would be the same as in 2013. Provisional landings estimates for 2014 indicated that the recreational 2014 landings were less than in 2013. When the projections were re-run using the provisional 2014 landings, revised OFL and ABC yields were produced. The SSC reviewed the updated analysis at a webinar meeting in February 2015, and approved the revised 2015-2017 OFL and ABC yields. The original and revised OFLs and ABCs are listed in Table 3.2.1.

Table 3.2.1. SSC projections for red snapper OFL and ABC 2015-2017

Year	Original Projections		Projections with Provisional 2014 Landings	
	OFL	ABC	OFL	ABC
2015	14.73 mp	13.00 mp	16.13 mp	14.30 mp
2016	14.56 mp	13.21 mp	15.32 mp	13.96 mp
2017	14.40 mp	13.32 mp	14.80 mp	13.74 mp

General Information on Reef Fish Species

The National Ocean Service collaborated with NMFS and the Council to develop distributions of reef fish (and other species) in the Gulf (SEA 1998). The National Ocean Service obtained fishery-independent data sets for the Gulf, including SEAMAP, and state trawl surveys. Data from the Estuarine Living Marine Resources Program contain information on the relative abundance of specific species (highly abundant, abundant, common, rare, not found, and no data) for a series of estuaries, by five life stages (adult, spawning, egg, larvae, and juvenile) and month for five seasonal salinity zones (0-0.5, 0.5-5, 5-15, 15-25, and >25 parts per thousand). National Ocean Service staff analyzed these data to determine relative abundance of the mapped species by estuary, salinity zone, and month. For some species not in the Estuarine Living Marine Resources Program database, distribution was classified as only observed or not observed for adult, juvenile, and spawning stages.

In general, reef fish are widely distributed in the Gulf, occupying both pelagic and benthic habitats during their life cycle. Habitat types and life history stages are summarized in Appendix C and can be found in more detail in GMFMC (2004a). In general, both eggs and larval stages are planktonic. Larvae feed on zooplankton and phytoplankton. Exceptions to these generalizations include the gray triggerfish that lay their eggs in depressions in the sandy bottom, and gray snapper whose larvae are found around submerged aquatic vegetation. Juvenile and adult reef fish are typically demersal, and are usually associated with bottom topographies on the continental shelf (<328 feet; <100 m) which have high relief, i.e., coral reefs, artificial reefs, rocky hard-bottom substrates, ledges and caves, sloping soft-bottom areas, and limestone outcroppings. However, several species are found over sand and soft-bottom substrates. Juvenile red snapper are common on mud bottoms in the northern Gulf, particularly from Texas to Alabama. Also, some juvenile snappers (e.g. mutton, gray, red, dog, lane, and yellowtail

snappers) and groupers (e.g. goliath grouper, red, gag, and yellowfin groupers) have been documented in inshore seagrass beds, mangrove estuaries, lagoons, and larger bay systems (GMFMC 1981). More detail on hard bottom substrate and coral can be found in the Fishery Management Plan (FMP) for Corals and Coral Reefs (GMFMC and SAFMC 1982).

Status of Reef Fish Stocks

The Reef Fish FMP currently encompasses 31 species (Table 3.3.2). Eleven other species were removed from the FMP in 2012 through the Generic ACL/AM Amendment (GMFMC 2011a). Stock assessments and stock assessment reviews have been conducted for 13 species and can be found on the Council (www.gulfcouncil.org) and SEDAR (www.sefsc.noaa.gov/sedar) websites. The assessed species are:

- Red Snapper (SEDAR 7 2005; SEDAR 7 Update 2009; SEDAR 31 2013)
- Vermilion Snapper (Porch and Cass-Calay 2001; SEDAR 9 2006c; SEDAR 9 Update 2011a)
- Yellowtail Snapper (Muller et al. 2003; SEDAR 3 2003; O’Hop et al. 2012)
- Mutton Snapper (SEDAR 15A 2008)
- Gray Triggerfish (Valle et al. 2001; SEDAR 9 2006a; SEDAR 9 Update 2011b)
- Greater Amberjack (Turner et al. 2000; SEDAR 9 2006b; SEDAR 9 Update 2010)
- Hogfish (Ault et al. 2003; SEDAR 6 2004b)
- Red Grouper (NMFS 2002; SEDAR 12 2007; SEDAR 12 Update 2009)
- Gag (Turner et al. 2001; SEDAR 10 2006; SEDAR 10 Update 2009)
- Black Grouper (SEDAR 19 2010)
- Yellowedge Grouper (Cass-Calay and Bahnick 2002; SEDAR 22 2011b)
- Tilefish (Golden) (SEDAR 22 2011a)
- Atlantic Goliath Grouper (Porch et al. 2003; SEDAR 6 2004a; SEDAR 23 2011)

The NMFS Office of Sustainable Fisheries updates its Status of U.S. Fisheries Report to Congress on a quarterly basis utilizing the most current stock assessment information. The most recent update can be found at: <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>. The status of both assessed and unassessed stocks as of the writing of this report is shown in Table 3.3.1.

Table 3.3.1. Species of the Reef Fish FMP grouped by family.

Common Name	Scientific Name	Stock Status
Family Balistidae – Triggerfishes		
Gray Triggerfish	<i>Balistes capriscus</i>	Overfished, no overfishing
Family Carangidae – Jacks		
Greater Amberjack	<i>Seriola dumerili</i>	Overfished, no overfishing
Lesser Amberjack	<i>Seriola fasciata</i>	Unknown
Almaco Jack	<i>Seriola rivoliana</i>	Unknown
Banded Rudderfish	<i>Seriola zonata</i>	Unknown
Family Labridae - Wrasses		
Hogfish	<i>Lachnolaimus maximus</i>	Unknown
Family Malacanthidae - Tilefishes		
Tilefish (Golden)	<i>Lopholatilus chamaeleonticeps</i>	Not overfished, no overfishing
Blueline Tilefish	<i>Caulolatilus microps</i>	Unknown
Goldface Tilefish	<i>Caulolatilus chrysops</i>	Unknown
Family Serranidae - Groupers		
Gag	<i>Mycteroperca microlepis</i>	Overfished, no overfishing
Red Grouper	<i>Epinephelus morio</i>	Not overfished, no overfishing
Scamp	<i>Mycteroperca phenax</i>	Unknown
Black Grouper	<i>Mycteroperca bonaci</i>	Not overfished, no overfishing
Yellowedge Grouper	* <i>Hyporthodus flavolimbatus</i>	Not overfished, no overfishing
Snowy Grouper	* <i>Hyporthodus niveatus</i>	Unknown
Speckled Hind	<i>Epinephelus drummondhayi</i>	Unknown
Yellowmouth Grouper	<i>Mycteroperca interstitialis</i>	Unknown
Yellowfin Grouper	<i>Mycteroperca venenosa</i>	Unknown
Warsaw Grouper	* <i>Hyporthodus nigritus</i>	Unknown
**Atlantic Goliath Grouper	<i>Epinephelus itajara</i>	Unknown
Family Lutjanidae - Snappers		
Queen Snapper	<i>Etelis oculatus</i>	Unknown
Mutton Snapper	<i>Lutjanus analis</i>	Not overfished, no overfishing
Blackfin Snapper	<i>Lutjanus buccanella</i>	Unknown
Red Snapper	<i>Lutjanus campechanus</i>	Overfished, no overfishing
Cubera Snapper	<i>Lutjanus cyanopterus</i>	Unknown
Gray Snapper	<i>Lutjanus griseus</i>	Unknown
Lane Snapper	<i>Lutjanus synagris</i>	Unknown
Silk Snapper	<i>Lutjanus vivanus</i>	Unknown
Yellowtail Snapper	<i>Ocyurus chrysurus</i>	Not overfished, no overfishing
Vermilion Snapper	<i>Rhomboplites aurorubens</i>	Not overfished, no overfishing
Wenchman	<i>Pristipomoides aquilonaris</i>	Unknown

Notes: * In 2013 the genus for yellowedge grouper, snowy grouper, and warsaw grouper was changed by the American Fisheries Society from *Epinephelus* to *Hyporthodus* (American Fisheries Society 2013).

**Atlantic goliath grouper is a protected grouper and benchmarks do not reflect appropriate stock dynamics. In 2013 the common name was changed from goliath grouper to Atlantic goliath grouper by the American Fisheries Society to differentiate from the Pacific goliath grouper, a newly named species (American Fisheries Society 2013).

Protected Species

There are 38 species protected by federal law that may occur in the Gulf. Thirty-seven of these are under the jurisdiction of NMFS, while the West Indian manatee (*Trichechus manatus*) is managed by the U.S. Fish and Wildlife Service. Of the species under NMFS's jurisdiction, 28 are marine mammals that are protected under the Marine Mammal Protection Act. Six of these marine mammal species are also listed as endangered under the Endangered Species Act (ESA) (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). In addition to those six marine mammals, five sea turtle species (Kemp's ridley, loggerhead, green, leatherback, and hawksbill), two fish species (Gulf sturgeon and smalltooth sawfish), and two coral species (elkhorn coral and staghorn coral) are also protected under the ESA. Designated critical habitat for *Acropora* corals, smalltooth sawfish, and Gulf sturgeon also occur within nearshore waters of the Gulf. Further, designated critical habitat for the Northwest Atlantic Distinct Population Segment of loggerhead sea turtles has been proposed for some nearshore waters of the Gulf. Information on the distribution, biology, and abundance of these protected species in the Gulf is included in the final EIS to the Generic EFH Amendment (GMFMC 2004a) and the February 2005, October 2009, and September 2011 ESA biological opinions on the reef fish fishery (NMFS 2005; NMFS 2009; NMFS 2011a). Marine Mammal Stock Assessment Reports and additional information are also available on the NMFS Office of Protected Species website: <http://www.nmfs.noaa.gov/pr/sspecies/>.

The gear used by the Gulf reef fish fishery is classified in the Marine Mammal Protection Act 2014 List of Fisheries as a Category III fishery (79 FR 14418). This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from any fishery is less than or equal to 1% of the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. Dolphins are the only species documented as interacting with these fisheries. Bottlenose dolphins prey upon on the bait, catch, and/or released discards of fish from the reef fish fishery. They are also a common predator around reef fish vessels, feeding on the discards.

All five species of sea turtles are adversely affected by the Gulf reef fish fishery. Incidental captures are relatively infrequent, but occur in all commercial and recreational hook-and-line and longline components of the reef fish fishery. Captured sea turtles can be released alive or can be found dead upon retrieval of the gear as a result of forced submergence. Sea turtles released alive may later succumb to injuries sustained at the time of capture or from exacerbated trauma from fishing hooks or lines that were ingested, entangled, or otherwise still attached when they were released. Sea turtle release gear and handling protocols are required in the commercial and for-hire reef fish fisheries to minimize post-release mortality.

Smalltooth sawfish are also affected by the Gulf reef fish fishery, but to a much lesser extent. Smalltooth sawfish primarily occur in the Gulf off peninsular Florida. Incidental captures in the commercial and recreational hook-and-line components of the reef fish fishery are rare events, with only eight smalltooth sawfish estimated to be incidentally caught annually, and none are expected to result in mortality (NMFS 2005). Fishermen in this fishery are required to follow

smalltooth sawfish safe handling guidelines. The long, toothed rostrum of the smalltooth sawfish causes this species to be particularly vulnerable to entanglement in fishing gear.

On September 30, 2011, the Protected Resources Division released a biological opinion, which concluded that the continued operation of the Gulf reef fish fishery is not likely to jeopardize the continued existence of sea turtles (loggerhead, Kemp's ridley, green, hawksbill, and leatherback) or smalltooth sawfish (NMFS 2011a). An incidental take statement was issued specifying the amount and extent of anticipated take, along with reasonable and prudent measures and associated terms and conditions deemed necessary and appropriate to minimize the impact of these takes. The Council addressed measures to reduce take in the reef fish fishery's longline component in Amendment 31 (GMFMC 2009). Other listed species and designated critical habitat in the Gulf were determined not likely to be adversely affected.

On December 7, 2012, NMFS published a proposed rule to list 66 coral species under the ESA and reclassify *Acropora* from threatened to endangered (77 FR 73220). In a memo dated February 13, 2013, NMFS determined the reef fish fishery was not likely to adversely affect *Acropora* because of where the fishery operates, the types of gear used in the fishery, and that other regulations protect *Acropora* where they are most likely to occur. None of the new information regarding population level concerns would affect those determinations.

Deepwater Horizon MC252 Oil Spill

On April 20, 2010 an explosion occurred on the Deepwater Horizon MC252 oil rig approximately 36 nautical miles (41 statute miles) off the Louisiana coast. Two days later the rig sank. An uncontrolled oil leak from the damaged well continued for 87 days until the well was successfully capped by British Petroleum on July 15, 2010. The Deepwater Horizon MC252 oil spill affected at least one-third of the Gulf area from western Louisiana east to the Florida Panhandle and south to the Campeche Bank in Mexico (Figure 3.3.1).

As reported by the National Oceanic and Atmospheric Administration Office of Response and Restoration (NOAA 2010), the oil from the Deepwater Horizon MC252 spill is relatively high in alkanes, which can readily be used by microorganisms as a food source. As a result, the oil from this spill is likely to biodegrade more readily than crude oil in general. The Deepwater Horizon MC252 oil is also relatively much lower in polyaromatic hydrocarbons. Polyaromatic hydrocarbons are highly toxic chemicals that tend to persist in the environment for long periods of time, especially if the spilled oil penetrates into the substrate on beaches or shorelines. Like all crude oils, MC252 oil contains volatile organic compounds (VOCs) such as benzene, toluene, and xylene. Some VOCs are acutely toxic but because they evaporate readily, they are generally a concern only when oil is fresh.⁸

In addition to the crude oil, 1.4 million gallons of the dispersant, Corexit 9500A[®], was applied to the ocean surface and an additional 770,000 gallons of dispersant was pumped to the mile-deep well head (National Commission 2010). No large-scale applications of dispersants in deep water had been conducted until the Deepwater Horizon MC252 oil spill. Thus, no data exist on the

⁸ Source: http://sero.nmfs.noaa.gov/sf/deepwater_horizon/OilCharacteristics.pdf

environmental fate of dispersants in deep water. However, a study found that, while Corexit 9500A[®] and oil are similar in their toxicity, when Corexit 9500A[®] and oil were mixed in lab tests, toxicity to microscopic rotifers increased up to 52-fold (Rico-Martínez et al. 2013). This suggests that the toxicity of the oil and dispersant combined may be greater than anticipated.

Oil could exacerbate development of the hypoxic “dead” zone in the Gulf as could higher than normal input of water from the Mississippi River drainage. For example, oil on the surface of the water could restrict the normal process of atmospheric oxygen mixing into and replenishing oxygen concentrations in the water column. In addition, microbes in the water that break down oil and dispersant also consume oxygen; this could lead to further oxygen depletion.

Changes in the amount and distribution of fishing effort in the Gulf in response to the oil spill and area closures has required a reanalysis of the number of days needed for the recreational sector to fill its quota in 2010. The continuing but unknown effects of the oil spill on both fishing effort and red snapper abundance are being monitored. Nevertheless, substantial portions of the red snapper population are found in the northwestern and western Gulf (western Louisiana and Texas) and an increasing population of red snapper is developing off the west Florida continental shelf. Thus, spawning by this segment of the stock may not be impacted, which would mitigate the overall impact of a failed spawn by that portion of the stock located in oil-affected areas.

As a result of the Deepwater Horizon MC252 spill, a consultation pursuant to ESA Section 7(a)(2) was reinitiated. As discussed above, on September 30, 2011, the Protected Resources Division released a biological opinion, which after analyzing best available data, the current status of the species, environmental baseline (including the impacts of the recent Deepwater Horizon MC252 oil release event in the northern Gulf), effects of the proposed action, and cumulative effects, concluded that the continued operation of the Gulf reef fish fishery is not likely to jeopardize the continued existence of green, hawksbill, Kemp’s ridley, leatherback, or loggerhead sea turtles, nor the continued existence of smalltooth sawfish (NMFS 2011a).

For additional information on the Deepwater Horizon MC252 oil spill and associated closures, see:

http://sero.nmfs.noaa.gov/deepwater_horizon_oil_spill.htm.

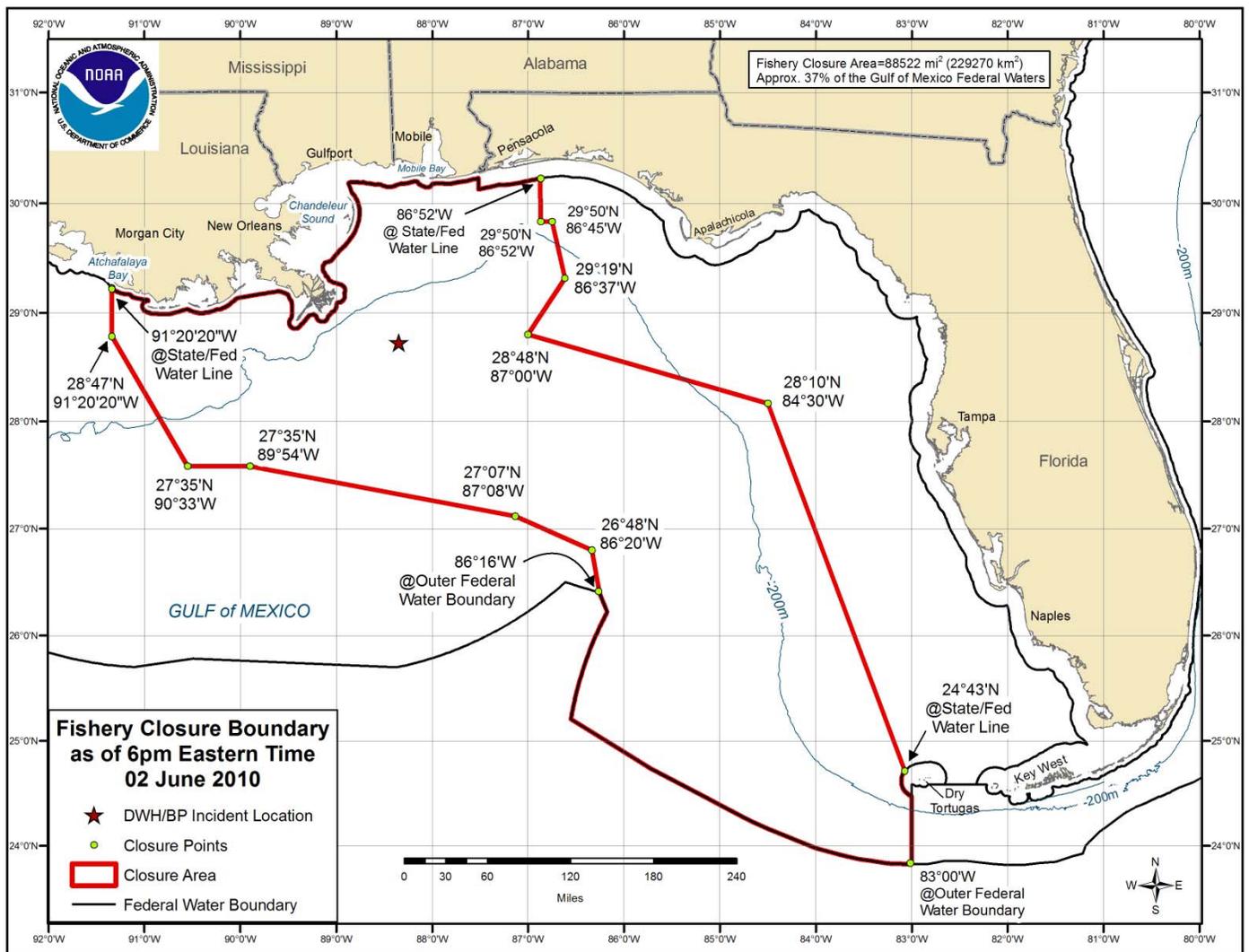


Figure 3.3.1. Fishery closure at the height of the Deepwater Horizon MC252 oil spill.

3.4 Description of the Social Environment

This section provides the conceptual and historical background for the proposed actions which will be evaluated in Chapter 4.

Allocation is a social issue of assigning access to a scarce resource. Reallocation is inherently controversial when the result will benefit some and be detrimental to others. When considering allocations of fishing privileges, the Magnuson-Stevens Act requires fishery managers to examine social and economic factors as laid out in the National Standards. These include National Standard 4 which states if it becomes necessary to allocate fishing privileges among fishermen, the allocation will be fair and equitable, will promote conservation, and be carried out such that no particular entity receives an excessive share; National Standard 5 which states conservation and management measures will consider efficiency in the utilization of fishery resources except that no such measure will have economic allocation as its sole purpose; and National Standard 8 which states that conservation and management measures shall take into account the importance of fishery resources to fishing communities.

NMFS' technical memorandum on the principles and practice of allocation (Plummer et al. 2012) identifies two main criteria for the national standard mandates. Each criterion is based on a conceptual approach from distinct social sciences: economic efficiency and social equity. While a quantitative framework exists for analyzing economic efficiency, there is no such quantitative framework for evaluating fairness and equity (Plummer et al. 2012). This section provides information on the social context for the evaluation of fairness for the two purposes of this action: to increase net benefits and increase the stability of red snapper fishing, particularly for the recreational sector that has experienced shorter and shorter seasons.

Plummer et al.'s (2012) review of approaches to evaluate fairness focuses on critiques of the application of efficiency analyses to policy. Specifically, efficiency is critiqued for the decision to ignore issues of equity by reducing such social concerns to assumptions of "other things being equal" (Dietz and Atkinson 2010, Copes 1997, Bromley 1977), when in fact, they are not. Dietz and Atkinson (2010) argue efficiency and fairness are often presented as a trade-off in environmental policy, but show that "public preferences do not support making efficiency the only goal of policy, at the expense of equity" (2010:440). Bromley (1977) also addresses the tension between requirements that policy consider economic efficiency and social fairness, arguing that allocation fairness in the distribution of fishing rights is just as important as efficiency for making policy decisions. Bromley further critiques efficiency analyses for their lack of attention to distributional effects and questions assumptions that an "efficiency analysis is scientific and value free" (1977).

Copes (1997) echoes Bromley's critique of economic efficiency, repeating the concerns on the use of "other things being equal" in efficiency analyses "to exclude from consideration interdependencies that may be important for their distributional repercussions" (1997:65). While such assumptions simplify the economic analysis, both Copes and Bromley argue that efficiency analyses ignore the social costs that underlie the direct and indirect social impacts (Copes 1997, Bromley 1977, 1990). That other things are *not* equal, precisely reflects those components of the human environment that are at the center of equity considerations. Furthermore, from the social

perspective, willingness-to-pay studies measure ideology of respondents more than actual behavior (Andreoni 1990), undermining any potential net benefits.

A review of the allocation decisions made by regional fishery management councils can provide insight into how allocation decisions have been made elsewhere around the country (Plummer et al. 2012). Nearly all allocation decisions have been based on historical or current landings ratios. Following initial establishment of a sector allocation, seven stocks have undergone a revision to the original allocation; five of these examples are in the Gulf. One, vermilion snapper, had its sector allocation removed entirely.

Of the remaining four examples from the Gulf, Plummer et al. (2012) cite two stocks as having had their allocations shifted in favor of the recreational sector: greater amberjack (Amendment 30A, GMFMC 2008a) and red grouper (Amendment 30B, GMFMC 2008b). Although Plummer et al. describe the respective actions as reallocations, each amendment specifically avoided labeling the action as an allocation. For greater amberjack, the adopted management measures were intended to reduce recreational effort less (by 18-26%) than commercial effort (by 38%). However, the actual allocation decision was moved to the considered but rejected section of the amendment; no reallocation was adopted.

For red grouper, the initial allocation decision in Amendment 1 (GMFMC 1989) set an aggregate grouper allocation at 35% recreational and 65% commercial; no allocations were established for individual grouper species. Secretarial Amendment 1 (GMFMC 2004b) created a commercial red grouper quota, but specifically stated that no allocation decision was being made. The commercial quota represented 81% of the total allowable catch. In Amendment 30B (GMFMC 2008b), an “interim” allocation was established for red grouper at 24% recreational and 76% commercial. Thus, the two actions affected the distribution of access to the resource while avoiding the formal declaration of a sector allocation.

The other two Gulf examples concern species for which management is shared between the Gulf and South Atlantic Councils: king and Spanish mackerel. Since it was first established in 1987, the allocation for the Atlantic stock of Spanish mackerel has been changed twice, once toward the recreational sector and once toward the commercial sector. Initially established at 76% commercial and 24% recreational, the allocation was changed in 1989 to 50%:50%, due to a determination that the allocation was based on a time period of overfishing and low recreational participation. In 1998, the commercial allocation was increased because the recreational sector was not harvesting its quota. The 2% change in the king mackerel allocation towards the commercial sector was an adjustment to account for the sale of recreational catches that counted against the commercial quota. The allocations of both these species are scheduled to be reviewed in Coastal Migratory Pelagics Amendment 24, currently under development.

Finally, the remaining two cases come from the Pacific Fishery Management Council’s management of salmon, Amendments 7 (PFMC 1986) and 9 (PFMC 1988). In contrast to nearly all allocation decisions that have been based on landings ratios, the rationale for these two cases was to provide more stability to the recreational sector. For both stocks, the recreational component is a directed fishery while the commercial component is provided for bycatch. In both examples, the reallocation was based on the recommendations from a working group of

commercial and recreational fishermen and is an example of negotiation-based allocation. Also in this case, the sector allocations shift depending on the size of the quota, similar in design to Alternatives 5 and 6 of Action 1.

Context of red snapper management in the Gulf

Historical patterns of harvest by both sectors is an important consideration for the distributional effects of allocation (Plummer et al. 2012). In the Gulf, the commercial and recreational sectors are managed differently and separately. Allocating between sectors is difficult to determine because the “characteristics, motivations, and output measures for participants differ dramatically” (Gislason 2006).

The existing allocation for red snapper was implemented alongside the establishment of a total allowable catch, and corresponding management measures intended to reduce landings by 20% for each sector (GMFMC 1989). Thus, at the time the allocation was established, there was already great demand for red snapper by both sectors. A minimum size limit of 13” was adopted for both sectors, alongside a recreational bag limit of 7 fish per angler per day, and a commercial quota of 3.1 mp. Since then, both sectors have been subject to additional measures to reduce harvests and effort (Figure 3.4.1) which have been insufficient to restrict harvests before reaching the quota for either sector (Figure 3.4.2).

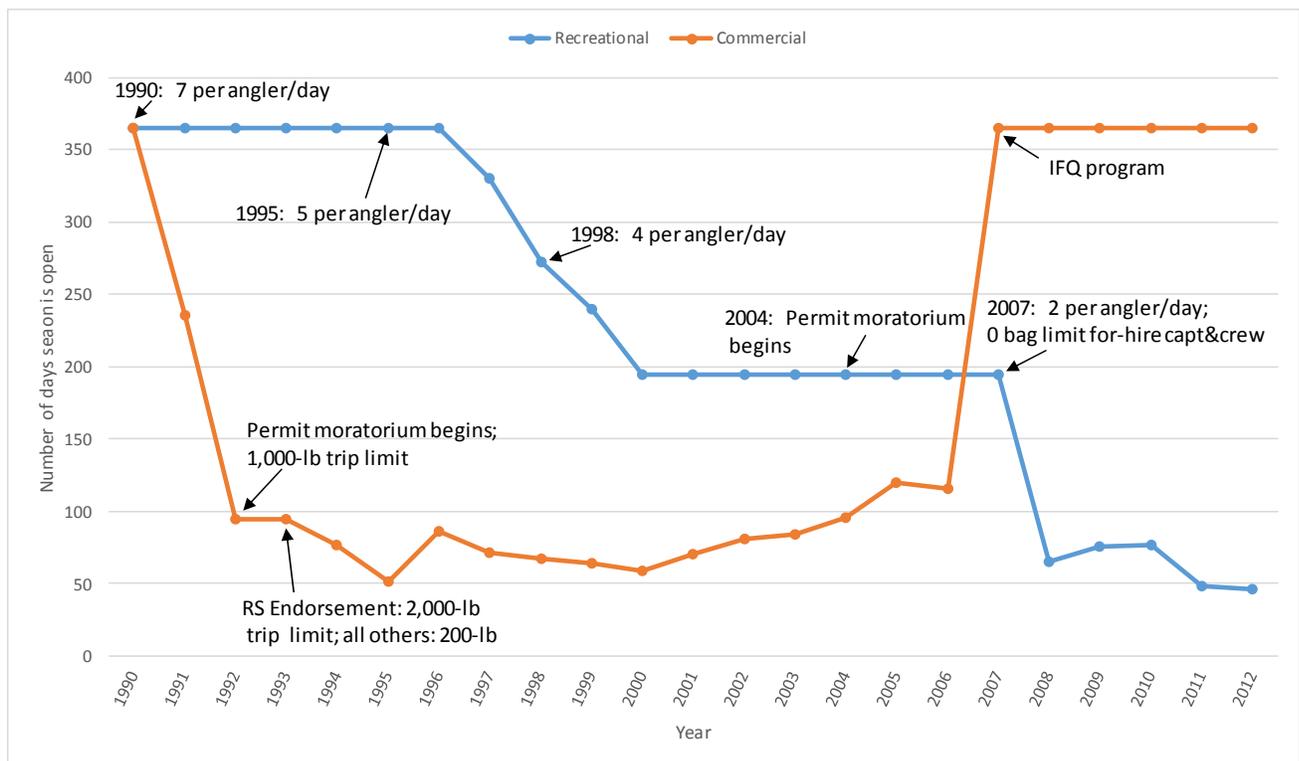


Figure 3.4.1. Length of fishing season for commercial and recreational sectors, with changes in bag limits, trip limits, and implementation dates of limited access regulations. The timeline does not include minimum size limits or additional requirements such as use of a vessel monitoring system.

For the **commercial sector**, the year the allocation was established (1990) was the last year commercial fishing was open year round until implementation of the IFQ program in 2007 (Figure 3.4.1). Entry to the commercial sector was capped in 1992, when the commercial reef fish permit moratorium began. No additional commercial permits have been available since that time, effectively capping sector participation. The following year, the system of red snapper endorsements for commercial permit holders was adopted. A red snapper endorsement allowed the holder a 2,000-lb trip limit, while all other commercial permit holders were allowed a 200-lb trip limit.

Despite the adoption of endorsements and trip limits to constrain harvests, from the early 1990’s until implementation of the IFQ program, the commercial fishing seasons were best described as “derbies,” where vessels raced to fish before each harvest closure. During this time, the commercial harvest was usually open only 10 days at a time. The IFQ program was implemented in 2007 to address two identified problems in commercial red snapper fishing: the derby fishing conditions and “overcapacity” in the commercial sector.

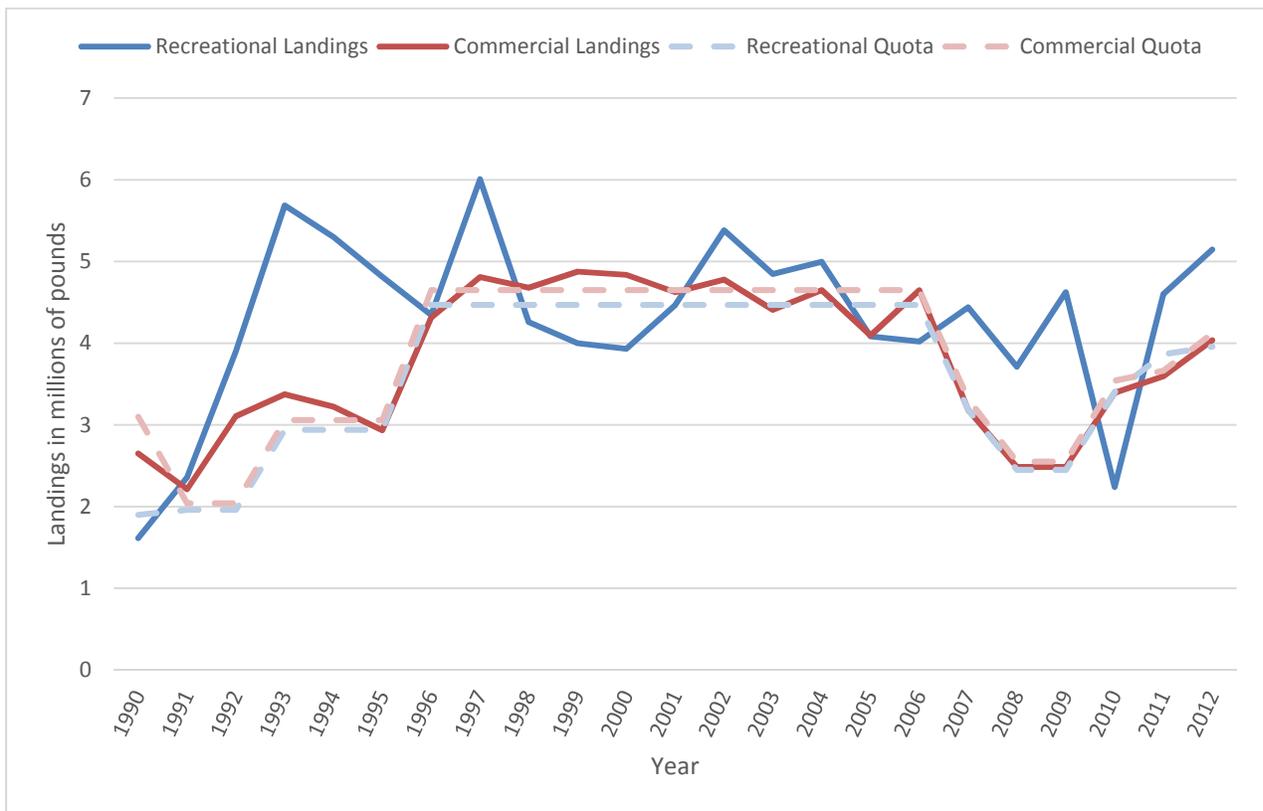


Figure 3.4.2. Recreational and commercial landings (solid lines) and quotas (dotted lines).

The IFQ program fundamentally restructured commercial fishing for red snapper. The opportunity for any permitted commercial vessel to harvest a trip limit of red snapper during a short open season was replaced by a system in which a vessel’s crew must obtain access to a quantity of red snapper prior to being harvested. Thus, the system of attempting to constrain commercial harvest to a quota using trip limits and closed seasons was replaced by a system

based on the distribution and exchange of portions of the red snapper commercial quota. This has effectively eliminated the occurrence of quota overages. From the sector-wide perspective, this has enabled the fishing season to remain open year round and for total landings to remain within the quota. The implementation of the IFQ program has resolved both issues of subtractability and excludability, within the sector. Though these controls appear to have improved the problems they were designed to address, the program has benefited some fishermen and been a detriment to others.

Although the **recreational sector** is often described as “open access,” open entry is more accurate as a true open access resource lacks rules of usage (Feeny et al. 1990). For the recreational sector, harvest constraints are implemented primarily by reductions to the bag limit and shortening of the fishing season. The bag limit has been reduced from seven red snapper per angler per day in 1990 (when the sector allocation was established), to five fish in 1995, four fish in 1998, and two fish in 2007 (Figure 3.4.1). In 1997, the recreational season was shortened for the first time from year round and has been getting shorter ever since. From 2008 through 2012, the recreational season averaged 62 days in length.

The practice in recent years of projecting season length for a given quota based on past effort has not prevented the quota from being exceeded (Figure 3.4.2). Without attending measures to actually stop harvest when the quota is met, a quota does not on its own constitute an output control. There is a disjunction between management measures used to constrain the rate of recreational harvest, and attempts to estimate the rate of harvest under such measures, as anglers modify their fishing activity in response to new access restrictions. Even with additional quota, continuing to rely on existing management measures to slow harvest may allow two problems to continue. First, the harvest coming from the recreational sector will continue to face the problems of “subtractability” and “excludability,” where the resource is open to anyone able to access it during a particular time. Without rules governing who has access to the resource (excludability), the effects of smaller returns are shared among all participants (subtractability; Feeny et al. 1990; McCay and Acheson 1987).

The second problem concerns the quota overages. Alongside the short seasons and lag time to calculate landings from MRIP, quota overages are likely to continue under the system of predicting season length based on past fishing effort. Faced with a shorter season for a desired target species, individual anglers rationally adjust their effort and fishing activity. With no restrictions on entry to the fishery (excludability), new participants join as well. This has resulted in an inverse relationship between season length and effort, where the shorter the length of the recreational fishing season, the more red snapper have been landed per day (Figure 3.4.3). However, it cannot be assumed that the pattern would reverse, where an increase in the length of the season would correspond with a proportional reduction in effort. An increasing proportion of the total recreational quota has been landed outside of the federal season under less restrictive state regulations. Compounding this problem, the average weight of a red snapper has increased under the rebuilding plan meaning that each angler’s bag limit weighs more. Thus, the rate at which the quota is caught accelerates. That recreational anglers as a sector are said to “exceed the quota” is not a reflection of individual angler compliance, but rather, reflects rational changes to fishing activity under situations of decreased access, and the inability of the existing management system to close harvest before the quota is met. Thus, the adoption of

accountability measures to reduce the likelihood of quota overages (Action 2.1) and to make adjustments to the quota in the event it is exceeded (Action 2.2) are included in this plan amendment.

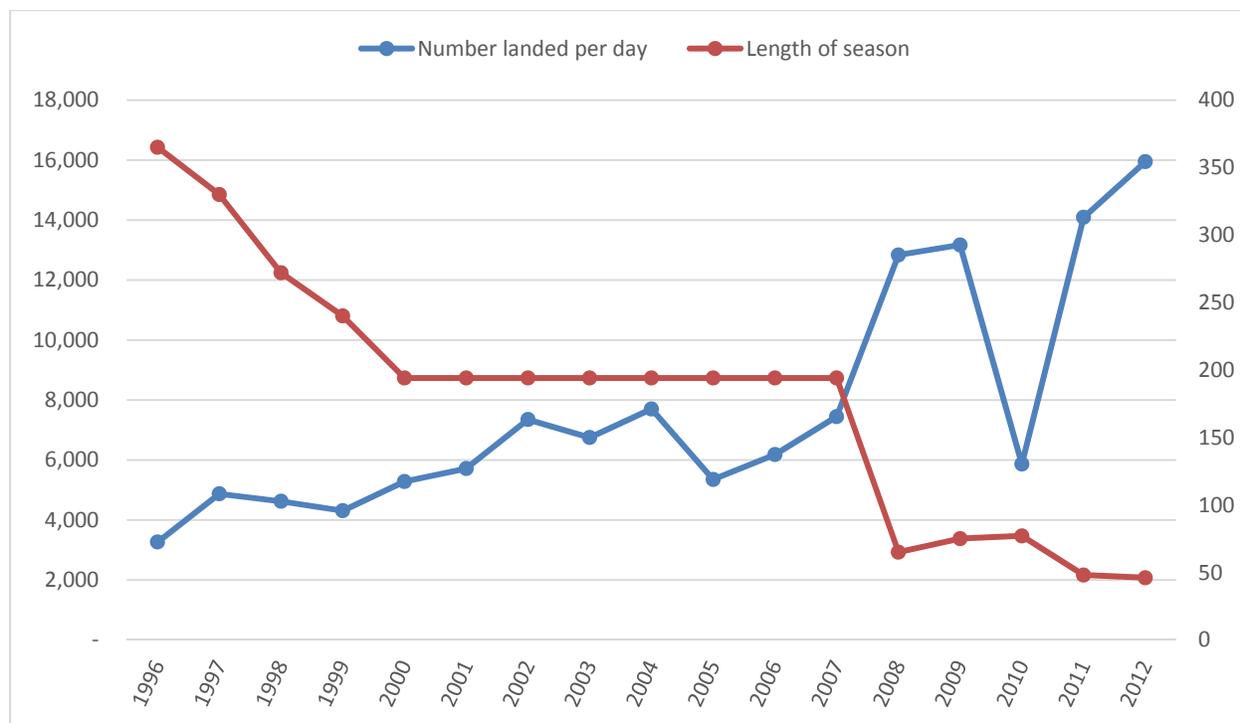


Figure 3.4.3. Length of recreational red snapper season in days (red line, right axis) and landings divided by average weight of fish and number of days in the federal season (blue line, left axis), providing an average number of red snapper landed per day the federal season was open (1996-2012). This includes red snapper landed outside of the federal season under less restrictive state regulations. Source: Southeast Fisheries Science Center, recreational ACL dataset (Sept 2013).

Recreational anglers can access red snapper fishing by private vessels and for-hire vessels. Both modes share the same bag limit and fishing season; however, additional restrictions are placed on the for-hire fleet, to which private vessels are not subject. Since 2007, captain and crew of for-hire vessels have been prohibited from retaining a bag limit, and there are mandatory reporting requirements for headboats to report all landings and discards. In 2004, a moratorium was put in place on the issuance of federal for-hire permits. As with commercial permits, no new federal for-hire permits may be issued, but existing permits may be transferred. There is no mechanism to limit entry by private recreational vessels. Also, since 2009, federally permitted for-hire vessels are prohibited from landing red snapper outside of the federal season, such as during extended state water seasons.

Thus, the issue of excludability described above reflects private recreational vessels only. During the open season, participation is limited to a finite number of for-hire vessels, but there is no restriction to the number of private vessels that may harvest red snapper. Since the permit moratorium became effective, the number of federally permitted for-hire vessels has decreased,

while the number of private fishing licenses has increased. The proportion of red snapper landed by each component of the recreational sector has shifted toward private vessel landings representing a greater proportion of the recreational quota (Figure 3.4.4). For the years 1991-2011, private-angler landings of red snapper represent 45.5% of recreational landings, but represent 56% for just the last 6 years. For-hire vessel landings of red snapper have decreased proportionally for these same years, from 54.5% to 44% of the recreational landings.

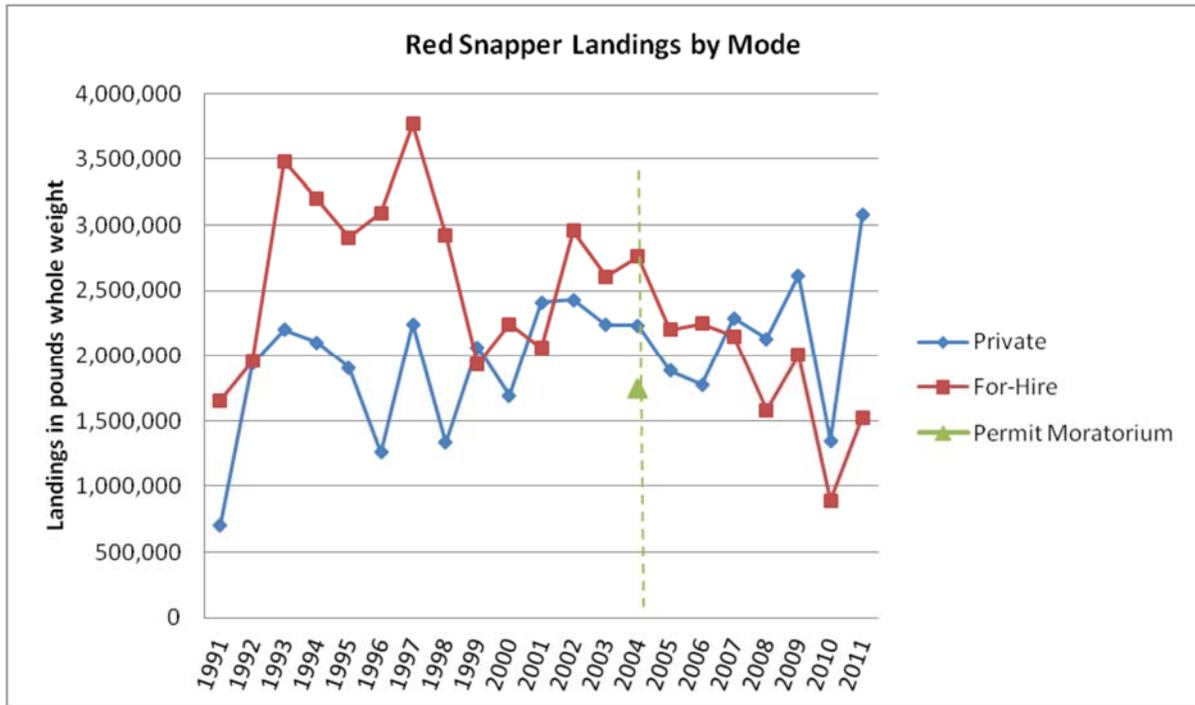


Figure 3.4.4. Red snapper recreational landings by private vessels and for-hire vessels (includes charter boats and headboats). Source: Southeast Fisheries Science Center, recreational ACL dataset (4/2012).

3.4.1 Fishing Communities

This section provides a description of where recreational and commercial fishing for red snapper occurs. The description is based on the geographical distribution of landings and the relative importance of red snapper for commercial and recreational communities. This spatial approach enables discussion of fishing communities and the importance of fishery resources to those communities, as required by National Standard 8.

Commercial Fishing Communities

To identify commercial reliance, a regional quotient (RQ) measure was used. The RQ measures the relative importance of a given species across all communities in the region and represents the proportional distribution of commercial landings of a particular species. This proportional measure does not provide the number of pounds or the value of the catch; data that might be confidential at the community level for many places. The RQ is calculated by dividing the total pounds (or value) of a species landed in a given community, by the total pounds (or value) for

that species for all communities in the region. The measure is a way to quantify the importance of red snapper to communities around the Gulf coast and suggest where impacts from management actions are more likely to be experienced. The data used for the RQ measure were assembled from the accumulated landings system (ALS), which includes commercial landings of all species from both state and federal waters and is based on dealers' reports. Because of this, the address of a dealer may not be the coastal community where the dealer's facility is located.

Commercial red snapper fishing is prosecuted throughout the Gulf region with the majority of landings occurring in the northern Gulf. Based on the RQ measure, the top 15 commercial red snapper fishing communities are identified in Figure 3.4.1.1. A community's proportion of total landings is not static and changes over time. Thus, the figure provides rankings by RQ value for four years: 2000, 2005, 2008, and 2011. The top three communities in terms of commercial landings are Galveston, Texas; Destin, Florida; and Golden Meadow, Louisiana (Figure 3.4.1.1). While in 2000, Panama City, Florida ranked first for commercial red snapper landings Gulf-wide, the community has since been replaced by Destin, Florida in terms of commercial landings of red snapper.

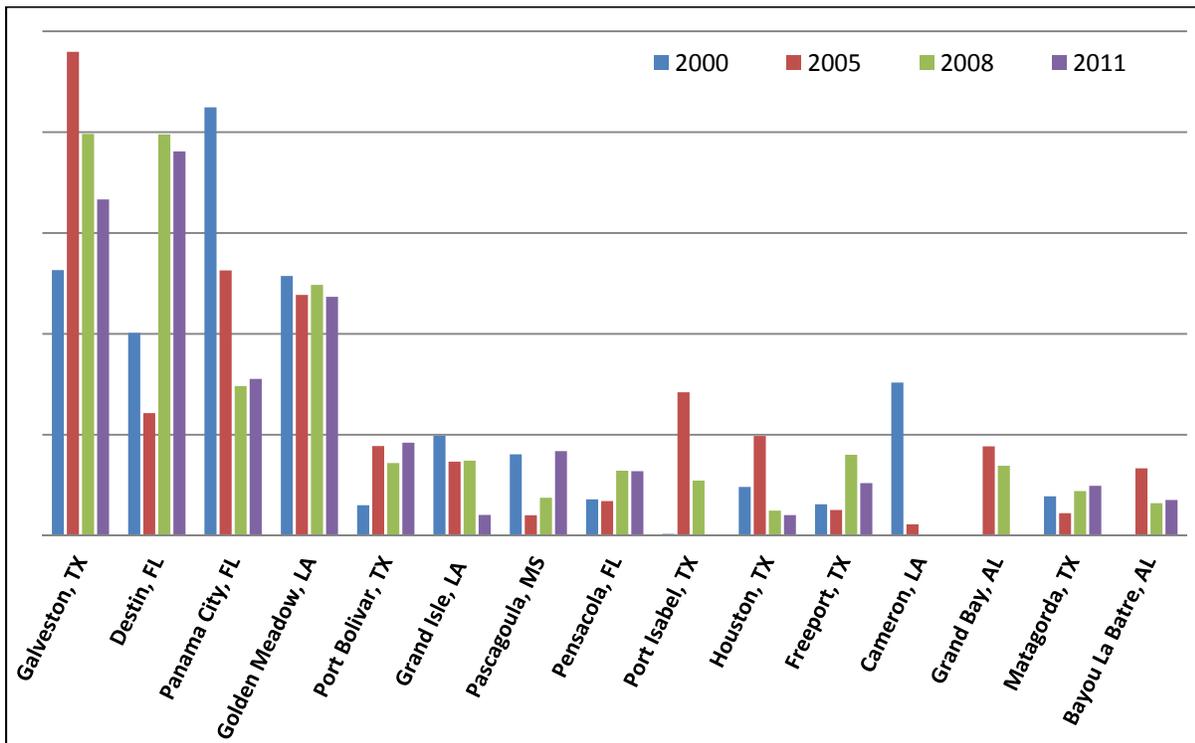


Figure 3.4.1.1. Top 15 commercial red snapper fishing communities by RQ value for four years. Source: Southeast Fisheries Science Center, accumulated landings system (2011).

To better understand how Gulf fishing communities are engaged and reliant on fishing, indices were created using secondary data from permit and landings information for the commercial and recreational sectors (Jepson and Colburn 2013; Jacob et al. 2012). Fishing engagement is primarily the absolute numbers of permits, landings, and value. Fishing reliance has many of the

same variables as engagement divided by population to give an indication of the per capita impact of this activity.

Using a principal component and single solution factor analysis each community receives a factor score for each index to compare to other communities. With the selected communities from both sectors, factor scores of both engagement and reliance were plotted onto bar graphs. Factor scores are denoted by colored bars and are standardized, therefore the mean is zero. Two thresholds of one and ½ standard deviation above the mean are plotted onto the graphs to help determine a threshold for significance. Because the factor scores are standardized a score above 1 is also above one standard deviation. Using the thresholds of fishing dependence of ½ and one standard deviation, Figure 3.4.1.2 suggests that several communities are substantially engaged or reliant or both on commercial fishing.

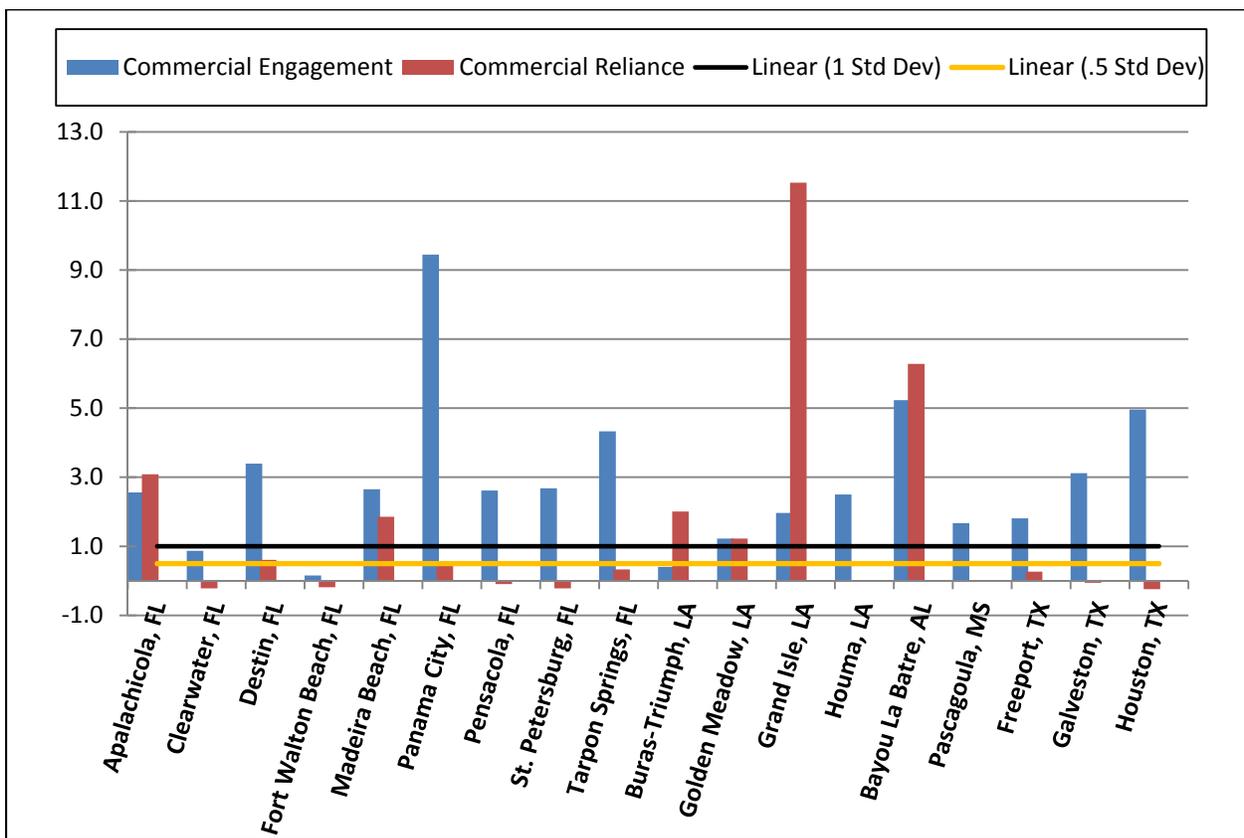


Figure 3.4.1.2. Top 18 red snapper fishing communities’ commercial engagement and reliance. Source: Southeast Regional Office, social indicators database (2012).

Recreational Fishing Communities

Red snapper is harvested recreationally in all states in the Gulf. However, as the red snapper stock has continued to rebuild, the proportion of landings made up by the eastern Gulf States (Alabama and western Florida) has increased compared to the western Gulf States (Texas and Louisiana). Most of the recreational catch is now landed in the eastern Gulf (Table 3.4.1.1). Fishermen in other Gulf States are also involved in recreational red snapper fishing, but these states represent a smaller percentage of the total recreational landings.

Table 3.4.1.1. Percentage of total recreational red snapper landings by state for 2013.

State	Landings
AL	43.9%
FL (Gulf Coast)	40.8%
LA	6.0%
MS	4.5%
TX	4.9%

Source: SERO Calibrated MRIP landings (Dec 2014).

Red snapper landings for the recreational sector are not available at the community level, making it difficult to identify communities as dependent on recreational fishing for red snapper. Data reflecting commercial landings of red snapper may or may not reflect areas of importance for recreational fishing of red snapper. It cannot be assumed that the proportion of commercial red snapper landings among other species in a community would be similar to its proportion among recreational landings within the same community because of sector differences in fishing practices and preferences.

While there are no landings data at the community level for the recreational sector, Table 3.4.1.2 offers a ranking of communities based upon the number of reef fish charter permits and reef fish charter permits divided by population. This is a crude measure of the reliance upon recreational reef fish fishing and is general in nature and not specific to red snapper. Ideally, additional variables quantifying the importance of recreational fishing to a community would be included (such as the amount of recreational landings in a community, availability of recreational fishing related businesses and infrastructure, etc.); however, these data are not available at this time. Because the analysis used discrete geo-political boundaries, Panama City and Panama City Beach had separate values for the associated variables. Calculated independently, each still ranked high enough to appear in the list suggesting a greater importance for recreational fishing in that region. At this time it is impossible to examine the intensity of recreational fishing activity at the community level for a specific species. However, it is likely that those communities that have a higher rank in terms of charter activity and have a dynamic commercial fishery for red snapper will likely have a vigorous recreational red snapper fishery. The communities that meet those criteria are: Destin, Panama City, and Pensacola, Florida; Port Bolivar and Freeport, Texas; and Venice and Grand Isle, Louisiana.

Table 3.4.1.2. Average community rank by total number of reef fish charter permits and divided by community population (SERO 2012).

State	Community	Reef Fish charter permits	Permit Rank	Pop	Permit/Pop	Permit/Pop rank	Combined rank
AL	Orange Beach	105	2	5185	0.0203	3	5
LA	Venice	36	7	202	0.1782	1	8
FL	Destin	114	1	12307	0.0093	10	11
AL	Dauphin Island	19	12	1375	0.0138	5	17
TX	Port Aransas	33	9	3444	0.0096	9	18
LA	Grand Isle	14	17	597	0.0235	2	19
TX	Freeport	40	5	12183	0.0033	15	20
TX	Port O'Connor	15	15	1253	0.0120	7	22
FL	Panama City	60	3	36795	0.0016	20	23
FL	Steinhatchee	13	19	1047	0.0124	6	25
FL	Pensacola	43	4	52903	0.0008	22	26
FL	Panama City Beach	32	10	11364	0.0028	16	26
FL	Apalachicola	17	14	2357	0.0072	12	26
FL	Naples	35	8	20405	0.0017	19	27
LA	Chauvin	15	15	3220	0.0047	13	28
TX	Galveston	38	6	49990	0.0008	23	29
FL	Cedar Key	8	27	463	0.0173	4	31
TX	Matagorda	8	27	710	0.0113	8	35
MS	Biloxi	26	11	43921	0.0006	25	36
FL	Mexico Beach	9	25	1181	0.0076	11	36
FL	Carrabelle	10	23	2612	0.0038	14	37
FL	Sarasota	18	13	52877	0.0003	26	39
FL	Madeira Beach	11	21	4335	0.0025	18	39
FL	Port St Joe	10	23	3560	0.0028	17	40
FL	Tarpon Springs	14	17	23071	0.0006	24	41
FL	St Petersburg	12	20	245715	0.0000	27	47
FL	Treasure Island	8	27	6847	0.0012	21	48
TX	Houston	11	21	2068026	0.0000	29	50
TX	Corpus Christi	9	26	299324	0.0000	28	54

Destin and Panama City are likely more reliant with regard to recreational fishing as they have numerous charter operations. When visiting charter service websites from these two communities photos of red snapper are very prominent and advertised as a key target species (<http://www.fishdestin.com/fishinggallery.html>; and <http://www.jubileefishing.com/>). Panama City is less reliant upon red snapper and located in a more rural area than the other communities. In terms of occupation it has the lowest percentage working in farming, forestry, and fishing, yet it does have the largest percentage class of worker in that category. All of these communities are considered to be primarily involved in fishing based upon their community profiles (Impact Assessment, Inc. 2005).

The Orange Beach Red Snapper World Championship Tournament, billed as “Alabama’s state celebration of recreational saltwater fishing,”⁹ was an annual event in March. Dauphin Island, Alabama also has a number of charter services that specialize in bottom fishing, especially for red snapper¹⁰. All three Alabama communities are considered primarily involved in fishing as noted in their fishing communities’ profiles (Impact Assessment, Inc. 2006). Red snapper fishing is featured at Pascagoula charter websites¹¹ and the community is regarded as primarily involved in fishing according to its community profile (Impact Assessment, Inc. 2006).

Venice and Grand Isle, Louisiana, are also ranked among the top recreational fishing communities. A sampling of charter service websites from these communities indicates they do feature red snapper as a target species but not as prominently as charter services from other states.

Red snapper are also an important species for charter fishing in Galveston and Freeport, Texas. Many of the charter services include photos of red snapper catches on their website and note that this species is one of their prime target species.¹² Although many inshore species like trout and redfish are more prominently displayed. Matagorda and Freeport are noted as being primarily involved in fishing while Galveston is secondarily involved.

The following figure was produced from the indicator database as described above for the commercial sector. Figure 3.4.1.4 identifies recreational communities engaged and reliant upon fishing in general. Using thresholds of fishing dependence of ½ standard deviation and one standard deviation, Figure 3.4.1.4 suggests that several communities are substantially engaged in recreational fishing.

⁹ http://www.cityoforangebeach.com/pages_2007/pdfs/events/2009/2009_Snapper_Tournament.pdf

¹⁰ <http://gulfinfo.com/fishing.htm>

¹¹ <http://www.jkocharters.com/1938863.html>

¹² <http://www.texasaltwaterfishingguide.com/> or <http://www.matagordabay.com/>

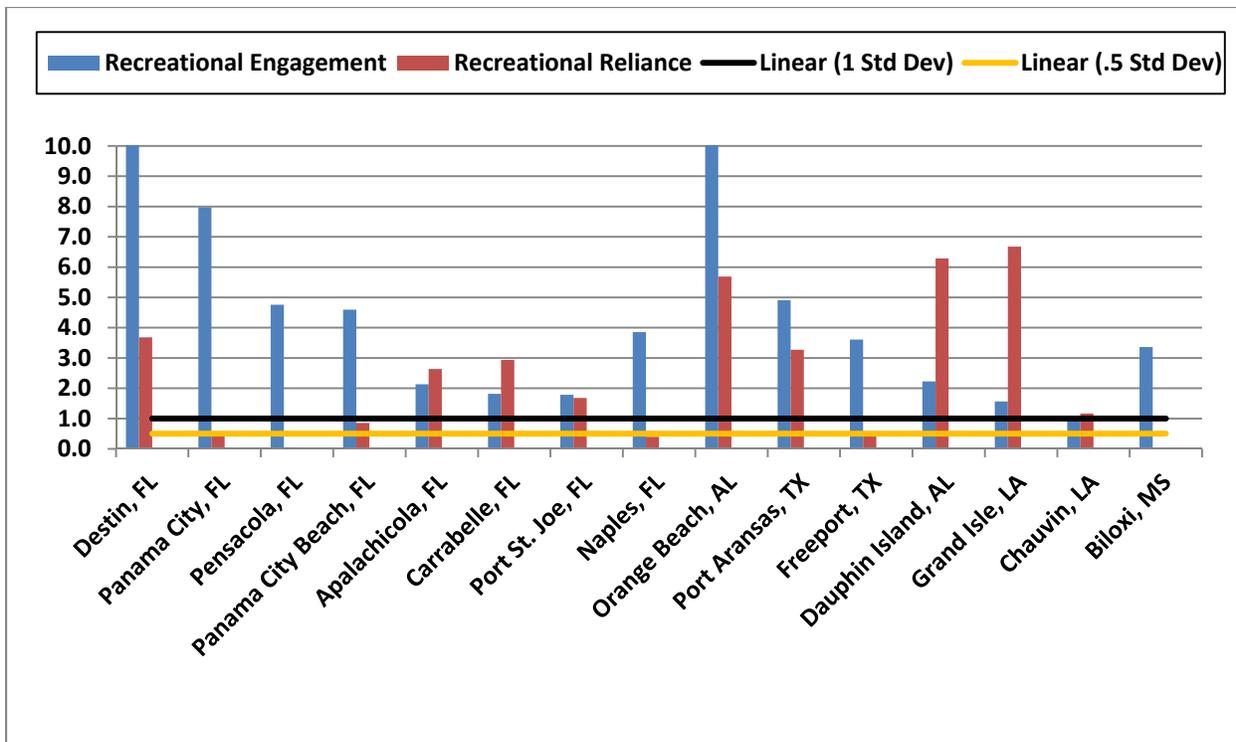


Figure 3.4.1.4. Top 16 recreational fishing communities’ engagement and reliance. Source: Southeast Regional Office, social indicators database (2012).

3.4.2 Environmental Justice Considerations

Executive Order 12898 requires federal agencies conduct their programs, policies, and activities in a manner to ensure individuals or populations are not excluded from participation in, or denied the benefits of, or subjected to discrimination because of their race, color, or national origin. In addition, and specifically with respect to subsistence consumption of fish and wildlife, federal agencies are required to collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. The main focus of Executive Order 12898 is to consider “the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories...” This executive order is generally referred to as environmental justice (EJ).

Commercial red snapper fishermen and associated businesses and communities along the coast are likely to be impacted by this proposed action. However, information on race, ethnicity, and income status for groups at the different participation levels and roles is not available. To identify potential areas of EJ concern, this analysis uses a suite of indices created to examine the social vulnerability of coastal communities (Jepson and Colburn 2013). The three indices are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified through the literature as being important components that contribute to a community’s vulnerability. Indicators such as increased poverty rates for different groups, more single female-headed households and households with children under the

age of five, disruptions such as higher separation rates, higher crime rates, and unemployment all are signs of populations experiencing vulnerabilities. Communities that exceed the threshold for one or more of the indices would be expected to exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change.

Figure 3.4.2.1 shows how the commercial communities most engaged and reliant on red snapper fishing (Figure 3.4.1.2) score for the three social vulnerability indices. The communities of Apalachicola and Panama City, Florida; Golden Meadow, Grand Isle, and Houma, Louisiana; Bayou La Batre, Alabama; Pascagoula, Mississippi; and Freeport, Galveston, and Houston, Texas exceed the threshold of ½ standard deviation above the mean for at least one of the social vulnerability indices. It would be expected that these communities may exhibit vulnerabilities to social or economic disruption because of regulatory change, and would be the communities most likely subject to EJ concerns. Those communities that exhibit several index scores exceeding the threshold would be the most vulnerable. These include Apalachicola, Florida; Golden Meadow, Louisiana; Bayou La Batre, Alabama; Pascagoula, Mississippi; and Freeport, Galveston, and Houston, Texas. Five communities exceed the threshold of ½ standard deviation for all three indices (Bayou La Batre, Alabama; Pascagoula, Mississippi; and Freeport, Galveston, and Houston, Texas). Social effects resulting from action taken in this plan amendment are likely to be greatest in these communities.

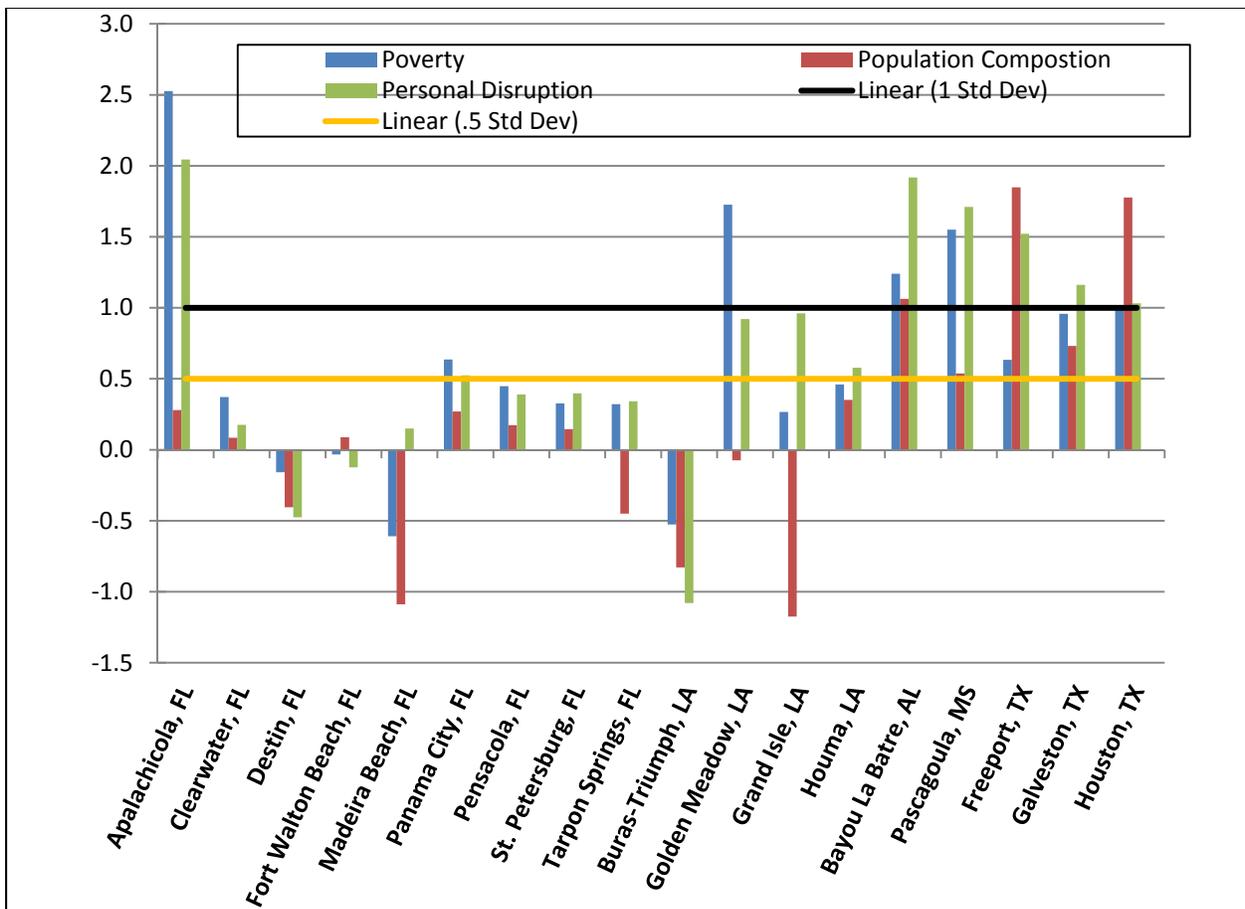


Figure 3.4.2.1. Social vulnerability indices for red snapper commercial fishing communities
Source: Southeast Regional Office, social indicators database (2012).

Recreational red snapper fishermen and associated businesses and communities along the coast are expected to benefit from this proposed action. Thus, no EJ concerns are expected for participants in the recreational sector. Figure 3.4.2.2 provides the scores of the social vulnerability indices for the top recreational fishing communities identified in Figure 3.4.1.4. Communities that exceed the threshold for one or more indices would be expected to exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change, and greater vulnerability is suggested by exceeding the thresholds for multiple indices. However, regulatory change that would impact recreational participants in these communities is not expected.

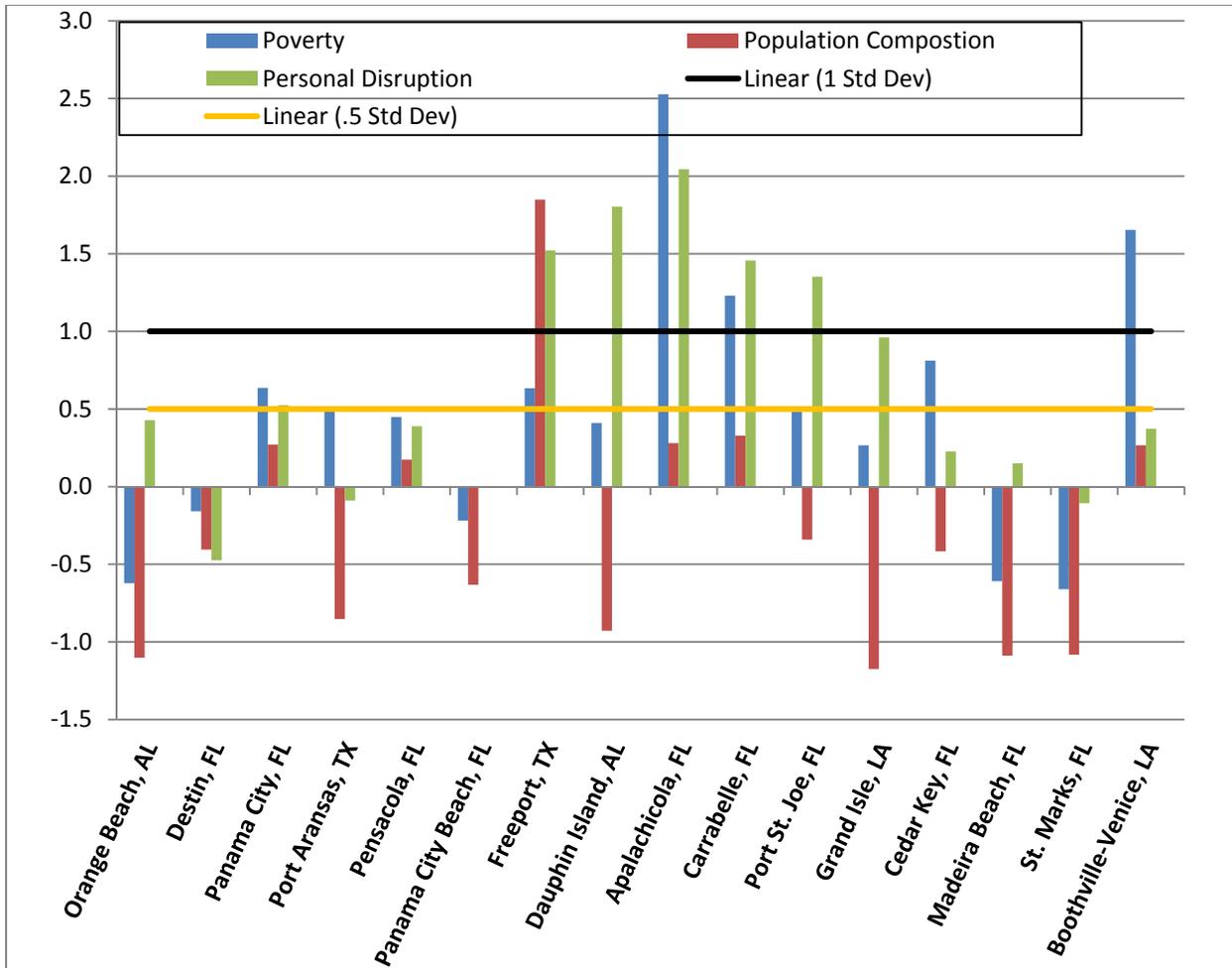


Figure 3.4.2.2. Social vulnerability indices for recreational fishing communities.

Source: Southeast Regional Office, social indicators database (2012).

3.5 Description of the Economic Environment

3.5.1 Commercial Sector

3.5.1.1 Vessel Activity

A description of the red snapper IFQ program is contained in GMFMC (2013b). This description is incorporated herein by reference. Tables 3.5.1.1.1 and 3.5.1.1.2 contain summary vessel and trip counts, landings, and revenue information from vessels landing at least one pound of red snapper from 2008 through 2012. Data from years prior to the implementation of the IFQ program are not representative of current conditions.

The tables contain vessel counts from the NMFS Southeast Fisheries Science Center (SEFSC) logbook (logbook) data (vessel count, trips, and landings) and the NMFS Southeast Regional Office (SERO) Limited Access Privilege Program (LAPP) data (vessel count). Dockside values were generated using landings information from logbook data and price information from the SEFSC ALS data. The logbook and LAPP data programs serve different purposes and use different data collection methods. Consequently, comparative analysis of data from these programs may produce different results, as evidenced by the vessel counts provided in Table 3.5.1.1.1. However, this assessment utilizes logbook data because the logbook program collects data on all species harvested on trips on which red snapper are harvested, as well as harvests by these vessels on trips without red snapper.

On average, 342 vessels per year landed red snapper (Table 3.5.1.1.1). These vessels averaged 2,871 trips per year on which red snapper was landed and 2,125 trips without red snapper (Table 3.5.1.1.1). The average annual total dockside revenue (2012 dollars) was approximately \$10.29 million from red snapper, approximately \$12.43 million from other species co-harvested with red snapper (on the same trip), and approximately \$10.42 million from other species harvested on trips on which no red snapper were harvested (Table 3.5.1.1.2). Total average annual revenues were approximately \$33.14 million, or approximately \$97,000 per vessel (Table 3.5.1.1.2).

Table 3.5.1.1.1. Summary of vessel counts, trips, and logbook landings (pounds gutted weight (lbs gw)) or vessels landing at least one pound of red snapper, 2008-2012.

Year	Number of Vessels, Logbook Data	Number of Vessels, LAPPs Data	Number of Trips that Caught Red Snapper, Logbook Data	Red Snapper Landings (lbs gw)*	“Other Species” Landings Jointly Caught with Red Snapper (lbs gw)	Number of Trips that Only Landed “Other Species”	“Other Species” Landings on Trips without Red Snapper (lbs gw)
2008	308	297	2,274	2,163,312	3,755,670	2,552	4,085,616
2009	296	289	2,329	2,163,632	3,753,024	2,425	3,964,434
2010	376	384	2,970	2,939,254	3,955,422	1,717	2,807,661
2011	368	362	3,389	3,073,697	5,467,639	1,959	4,160,800
2012	363	371	3,391	3,446,987	5,392,126	1,971	4,210,523
Average	342	341	2,871	2,757,377	4,464,776	2,125	3,845,807

Source: NMFS SEFSC Logbook and NMFS SERO LAPPs data.

*Red snapper harvest totals from logbook records for 2008-2012 ranged from 3.4% (2009) to 5.5% (2011) lower than IFQ reported landings for these years.

Table 3.5.1.1.2. Summary of vessel counts and revenue (thousand 2012 dollars) for vessels landing at least one pound of red snapper, 2008-2012.

Year	Number of Vessels, Logbook Data	Dockside Revenue from Red Snapper	Dockside Revenue from “Other Species” Jointly Caught with Red Snapper	Dockside Revenue from “Other Species” Caught on Trips without Red Snapper	Total Dockside Revenue	Average Total Dockside Revenue per Vessel
2008	308	\$8,504	\$10,101	\$10,796	\$29,402	\$95
2009	296	\$8,088	\$9,208	\$9,716	\$27,012	\$91
2010	376	\$10,563	\$10,903	\$7,427	\$28,893	\$77
2011	368	\$11,139	\$15,689	\$11,594	\$38,422	\$104
2012	363	\$13,145	\$16,239	\$12,585	\$41,969	\$116
Average	342	\$10,288	\$12,428	\$10,424	\$33,140	\$97

Source: NMFS SEFSC Logbook and ALS data.

Commercial fishing for red snapper in 2010 appeared to be unaffected, from a landings and revenue perspective, by conditions associated with the Deepwater Horizon MC252 oil spill. As a result, 2010 data were included in the information provided in Tables 3.5.1.1.1 and 3.5.1.1.2. As discussed below, this was not the case for the recreational sector.

3.5.1.2 Commercial Sector Business Activity

Estimates of the business activity (economic impacts) in the U.S. associated with the Gulf red snapper commercial harvests were derived using the model developed for and applied in NMFS (2011b) and are provided in Table 3.5.1.2.1. Business activity for the commercial sector is characterized in the form of full-time equivalent (FTE) jobs, income impacts (wages, salaries, and self-employed income), and output (sales) impacts (gross business sales). Income impacts should not be added to output (sales) impacts because this would result in double counting. The estimates of economic activity include the direct effects (effects in the sector where an expenditure is actually made), indirect effects (effects in sectors providing goods and services to directly affected sectors), and induced effects (effects induced by the personal consumption expenditures of employees in the direct and indirectly affected sectors).

Table 3.5.1.2.1. Average annual business activity associated with the harvests of vessels that harvest red snapper, 2008-2012.

Species	Average Annual Dockside Revenue (thousands)¹	Total Jobs	Harvester Jobs	Output (Sales) Impacts (thousands)¹	Income Impacts (thousands)¹
Red snapper	\$10,288	1,818	237	\$135,456	\$57,730
All species ²	\$33,140	5,857	764	\$436,332	\$185,961

¹2012 dollars.

²Includes dockside revenues and economic activity associated with the average annual harvests of all species, including red snapper, harvested by vessels that harvested red snapper.

In addition to red snapper harvests, as discussed above, vessels that harvested red snapper also harvested other species on trips where red snapper were harvested. These vessels also took trips during the year where only species other than red snapper were caught. All revenues from all species on all these trips contributed towards making these vessels economically viable and contribute to the economic activity associated with these vessels. The average annual total ex-vessel revenues from all species (including red snapper) harvested during this period (2008-2012) by vessels that harvested red snapper was approximately \$33.14 million (2012 dollars). In terms of business activity, these revenues are estimated to support 5,857 FTE jobs (764 in the harvesting sector) and are associated with approximately \$436.33 million in output (sales) impacts and approximately \$185.96 million in income impacts.

3.5.1.3 Dealers

Commercial vessels landing reef fish, including red snapper, can only sell their catch to federally permitted fish dealers. On December 20, 2013, 160 dealers possessed a reef fish dealer permit and the IFQ endorsement necessary to receive Gulf LAPP species (SERO Permits and LAPP

data). Because there are no income or sales requirements to acquire a federal dealer permit or IFQ endorsement, the total number of dealers can vary over the course of the year and from year to year. In addition to red snapper, grouper and tilefish are Gulf LAPP species and not all dealers authorized to receive Gulf LAPP species purchase red snapper. The following results are based on assessment of ALS data. In 2011, 88 dealers purchased red snapper. Sixty-six of these dealers were in Florida, eight in Texas, six in Louisiana, and four each in Alabama and Mississippi. Total red snapper purchased by these dealers in 2011 had an ex-vessel value of approximately \$11.42 million (2011 dollars), or approximately 10.6% of the total revenues, approximately \$108.21 million (2011 dollars), from all marine resource purchases by these dealers. Dependency on red snapper sales varies by dealer, with the percentage of red snapper purchases (value, not pounds) to total purchases varying from less than 1% to 100%. Red snapper purchases in 2011 comprised 10% or more of total purchases for 40 of these dealers, between 5% and 10% for 13 dealers, and 5% or less for 35 dealers. Average red snapper dependency (measured as the percentage of red snapper value to total value of all purchases) was highest for Texas and Mississippi dealers, approximately 20.83% in both states, followed by Florida (approximately 5.73%), Louisiana (approximately 4.78%), and Alabama (approximately 2.33%).

3.5.1.4 Imports

Information on the imports of all snapper and grouper species, either fresh or frozen, are available at: http://www.st.nmfs.noaa.gov/st1/trade/cumulative_data/TradeDataProduct.html. Information on the imports of individual snapper or grouper species is not available. In 2012, imports of all snapper and grouper species (fresh and frozen) were approximately 44.51 million pounds valued at approximately \$128.20 million (2012 dollars). These amounts are contrasted with the domestic harvest of all snapper and grouper in the U.S. in 2012 of approximately 19.60 million pounds valued at approximately \$60.53 million (data available at: http://www.st.nmfs.noaa.gov/Assets/commercial/fus/fus12/02_commercial2012.pdf). Although the levels of domestic production and imports are not totally comparable for several reasons, including considerations of different product form such as fresh versus frozen, and possible product mislabeling, the difference in the magnitude of imports relative to amount of domestic harvest is indicative of the dominance of imports in the domestic market.

3.5.2 Recreational Sector

3.5.2.1 Angler Effort

Recreational effort derived from the MRFSS/MRIP database can be characterized in terms of the number of trips as follows:

1. Target effort - The number of individual angler trips, regardless of duration, where the intercepted angler indicated that the species or a species in the species group was targeted as either the first or second primary target for the trip. The species did not have to be caught.

2. Catch effort - The number of individual angler trips, regardless of duration and target intent, where the individual species or a species in the species group was caught. The fish did not have to be kept.
3. Total recreational trips - The total estimated number of recreational trips in the Gulf, regardless of target intent or catch success.

Other measures of effort are possible, such as the number of harvest trips (the number of individual angler trips that harvest a particular species regardless of target intent), and directed trips (the number of individual angler trips that either targeted or caught a particular species), among other measures, but the three measures of effort listed above are used in this assessment. Because of the Deepwater Horizon MC252 oil spill, 2010 was not a typical year for recreational fishing due to the extensive closures and associated decline in fishing in much of the Gulf. For information on the Deepwater Horizon MC252 oil spill and associated closures, see: http://sero.nmfs.noaa.gov/deepwater_horizon_oil_spill.htm. Estimates of the average annual red snapper effort (in terms of individual angler trips) for the shore, charter, and private/rental boat modes in the Gulf for 2008-2012 with and without 2010 data are provided in Table 3.5.2.1.1. The average annual red snapper target effort for 2008-2012 was approximately 8% less than the average for this period excluding 2010. For red snapper catch effort, the difference was approximately 7%. This difference indicates the importance of the effort data for 2010 when assessing the socio-economic implications of the actions in this amendment.

Table 3.5.2.1.2 contains estimates for the average annual red snapper recreational effort for 2008-2012 by mode (shore, charter, and private/rental boat only). Although the private/rental mode accounted for a greater portion of angler trips (about 83% to 84% of target trips and 75% to 76% of catch trips), percentage-wise the charter mode was affected by the 2010 oil spill incident more than the private/rental mode. The average annual red snapper target effort for 2008-2012 was less than the average for this period excluding 2010 by approximately 13% for the charter mode and 7% for the private mode. For red snapper catch effort, the difference was approximately 11% for the charter mode and 6% for the private mode.

Tables 3.5.2.1.3 and 3.5.2.1.4 provide some details on the 2008-2012 average annual recreational effort by state and mode. Percentage-wise, recreational effort for Alabama and Louisiana was affected by the 2010 oil spill incident more than that for Florida. This holds true for both the charter (target and catch effort) and private modes (target and catch effort).

Table 3.5.2.1.1. Annual red snapper recreational effort, by state, 2008-2012.

	Alabama	West Florida	Louisiana	Mississippi	Texas	Total
	Target Trips					
2008	39,325	160,466	31,864	8,877	*	240,532
2009	75,854	222,035	42,112	7,622	*	347,623
2010	23,548	146,738	3,338	5,659	*	179,283
2011	136,704	142,663	21,324	16,790	*	317,481
2012	90,278	161,247	50,751	13,589	*	315,865
Avg (full)	73,142	166,630	29,878	10,507	*	280,157
Avg (w/o 2010)	85,540	171,603	36,513	11,720	*	305,375
	Catch Trips					
2008	80,042	407,477	55,393	10,362	*	553,274
2009	98,005	399,309	60,119	13,035	*	570,468
2010	56,170	266,485	5,635	7,225	*	335,515
2011	134,346	261,454	32,451	6,390	*	434,641
2012	95,389	332,921	49,938	2,410	*	480,658
Avg (full)	92,790	333,529	40,707	7,884	*	474,911
Avg (w/o 2010)	101,946	350,290	49,475	8,049	*	509,760

*Unavailable

Source: NOAA Fisheries Office of Science and Technology website,
<http://www.st.nmfs.noaa.gov/recreational-fisheries/index#>

Table 3.5.2.1.2. Annual red snapper recreational effort, by fishing mode, 2008-2012.

	Charter	Private/ Rental	Shore	Total
Target Trips				
2008	51,766	188,766	0	240,532
2009	53,797	293,555	271	347,623
2010	19,463	159,296	524	179,283
2011	50,076	266,597	808	317,481
2012	48,540	265,686	1,639	315,865
Avg (full)	44,728	234,780	811	280,157
Avg (w/o 2010)	51,045	253,651	680	305,375
Catch Trips				
2008	145,193	403,047	5,034	553,274
2009	133,938	435,245	1,285	570,468
2010	59,208	273,875	2,432	335,515
2011	121,628	313,013	0	434,641
2012	109,450	370,637	571	480,658
Avg (full)	113,883	359,163	2,331	474,911
Avg (w/o 2010)	127,552	380,486	1,723	509,760

*Unavailable

Source: NOAA Fisheries Office of Science and Technology website,
<http://www.st.nmfs.noaa.gov/recreational-fisheries/index#>

Table 3.5.2.1.3. Average (2008-2012) annual red snapper recreational effort, by state and mode.

	Charter	Private/ Rental	Shore	Total
Target Trips				
Alabama	13,526	59,072	544	73,142
West Florida	26,183	140,342	105	166,630
Louisiana	4,963	24,915	0	29,878
Mississippi	56	10,451	0	10,507
Texas	*	*	*	*
Catch Trips				
Alabama	24,169	68,278	343	92,790
West Florida	84,048	247,960	1,521	333,529
Louisiana	5,496	35,211	0	40,707
Mississippi	170	7,714	0	7,884
Texas	*	*	*	*

*Unavailable

Source: NOAA Fisheries Office of Science and Technology website:
<http://www.st.nmfs.noaa.gov/recreational-fisheries/index#>

Table 3.5.2.1.4. Average (2008-2012) annual red snapper recreational effort, by state and mode, excluding 2010.

	Charter	Private/ Rental	Shore	Total
	Target Trips			
Alabama	16,211	68,650	680	85,540
West Florida	28,612	142,991	0	171,603
Louisiana	6,204	30,309	0	36,513
Mississippi	19	11,701	0	11,720
Texas	*	*	*	*
	Catch Trips			
Alabama	27,388	74,236	321	101,946
West Florida	93,198	255,691	1,401	350,290
Louisiana	6,819	42,657	0	49,475
Mississippi	147	7,902	0	8,049
Texas	*	*	*	*

*Unavailable

Source: NOAA Fisheries Office of Science and Technology website,
<http://www.st.nmfs.noaa.gov/recreational-fisheries/index#>

Headboat data do not support the estimation of target or catch effort because target intent is not collected and the harvest data (the data reflect only harvest information and not total catch) are collected on a vessel basis and not by individual angler. Table 3.5.2.1.5 contains estimates of the number of headboat angler days for all Gulf States for 2008-2012.

Table 3.5.2.1.5. Headboat angler days.

Year	W Florida/Alabama	Louisiana	Mississippi	Texas	Total
2008	130,176	2,945	0	41,188	174,309
2009	142,438	3,268	0	50,737	196,443
2010	111,018	217	*	47,154	158,389
2011	157,025	1,886	1,771	47,284	207,966
2012	161,973	1,839	1,840	51,771	217,423
Average all	140,526	2,031	903	47,627	190,906
Average w/o 2010	147,903	2,485	903	47,745	199,035

*Confidential. **Because the average totals are used to represent expectations of future activity, the 2011 and 2012 numbers of trips are provided as best representative of the emergent headboat fishery in Mississippi.

Source: NMFS Southeast Region Headboat Survey (HBS).

3.5.2.2 Permits

The for-hire sector is comprised of charter boats and headboats (party boats). Although charter boats tend to be smaller, on average, than headboats, the key distinction between the two types of

operations is how the fee is determined. On a charter boat trip, the fee charged is for the entire vessel, regardless of how many passengers are carried, whereas the fee charged for a headboat trip is paid per individual angler.

A federal for-hire vessel permit has been required for reef fish since 1996 and the sector currently operates under a limited access system. On December 20, 2013, there were 1,190 valid (non-expired) or renewable Gulf of Mexico Charter/Headboat Reef Fish Permits. A renewable permit is an expired permit that may not be actively fished, but is renewable for up to one year after expiration. Although the for-hire permit application collects information on the primary method of operation, the resultant permit itself does not identify the permitted vessel as either a headboat or a charter boat, operation as either a headboat or charter boat is not restricted by the permitting regulations, and vessels may operate in both capacities. However, only federally permitted headboats are required to submit harvest and effort information to the NMFS Southeast Region Headboat Survey (HBS). Participation in the HBS is based on determination by the SEFSC that the vessel primarily operates as a headboat. Seventy vessels were registered in the SHRS as of March 1, 2013 (K. Brennen, NMFS SEFSC, pers. comm.).

Information on Gulf charter boat and headboat operating characteristics, including average fees and net operating revenues, is included in Savolainen et al. (2012), is incorporated herein by reference, and is summarized below.

There are no specific federal permitting requirements for recreational anglers to fish for or harvest reef fish. Instead, anglers are required to possess either a state recreational fishing permit that authorizes saltwater fishing in general, or be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions. As a result, it is not possible to identify with available data how many individual anglers would be expected to be affected by this proposed amendment. (Note: although it is not a federal permit, Louisiana has developed an offshore angler permit. Tabulation of these permits would be expected to provide an estimate of only a small portion of the total number of individual anglers expected to be affected by this proposed amendment.)

3.5.2.3 Economic Value

Economic value can be measured in the form of consumer surplus per red snapper trip for anglers (the amount of money that an angler would be willing to pay for a fishing trip in excess of the cost of the trip) and producer surplus per passenger trip for for-hire vessels (the amount of money that a vessel owner earns in excess of the cost of providing the trip). The estimated mean value of consumer surplus per two red snapper (current bag limit) kept on a trip ranges from \$142.11 to \$154.16 in 2012 dollars (Appendix G: Agar and Carter 2013). On a per pound basis, the estimated mean consumer surplus ranges from \$11.21 to \$12.16 per pound in 2012 dollars.

Estimates of the producer surplus per for-hire passenger trip are not available. Instead, net operating revenues, which are the return used to pay all labor wages, returns to capital, and owner profits, are used as the proxy for producer surplus. The estimated net operating revenue is \$164.88 per target charter angler trip and \$54.59 (2012 dollars) per target headboat angler trip

regardless of species targeted or catch success (C. Liese, NMFS SEFSC, pers. comm.). Estimates of net operating revenue by target species are not available.

3.5.2.4 Recreational Sector Business Activity

Estimates of the business activity (economic impacts) associated with recreational angling for red snapper were derived using average impact coefficients for recreational angling for all species, as derived from an add-on survey to the MRFSS to collect economic expenditure information, as described and utilized in NMFS (2011a). Estimates of these coefficients for target or catch behavior for individual species are not available. Estimates of the average expenditures by recreational anglers are also provided in NMFS (2011a) and are incorporated herein by reference.

Business activity for the recreational sector is characterized in the form of fulltime equivalent (FTE) jobs, output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Job and output (sales) impacts are equivalent metrics across both the commercial and recreational sectors. Income impacts (commercial sector) and value-added impacts (recreational sector) are not equivalent, though similarity in the magnitude of multipliers generated and used for the two metrics may result in roughly equivalent values. Similar to income impacts, value-added impacts should not be added to output (sales) impacts because this would result in double counting.

Estimates of the average red snapper effort (2008-2009 and 2011-2012) and associated business activity (2012 dollars) are provided in Table 3.5.2.4.1. Red snapper target effort (trips) was selected as the measure of red snapper effort. More individual angler trips catch red snapper than target red snapper, however, as shown in Tables 3.5.2.1.1 and 3.5.2.1.2. Estimates of the business activity associated with red snapper catch trips can be calculated using the ratio of catch trips to target trips because the available estimates of the average impacts per trip are not differentiated by trip intent or catch success. For example, if the estimated number of catch trips is three times the number of target trips for a particular state and mode, the estimate of the business activity associated with these catch trips would equal three times the estimated impacts of target trips.

The estimates of the business activity associated with red snapper recreational trips are only available at the state level. Addition of the state-level estimates to produce a regional or national total will underestimate the actual amount of total business activity because summing the state estimates will not capture business activity that leaks outside the individual states. A state estimate only reflects activities that occur within that state and not related activity that occurs in another state. For example, if a good is produced in Alabama but sold in Florida, the measure of business activity in Florida associated with the its sale in Florida does not include the production process in Alabama. Assessment of business activity at the national (or regional) level would capture activity in both states and include all activity except that which leaks into other nations.

It is noted that these estimates do not, and should not be expected to, represent the total business activity associated with a specific recreational harvest sector in a given state or in total. For example, these results do not state, or should be interpreted to imply, that there are only 154 jobs

associated with the charter sector in Alabama. Instead, as previously stated, these results relate only to the business activity associated with target trips for red snapper. Because of the seasonal nature of red snapper fishing, few, if any businesses or jobs, would be expected to be devoted solely to red snapper fishing. The existence of these businesses and jobs, in total, is supported by the fishing for, and expenditures on, the variety of marine species available to anglers throughout the year.

Table 3.5.2.4.1. Summary of red snapper target trips (2008-2009 and 2011-2012 average) and associated business activity (thousand 2012 dollars). Output and value added impacts are not additive.

	Alabama	West Florida	Louisiana	Mississippi	Texas
Shore Mode					
Target trips	680	0	0	0	*
Output impact	\$53,049	\$0	\$0	\$0	*
Value added impact	\$28,538	\$0	\$0	\$0	*
Jobs	1	0	0	0	*
Private/Rental Mode					
Target trips	68,650	142,991	30,309	11,701	*
Output impact	\$4,259,249	\$6,922,865	\$2,635,702	\$355,841	*
Value added impact	\$2,331,842	\$4,116,595	\$1,296,330	\$170,544	*
Jobs	42	65	23	3	*
Charter Mode					
Target trips	16,211	28,612	6,204	19	*
Output impact	\$9,000,468	\$9,580,658	\$3,149,447	\$6,295	*
Value added impact	\$4,954,456	\$5,680,344	\$1,788,250	\$3,547	*
Jobs	113	92	31	0	*
All Modes					
Target trips	85,541	171,603	36,513	11,720	*
Output impact	\$13,312,766	\$16,503,524	\$5,785,149	\$362,136	*
Value added Impact	\$7,314,836	\$9,796,939	\$3,084,581	\$174,091	*
Jobs	155	157	54	3	*

*Because target information is unavailable, associated business activity cannot be calculated.

Source: Effort data from NOAA Fisheries Science and Technology website, economic impact results calculated by NMFS SERO using the model developed for NMFS (2011b).

Estimates of the business activity (impacts) associated with headboat red snapper effort are not available. The headboat sector in the Southeast is not covered in the MRFSS/MRIP, so estimation of the appropriate impact coefficients for the headboat sector has not been conducted. While appropriate impact coefficients are available for the charter sector, potential differences in certain factors, such as the for-hire fee, rates of tourist versus local participation, and expenditure

patterns, may result in significant differences in the business impacts of the headboat sector relative to the charter sector.

3.6 Description of the Administrative Environment

3.6.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 *et seq.*), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the exclusive economic zone, an area extending 200 nautical miles from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the exclusive economic zone.

Responsibility for federal fishery management is shared by the Secretary of Commerce (Secretary) and eight regional fishery management councils that represent the expertise and interests of constituent states. Regional councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for promulgating regulations to implement proposed plans and amendments after ensuring management measures are consistent with the Magnuson-Stevens Act and with other applicable laws summarized in Appendix A. In most cases, the Secretary has delegated this authority to NMFS.

The Council is responsible for fishery resources in federal waters of the Gulf. These waters extend to 200 nautical miles offshore from the nine-mile seaward boundary of the states of Florida and Texas, and the three-mile seaward boundary of the states of Alabama, Mississippi, and Louisiana. The length of the Gulf coastline is approximately 1,631 miles. Florida has the longest coastline of 770 miles along its Gulf coast, followed by Louisiana (397 miles), Texas (361 miles), Alabama (53 miles), and Mississippi (44 miles).

The Council consists of seventeen voting members: 11 public members appointed by the Secretary; one each from the fishery agencies of Texas, Louisiana, Mississippi, Alabama, and Florida; and one from NMFS. The public is also involved in the fishery management process through participation on advisory panels and through Council meetings that, with few exceptions for discussing personnel matters, are open to the public. The regulatory process is also in accordance with the Administrative Procedures Act, in the form of “notice and comment” rulemaking, which provides extensive opportunity for public scrutiny and comment, and requires consideration of and response to those comments.

Regulations contained within FMPs are enforced through actions of the National Oceanic and Atmospheric Administration’s Office of Law Enforcement, the United States Coast Guard, and various state authorities. To better coordinate enforcement activities, federal and state enforcement agencies have developed cooperative agreements to enforce the Magnuson-Stevens Act. These activities are being coordinated by the Council’s Law Enforcement Advisory Panel

and the Gulf States Marine Fisheries Commission's Law Enforcement Committee, which have developed joint enforcement agreements and cooperative enforcement programs (www.gsmfc.org).

The red snapper stock in the Gulf is classified as overfished, but no longer undergoing overfishing. A rebuilding plan for red snapper was first implemented under Amendment 1 (GMFMC 1989), and has undergone several revisions. The current rebuilding plan was established in Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007), and calls for rebuilding the stock to a level capable of supporting maximum sustainable yield on a continuing basis by 2032. Periodic adjustments to the ACL and other management measures needed to affect rebuilding are implemented through regulatory amendments.

3.6.2 State Fishery Management

The purpose of state representation at the Council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters. The state governments of Texas, Louisiana, Mississippi, Alabama, and Florida have the authority to manage their respective state fisheries. Each of the five Gulf States exercises legislative and regulatory authority over their respective state's natural resources through discrete administrative units. Although each agency is the primary administrative body with respect to the states' natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources. A more detailed description of each state's primary regulatory agency for marine resources is provided in Amendment 22 (GMFMC 2004c).

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1 Action 1 – Allocation of Red Snapper

4.1.1 Direct and Indirect Effects on the Physical Environment

Sections 3.1, 3.2, and GMFMC (2004a, 2004c, and 2007) describe the physical environment and habitat used by red snapper. In summary, adult red snapper are found around low relief bottom structure, hard bottom, and artificial structures; eggs and larvae are pelagic; and juveniles are found associated with bottom inter-shelf habitat (Szedlmayer and Conti 1998) and prefer shell habitat over sand (Szedlmayer and Howe 1997). Adult red snapper are closely associated with artificial structures in the northern Gulf of Mexico (Gulf) (Szedlmayer and Shipp 1994; Shipp and Bortone 2009) and larger individuals have been found to use artificial habitats, but move further from the structure as they increase in size and based on the time of day (Topping and Szedlmayer 2011). In terms of red snapper fishing, most commercial red snapper fishermen use handlines (mostly bandit rigs and electric reels, occasionally rod-and-reel) with a small percentage (generally <5% annually) caught with bottom longlines (see section 3.1). Recreational red snapper fishing almost exclusively uses vertical-line gear, most frequently rod-and-reel (See section 3.1). The following describes the effects of common fishing gear on the physical environment.

Handline gear (bandit gear, rod-and-reel, and electric reels) used in fishing for reef fish is generally suspended over hard bottom because many managed reef fish species occur higher over this type of substrate than over sand or mud bottoms (GMFMC 2004a). Handline gear is less likely to contact the bottom than longlines, but still has the potential to snag and entangle bottom structures and cause tear-offs or abrasions (Barnette 2001). In using bandit gear, a weighted line is lowered to the bottom, and then the lead is raised slightly off the bottom (Siebenaler and Brady 1952). The gear is in direct contact with the bottom for only a short period of time. Barnette (2001) suggests that physical impacts may include entanglement and minor degradation of benthic species from line abrasion and the use of weights (sinkers). Commercial or recreational fishing with rod-and-reel also lays gear on the bottom. The terminal part of the gear is either lifted off the bottom like fishing with bandit gear, or left contacting the bottom. Sometimes the fishing line can become entangled on coral and hard bottom outcroppings. The subsequent algal growth can foul and eventually kill the underlying coral (Barnette 2001). Researchers conducting studies in the restricted fishing area at Madison-Swanson reported seeing lost fishing line on the bottom, much of which appeared to be fairly old and covered with growth (A. David, Southeast Fisheries Science Center, pers. comm.), a clear indication that bottom fishing has had an impact on the physical environment prior to fishing being prohibited in the area (GMFMC 2003).

Anchor damage is also associated with handline fishing vessels, particularly by the recreational sector where fishermen may repeatedly visit well marked fishing locations. Hamilton (2000) points out that “favorite” fishing areas such as reefs are targeted and revisited multiple times, particularly with the advent of global positioning technology. The cumulative effects of repeated anchoring could damage the hard bottom areas where fishing for red snapper occurs.

Bottom longline gear is deployed over hard bottom habitats using weights to keep the gear in direct contact with the bottom. Its potential for adverse impact is dependent on the type of habitat it is set on, the presence or absence of currents, and the behavior of fish after being hooked. In addition, this gear upon retrieval can abrade, snag, and dislodge smaller rocks, corals, and sessile invertebrates (Hamilton 2000; Barnette 2001). Direct underwater observations of longline gear in the Pacific halibut fishery by High (1998) noted that the gear could sweep across the bottom. Some halibut were observed pulling portions of longlines 15 to 20 feet over the bottom. Although the gear was observed in contact with or snagged on a variety of objects including coral, sturdy soft corals (e.g., gorgonians) usually appeared unharmed while stony corals often had portions broken off. However, in a different study where deployed bottom longline gear was directly observed (Atlantic tilefish fishery), no evidence of gear movement was documented, even when placed in strong currents (Grimes et al. 1982). This was attributed to anchors set at either end of the bottom longline as well as sash weights along the line to prevent movement. Based on these direct observations, it is logical to assume that bottom longline gear would have a minor impact on sandy or muddy habitat areas. However, due to the vertical relief that hardbottom and coral reef habitats provide, it would be expected that bottom longline gear may become entangled, resulting in potential negative impacts to habitat (Barnette 2001). Because bottom longlines are a minor gear type used in harvesting red snapper by the commercial sector, any effects to the physical environment by this gear as a result of this action would likely be minor.

The action would have no direct effect on the physical environment. This action could indirectly affect the physical environment if changes in allocation result in an increase or decrease in the amount of fishing gear used to harvest the respective commercial and recreational quotas. However, any effects under **Alternatives 2-9** would likely be minimal. One reason is the overall red snapper combined quota, currently 11.0 million pounds (mp), would remain the same. Thus any beneficial effects from reducing the commercial quota would likely be offset by adverse effects from increasing the recreational quota. Additionally, changes in overall fishing effort is likely to be small because fishermen target other species besides red snapper. Thus, for example, an angler who could schedule additional red snapper fishing trips under an alternative that increases the recreational quota (more red snapper fishing days), could still take those fishing trips under a smaller quota. The fishing trips would target some other species besides red snapper (e.g., gag). Conversely, a commercial fisherman who might not take a trip targeting red snapper because of less IFQ allocation based on a lower commercial quota, might schedule another trip targeting some other species. An example would be a trip targeting vermilion snapper, which is not managed under an IFQ program.

The no action (**Alternative 1**) would continue the current allocation. **Alternatives 2-9** would reduce the commercial red snapper allocation and increase the recreational red snapper allocation. Assuming that commercial vessels in general are more efficient at catching red snapper due to vessel type, experience, and equipment, then a likely result of having greater recreational allocation could be an increase in overall red snapper effort as a result of lower recreational efficiency. Thus, **Alternative 6** that increases the recreational allocation the most (by >17% totaling 66.1-67.5%), would have the greatest indirect effect on the physical environment compared to **Alternative 1**, no action (49%). Moving this logic forward, then

Alternative 4 (59%) would have the next greatest effect, followed by **Alternative 5** (57.7-58.4%), **Preferred Alternative 9** (57.3-57.7%), **Alternative 7** (56.1-56.8%), **Alternative 3** (54%), **Alternative 2** (52%), and **Alternative 8** (51.4-51.6%) when compared to **Alternative 1**.

4.1.2 Direct and Indirect Effects on the Biological Environment

The action in this amendment is not expected to have any direct effects on the biological environment because the Council is not considering changes to the total quota. The SSC recommends the acceptable biological catch, the management metric that the Council cannot exceed, therefore, any biological effects from these alternatives are expected to be indirect. Indirect effects on the biological environment could occur if there are significant changes in the total number of red snapper killed (landed or discarded dead) by either sector, or any changes to the frequency or magnitude of any quota overages due to modifications to the red snapper allocation. Gear types used by the commercial and recreational sectors and their expected effects are discussed in Sections 3.1 and 4.1.1 of this document.

The most recent red snapper stock assessment (SEDAR 31 2013) estimated dead discard rates separately for each sector. Based on the commercial observer program, dead discard rate estimates were based on average depths, gear type (handline or longline), region (eastern or western Gulf), and season (open or closed). The assessment defined open season discard rates as those occurring on commercial fishing trips with IFQ allocation, while discards from trips without IFQ allocation were considered closed season dead discard rates. For the recreational sector, average depths at which discards occurred for each region (eastern or western Gulf) and season (open or closed) were calculated using self-reported discard data from the iSnapper program and reflected fishing depths, in general, reported by recreational anglers (SEDAR 31 2013). The stock assessment also estimated discard mortality rates before and after the implementation of the circle hook and venting tool requirement in 2008 for both sectors (GMFMC 2007). In August 2013, the Council decided to remove the venting tool requirement due to questions of its efficacy (GMFMC 2013c).

For purposes of comparing these alternatives, only the discard mortality rates estimates by sector, region (east and west), and fish venting are cited and discussed from Tables 5.1 and 5.2 in SEDAR 31 (2013). Regardless of whether the recreational red snapper season is open or closed, the recreational sector reported fishing at shallower depths and typically used hook and line gear that results in lower rates of dead discards (Table 4.1.2.1). The commercial sector is estimated to have higher estimates of dead discard rates than the recreational sector due to gear types and depth fished (GMFMC 2007; SEDAR 7 2005; SEDAR 31 2013). This is especially true in the western Gulf when commercial fishers did not possess IFQ allocation (closed season).

Because **Alternatives 2** through **9** would increase the recreational quota and decrease the commercial quota relative to **Alternative 1 (no action)**, the following discussion will only focus on this direction of allocation change. For the recreational sector, the average rate of red snapper discarded dead is lower based on information in the stock assessment for depths fished and gear types (Table 4.1.2.1). Additionally, as a result of increased allocation and subsequently longer fishing season, some red snapper caught could now be retained instead of discarded dead. However, the magnitude of this reduction in dead discards is expected to be minimal based on

the number recreational anglers compared to commercial fishermen. **Alternative 6** has the greatest allocation shift and is expected to increase the recreational season the most compared to **Alternative 1 (no action)**.

Table 4.1.2.1. Average depth fished and estimated discard mortality rates of red snapper by sector during the closed and open seasons in the eastern and western Gulf. The associated discard mortality estimates for the recreational and commercial sector listed are based on use of circle hooks and the venting tool requirement.

Recreational sector		Commercial handline		Commercial bottom longline	
Open		Open		Open	
East	West	East	West	East	West
102 ft	105 ft	135 ft	159 ft	186 ft	312 ft
10%	10%	56%	60%	64%	81%
Closed		Closed		Closed	
East	West	East	West	East	West
99 ft	108 ft	126 ft	252 ft	198 ft	396 ft
10%	10%	55%	74%	66%	88%

Source: Tables 5.1 and 5.2 in SEDAR 31 2013

For the commercial sector, estimates of dead discard rates are higher compared to the recreational sector and a decrease in the allocation would likely lead to increased dead discards as a result of a reduced commercial quota (Table 4.1.2.1). Since the implementation of the red snapper IFQ program, the overall rates of dead discards by the commercial sector have been reduced (GMFMC 2013b), which may minimize any increases in discarded fish from this action. However, SEDAR 31 (2013) reported that in the western Gulf, where most of the red snapper are commercially caught, the discard mortality rate for vessels using handline gear without IFQ shares was greater than the discard mortality rate for handline vessels with IFQ shares (Table 4.1.2.1). Handline gear is the predominant gear used to harvest red snapper (see Section 4.1.1). Thus in the western Gulf, a decrease in allocation could result in more trips without red snapper shares and more dead discards. In eastern Gulf, even though there did not seem to be a different discard mortality rates between commercial vessels with IFQ shares and those without; as allocation is shifted away from the commercial sector, it is likely that the number of dead discards would increase (Table 4.1.2.1). As the red snapper stock expands into the eastern Gulf, the incidence of red snapper being encountered should increase as catch rates increase (Boen and Keithly 2012). As a result, fewer red snapper could be kept and more fish would need to be discarded because of the reduced allocation and subsequent quota reduction from **Alternatives 2** through **9**. Additionally, the reef fish fishery is a multispecies fishery and commercial fishermen may shift fishing effort to others species due to the reduction in red snapper quota so they could compensate for lost income.

With the introduction of the IFQ program, no overages of the commercial quota have occurred and are not likely to occur in the near future. However, for the recreational sector, quota overages have occurred frequently in recent years and could adversely affect the stock's recovery if they continue (NMFS 2013d; SEDAR 31 2013). Recreational quota overages have occurred because of difficulties assessing past fishing patterns and projecting them into the future to estimate season length (NMFS 2013). Because **Alternatives 2** through **9** provide additional

recreational fishing days, is it possible that the additional allocation may increase the model's predictive capability.

Given the discussion above, if the recreational quota were increased as a result of **Alternative 2** through **Alternative 9**, the number of recreational dead discards would likely decrease. However, this benefit to the red snapper stock would likely be offset by increases in dead discards as a result of a reduced commercial quota. Therefore, it is difficult to assess whether these alternatives, in terms of dead discards, would be beneficial, adverse, or have no effect on the red snapper stock. These effects need to be qualified in that they are largely based upon behavior of fishermen and this behavior could change in response to changing allocation. Current monitoring of harvests and discards could provide insights into these effects in the future.

Based on the information discussed above, **Alternative 6** would be expected to have the greatest beneficial effect on the biological environment compared to **Alternative 1 (no action)**, if in fact discard mortality rates are reduced when the recreational sector has more quota. Whereas, **Alternative 6** would be expected to have the greatest adverse effect on the biological environment compared to **Alternative 1 (no action)**, if in fact dead discard mortality rates are increased when the commercial sector has less quota. The comparison of these alternatives to no action, whether beneficial or adverse depends on fishermen behavior, and based on these behaviors any potential effects on the biological environment could end up canceling each other out. **Alternative 4** and **Preferred Alternative 5** would be expected to have the next greatest effects (either beneficial or adverse) on the biological environment after **Alternative 6** compared to **Alternative 1 (no action)**. Given the combined quotas for 2015-2017, **Alternative 9**, **Alternative 7**, **Alternative 3**, and **Alternative 2** are expected to have intermediate impacts compared to **Alternative 8** and **Preferred Alternative 5**. If the total quota is decreased, but does not reach the given threshold, the indirect effects under **Preferred Alternative 5**, **Alternative 6**, and **Alternative 7** would be reduced as the allocations get closer to **Alternative 1 (no action)**. However, if the total quota increases, effects of **Preferred Alternative 5**, and **Alternatives 6** and **7** could be greater than any of the other alternatives.

4.1.3 Direct and Indirect Effects on the Social Environment

Alternative 1 (no action) would retain the current sector allocations for red snapper and would have no impact upon the commercial sector as their allocation would remain the same. The shortened recreational fishing seasons over the past few years have been exacerbated by differential management between some states and their adjoining federal waters. This varied management has allowed for continued harvest, including when federal waters are closed, which then translates into shortened seasons because season length is based on total harvest in state and federal waters.

A direct result of the shortened seasons has been dissatisfaction with current management for the recreational sector. This dissatisfaction has, in part, prompted the Council to revisit the red snapper allocation to potentially provide some relief to the shortening seasons, which in turn has increased tension among the recreational and commercial sectors. While the red snapper stock has rebounded, the appearance of good year classes has resulted in an abundance of larger fish

which has allowed the recreational quota to be caught faster, as each angler's bag limit weighs more and thus represents more of the quota. Without addressing the problem of shortened seasons, there will continue to be dissatisfaction with management and continued quota overages by the recreational sector. Modifying the red snapper allocation could potentially provide some temporary relief to the shortened recreational fishing seasons (although, with the current federal season only nine days, allocating the total red snapper quota to the recreational sector would still allow less than one month of red snapper harvest in federal waters); however, the scope of this action is to evaluate reallocation, rather than addressing the broader issues of managing the recreational harvest of red snapper.

Alternative methods of allowing for transfer of quota between the sectors, such as incentive-based mechanisms, rather than the regulatory-based alternatives provided in this amendment might avoid some of the disparities that occur with the regulatory approach used here, and have been recommended by the Socio-economic Scientific and Statistical Committee (SESSC). With the commercial sector already under an IFQ program, such incentive-based mechanisms would allow for trading of quota between the two sectors, thereby allowing market mechanisms to determine efficiency. Incentive-based approaches would more likely result in actual increases in efficiency, but would face similar concerns for social impacts resulting from unequal distributional effects (see Section 3.4). Reallocation of quota through the regulatory-based approaches in **Alternatives 2-9** would be the quickest manner of providing some additional fishing opportunities to the recreational sector; yet, the season is extended only nominally and would be matched by negative impacts in the commercial sector, as discussed below.

Because **Alternatives 2-9** all transfer a certain amount of quota from the commercial sector to the recreational sector, the types of effects on the social environment would be similar among the alternatives. The effects would vary in scope and strength relative to the amount of quota that is reallocated. It is difficult to quantify social effects because a quantitative social benefits model is not available. As a result, the discussion that follows will be qualitative in its approach and identify possible direct and indirect effects that might accrue from reallocation under the different alternatives. Most generally, the quality of social impacts differs between the sectors, in that a loss of commercial access to red snapper could affect the livelihoods of commercial fishermen, especially small-scale owner-operators, hired captains and crew who do not own red snapper shares, and the well-being of commercial communities. The gains in recreational quota would provide additional recreational opportunities to retain red snapper.

From a social perspective, the potential economic gains estimated in an economic efficiency analysis assume certain aspects of the economy are equal, which may not be the case. The distributional effects of how dollars lost and gained from reallocation move through the various value chains and other targeted fisheries, including fishing communities and the larger Gulf coast economy, should be taken into consideration. While it might be expected that any net benefits from a purely economic efficiency standpoint should continue to provide net gains, there is concern that gains and losses may be experienced differently and appear with other types of analysis (Copes 1997). This point was made by the SEFSC as there are other aspects within the current economic and social climate that are not taken into consideration in the analysis. Some of the factors that might contribute to resulting impacts and how impacts are distributed through the economy include differential value chains, a sluggish economy, a high unemployment rate,

the recovery from the recent Deepwater Horizon MC252 oil spill, different property rights structures, and the general differences in community well-being that currently exist.

The net benefits estimated by an economic efficiency analysis are not actual economic gains, but potential gains that do not consider other distributional effects (Bromley 1977). Should net gains in economic efficiency be realized as a result of reallocation, there is no reason to expect that the gains or losses would be equally distributed among fishing communities. Jacob et al. (2013) found that when shifting allocation between recreational and commercial fishing communities, highly dependent fishing communities experienced greater positive or negative effects on well-being than those communities that were less dependent. Although this research was not specific to red snapper or the Gulf coast, it did look at reallocation and reinforces the idea that any shift may have unintended consequences not accounted for in an economic efficiency analysis (Appendix G). Current measures of community well-being (Section 3.3) also suggest that commercial dependent fishing communities exhibit greater vulnerability than recreational-dependent fishing communities, in that more index thresholds are exceeded for commercially dependent communities than recreationally dependent communities (Figures 3.4.2.1 & 3.4.2.2). Of the commercially dependent communities discussed in Section 3.3, five exceed the social vulnerability threshold on all three measures and three exceed the thresholds for two social vulnerability measures. For the recreationally dependent communities discussed in Section 3.3, only one community exceeds the social vulnerability threshold for all three measures and three communities exceed at least two measures of social vulnerability. Again, these social vulnerability measures are not specific to red snapper but suggest the nature of differences among other parts of the economy outside of red snapper fishing. The communities that are experiencing higher social vulnerabilities may be less able to absorb negative social effects from a change in resource access resulting from reallocation due to having higher levels of poverty, unemployment, and a higher proportion of vulnerable populations. The losses to commercial fishing communities may be compounded because of increased vulnerabilities that are not captured in the economic efficiency analysis, as discussed above.

Reallocating 3% of the red snapper quota to the recreational sector (**Alternative 2**) would provide the recreational sector with a limited number of additional additional fishing days. With a larger shift in allocation of 10% (**Alternative 4**), the projected fishing season could possibly be extended further. However, these additional fishing opportunities for recreational fishing communities would not extend the season near the six months advocated by many anglers (<https://docs.google.com/spreadsheets/ccc?key=0Atgbk2rxQkqhdHByby1ad0F0THZiMGtoVTdIVDJ6cWc#gid=0>). Furthermore, assuming the daily rate of harvest will increase as the season becomes shorter (Figure 3.4.3), and the increasing proportion of the recreational quota caught during extended state water seasons, estimations of additional fishing days may be over generous, as changes in effort or participation are likely for an open entry sector.

Conversely, the increase in fishing opportunities provided to the recreational sector from reallocation would correspond with negative impacts to the commercial sector by reducing their access to the red snapper resource. **Alternatives 2-9** will not increase the stability of red snapper fishing for the recreational sector but, instead, these alternatives would be expected to trigger some instability in the IFQ market as a result of restructuring existing fishing privileges. Although the commercial harvest of red snapper has been open year round since inception of the

IFQ program, a commercial fisherman's ability to harvest red snapper depends on the ability to acquire quota. The commercial sector consists of numerous participation roles that may incur differential impacts from this management action. For example, some captains own and fish from their own vessel, and other captains work vessels for owners, including dealers. Commercial red snapper allocation can cost upwards of 75% of ex-vessel price (GMFMC 2013b; Appendix G) for those who must purchase allocation from others. Although IFQ shares were initially distributed based on historical landings, since implementation of the program, red snapper IFQ shares have been bought by fishermen who did not initially receive them representing direct economic investment in the IFQ program. Because frustration has been expressed in public testimony by those opposed to the sale of red snapper quota allocation in the IFQ program, it must be noted that for every pound of allocation sold, another commercial fisherman paid to land that red snapper.¹³

One concern about reallocation under current management is that the quota has been increasing, but may not continue to do so in the future. If the quota decreases, the losses and benefits that accrue would be much different and could shift the direction of how those benefits accrue. Even with a stable quota, net benefits could change over time as other factors related to either sector or other parts of the economy can change.

The concerns discussed above highlight many of the issues that might be raised with this choice of reallocation alternatives. As mentioned earlier, the shortened seasons and quota overages occurring in the recreational sector suggest the need for a revision to current management. Reallocation is one method of addressing the overages of one sector, but does not provide a mechanism for avoiding overages in the future. As discussed, other alternative management strategies have been suggested that include incentive-based mechanisms that would require a more complex management regime. The various reallocation alternatives under consideration may provide some temporary relief to a challenge in the recreational sector that needs a long-term solution.

Another aspect of reallocation is the effect on perceptions of management. Existing management has led to considerable dissatisfaction among the recreational sector. However, with a reallocation of quota from the commercial sector, considerable dissatisfaction and instability in commercial participants' confidence in the IFQ market would be expected to result, because there would be no mitigation to the commercial sector for the loss of access to red snapper quota. Although the efficiency analysis suggests potential net gains from a shift in allocation, all losses accrue to the commercial sector. Prior to implementation of the IFQ program for the commercial sector, there were many years during which commercial fishermen experienced similar dissatisfaction with management due to trip limits and shortened seasons that led to derby fishing (Figure 3.4.1). Doubtless, painful social impacts accompanied the transition to the incentive-based management regime, including reductions in participation; however, seven years later, commercial red snapper fishing has stabilized, both in terms of the season length (year round), prices, and avoiding quota overages. Nevertheless, the commercial red snapper IFQ program is still considered overcapitalized (GMFMC 2013b). A reallocation from the commercial quota

¹³ In the IFQ program, 'shares' refer to a percentage of the entire commercial quota; shares may be bought and sold by any U.S. citizen. 'Allocation' refers to the pounds of red snapper represented by those shares, based on the current year's quota. Allocation may only be purchased and landed by a permitted commercial vessel.

would be expected to negatively affect the stability of the commercial sector in terms of long-term access to red snapper allocation and confidence in the IFQ program. These effects are different than would be expected from a quota decrease deemed necessary for biological concerns, which would also result in less quota availability, but would not be expected to negatively affect participants' confidence in the IFQ market and their ability to continue participating. Given the history of the commercial sector's derby seasons prior to the IFQ program's implementation, reallocating commercial quota to the recreational sector may be seen as unfair and create new tensions with management, as quota overages and shortened seasons would be expected to continue in the recreational sector.

Although the allocation is currently at 51% commercial, 49% recreational, the proportion of actual landings by each sector has consistently departed from the established allocation (Tables 2.1.1 and 2.1.2). That is, since the allocation was established in 1990, in all but five years the recreational sector's annual landings have represented a larger proportion of total landings than their allocation. With a 3% reallocation, **Alternative 2** would have the least negative direct or indirect social effects upon the commercial sector while providing the fewest additional opportunities for the recreational sector to retain red snapper among **Alternatives 2-9**. With a 5% reallocation, **Alternative 3** would result in slightly more negative direct and indirect social effects upon the commercial sector compared with **Alternative 2**, assuming that any gains and losses move through all sectors proportionately in strength and scope. With a 10% reallocation, **Alternative 4** would provide greater fishing opportunities to the recreational sector, but also result in the greater negative direct and indirect social effects on the commercial sector. **Alternative 6** would result in the greatest quota increase for the recreational sector (consequently, the greatest decrease for the commercial sector). **Alternative 6** has the potential to have the greatest positive impacts on the recreational sector and adverse effects on the commercial sector, including social aspects of the IFQ program.

Given the progress of red snapper rebuilding, as evidenced by larger fish and quota increases, the preceding discussion largely focused on impacts assuming a stable or increasing quota. However, it is possible the quota may decrease in future years, for example, if recruitment declines. Under **Alternatives 2-4**, quota decreases would compound the problems of the commercial sector's loss of access to red snapper from reallocation. **Preferred Alternative 5** and **Alternative 6** propose reallocations only on any quota above 9.12 mp, and **Alternative 7** would reallocate only that portion of the quota above 10.0 mp. **Alternatives 8 and 9** reallocate portions of the quota linked to the MRIP recalibration of recreational landings and to changes in size selectivity in the recreational sector. As a result, these alternatives (**Alternatives 5-9**) result in different sector allocations depending on the total amount of the red snapper quota.

By limiting reallocation of 75% of any quota over 9.12 mp to the recreational sector (**Preferred Alternative 5**), no negative social effects on the commercial sector would occur when the quota is at or below 9.12 mp, because the sectors' proportions of the quota would remain the same as under **Alternative 1**. However, with a current 2015 quota of 14.30 mp, the potential increased benefits associated with the increased quota under **Preferred Alternative 5** to the recreational sector could be appreciable compared to **Alternative 1**. In turn, the commercial quota would be decreased by the same amount, and attending adverse impacts would result from decreased

access to the red snapper resource. Yet, if the red snapper stock continues to rebuild, quota increases could benefit both sectors, but provide more additional quota to the recreational sector.

By allocating 100% of all quota above 9.12 mp to the recreational sector (**Alternative 6**), the negative social effects to the commercial sector would be greater than under **Preferred Alternative 5**, but remain the same as **Alternative 1** when the quota is equal or less than 9.12 mp. Setting the baseline above which to reallocate at 10.0 mp, **Alternative 7** would reallocate the less amount of quota compared with **Preferred Alternative 5**. **Alternative 7** would be therefore expected to provide less potential benefits to the recreational sector relative to **Preferred Alternative 5**. However, the baseline is lower than the current quota (**Alternative 1**), meaning that adverse impacts would still be expected for the commercial sector.

This section has primarily addressed the recreational sector as a whole; however, fishing opportunities are not distributed evenly Gulf-wide. Prior to 2014, three of the five Gulf States allowed some additional harvest of red snapper in their state waters when the retention of red snapper from federal waters was prohibited. In 2014, all five Gulf States allowed additional fishing days for red snapper in state waters. The result is fewer red snapper fishing opportunities for 1) all anglers in federal waters during the federal season, 2) all anglers in states with compatible regulations, and 3) federal for-hire vessels operating from states with incompatible regulations. It is unknown whether a reallocation decision will affect the practice of states adopting incompatible regulations, by either increasing compliance, or resulting in greater state regulatory inconsistency. Nevertheless, those states with incompatible regulations provide additional fishing opportunities for anglers in their state waters, which shortens the recreational fishing season for other anglers. For the 2014 red snapper fishing season, an estimated 2.04 mp of the recreational red snapper quota was expected to be harvested in state waters outside of the federal season. This is approximately half of the 4.312 mp ACT implemented by emergency rule for the 2014 recreational red snapper season (NMFS 2014). Thus, it cannot be assumed that additional fishing opportunities provided through reallocation would benefit all recreational anglers through a longer federal season, as some portion of the quota would be expected to be landed in state waters outside of the federal season.

4.1.4 Direct and Indirect Effects on the Economic Environment

This action considers alternative reallocations of the red snapper quota between the recreational and the commercial sectors. The current partition of the resource grants 49 percent of the quota to the recreational sector and 51 percent to the commercial sector. Reallocation alternatives considered in this action vary the recreational share of the quota from 49 percent (**Alternative 1**) to 59 percent in **Alternative 4**. Conversely, the commercial share of the red snapper quota ranges from a minimum of 41 percent to a maximum of 51 percent for **Alternative 4** and **Alternative 1**, respectively. The commercial and recreational red snapper allocations, in pounds and percentage of the quota, are provided in Table 2.1.3.

Alternative 1 (no action) would maintain the current split of the red snapper quota between the commercial and recreational sectors (51% commercial and 49% recreational¹⁴). Therefore, direct

¹⁴ The status quo allocation was established in Amendment 1 (GMFMC, 1989) and was based on historical landings during the base period 1979-1987.

economic effects are not expected to result from **Alternative 1** because changes to harvests or other customary uses of red snapper are not expected to result from the no action alternative. However, in a study evaluating the economic efficiency of red snapper allocation between the commercial and recreational sectors, Agar and Carter (2013, Appendix G) concluded that the existing allocation was not economically efficient. Based on this finding, the continued apportionment of red snapper resources according to the status quo allocation between the sectors could potentially be expected to result in indirect adverse economic effects that would stem from forgone opportunities to enhance economic efficiency and thus generate more economic benefits. Improvements in economic efficiency would increase the economic value derived from the red snapper resources if the current allocation is moved closer to the optimal allocation, which is unknown.

All remaining alternatives (**Alternatives 2-9**) considered in this amendment would increase the percentage of the red snapper quota allocated to the recreational sector (and decrease the commercial sector's share by an equivalent percentage). Therefore, the implementation of any one of these alternatives would be expected to result in economic losses to the commercial sector and potentially generate economic benefits for the recreational sector. For each reallocation alternative, the relative magnitude of the expected losses to the commercial sector and potential gains to the recreational sector would determine the net economic effects.

Alternatives 2, 3, and 4 would add 3%, 5%, and 10% of the red snapper quota to the recreational allocation, respectively. Adjustments proposed in **Preferred Alternative 5** and **Alternative 6** would only reapportion quota amounts in excess of 9.12 mp and would either grant 75% of the amounts in excess of 9.12 mp (**Preferred Alternative 5**) or 100% of the amount in excess of 9.12 mp (**Alternative 6**) to the recreational sector. The status quo allocation ratio would apply if the quota were 9.12 mp or lower. **Alternative 7** would allocate 75% of quota amounts in excess of 10.0 mp to the recreational sector, and the remaining 25% to the commercial sector. The status quo allocation ratio would apply if the quota were 10.0 mp or lower. **Alternative 8** would allocate quota amounts attributable to the recalibration of MRIP catch estimates to the recreational sector. **Alternative 9** would allocate the quota amounts attributable to the recalibration of MRIP catch estimates and to the change in size selectivity to the recreational sector. Based on the red snapper quotas between 2015 and 2017, of all the alternatives considered in this amendment, **Alternative 6** would allocate the greatest percentage of the red snapper quota to the recreational sector (ranging from 66.1% in 2017 to 67.5% in 2015). For each alternative, red snapper allocations to the commercial and recreational sector (in pounds and in percentage of the quota) between 2015 and 2017 are provided in Table 2.1.4.

Resulting percentages allocated to each sector would be fixed in **Alternatives 2-4** but would fluctuate in **Preferred Alternative 5** and **Alternatives 6-7** based on the magnitude of the red snapper quota. **Preferred Alternative 5** and **Alternatives 6-7** could potentially result in the reallocation of large portions of the red snapper quota as the red snapper stock recovers and red snapper quotas are increased. Percentages of the red snapper quota allocated to each sector would also not be fixed under **Alternatives 8** and **9** but would vary based on the quota and on the amounts attributed to the recalibration and to the change in size selectivity in the recreational sector.

Estimates for mean net economic benefit per pound of red snapper are provided by Agar and Carter (2013, Appendix G). Aggregate net benefits estimates are also provided in Appendix G. In general, for commercial fisheries managed under an IFQ program, e.g., red snapper, changes in economic value in the commercial sector could be evaluated using IFQ allocation prices because for well-functioning IFQ markets, allocation prices can be used to measure net economic benefits. The estimates of economic value to the commercial sector provided in Appendix G were derived following the approach suggested in Newell et al. (2005a and 2005b), which provide discussions on IFQ markets and on the determinants of allocation prices in individual fishing quota markets. For commercial red snapper harvesters, the mean net benefit per pound of red snapper is estimated to range from \$2.75 to \$2.95, for a commercial red snapper quota of 5.06 mp and 4.06 mp, respectively (Agar and Carter, 2013, Appendix G). These net benefit estimates are limited to red snapper IFQ participants, including harvesters and individuals/entities who elect to lease their annual allocation. Producer surplus received by economic agents operating between the harvest and the final consumption of red snapper, e.g., dealers and retailers, were not included. The consumer surplus enjoyed by red snapper consumers was also not included in the estimates provided. However, if there are many substitutes for red snapper (e.g., other domestic or imported reef fish), then the surplus to the retail consumer would be expected to be small. For a discussion on substitution between red snapper and imports, see, for example, Norman-López (2009).

In the recreational sector, due to the absence of market transactions for recreationally-caught fish, the evaluation of economic benefits typically relies on non-market valuation techniques such as revealed preference methods or stated preference approaches. Following Carter and Liese (2012), estimates of economic value cited in this analysis were derived based on a 2003 stated preference choice experiment survey administered by the SEFSC. For recreational anglers who prefer to fish for red snapper, the estimated benefit of keeping 2 red snapper per trip instead of keeping 2 of the next preferred species is \$142.11 (in 2012 dollars). On a per pound basis, this estimate corresponds to a mean net benefit of \$11.21 per pound (based on an average weight of 6.34 lbs per red snapper). This estimate does not include producer surplus to the for-hire entities (charter and headboat owners and operators).

The economic effects expected to result from reallocations of the red snapper quota between the recreational and commercial sectors are usually evaluated based on aggregate (sum of recreational and commercial) changes in economic benefit relative to a baseline allocation (51% commercial and 49% recreational). Although it logically follows that the allocation of greater proportions of the red snapper quota to a given sector would be expected to result in greater economic benefits for that sector and lower economic benefits for the other sector, inferences about overall changes in economic efficiency are not provided here because it cannot be assumed that the resource allocation within each sector is efficient. The resource allocation within the commercial sector, which is managed under an IFQ system, would constitute a reasonable approximation for an efficient resource allocation (despite the limitations to the transfer of IFQ shares and allocation due, for example, to ownership caps). However, the open access management approach in the recreational sector cannot be conducive to an efficient allocation of red snapper within the recreational sector. As suggested by Holzer and McConnell (2014), by Abbott (2015) and in a recent report (OECD 2014), changes in net benefit estimates based on the generally accepted application of the equimarginal principle and associated inferences about

economic efficiency are erroneous when each sector's quota is not efficiently allocated within the sector. As a result, policy prescriptions based on such inferences would be invalid, and therefore, not useful. Therefore, it is not possible to provide policy-relevant rankings of the reallocation alternatives in this amendment based on the expected net economic outcome, i.e., the sum of the change in economic benefits to the recreational and commercial sectors. It can only be stated that greater percentages of the red snapper quota allocated to the recreational sector would be expected to increase economic benefits to the recreational sector and decrease benefits to the commercial sector.

In addition to the preceding discussion relative to the economic changes of the proposed alternatives, several other factors should be considered in the evaluation of the potential economic effects that would be expected to result. These factors include the Magnuson-Stevens Act mandates, discrepancies between Council-determined allocations and actual percentages of total red snapper landings attributed to each sector, potential impacts of increased scarcity of IFQ allocation, and considerations relative to which sectors may be better or worse off following a reallocation.

Provisions of the Magnuson-Stevens Act prohibit management measures, including allocation decisions, from having economic efficiency as their sole purpose (National Standard 5). Other factors that must be considered include the promotion of conservation, the prevention from acquiring an excessive share, and the fairness and equity of the measure (National Standard 4). Relative to fairness and equity considerations, the Magnuson-Stevens Act also stipulates that, should the reallocation maximize overall benefits, fairness and equity does not mean that the status quo allocation should be maintained. A concise summary of the Magnuson-Stevens Act considerations as they relate to allocation is provided by Plummer et al (2012). The purpose and need for this proposed action indicates that economic efficiency does not constitute the sole purpose for this amendment. It would not be expected that the range of allocation shifts considered would grant any one sector, entity, or individual an excessive share of the resource. However, it is not clear that the proposed reallocation alternatives would promote conservation, in light of the repeated and sizeable harvest overages recorded for the recreational sector. It is noted that recently implemented accountability measures for the recreational sector, i.e., annual catch target (ACT) are expected to mitigate the occurrence and size of overages (GMFMC, 2014). Fairness and equity considerations are discussed in the social effects section (Section 4.1.3).

The frequency and magnitude of recorded overages have resulted in sizeable discrepancies between the Council-mandated allocation (51% commercial and 49% recreational) and the percentages of red snapper landings attributed to each sector (Figure 2.1.2). Given the Council's limited success in constraining landings to the mandated allocation, the relevance of reallocation efforts may be improved by management measures ensuring that a mandated apportionment would be reached and, as stated by the Socioeconomic SSC¹⁵, by giving more consideration to management approaches that would strengthen the property rights structure within the recreational sector and foster the use of rights-based instruments.

¹⁵ For example, during its November 2013 meeting, the SESSC unanimously approved a motion to encourage the Council to look at first best i.e., incentive based mechanisms vs. second best, i.e. regulatory actions when making allocation decisions away from the current allocation.

The decrease in the amount of IFQ allocation available to IFQ participants following a reallocation could be expected to put upward pressure on the price of allocation. The model explaining the variability of allocation prices as a function of the commercial quota and other explanatory variables presented in Appendix G suggests that a one million pound drop in commercial red snapper quota would result in approximately a \$0.20 increase in the per pound price of allocation. However, the extent to which the decreased availability of red snapper IFQ annual allocation would impact the behavior of participants in the market for IFQ allocation is not known. For example, the willingness to sell allocation could be reduced, especially in the Eastern gulf, possibly contributing to increased discards. Additional challenges to small IFQ shareholders who typically purchase allocation during the year and to potential new entrants could also result from the limited availability. All of the proposed alternatives to the status quo (**Alternative 1**) consider increases in the recreational red snapper quota. However, because none of the proposed alternatives would allow or require actual compensation to the commercial sector, recreational anglers would be better off and commercial fishermen worse off.

4.1.5 Direct and Indirect Effects on the Administrative Environment

The setting of an allocation is an administrative action and it will have direct effects on the administrative environment through additional rulemaking. Because **Alternative 1** (no-action) would not require rulemaking, it would have no effect on the administrative environment. The act of setting the allocation under **Alternatives 2-4** and **Alternatives 8-9** is a one-time event, and thus these alternatives would have an equivalent burden though the minor direct administrative impacts associated with rulemaking to implement the new allocations. **Alternatives 5 - 7** would require the allocations to be changed each time the red snapper allowable biological catch (ABC) is changed. Therefore, it will trigger an additional administrative burden to the Council and NMFS to set the revised allocations and associated quotas. Under these conditions, **Alternatives 5 - 7** would have the greatest negative direct effect on the administrative environment, followed by **Alternatives 2, 3, 4, 8** and **9**, which would have similar effects. **Alternative 1** would have no effect.

Indirect effects of setting allocations require monitoring of the resultant quotas, enforcement of the quotas. However, regardless of which alternative is selected, these management and enforcement activities need to continue. Therefore, the indirect effects from each alternative should be similar.

4.2. Cumulative Effects Analysis (CEA)

As directed by NEPA, federal agencies are mandated to assess not only the indirect and direct impacts, but cumulative impacts of actions as well. NEPA defines a cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 C.F.R. 1508.7). Cumulative effects can either be additive or synergistic. A synergistic effect is when the combined effects are greater than the sum of the individual effects.

This section uses an approach for assessing cumulative effects that was initially used in Amendment 26 to the Reef Fish FMP and is based upon guidance offered in CEQ (1997). The report outlines 11 items for consideration in drafting a CEA for a proposed action.

1. Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals.
2. Establish the geographic scope of the analysis.
3. Establish the timeframe for the analysis.
4. Identify the other actions affecting the resources, ecosystems, and human communities of concern.
5. Characterize the resources, ecosystems, and human communities identified in scoping in terms of their response to change and capacity to withstand stress.
6. Characterize the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds.
7. Define a baseline condition for the resources, ecosystems, and human communities.
8. Identify the important cause-and-effect relationships between human activities and resources, ecosystems, and human communities.
9. Determine the magnitude and significance of cumulative effects.
10. Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects.
11. Monitor the cumulative effects of the selected alternative and adapt management.

Cumulative effects on the biophysical environment, socio-economic environment, and administrative environments are analyzed below.

1. Identify the significant cumulative effects issues associated with the proposed actions and define the assessment goals.

The CEQ cumulative effects guidance states this step is accomplished through three activities as follows:

- I. The direct and indirect effects of the proposed actions (Section 4.1-4.3);
- II. Which resources, ecosystems, and human communities are affected (Section 3 and Appendix C); and
- III. Which effects are important from a cumulative effects perspective (information revealed in this CEA).

2. Establish the geographic scope of the analysis.

The primary effects of the actions in this amendment would affect the social, economic, and administrative environments of the Gulf. The physical and biological/ecological environments would be less affected as described in Sections 4.1-4.3.

The geographic scope affected by these actions is described in detail in Reef Fish Amendments 22 and 27 (GMFMC 2004c and 2007) and pertains directly to the Gulf. Red snapper are one of the most sought after species in the reef fish fishery. This species occurs on the continental

shelves of the Gulf and the U. S. Atlantic coast to Cape Hatteras, N. C. (Moran 1988). Eggs and larvae are pelagic and juveniles are found associated with bottom features or bare bottom. In the Gulf, adults are found in submarine gullies and depressions; natural vertical relief structures such as coral reefs, rock outcroppings, and gravel bottoms; and artificial structures such as oilrigs and artificial reefs (GMFMC 2004c).

Commercial reef fish vessels and dealers are primarily found in Gulf States (GMFMC 2008b, 2013b). Based on mailing addresses or home ports given to the Southeast Regional Office (SERO) as of January 6, 2014,¹⁶ 100% of historical charter captain reef fish, 97% of for-hire reef fish, 98.5% of commercial reef fish permitted vessels, and 100% of vessels with reef fish longline endorsements are found in Gulf States. For permitted reef fish dealers, 94.5 percent are found in Gulf States. All dealers who are able to process IFQ transactions are located in Gulf States (Section 3.5.1.3). With respect to eligible red snapper individual fishing quota shareholders actually holding red snapper shares, 98% have mailing addresses in Gulf States (GMFMC 2013b). According to NMFS (2013b), the Gulf accounted for approximately 35% of trips and 42% of the catch in 2012 for U. S. marine recreational fishing trips by approximately 3.1 million Gulf anglers catching, with visitors, 161 million fish.

3. Establish the timeframe for the analysis

The timeframe for this analysis is 1984 through 2017. Red snapper have been managed in the Gulf since the implementation of the Reef Fish Fishery Management Plan in **1984** which put in place a 13-inch minimum size limit total length (TL). The red snapper stock has been periodically assessed since 1988. The 2013 SEDAR 31 red snapper stock assessment was the last benchmark assessment and this assessment was updated in 2014. The 2014 assessment included reconstructed data for analysis for the commercial sector from 1872 through 1962 (Porch et al. 2004), data from 1963-2011 for commercial landings, and data from 1981-2013 for recreational landings (SEDAR 31 2013) with provisional 2014 landings. In addition, catch effort for the Gulf shrimp fishery (SEDAR 31 2013), including reconstructed data from 1948-1972 (Porch and Turner 2004), was used to estimate juvenile red snapper discards from this fishery. Based on the assessment, the Council set red snapper quotas through **2017**.

The following is a list of reasonably foreseeable future management actions. These are described in more detail in Step 4.

- The next assessment for red snapper through SEDAR is an update scheduled to occur in **2017** as a standard assessment. Other reef fish species scheduled for assessments include: red grouper, vermilion snapper, mutton snapper, gray triggerfish, goliath grouper, and black grouper in 2015; and gag, greater amberjack, and data poor stocks in 2016; and gray snapper, scamp, yellowedge grouper, red snapper, and yellowtail snapper in 2017.
- The Council is currently developing several actions that will affect the reef fish fishery. Actions affecting red snapper include: Amendment 36 (IFQ program revision),

¹⁶http://sero.nmfs.noaa.gov/operations_management_information_services/constituency_services_branch/freedom_of_information_act/common_foia/index.html

Amendment 39 (red snapper regional management), Amendment 40 (sector separation of the recreational sector), and a generic minimum stock size threshold for low natural mortality stocks amendment. In addition, the Council is working on reef fish actions that update ACLs with new MRIP numbers, look at gag regional management, and require electronic reporting for charter boats. These actions are described in more detail in Step 4 of this CEA.

4. Identify the other actions affecting the resources, ecosystems, and human communities of concern.

a. Past actions affecting red snapper fishing are summarized in Sections 1.4 and 3.1. The following list identifies more recent actions (Note actions taken prior to Amendment 32, the last EIS done for the Reef Fish FMP are described in detail in that amendment (GMFMC 2011b) and are incorporated here by reference).

- The following are past actions are specific to red snapper:
- In January 2011, the Council submitted a framework action (GMFMC 2011c) to NMFS to increase the red snapper total allowable catch to 7.185 mp, with a 3.521 mp recreational quota and a 3.664 mp commercial quota. The final rule from this action established a 48-day recreational red snapper season was June 1 through July 18.
- On August 12, 2011, NMFS published an emergency rule that, in part, increased the recreational red snapper quota by 345,000 pounds for the 2011 fishing year and provided the agency with the authority to reopen the recreational red snapper season later in the year, if the recreational quota had not been filled by the July 19 closing date. However, in August of that year, based on headboat data plus charter boat and private recreational landings through June, NMFS calculated that 80% of the recreational quota had been caught. With the addition of July landings data plus Texas survey data, NMFS estimated that 4.4 to 4.8 mp were caught, well above the 3.865 mp quota. Thus, no unused quota was available to reopen the recreational fishing season.
- On May 30, 2012, NMFS published a final rule to implement a framework action submitted by the Council to increase the commercial and recreational quotas and establish the 2012 recreational red snapper fishing season (GMFMC 2012a). The recreational season opened on June 1 through July 11. However, the north-central Gulf experienced extended severe weather during the first 26 days of the 2012 recreational red snapper fishing season, including Tropical Storm Debby. Because of the severe tropical weather, the season was extended by six days and closed on July 17.
- On May 29, 2013, NMFS published a final rule to implement a framework action submitted by the Council to increase the commercial and recreational quotas (GMFMC 2013c). The combined quotas were raised from 8.080 million pounds whole weight to 8.460 lbs whole weight. The recreational fishing season was set differently for waters off different states because of non-compatible regulations. However, a federal court ruled against different seasons, so the season for federal waters was from June 1 through July 5. Later in 2013, NMFS approved a framework action (GMFMC 2013a) to increase the combined quotas from 8.46 mp to 11 mp. This allowed an additional recreational fishing season from October 1 through October 15.
- An exempted fishing permit was given to the Gulf of Mexico Headboat Collaborative

Pilot program that began on January 1, 2014. NMFS authorized the 2-year pilot program to assess the viability of an allocation-based management strategy for achieving conservation and economic goals more effectively than current management. The Headboat Collaborative was allocated a portion of the red snapper and gag recreational quotas based on historical landings data and participating headboats are able to use the allotted quota to harvest red snapper and gag outside the normal recreational fishing seasons.

- In response to a decision by the U.S. District Court for the District of Columbia (Court) in *Guindon v. Pritzker*, 2014 WL 1274076 (D.D.C. Mar. 26, 2014), NMFS took emergency action May 15, 2014 (79 FR 27768) to address recent recreational red snapper quota overages. At their April 2014 meeting, the Council requested an emergency rule to implement an in-season accountability measure for the recreational harvest of red snapper in the Gulf that would apply to the 2014 season that opened on June 1, 2014. The action set an ACT equal to 80% of the 5,390 mp quota (ACT = 4,312 mp). The resultant 9-day season was based on the ACT and has only a 15% probability of exceeding the quota.
- A framework action was submitted by the Council to establish a recreational red snapper ACT and overage adjustment as accountability measures for the recreational sector. A final rule was published on March 19, 2015.
- On January 23, 2015, a proposed rule for Amendment 40 was published. The purpose of Amendment 40 is to define a distinct private angling and federal for-hire components of the red snapper recreational fishery in the Gulf and allocate the red snapper recreational quota between these recreational components to provide a basis for flexible management approaches and reduce the likelihood for recreational quota overruns. The amendment contains measures to establish two components within the recreational sector with a three-year sunset provision; allocate the recreational red snapper quota between the components; and establish separate season closure provisions for the federal for-hire component and the private angling component.
- In March, 2015 a proposed rule for a framework action that sets the recreational and commercial quotas was published. The purpose of the action is to revise the quotas for commercial and recreational harvest of red snapper in the Gulf consistent with the red snapper rebuilding plan and allow each sector to harvest the additional quota.

b. The following are recent reef fish actions not summarized in Section 1.4 or 3.1 but are important to the reef fish fishery in general (Note actions taken prior to Amendment 32 are described in detail in that amendment (GMFMC 2011b) and incorporated here by reference).

- A rule effective April 2, 2012, that adjusted the 2012 commercial quota for greater amberjack, based on final 2011 landings data. For 2011, the commercial quota was exceeded by 265,562 pounds. Therefore, NMFS adjust the 2012 commercial quota to account for the overage resulting in a quota of 237,438 pounds.
- A temporary rule effective May 14, 2012, reduced the gray triggerfish annual catch limits and commercial and recreational annual catch targets. The temporary rule was put in place to reduce overfishing while the Council worked on long-term measures to

- end overfishing and rebuild the stock in Amendment 37.
- A framework action effective on November 19, 2012, eliminated the earned income qualification requirement for the renewal of Gulf commercial reef fish permits and increased the maximum number of crew members for dual-permitted (commercial and charter) vessels. The Council determined the existing earned income requirement in the reef fish fishery is no longer necessary and relaxing the number of crew on dual-permitted vessels increased the safety on commercial trips, particularly for commercial spear fishermen.
 - Amendment 38 (GMFMC 2012c), effective March 1, 2013, allows NMFS to shorten the season for gag and red grouper if landings exceeded the catch limit in the previous year. The amendment also changed the trigger method for recreational accountability measures to an annual comparison of landings to the catch limit rather than using a three-year moving average. Finally, the amendment allows the establishment or modification of accountability measures through the faster framework procedure rather than through slower plan amendments.
 - Amendment 37 (GMFMC 2012b), rulemaking effective June 10, 2013, was developed to end overfishing of gray triggerfish and rebuild the gray triggerfish stock. The amendment adjusted the commercial and recreational gray triggerfish annual catch limits and annual catch targets, established a 12-fish commercial gray triggerfish trip limit and a 2-fish recreational daily bag limit, established an annual fishing season closure from June 1 through July 31 for the commercial and recreational sectors, and established an overage adjustment for the recreational sector.
 - A framework action effective July 5, 2013, adjusted the recreational gag season to July 1 through December 3, 2013, the time projected to harvest the recreational annual catch target of 1.287 mp. The framework action also restricted the geographical extent of the fixed February 1 through March 31 shallow-water grouper closed season to apply only to waters seaward of the 20-fathom boundary. This allows grouper fishing to occur year-round while providing some protection to species that spawn during February and March.
 - A framework action effective September 3, 2013, set a 10-vermillion snapper bag limit within the 20-fish aggregate reef fish bag limit as a precautionary measure to reduce the chance of overfishing for this species. The action also increased the Gulf yellowtail snapper annual catch limit from 725,000 pounds to 901,125 pounds based on a recent stock assessment. Finally, the action eliminated the requirement to use venting tools when fishing for reef fish as 1) some scientific studies have questioned the usefulness of venting tools in preventing barotrauma in fish and 2) the action would give more flexibility to fishermen on when to vent or to use some other device like fish descenders.
 - A framework action effective August 30, 2013, simplified for-hire permit renewals and transfers as well as allow more flexibility to the for-hire industry in how they use their vessels.
 - Accountability measures for red grouper and gray triggerfish were implemented. For red grouper recreational fishing, the bag limit was reduced from four to three fish on May 5, 2014, and a season closure was projected for September 16, 2014. For gray triggerfish, the recreational season was closed on May 1, 2014.

c. The following are reasonably foreseeable future actions (RFFA) important to red snapper and the reef fish fishery in general¹⁷.

- The Council is currently developing the following actions for red snapper.
 - Amendment 36 would revise the IFQ program based on recommendations from the red snapper IFQ program. These recommendations would be based on a review of the program completed in 2013 (GMFMC 2013b).
 - Amendment 39 would allow regional management of red snapper for the recreational sector. This regional management could be set at the state level or be based on broader regions (e.g., eastern and western Gulf).
 - A reef fish amendment (unnumbered) addressing the minimum stock size threshold (MSST) for stocks with low natural mortality rates. The purpose of the amendment is to set MSST for reef fish stocks taking into consideration natural mortality rates, and to establish MSST for all stocks in the reef fish fishery management unit.
- The Council is working on other reef fish actions. These are as follow:
 - A framework action to update ACLs with new MRIP numbers for grouper and tilefish stocks managed under IFQ programs. The action proposes to update ACLs developed in the Generic ACL/AM Amendment that used MRFSS landings data with the new MRIP landing estimates.
 - An abbreviated framework action for definition & intent of for-hire fishing in the EEZ.
 - An amendment for regional management for the recreational harvest of gag to provide greater flexibility in regionally managing this species.
 - An amendment to require electronic reporting for charter boats to improve the quality and timeliness of landings data for this sector.
- Congress has proposed HR 3099 and S 1161 which directs the Gulf States Marine Fisheries Commission to: (1) prepare and adopt a data collection strategy for the Gulf red snapper fishery, including interstate collaboration measures and a plan for annual stock assessments; and (2) prepare, adopt, and submit to the Secretary of Commerce a fishery management plan providing for the conservation and management of Gulf red snapper and describing the standards of compliance for Gulf coastal states to use in developing fishery management measures.

d. The following are non-FMP actions which can influence the reef fish fishery.

In addition, Amendment 32 (GMFMC 2011a) discussed in detail a 2005 red tide event on the west-Florida shelf and the resultant oil spill from the explosion on the Deepwater Horizon MC252 oil rig. The red tide event may have affected reef fish, including red snapper populations. It has only been in the last 10 years that mortalities of higher vertebrates have been indisputably demonstrated to be due to acute red tide blooms and their brevetoxins (Landsberg et al. 2009). The extent of this event and possible effects of fish community structure has been described in Gannon et al. (2009).

¹⁷ Information on these developing actions can be found on the Council's website at www.gulfcouncil.org.

Millions of barrels of oil were released into the Gulf from the Deepwater Horizon MC252 event (see <http://response.restoration.noaa.gov/deepwaterhorizon>). The effects on the environment on reef fish and the reef fish fisheries may not be known for several years when affected year classes of larval and juvenile fish enter the adult spawning population or fishery. For red snapper, this occurs at approximately 3 years of age, so a year class failure in 2010 may not be detected in the spawning populations or by harvesters of red snapper until 2013 at the earliest. The results of the studies detecting these impacts on recruitment should be available soon and will be taken into consideration in the next SEDAR assessment. In addition to impacts on recruitment, adult reef fish may also have been negatively affected by the oil spill. For example, Weisberg et al. (2014) suggested the hydrocarbons associated with Deepwater Horizon MC252 oil spill did transit onto the Florida shelf and may be associated with the occurrences of reef fish (including red snapper) with lesions and other deformities. The overall impact of the oil spill may not be realized for quite some time and study results are just now becoming available.

There is a large and growing body of literature on past, present, and future impacts of global climate change induced by human activities (Kennedy et al. 2002). Some of the likely effects commonly mentioned in relation to marine resources are sea level rise, ocean acidification, coral bleaching, increased frequency of severe weather events, and change in air and water temperatures (Kennedy et al. 2002; Osgood 2008). The Environmental Protection Agency's climate change Web page provides basic background information on these and other measured or anticipated effects. In addition, the Intergovernmental Panel on Climate Change has numerous reports addressing its assessments of climate change (http://www.ipcc.ch/publications_and_data/publications_and_data.shtml). Additional reports are provided on the Global Climate Change website <http://climate.nasa.gov/scientific-consensus>.

Global climate changes could affect Gulf fisheries; however, the extent of these effects is not known at this time. Possible impacts include temperature changes in coastal and marine ecosystems that can influence organism metabolism and alter ecological processes such as productivity and species interactions; changes in precipitation patterns and a rise in sea level which could change the water balance of coastal ecosystems; altering patterns of wind and water circulation in the ocean environment; and influencing the productivity of critical coastal ecosystems such as wetlands, estuaries, and coral reefs (Kennedy et al. 2002; Osgood 2008). An area of low oxygen, known as the dead zone, forms in the northern Gulf each summer, and has been increasing in recent years (see Section 3.3). Climate change may contribute to this increase by increasing rainfall that in turn increases nutrient input from rivers. This increased nutrient load causes algal blooms that, when decomposing, reduce oxygen in the water (Needham et al. 2012; Kennedy et al. 2002). It is unclear how climate change would affect reef fishes and likely would affect species differently. Climate change can affect factors such as migration, range, larval and juvenile survival, prey availability, and susceptibility to predators. Burton (2008) speculated climate change could cause shifts in spawning seasons, changes in migration patterns, and changes to basic life history parameters such as growth rates. In addition, the distribution of native and exotic species may change with increased water temperature, as may the prevalence of disease in keystone animals such as corals and the occurrence and intensity of toxic algae blooms. Hollowed et al. (2013) provided a review of projected effects of climate change on the marine fisheries and dependent communities. Integrating the potential effects of climate change into the fisheries assessment is currently difficult due to the time scale differences (Hollowed et

al. 2013). The fisheries stock assessments rarely project through a time span that would include detectable climate change effects. Climate change may significantly affect Gulf reef fish species in the future, but the level and time frame of these effects cannot be quantified at this time. Actions from this amendment are not expected to significantly contribute to climate change through the increase or decrease in the carbon footprint from fishing.

5. Characterize the resources, ecosystems, and human communities identified in scoping in terms of their response to change and capacity to withstand stress.

This step should identify the trends, existing conditions, and the ability to withstand stresses of the environmental components. According to the CEQ guidance describing stress factors, there are two types of information needed. The first are the socioeconomic driving variables identifying the types, distribution, and intensity of key social and economic activities within the region. The second are the indicators of stress on specific resources, ecosystems, and communities.

Reef Fish Fishery

Data used to monitor commercial reef fish effort includes the number of vessels with landings, the number of trips taken, and trip duration. Declines in effort may be a signal of stress within the fishery. For the red snapper component of the commercial sector, the number of vessels and trips did decline after the red snapper IFQ program was first implemented. However, the number of vessels and trips with red snapper landings have increased from 2007 to 2012 (GMFMC 2013b). These trends are described in Sections 3.1, 5.0, 6.0 and in GMFMC (2013b). The commercial IFQ program recently underwent a 5-year review (GMFMC 2013b). The stated goals of this program, implemented through Amendment 26 (GMFMC 2006) were to reduce overcapacity and eliminate problems associated with overcapacity. The review found the program was moderately to highly successful in meeting the program goals; however, further improvements were identified regarding overcapacity, discard mortality price reporting, and social and community impacts. Therefore, the red snapper component of the commercial sector does not seem to be stressed.

Within the commercial reef fish sector as a whole, the number of commercial vessels has been declining as evidenced by the number of permits (Table 4.2.1). The number of permits has declined from 1,099 in 2008 to 917 in 2012 and the number landing at least one pound of reef fish has declined from 681 to 557 over the same time period. Although this could be an indicator of stress in the fishery, the commercial sector has undergone several changes in the past few years with the IFQ programs for red snapper, grouper, and tilefish. Given that a primary goal of these programs is to reduce overcapacity, the reduction in permits may just reflect this expected change.

Table 4.2.1. Number of Gulf of Mexico reef fish commercial (landing at least one pound of reef fish), for-hire, and historical captain permits by year.

Sector	Year				
	2008	2009	2010	2011	2012
Commercial	1099 (681)	998 (696)	969 (580)	952 (561)	917 (557)
For-hire	1458	1417	1385	1353	1336
Historical captain	61	56	47	43	42

Source: Southeast Regional Office, Limited Access Permit Program Branch.

Table 4.2.2. Number of Gulf of Mexico reef fish commercial trips catching at least one pound of reef fish and the number of offshore angler trips for the charter and private angler components of the reef fish recreational sector for the years 2008-1012.

Sector	Year				
	2008	2009	2010	2011	2012
Commercial	8,079	8,177	5,991	6,541	6,629
Charter	326,868	319,768	229,679	300,668	355,413
Private angler	1,434,875	1,011,948	767,080	782,989	1,017,007

Sources: Commercial trip data from the Southeast Regional Office, Limited Access Permit Program Branch and recreational angler trip data from NOAA Office of Science and Technology’s Recreational Fisheries Statistics web page at <https://www.st.nmfs.noaa.gov/recreational-fisheries/index>.

Social and economic characteristics of recreational anglers are collected periodically as an add-on survey to MRIP. Data used to monitor recreational reef fish effort in the sector primarily comes from MRIP and includes the number of trips and number of catch trips. Declines in effort may be a signal of stress within the sector. Private and charter fishing modes accounted for most of red snapper target trips, with the private angler mode the most common mode (Table 3.5.2.1.2). By state, Florida accounts for the greater percentage of landings (Table 3.5.2.1.1). For red snapper, changes in angler trips between 2008 and 2012 do not appear to show this segment of the fishery is stressed. Both targeted angler trips and trips that caught red snapper by the sector were highest in 2009 and lowest in 2010 (Table 3.5.2.1.2). The low harvest in 2010 was likely due to the Deepwater Horizon MC252 oil spill when large areas of the northern Gulf were closed to fishing. Although the number of annual angler trips for 2011 and 2012 has not reached the high of 2009 since the spill, the annual number of trips for these years is closer to the 2009 level than the 2010 level. This trend is also apparent in the number of private/rental angler and for-hire trips (Table 3.5.2.1.2).

For the reef fish recreational sector, the number of angler trips in offshore waters (Table 4.2.2; used as a proxy for recreational reef fish fishing) and on headboats (Table 3.5.2.1.5) show a similar trend as noted above for recreational red snapper fishing with a decline in 2010 from 2008 and 2009 values followed by an increase in trips in 2011 and 2012. This suggests the sector is recovering from the 2010 Deepwater Horizon MC252 oil spill. Within the for-hire component, the number of for-hire and historical captain permitted vessels has declined from 2008 to 2012 (Table 4.2.1; 1458 to 1336 permits and 61 to 42 permits, respectively) and could be viewed as an indicator of stress. However, the number of offshore trips by the charter component has increased above 2008 and 2009 values suggesting economic conditions for this component are improving.

At this time, climate change does not appear to be a stressor on the reef fish fishery. However, it could be in the future. The National Ocean Service (2011) indicated that 59% of the Gulf coast shoreline is vulnerable to sea level rise. This means coastal communities that support this fishery could be impacted in the future from higher storm surges and other factors associated with sea

level rise. These communities do appear to be somewhat resilient given their ability to recover after the 2004 and 2005 hurricane seasons as well as from the Deepwater Horizon MC252 oil spill (see step 4).

Red Snapper

Major stresses to the red snapper stock have primarily come from overfishing, which has been occurring at least since the first stock assessment in 1988 and overfishing only recently ended. It is likely that quota overruns by both commercial and recreational sectors have slowed the recovery of the stock. Trends in landings and the status of red snapper stock are based on NMFS and SEDAR stock assessments (summarized in Sections 3.1 and 3.3) and incorporated here by reference. The most recent stock assessment indicates the stock is continuing to rebuild. It is likely the red snapper stock was adversely affected by the Deepwater Horizon MC252 oil spill in 2010; however, these effects are only just being realized (see step 4d). A recommendation in the 2013 stock assessment (SEDAR 31 2013) is that future assessments of Gulf red snapper should be conducted with the explicit goal of attempting to model any enduring oil spill effects and their effect on the stock. At this point, it is unclear if and how climate change is affecting red snapper stocks. Burton (2008) speculated climate change could cause shifts in spawning seasons, changes in migration patterns, and changes to basic life history parameters such as growth rates in Gulf fish stocks, but changes to such patterns have not been observed for red snapper.

Ecosystem

With respect to stresses to the ecosystem from actions in this amendment, changes in the red snapper allocation are not likely to create additional stress. Handline gear, the primary gear used by the fishery, and longlines can damage habitat through snagging or entanglement; however, as described in Section 4.1.1, these impacts are minimal. Changes in the population size structure as a result of shifting red snapper fishing selectivities and increases in stock abundance could lead to changes in the abundance of other reef fish species that compete with red snapper for shelter and food. Predators of red snapper could increase if red snapper abundance is increased, while species competing for similar resources as red snapper could potentially decrease in abundance if food and/or shelter are less available. Efforts to model these interactions are still ongoing [e.g., Ecopath (Walters et al. 2006) and Atlantis], and so predicting possible stresses on the ecosystem in a meaningful way is not possible at this time. As described in Part 4d of this cumulative effects analysis, the Deepwater Horizon MC252 incident has affected more than one-third of the Gulf area from western Louisiana east to the panhandle of Florida and south to the Campeche Bank in Mexico. The impacts of the oil spill on the physical and biological environments are expected to be significant and may be long-term. Stressors to the ecosystem could include such factors as year-class failures and damage to reef fish EFH. Climate change may also be a stressor to the ecosystem, but is poorly understood. Hollowed et al. (2013) outlined the difficulties in understanding the effects of climate change and developed a conceptual pathway of direct and indirect effects of climate change and other anthropogenic factors on marine ecosystems. They suggest integrated interdisciplinary research teams be used better understand the effects.

Administrative Environment

The stresses to the administrative environment from these actions would likely focus on the setting of annual quotas, ACTs, as well as monitoring landings to determine if AMs have been triggered. However, these stresses are not expected to significantly differ from the current stresses. In 2013, several states established recreational red snapper regulations that were inconsistent with federal regulations. This caused additional stress on the administrative environment requiring additional regulations, analysis, presence of law enforcement, and increased confusion among the fishing public. The actions in this amendment would allow regions to adjust regulations to meet their regional needs while maintaining consistency with the FMP and likely reduce stress in this environment. It is unknown whether the regions would be able to constrain harvest to the quota. However, with the current federal management, the recreational sector has exceeded the allocation in 14 of 22 years in which an allocation was specified. The stock could likely withstand some overages without jeopardizing the rebuilding plan; however, continuous overages could result in a change of the stock status. However, the regions have indicated they intend to establish new monitoring procedures, which could improve the estimations for landings, but the SEFSC would need to review the sampling designs and data to insure compatibility with the current methods.

6. Characterize the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds.

This section examines whether resources, ecosystems, and human communities are approaching conditions where additional stresses could have an important cumulative effect beyond any current plan, regulatory, or sustainability threshold (CEQ 1997). Sustainability thresholds can be identified for some resources, which are levels of impact beyond which the resources cannot be sustained in a stable state. Other thresholds are established through numerical standards, qualitative standards, or management goals. The CEA should address whether thresholds could be exceeded because of the contribution of the proposed actions to other cumulative activities affecting resources.

Reef Fish Fishery

As indicated above, both commercial and for-hire fisheries are subject to stress as a result of increases in fishing costs, increases in harvesting efficiency, more restrictive regulations (particularly for red snapper), and changes in the stock status of certain species (effort shifting). Reductions in dollars generated by these entities would likely be felt in the fishery infrastructure. For the reef fish fishery, an indicator of stress would be a decline in the number of permitted vessels. For the commercial sector, the number of vessels and trips landing red snapper initially declined after the IFQ program went into effect in 2007 (419 vessels and 4,714 trips in 2006 compared to 319 vessels and 2,578 trips in 2007; GMFMC 2013b). However, the number of vessels and trips landing red snapper has increased in recent years (368 vessels and 3,389 trips in 2011) demonstrating that conditions in commercial red snapper sector are improving. GMFMC (2013b) also cites other factors such as pricing, fleet and effort consolidation, and market conditions that also support an improved socioeconomic environment. As mentioned in Step 5 of this CEA, the number of vessels in the commercial sector has declined (Table 4.2.1); however, with the shift towards IFQ management, it is difficult to determine if this reflects stress in the sector or is a result of overcapacity reduction - an expected result of IFQ management. Five-year

reviews similar to the one conducted for red snapper are planned for the grouper and tilefish IFQ programs after the 2014 fishing year (year 5 of the) is complete.

Analyses conducted on the effects of a limited access program for for-hire vessels indicated operations were generally profitable (GMFMC 2005a). However, testimony from for-hire operators in light of recent red snapper regulations have suggested some for-hire operators may go out of business, particularly in the northeastern Gulf. This may be reflected in the declines in the numbers of permitted vessels shown in Table 4.2.2. However, Action 1 would increase the recreational allocation and support more red snapper fishing days. As a result, more red snapper trips would likely be booked unless any gains derived from shifting the allocation are minimized through the Action 2 buffers used to estimate the red snapper season length. Other reasonably foreseeable actions listed in Step 4c of this analysis are not expected to adversely affect the for-hire component and so should not place additional stress to the recreational sector. Non-FMP actions (see Step 4d) may place added stress on the for-hire component of the recreational sector (e.g., hurricanes and higher fuel costs). However, timing and magnitude of the potential negative cumulative the effects from these events are difficult to predict.

Little information is available on the stresses on the private angler sector. Because private angling is an optional activity, likely factors that affect a person's involvement are likely economic. Therefore, costs such as fuel, marina fees, and boat upkeep are likely to affect a person's decision to go red snapper fishing or not, particularly within the current short recreational red snapper season. As a result, more red snapper trips could be taken if there are gains in pounds for this component. Other reasonably foreseeable actions listed in Step 4c of this analysis are not expected to adversely affect the private angling component and so should not place additional stress to the recreational sector as a whole. Non-FMP actions (see Step 4d) may place added stress on the private angling component (e.g., hurricanes, higher fuel costs, and climate change). However, timing and magnitude of the potential negative cumulative the effects from these events are difficult to predict (see steps 4 and 6).

Red Snapper

Amendment 1 to the Reef Fish FMP (GMFMC 1989), implemented in 1990 before the Sustainable Fisheries Act (SFA) was passed, established the minimum spawning stock biomass at 20 percent SPR for all reef fish species. A 1991 regulatory amendment (GMFMC 1991) established a commercial quota and a 1997 regulatory amendment established a recreational quota. The quotas were set based on the 51:49 commercial:recreational allocation being applied to the total allowable catch. The Generic Sustainable Fisheries Act (SFA) Amendment (GMFMC 1999) proposed SFA definitions for optimum yield, minimum stock size threshold and maximum fishing mortality threshold for three reef fish species and generic definitions for all other reef fish. The definition of maximum fishing mortality threshold for red snapper, $F_{26\%SPR}$, was approved and implemented. Definitions for optimum yield and minimum stock size threshold were disapproved because they were not biomass-based. ACLs were not implemented for red snapper as the commercial and recreational quotas were considered functional equivalents; however, ACLs are currently being developed by the Council in a Generic Status Determination Criteria Amendment (see 4c of this CEA).

A benchmark assessment was conducted for red snapper in 2013 with an update in 2014 under the SEDAR stock assessment process (see Section 3.3 for a summary of the assessment). Based on the parameter estimates through 2014 (using provisional landings), the red snapper stock was found to be overfished, but that overfishing had ended. A brief description of the stock and its status can be found in Section 3.3 and step 5 of this CEA. Measures proposed in this amendment are not likely to adversely affect the red snapper stock status as long as landings do not exceed the OFL. This is because the actions would affect the allocation of red snapper between sectors and not how many red snapper can be caught. At this time, it is unclear how climate change may affect these regulatory thresholds (see steps 4 and 5).

Ecosystem

The stresses associated with the proposed actions in relation to regulatory thresholds are not likely to cause beneficial or adverse effects on the ecosystem. The actions would not change the way the reef fish fishery as a whole is prosecuted. Actions in the amendment would affect red snapper recreational fishing and not fishing for the other 30 reef fish species. Thus, significant effects on the ecosystem are not expected. The overall Gulf-wide fishing effort would remain constrained by the recreational quotas and annual catch limits. Climate change is likely to affect the Gulf ecosystem; however, as described in steps 4 and 5, these effects are poorly understood.

Administrative Environment

The stresses associated with the proposed actions in relation to regulatory thresholds are not likely to cause beneficial or adverse effects on the administrative environments. Activities such as monitoring landings, setting quotas, and enforcing fisheries regulations will continue as before. If the creating reallocating red snapper between sectors results in more satisfying management measures for each sector, this should reduce stresses on managers to respond complaints by stakeholders on red snapper management. However, given the allocation for the commercial sector would be reduced, dissatisfaction by the sector could result and place more stress on fishery managers.

7. Define a baseline condition for the resources, ecosystems, and human communities.

The purpose of defining a baseline condition for the resource and ecosystems in the area of the proposed actions is to establish a point of reference for evaluating the extent and significance of expected cumulative effects.

Reef Fish Fishery

As noted in Section 3.1, a description of the fishery and affected environment relative to red snapper was last fully discussed in joint Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007). Red snapper landings for the recreational sector are not available at the community level, making it difficult to identify communities as dependent on recreational fishing for red snapper. Data reflecting commercial landings of red snapper may or may not reflect areas of importance for recreational fishing of red snapper. It cannot be assumed that the proportion of commercial red snapper landings among other species in a community would be similar to its proportion among recreational landings within the same community because of sector differences in fishing practices and preferences. Thus, in addition to communities with the greatest commercial red snapper landings, the referenced analysis identifies communities with

the greatest recreational fishing engagement, based on numbers of: 1) federal for-hire permits, 2) vessels designated recreational by owner address, and 3) vessels designated recreational by homeport, plus availability of recreational fishing infrastructure. The Gulf communities to score highest for recreational fishing engagement based on the described analysis are listed in Figures 3.4.1.1 and 3.4.1.2, and Table 3.4.1.2. Because the analysis used discrete geo-political boundaries, Panama City and Panama City Beach had separate values for the associated variables. Calculated independently, each still ranked high enough to appear in the top 30 list suggesting a greater importance for recreational fishing in that region.

Information is lacking on the social environment of these fisheries, although some economic data are available, although primarily for the commercial sector. Fishery-wide ex-vessel revenues are available dating to the early 1960s, and individual vessel ex-vessel revenues are available from 1993 when the logbook program was implemented for all commercial vessels.

Red Snapper

The first stock assessment of red snapper was conducted in 1986 and has been assessed periodically since then (see Section 3.1). The most recent assessment (see Section 3.3 for a summary) occurred in 2013 through the SEDAR process and included data through 2011. The assessment shows trends in biomass, fishing mortality, fish weight, and fish length dating to the earliest periods of data collection. For this assessment, reliable commercial landings data were estimated back to 1963 and projected landings were estimated back to 1872 (Porch et al. 2004). Recreational data were available since 1981. Beginning with the 1988 assessment (Goodyear 1988), red snapper have been considered overfished and undergoing overfishing. However, the most recent assessment (SEDAR 31 2013) showed that overfishing had ended and that the stock condition, although still overfished, was improving. At this time, it is unknown what affects non-FMP actions (beneficial or adverse) such as the Deepwater Horizon MC252 oil spill or climate change may have on the health of red snapper stocks. Long-term monitoring of reef fish stocks relative to the Deepwater Horizon MC252 oil spill are ongoing.

Ecosystem

A baseline for analysis of the physical environment, as discussed in Section 3.2, was conducted in the EIS for the Generic EFH Amendment (GMFMC 2004a). Detailed information pertaining to the closures and preserves is provided in the February 2010 Regulatory Amendment (GMFMC 2010). In the Gulf, fish habitat for adult red snapper consists of submarine gullies and depressions; natural vertical relief structures such as coral reefs, rock outcroppings, and gravel bottoms; and artificial structures such as oilrigs and artificial reefs (GMFMC 2004a). Many of these vertical relief areas are identified as protected areas.

Other species in the ecosystem are discussed in Section 3.3. The Reef Fish FMP currently encompasses 31 species (Table 3.3.2). Eleven other species were removed from the FMP in 2012 through the Generic ACL/AM Amendment (GMFMC 2011a). Stock assessments and stock assessment reviews have been conducted for 13 species and can be found on the Council (www.gulfcouncil.org) and SEDAR (www.sefsc.noaa.gov/sedar) websites.

Administrative Environment

The administrative environment is described in Section 3.6. Responsibility for federal fishery management is shared by the Secretary of Commerce (Secretary) and the Council for the federal waters of the Gulf. These waters extend to 200 nautical miles offshore from the nine-mile seaward boundary of the states of Florida and Texas, and the three-mile seaward boundary of the states of Alabama, Mississippi, and Louisiana. The state governments of Texas, Louisiana, Mississippi, Alabama, and Florida have the authority to manage their respective state fisheries. Each of the five Gulf states exercise legislative and regulatory authority over their respective state's natural resources through discrete administrative units. Although each agency is the primary administrative body with respect to the states' natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources.

Regulations contained within FMPs are enforced through actions of NOAA's Office of Law Enforcement, the United States Coast Guard, and various state authorities. To better coordinate enforcement activities, federal and state enforcement agencies have developed cooperative agreements to enforce the Magnuson-Stevens Act. These activities are being coordinated by the Council's Law Enforcement Advisory Panel and the Gulf States Marine Fisheries Commission's Law Enforcement Committee, which have developed a 5-year "Gulf of Mexico Cooperative Law Enforcement Strategic Plan – 2008-2012."

The ability of the regions to constrain harvest causes uncertainty surrounding the effects of implementing regional management. The federal management has experienced overages of the quota or allocation in 14 of the last 22 years. However, the methods for estimating landings and projecting the season have improved consistently over time. The question remains if regions could constrain the harvest within the regional quotas; however, the regions have indicated they intend to improve monitoring for their specific regions under this plan, which should ameliorate any concerns about overages being worse. Nevertheless, NMFS would need to continue analyzing the catch rates and landings to determine whether the regional management measures constrain the harvest. If the quota is exceeded for Gulf recreational red snapper harvest, then NMFS would be required to prohibit harvest in the EEZ regardless of the regional management plans.

8. Identify the important cause-and-effect relationships between human activities and resources, ecosystems, and human communities.

Cause-and-effect relationships are presented in Tables 4.2.3.

Table 4.2.3. The cause and effect relationship of fishing and regulatory actions for red snapper within the time period of the CEA.

Time periods	Cause	Observed and/or expected effects
1800-2016	Climate change	Changes ocean acidity and temperature modifies fish and prey distributions and productivity; threaten fishing communities through sea level rise and changing weather patterns
1962-1983	Growth and recruitment overfishing	Declines in mean size and weight
1984	13-inch minimum size limit for the recreational and commercial fisheries	Slowed rate of overfishing
1990	3.1 mp quota for commercial fishery and 7 fish bag limit	Further slow rate of overfishing
1991-1992	2.04 mp commercial quota	Continue to slow rate of overfishing
1992	Establish red snapper Class 1 and 2 endorsements and respective trip limits	Begin derby fishery
1993-1998	3.06 mp commercial quota	Continue to slow rate of overfishing
1994	Increase minimum size to 14 inches in the commercial and recreational fisheries	Increase yield per recruit, increase the chance for spawning, and slow rate of overfishing
1995-1997	Increase minimum size to 15 inches in the commercial and recreational fisheries and reduce the bag limit to 5 fish	Increase yield per recruit, increase the chance for spawning, and slow rate of overfishing
1997-2005	Reduce recreational season length	Constrain harvest in recreational fishery
1998	Shrimp trawls in the EEZ required to use NMFS-certified BRDs west of Cape San Blas	Reduce fishing mortality rate on age 0 and age 1 red snapper
1998-2005	Reduce bag limit to 4 fish	Reduce fishing mortality rate in recreational fishery
1999-2005	Raise total quota to 9.12 mp	Reduce rebuilding rate for fishery
2000-2016	Raise recreational minimum size limit to 16 inches	Increase yield per recruit, increase the chance for spawning, slow rate of overfishing
2004	Shrimp trawls in the EEZ required to use NMFS-certified BRDs east of Cape San Blas	Further reduce fishing mortality rate on age 0 and age 1 red snapper
2004	Implement red snapper rebuilding plan	Provide mechanism to monitor harvest for rebuilding
2007-2016	Commercial- Established Individual Fishing Quota Program (IFQ)	Constrain commercial harvests within the limits set by the rebuilding plan; IFQ to further control commercial sector to prevent overages; increase in administrative work to manage the IFQ.
2007-2016	Recreational - Reduction of bag limit to 2 fish and adjustment of season length	Constrain recreational harvest to the quota. Progressively shorter seasons as average size of landed fish increases.
2013-2016	Overfishing has ended, but the stock remains overfished.	Continue stock rebuilding

9. Determine the magnitude and significance of cumulative effects.

The primary objectives of this amendment and associated EIS is to reallocate red snapper resources between the commercial and recreational sectors as well as add accountability measures to reduce the probability of exceeding the recreational quota with the intent to increase the net benefits from red snapper fishing as well as increase the stability of the red snapper component. The short- and long-term direct and indirect effects of each these actions are provided in Section 4.1.

To examine the magnitude and significance of the cumulative effects, important valued environmental components (VECs) were identified for the overall actions to be taken with this amendment. VECs are “any part of the environment that is considered important by the proponent, public, scientists and government involved in the assessment process. Importance may be determined on the basis of cultural values or scientific concern” (EIP 1998). For purposes of this analysis, an initial 22 VECs were identified, and the consequences of each alternative proposed in this amendment on each VEC were evaluated. Some of these VECs were combined into a revised VEC because many of the past, current, and reasonably foreseeable future actions (RFFA) were similar. Based on this analysis, seven VECs were determined to be the most important for further consideration. These are shown in Table 4.2.4.

VECs not included for further analysis were sharks and protected resources. Many longline vessels that target reef fish also target sharks. However, sharks were not considered as an important VEC because, as shark stocks have declined, the shark fishery has become more and more regulated, limiting the effects of this fishery and the stock on reef fish stocks. There may be some effort shifting from the shark fishery to the reef fish fishery due to increased restrictions, however, this effect will likely be minor because only a minority of vessels have dual federal reef fish and shark permits. Protected resources were also eliminated from further analyses in this section. As described in Section 3.3, biological opinions have concluded the primary reef fish gear (longline and hook-and-line) were not likely to jeopardize sea turtles or small tooth sawfish. Because actions considered in this amendment are not expected to change how reef fish fishing gear is used in the prosecution of the reef fish fishery, any take associated with reef fish fishing should not exceed that considered in biological opinions. All other Endangered Species Act (ESA)-listed species have been found not likely to be adversely affected or not affected by the reef fish fishery. For marine mammals, gear used in the reef fish fishery were classified in the as Category III fisheries (see Section 3.3). This means this fishery has minimal impacts on marine mammals.

Table 4.2.4. VECs considered, consolidated, or not included for further evaluation.

VECs considered for further evaluation	VECs consolidated for further evaluation	VECs not included for further evaluation
Habitat	Hard bottom EFH	
Managed resources - red snapper - other reef fish species	Red snapper Other reef fish Prey species Competitors Predators	Sharks Protected species
Vessel owner, captain and crew - Commercial - For-hire	Vessel owner Captain Crew	
Wholesale/retail	Dealers Consumers	
Anglers		
Infrastructure	Fishing Communities Fishing support businesses (ice and gear suppliers, marinas, fuel docks)	
Administration	Federal Rulemaking Federal Permitting Federal Education State Rulemaking/Framework State Education	

The following discussion refers to the effects of past, present, and RFFAs on the various VECs.

Habitat

In the past, some fishing practices have had detrimental effects on the physical environment. Gears such as roller trawls and fish traps damaged habitats while harvesting fish species. As a result of these effects, the Council developed stressed areas to reduce these impacts. Further protections have been developed, primarily by either prohibiting fishing or limiting fishing activities that can occur within certain areas. Detailed information on the the closures and preserves is provided in the February 2010 Regulatory Amendment (GMFMC 2010). In addition, regulatory changes through Generic EFH Amendment 3 (GMFMC 2005b; implemented in 2006) prohibited bottom anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots to protect coral reefs in several HAPCs, and required a weak link in the tickler chain of bottom trawls on all habitats throughout the Gulf EEZ to minimize damage done to habitats should the chain get hung up on natural bottom structures.

Current allowable gear types can adversely affect hard bottom areas; however, these impacts are not considered great (See Section 4.1.1). Handline gear and longlines used in the reef fish fishery can damage habitat through snagging or entanglement. Longlines can also damage hard bottom structures during retrieval as the line sweeps across the seafloor. Additionally, anchoring over hard-bottom areas can also affect benthic habitat by breaking or destroying hard bottom structures. However, these gears are not believed to have much negative impact on bottom

structures and are considerably less destructive than other commercial gears, such as traps and trawls, which are not allowed for reef fish fishing.

Damage caused from reef fish fishing, although minor, is associated with the level of fishing effort (see Section 4.1.1). Therefore, actions reducing levels of effort would result in greater benefits to the physical environment because fishing related interactions with habitat would be reduced. Thus, actions described in steps 3 and 4 of this CEA which have reduced fishing effort for some species, and possibly the fishery on the whole, have had a positive effect on hard bottom habitats. RFFAs, such as Amendments 28 and 39, should also benefit these habitats as they would also reduce or limit fishing effort. As described in Sections 4.1.1, 4.2.1, and 4.3.1, effects on the physical environment from the proposed actions would likely be minimal because prosecution of the fishery should not be changed.

Reef fish EFH, particularly coral reefs and SAVs, are particularly susceptible to non-fishing activities (GMFMC 2004a). The greatest threat comes from dredge-and-fill activities (ship channels, waterways, canals, and coastal development). Oil and gas activities as well as changes in freshwater inflows can also adversely affect these habitats. As described in Step 4d of this cumulative effects analysis, the potential harm to reef fish habitat was highlighted by the Deepwater Horizon MC252 incident (<http://response.restoration.noaa.gov/deepwaterhorizon>). Essential fish habitat and HAPC designations cited in Section 3.2, GMFMC (2005b), and GMFMC (2010) and are intended to promote careful review of proposed activities that may affect these important habitats to assure that the minimum practicable adverse impacts occur on EFH. However, NMFS has no direct control over final decisions on such projects. The cumulative effects of these alternatives depend on decisions made by agencies other than NMFS, as NMFS and the Gulf Council have only a consultative role in non-fishing activities. Decisions made by other agencies that permit destruction of EFH in a manner that does not allow recovery, such as bulkheads on former mangrove or marine vegetated habitats, would constitute irreversible commitments. However, irreversible commitments should occur less frequently as a result of EFH and HAPC designations. Accidental or inadvertent activities such as ship groundings on coral reefs or propeller scars on seagrass could also cause irreversible loss.

At this time, it is unclear what effects climate change will have on red snapper EFH. Factors associated with climate change such as ocean acidification could negatively affect important biotic components of red snapper EFH such as corals (IPCC 2014). Hollowed et al. (2013) has identified important ecosystem paths that deserve future study to determine climate change cause and effects.

Managed Resources

There are 31 species of reef fish managed in the Gulf EEZ, and of the species where the stock status is known, four of the eleven species are considered overfished (gag, greater amberjack, gray triggerfish, and red snapper; see Section 3.3). Recent actions for these overfished stocks were intended to end overfishing and set or continued rebuilding plans (e.g., Amendments 27, 32, 35, and 37).

In the past, the lack of management of reef fish allowed many stocks to undergo both growth and recruitment overfishing. This has allowed some stocks to decline as indicated in numerous stock assessments (Section 3.3). Red snapper have been considered overfished since the first stock assessment in 1986. For red snapper, management measures including a minimum size limit, commercial quota, and aggregate bag limit were put in place as part of the initial Reef Fish FMP or Amendment 1 (Section 3.1). None of these measures halted increases in landings (Table 3.1.2). However, over time, management measures have become more restrictive and held landings more closely to the quotas.

The present harvest levels are based on a rebuilding plan put in place by Amendment 27 which shifted the plan from a constant catch to a constant fishing mortality plan. The current plan, after an initial reduction in the total allowable catch from 9.12 mp to 5 mp, has allowed harvests to increase as the stock rebuilds. These measures have also limited the red snapper harvest sufficiently to end overfishing on the stock. In addition, the red snapper IFQ program has successfully held landings by the commercial sector below its quota. However, these measures, along with other IFQ programs for grouper and tilefish (Amendment 29) may have, at least for the commercial sector, redirected effort towards other non-IFQ managed reef fish species such as gray triggerfish and greater amberjack by fishermen without IFQ shares or allocation. Landings of these non-IFQ managed species are closely managed to prevent them from exceeding their ACLs and protects them from overharvest. In fact, measures for gray triggerfish and greater amberjack allow the fishery to be closed if the harvest is projected to meet their respective commercial and recreational quotas.

Fishery management RFFAs are expected to benefit managed species. These actions are expected to manage the stocks at OY per National Standard 1 and are described in steps 3 and 4 of this CEA. Although this amendment and Amendments 36, 39, and 40 do not specifically address overfishing of red snapper, they are intended to improve the management of the commercial and recreational sectors in ways that are likely to better keep harvests within the quotas. Other RFFAs described in steps 3 and 4 similarly do not specifically address overfishing but are intended to improve the management of reef fish stocks either through revising ACLs, improving data reporting, or allowing more flexibility in management.

Non-fishing activities are likely to adversely affect reef fish stocks as listed in Step 4d. For example, LNG facilities are being proposed in the western and northern Gulf. As described in Step 4d, these facilities can have a negative effect on species with pelagic larvae, like most reef fish species. To mitigate the effects of these facilities, closed- rather than open-loop systems are being called for. At this time, the effect of LNG facilities is unknown and is likely to be less for reef fish species than other more coastal species such as red drum. Other factors such as climate change, hurricanes, and oil and gas extraction could have detrimental effects on reef fish species.

Vessel Owner, Captain, and Crew (Commercial and For Hire)

Adverse or beneficial effects of actions on vessel owners, captains, and crew are tied to the ability of a vessel to make money. In commercial fisheries, these benefits are usually derived from shares awarded after fishing expenses are accounted for. The greater the difference between expenses and payment (revenue) for harvested fish, the more profit is generated by the

fishing vessel. For-hire businesses generate revenue by selling either at the vessel level (charter businesses) or passenger level (headboats)

The commercial fishery has benefited from past actions in the reef fish fishery relative to this action. Prior to 1990, entry into the reef fish fishery was unhindered by regulation. To constrain harvest in order to prevent overexploitation of reef fish in general and red snapper specifically, the Council implemented size limits, quotas, seasonal closures, and a permit moratorium. These measures have produced limited success. For red snapper, the commercial quota was overrun 10 times until the IFQ program established in 2007 (Table 3.1.2).

Current management measures have had an overall positive, short-term impact on the red snapper component of the commercial sector. Landing restrictions were needed to keep the commercial red snapper harvest within its quota and primarily took the form of short mini-seasons (Hood et al. 2007). The mini-seasons kept many commercial vessels from taking more fishing trips during these years limiting fishing effort. With the advent of the IFQ program, fishermen with red snapper allocation were able to have flexibility in when and where they could fish. It also stopped the commercial quota from being exceeded. However, this program adversely affected fishermen who did not qualify for the initial distribution of IFQ shares. These fishermen have been required to purchase IFQ shares or allocation if they wished to harvest red snapper.

For other overfished reef fish stocks other than red snapper, rebuilding measures required to end this condition and rebuild stocks have constrained the harvest for these species over the short-term and likely increased competition within the commercial sector to harvest other stocks. However, by using constant fishing mortality rebuilding plans, harvests have been allowed to increase as the stocks recover.

Non-FMP factors have adversely affected the reef fish commercial and for-hire fleets. Imports can cause fishermen to lose markets when fishery closures occur as dealers and processors use imports to meet consumer demand. Consumer comfort with imports can then limit the price fishermen receive when harvest is allowed. Other factors that have had an adverse effect on the commercial fishery include hurricanes and increases in fishing costs, such as fuel, which may have pushed marginal fishing operations out of business (see step 4d). Hurricanes are unpredictable and localized in their effects. Increases in fishing costs, unless accompanied by an increase in prices or harvest quantity, decrease the profitability of fishing.

The for-hire component has benefited from past actions in the reef fish fishery relative to this action. This increase has been fueled by increased interest by the public to go fishing (i.e., more trips sold) as evidenced by an almost three-fold increase in recreational fishing effort since 1986 (SEDAR 12 2007). To constrain harvest in order to prevent overexploitation of reef fish in general and red snapper specifically, NMFS, through the Council, implemented minimum size and bag limits for most species prior to 2000. In addition, a recreational red snapper quota was implemented in 1997 and a permit moratorium to constrain the recreational effort from the for-hire industry in 2003. These measures have met with limited success toward ending overfishing.

Current management measures may have had a negative, short-term impact on the for-hire component of the reef fish fishery. Landing restrictions have been needed to keep the recreational red snapper harvest within its quota. These restrictions include a reduced bag limit and seasonal closures. These measures may have reduced interest by the public to take for-hire fishing trips and possibly resulted in a reduction in the number of trips taken, as shown in Table 4.4.2 (although the Deepwater Horizon MC252 oil spill may also be partly responsible for the decrease in trips). In addition, the restriction requiring a person aboard a federally-permitted Gulf for-hire reef fish vessel to comply with federal regulations for reef fish species regardless of where the fish are harvested (GMFMC 2008b), may have reduced the ability of federally permitted for-hire operators to sell trips because of longer non-compliant state fishing seasons. However, as discussed in Sections 4.1.3 and 4.1.4, the creation of the two recreational components may allow for more federal fishing days for the federal for-hire component. Other factors that have had an adverse effect on the for-hire component of the reef fish fishery include increases in fishing costs, such as fuel, and hurricanes which may have pushed marginal fishing operations out of business (see step 4d). However, these factors may be less important than may seem apparent. For the red snapper for-hire component, reductions in charter fishing from more restrictive regulations, increased costs, and effects from hurricanes were claimed by the industry (GMFMC 2007). But red snapper data for 2007 found only lingering effects of the 2005 hurricanes; annual average effort for 2004 through 2005 were only slightly greater than in 2007. Although the available data cannot address claims of severe economic losses by individual entities, this data does not support contentions of widespread industry harm. However, for red snapper, effort may have shifted to other species or other charter businesses.

Magnuson-Stevens Act §407(d)(1) requires recreational or commercial red snapper fishing to end when a sector catches its quota. The recreational sector includes both the federal for-hire and private angling components. Thus, if the private angling component exceeds its allocation of the recreational quota to such an extent that the overall recreational quota is projected to be met, the federal for-hire component would also be prohibited from retaining red snapper regardless of whether there is remaining quota available for that component. Reduced season lengths in the following year for the federal for-hire components could be further exacerbated by overage adjustments from exceeding the quota and non-compatible state fishing seasons. However, the likelihood of overages is reduced because each component's season will be based on the lower recreational ACT rather than the recreational quota.

Many RFFAs are likely to have a short-term negative impact on the for-hire component. Red snapper, gray triggerfish, greater amberjack, and gag have experienced overfishing, are considered overfished, and are being managed under stock rebuilding plans. Measures required to end overfishing and rebuild these stocks have constrained the harvest for these species. If these measures result in less interest by the fishing public to take fishing trips on for-hire vessels, then this will adversely affect this sector. However, as mentioned above, this effect has not been apparent for red snapper because the for-hire component has the ability to shift to other species. The ability to shift to other species would be expected to continue in response to subsequent RFFAs, though the flexibility would be reduced the more species that become subject to increased restrictions. Some short-term beneficial actions include an increase in TAC and relaxation of management measures for red grouper and vermilion snapper, as these stocks have recovered from overfishing and harvest restrictions have been relaxed.

Because many management RFFAs are designed to manage stocks at OY, these actions should be beneficial to the for-hire component. Stocks would be harvested at a sustainable level, and at higher levels for those stocks being rebuilt. If allocation between components, as proposed in this amendment, favors the for-hire component, this could provide additional red snapper fishing days and allow for more trips for this component. Specific to red snapper fishing, Amendments 28 and 39 evaluate changing the commercial and recreational red snapper allocation and implementing some type of regional management of the recreational sector, respectively. In Amendment 28, the alternatives for shifting the allocation would decrease the commercial percentage and increase the recreational percentage of the stock ACL. Depending how these shifts are put in place, they could adversely affect the commercial sector if the commercial quota is reduced. The recreational sector, including the federal for-hire component, would benefit from increased quotas. Regional management would affect the recreational sector only in Amendment 39. Depending on how the recreational quota is allocated among states and the management measures implemented by the states, the effects on the federal for-hire component could be beneficial or adverse depending on where a vessel operator fishes.

Non-management-related RFFAs that could affect the for-hire component include hurricanes, oil and gas extraction, and increases in fishing costs. Hurricanes are unpredictable and localized in their effects. Oil spills, which are also unpredictable, can have extensive adverse impacts over large areas as evidenced by the Deepwater Horizon MC252 spill. Increases in fishing costs, unless accompanied by an increase in the price charged per trip or the number of trips, decrease the profitability of fishing.

Wholesale/retail

Reef fish dealers are primarily found in Gulf States (step 2). As of January 6, 2014, there were 202 reef fish dealer permits. In 2012, there were 82 dealers involved in buying and selling red snapper through the IFQ program (NMFS 2013c). These dealers may hold multiple types of permits. Average employment information per reef fish dealer is unavailable. The profit profile for dealers or processors is not known.

Relative to past actions, dealers have benefitted from actions that have allowed the commercial fishery to expand, as described above. However, the effect of measures constraining commercial landings both in the past, present, and RFFAs may not have negative effects on dealers. As described in step 4d, the amount of snapper and grouper imports have doubled between 1994 and 2005. In terms of pounds, 2012 imports (44.5 mp) were more than twice domestic annual Gulf snapper and grouper landings (19.6 mp; see Section 3.5.1.4). This means dealers have some ability to substitute domestic product with imports. In addition, dealers also have the ability to substitute other domestic seafood products for red snapper in order to satisfy public demand for seafood. Therefore, the negative effects from management actions for the fishery may not necessarily translate into significant negative effects for dealers, though it is recognized that foreign product is less desirable because, if not, dealers would be substituting imports instead of domestic harvest when domestic harvest is available. As domestic fish stocks are rebuilt and management programs like IFQs are instituted, a more stable supply of domestic reef fish will be available to dealers. This should improve their ability to market these products and improve the

profit they receive from selling these fish. However, if a consequence of these actions is a reduction in the amount of domestically harvested red snapper, this would reduce any improvements in their ability to market red snapper.

In general, consumers of seafood may be somewhat sheltered from fluctuations in the domestic seafood supply by the availability of imported seafood. Therefore, if harvest is restricted for specific species of reef fish due to management change, there is likely some imported product that can be substituted for that species. However, the higher prices that domestically harvested reef fish generally receive compared to imports demonstrates the preference many consumers have for domestic harvest. This preference and the importance of red snapper to consumers is also supported by comments submitted during scoping. Here, they voiced their concern about the availability of red snapper in markets and restaurants if the commercial sector's allocation is decreased

(<https://docs.google.com/spreadsheet/ccc?key=0Atgbk2rxQkqhdHByby1ad0F0THZiMGtoVTdlVDJ6cWc#gid=0>).

Anglers

It is estimated that 3.1 million residents of Gulf States participated in marine recreational fishing (NMFS 2013b). Red drum and spotted sea trout are the species most commonly reported as target species by these anglers, with approximately 35% and 33% of interviewed anglers reporting targeting these species, respectively. The most commonly caught non-bait species across all waters of the Gulf were spotted seatrout, red drum, sand seatrout, Atlantic croaker, and gray snapper. In federal waters, the most commonly harvested species are white grunt, red grouper, red snapper, gag, and yellowtail snapper. As summarized in Holiman (2000), the typical angler in the Gulf is 44 years old, male (80%), white (90%), and employed full-time (92%). They have a mean income of \$42,700, and have fished in the state for an average of 16 years. The average number of trips taken in the 12 months preceding the interview was about 38 and these were mostly (75%) one-day trips with average expenditure of less than \$50. Seventy-five percent of interviewed anglers reported that they held salt-water licenses, and 59 percent owned boats used for recreational saltwater fishing. More recent comparable statistics are not available.

The effects of various past, present, and RFFAs on anglers are measured through levels of participation in the fishery. Measures that reduce participation are negative and measures that increase participation are positive. However, it is difficult to assess what affects past and present management measures have had on anglers because available data indicates the amount of effort by the private sector has increased. This increase has been from approximately 6.8 million trips in 1981 to over 14 million trips from in 2003 to 2009 (Rios 2013). The number of angler trips declined from 14,356,523 angler trips in 2009, to 13,548,899 in 2010, and 13,874,314 in 2011. The decline in 2010 and 2011 is likely due to the Deepwater Horizon MC252 oil spill. The effects of various management measures on the participation by anglers is likely similar to the effects on the for-hire industry discussed above with the exception that private anglers are not subject to permit restrictions on where they can fish that federally permitted for-hire vessel operators are (see above section). However, as discussed in Sections 4.1.3 and 4.1.4, the creation of the two recreational components may further restrict the number of federal fishing days for the

private angling component due to non-compatible state season lengths. Factors unrelated to management, such as hurricanes and increasing fuel and other costs, likely affect private anglers similar to for-hire fishermen. It should be noted that a possible effect of the proposed action could be constraining most of the private angling to state waters if state non-compatible seasons continue. If the private angling allocation is too low, then a greater proportion of private angling fish would be caught in state waters, reducing the days available to fish in federal waters.

As mentioned above in the discussion of the vessel owner, captain, and crew above, Magnuson-Stevens Act §407(d)(1) requires recreational or commercial red snapper fishing to end when a sector catches its quota. The recreational sector includes both the federal for-hire and private angling components. Thus, if the federal for-hire component exceeds its allocation of the recreational quota to such an extent that the overall recreational quota is projected to be met, the private angling component would also be prohibited from retaining red snapper regardless of whether there is remaining quota available for that component. Reduced federal season lengths for the private angling component in the following year could be further exacerbated by overage adjustments if the quota is exceeded and non-compatible state fishing seasons. However, the likelihood of this occurring is reduced because each component's season will be based on the lower recreational ACT rather than the recreational quota.

Two RFFAs specific to red snapper fishing, Amendments 28 and 39 evaluate changing the commercial and recreational red snapper allocation and implementing some type of regional management of the recreational sector, respectively. In Amendment 28, the alternatives for shifting the allocation would decrease the commercial percentage and increase the recreational percentage of the stock ACL. The recreational sector, including the private angling component, would benefit from increased quotas. Regional management would affect the recreational sector only in Amendment 39. Depending on how the recreational quota is allocated among states and the management measures implemented by the states, the effects on the private angling component could be beneficial or adverse depending on where anglers fish.

Non-management-related RFFAs that could affect anglers include hurricanes, oil and gas extraction, and increases in fishing costs. Hurricanes are unpredictable and localized in their effects. Oil spills, which are also unpredictable, can have extensive adverse impacts over large areas as evidenced by the Deepwater Horizon MC252 spill. Increases in fishing costs as well as lost fishing opportunities would likely reduce the amount of angler effort.

Infrastructure

Infrastructure refers to fishing-related businesses and includes marinas, rentals, snorkel and dive shops, boat dockage and repair facilities, tackle and bait shops, fish houses, and lodgings related to recreational fisheries industry. This infrastructure is tied to the commercial and recreational fisheries and can be affected by changes in those fisheries. Therefore, the effects of past, present, and RFFAs should reflect responses by the fisheries to these actions. Past actions allowing the recreational and commercial fisheries to expand have had a beneficial effect by providing business opportunities to service the needs of these industries. Present actions which have constrained the commercial fisheries likely have had a negative effect because lower revenues generated from the fishery would be available to support the infrastructure. However,

as conditions improve for the fishery, as described above, through RFFAs, benefits should be accrued by the businesses comprising the infrastructure. For the recreational sector, as stated above, it is difficult to assess the impact of present and RFFAs because angler participation has increased until recently. Actions enhancing this participation should be beneficial to the infrastructure. However, it should be noted the Council has been receiving public testimony that participation may be declining due to fuel price increases and this decline may be reflected in the decline in the number of angler trips taken. Non-FMP factors, such as the Deepwater Horizon MC252 oil spill (IAI 2012) and climate change (http://www.nefsc.noaa.gov/ecosys/climate_change/implications.html) may adversely affect fishing communities, particularly those communities considered more vulnerable.

Administration

Administration of fisheries is conducted by federal (including the Council) and state agencies that develop and enforce regulations, collect data on various fishing entities, and assess the health of various stocks. As more regulations are required to constrain stock exploitation to sustainable levels, greater administration of the resource is needed. The NMFS Office of Law Enforcement, in cooperation with state agencies, would continue to monitor regulatory compliance with existing regulations and NMFS would continue to monitor both recreational and commercial landings to determine if landings are meeting or exceeding specified quota levels. Further, stock status needs to be periodically assessed to ensure stocks are being maintained at proper levels. Some present actions have assisted the administration of fisheries in the Gulf. In 2007, an IFQ program was implemented for the commercial red snapper fishery, requiring NMFS to monitor the sale of red snapper IFQ shares. The recordkeeping requirements of the IFQ programs have improved commercial quota monitoring and prevented or limited overages from occurring. A vessel monitoring system was also implemented for all commercial reef fish vessels in 2007 and is helping enforcement identify vessels violating various fishing closures. The recent implementation of ACLs and AMs for most federally managed species has required close monitoring of landings. For some species, harvest is closed if landings are projected to exceed the ACL within the season. For others, quotas or ACLs need to be adjusted during the following season to account for any ACL overages that occur in the preceding year.

10. Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects.

The cumulative effects of allocation for red snapper on the biophysical environment is likely neutral because it should not have much effect on overall fishing effort. For the socioeconomic environment, depending on the sector, some effects would be likely be positive and some negative. However, short-term negative impacts on the fisheries' socioeconomic environment may occur due to the need to limit directed harvest and reduce bycatch mortality. These negative impacts can be minimized for the recreational sector by using combinations of bag limits, size limits and closed seasons and for the commercial sector through individual fishing quota programs, size limits, and season-area closures.

11. Monitor the cumulative effects of the selected alternative and modify management as necessary.

The effects of the proposed actions are, and will continue to be, monitored through collection of landings data by NMFS, stock assessments and stock assessment updates, life history studies, economic and social analyses, and other scientific observations. Landings data for the recreational sector in the Gulf is collected through MRIP, NMFS' Headboat Survey, and the Texas Marine Recreational Fishing Survey. MRIP replaced the previous MRFSS program. Commercial data is collected through trip ticket programs, port samplers, and logbook programs. Currently, SEDAR assessments of Gulf red snapper are scheduled for 2014 and 2015 (see step 3).

Unavoidable Adverse Effects

Unavoidable adverse effects are described in detail in the cumulative effects analysis of Amendment 30B (GMFMC 2008b) and 32 (GMFMC 2011b) and is incorporated here by reference. Catch quotas, minimum size limits, bag limits, and seasonal closures, are generally effective in limiting total fishing mortality, the type of fish targeted, the number of targeted fishing trips, and/or the time spent pursuing a species. However, these management tools have the unavoidable adverse effect of creating regulatory discards. Discard mortality must be accounted for in a stock assessment as part of the allowable biological catch, and thus restricts total allowable catches.

Many of the current participants in the reef fish fishery may never recuperate losses incurred from the more restrictive management actions imposed in the short-term to end overfishing of red snapper. Because red snapper is but one of the reef fish species managed in the Reef Fish FMP, short-term losses are not expected to be significant, and other species may be substituted to make up for losses to the fishery. With the anticipated recovery of the stock, future participants in the reef fish fishery will benefit. Overall, short-term impacts of actions would be offset with much higher allowable catch levels as the stock recovers and is rebuilt.

The actions considered in this amendment should not have an adverse effect on public health or safety because these measures should not alter actual fishing practices, just 1) which sector can harvest what percentage of the overall allowable harvest and 2) reduce the probability of the recreational sector exceeding its allocation. Unique characteristics of the geographic area are highlighted in Section 3. Adverse effects of fishing activities on the physical environment are described in detail in Section 4.1. This section concludes the impact on the physical environment should be minor from actions proposed in this document. Uncertainty and risk associated with the measures are described in detail in the same sections as well as assumptions underlying the analyses.

Relationship between Short-term Uses and Long-term Productivity

The primary objectives of this amendment and associated EIS are to 1) reallocate red snapper resources between the commercial and recreational sectors with the intent to increase the net benefits from red snapper fishing as well as increase the stability of the red snapper component, and 2) establish buffers and payback provisions as additional accountability measures for the recreational red snapper sector to support management efforts to maintain landings within the recreational quota and mitigate quota overages should they occur. The relationship between short-term economic uses and long-term economic productivity are discussed in the preceding section. However, because red snapper is but one species in the reef fish complex, these effects may be mitigated through effort shifting to other species and may not be significant.

No alternatives are being considered that would avoid these short-term negative effects because they are a necessary cost associated with rebuilding and protecting the red snapper stock. The range of alternatives has varying degrees of economic costs and administrative burdens. Some alternatives have relatively small short-term economic costs and administrative burdens, but would also provide smaller and more delayed long-term benefits. Other alternatives have greater short-term costs, but provide larger and more immediate long-term benefits.

Mitigation, Monitoring, and Enforcement Measures

Mitigation, monitoring and enforcement measures are described in detail in the cumulative effects analysis of Amendment 30B (GMFMC 2008b) and is incorporated here by reference. The process of reallocating the red snapper resource between sectors in favor of the recreational sector is expected to have a negative short-term effect on the social and economic environment for the commercial sector, and will create a burden on the administrative environment. Given the negative effects described in Sections 4.1 and 4.4, it is difficult to mitigate these measures and managers must balance the costs and benefits when choosing management alternatives for the reef fish fishery. The establishment of buffers and payback provisions as additional accountability measures for the recreational red snapper sector supports management efforts to maintain landings within the recreational quota and mitigate quota overages should they occur. These additional accountability measures, as discussed in Sections 4.2, 4.3, and 4.4 may have negative short-term effects on this sector, but are expected to have long-term benefits by helping the red snapper stock recover more quickly.

To ensure the red snapper stock recovers to a level that supports harvests at the optimum yield, periodic reviews of stock status are needed. These reviews are designed to incorporate new information and to address unanticipated developments in the respective fisheries and would be used to make appropriate adjustments in the reef fish regulations should harvest not achieve optimum yield objectives. The details for how assessments are developed, reviewed, and applied are described in Amendment 30B, as are the rule-making options the Council and NMFS have for taking corrective actions (GMFMC 2007).

Current reef fish regulations are labor intensive for law enforcement officials. NMFS law enforcement officials work cooperatively with other federal and state agencies to keep illegal

activity to a minimum. Violators are penalized, and for reef fish commercial and reef fish for-hire operators, permits required to operate in their respective fisheries can be sanctioned.

Reef fish management measures include a number of area-specific regulations where reef fish fishing is restricted or prohibited in order to protect habitat or spawning aggregations of fish, or to reduce fishing pressure in areas that are heavily fished. To improve enforceability of these areas, the Council has established a vessel monitoring system program for the commercial reef fish sector to improve enforcement. Vessel monitoring systems allows NMFS enforcement personnel to monitor compliance with these area-specific regulations, and track and prosecute violations.

Irreversible and irretrievable Commitments of Resources

There are no irreversible or irretrievable commitments of resources proposed herein. The actions to change the red snapper allocation and accountability measures are readily changeable by the Council in the future. There may be some loss of immediate income (irretrievable in the context of an individual not being able to benefit from compounded value over time) to some sectors from the restricted fishing seasons.

Any Other Disclosures

CEQ guidance on environmental consequences (40 CFR §1502.16) indicates the following elements should be considered for the scientific and analytic basis for comparisons of alternatives. These are:

- a) Direct effects and their significance.
- b) Indirect effects and their significance.
- c) Possible conflicts between the proposed actions and the objectives of federal, regional, state, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned.
- d) The environmental effects of alternatives including the proposed action.
- e) Energy requirements and conservation potential of various alternatives and mitigation measures.
- f) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.
- g) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.
- h) Means to mitigate adverse environmental impacts.

Items a, b, d, e, f, and h are addressed in Sections 2, 3, 4, and 5. Items a, b, and d are directly discussed in Sections 2 and 4. Item e is discussed in economic analyses (Sections 4.1.3, 4.2.3, and 4.3.3). Alternatives that encourage fewer fishing trips would result in energy conservation. Item f is discussed throughout the document as fish stocks are a natural and depletable resource. A goal of this amendment is to make this stock a sustainable resource for the nation. Mitigation

measures are discussed in Section 4.4. Item h is discussed in Section 4, with particular mention in Section 4.4.

The other elements are not applicable to the actions taken in this document. Because this amendment concerns the management of a marine fish stock, it is not in conflict with the objectives of federal, regional, state, or local land use plans, policies, and controls (Item c). Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures (Item g) is not a factor in this amendment. The actions taken in this amendment will affect a marine stock and its fishery, and should not affect land-based, urban environments. The exception would be the *U.S.S. Hatteras*, located in federal waters off Texas, which is listed in the National Register of Historic Places. The proposed actions are not likely to increase fishing activity and so no additional impacts to the *U.S.S. Hatteras* would be expected.

With regards to the Endangered Species Act (ESA), the most recent biological opinion for the Reef Fish Fishery Management Plan, completed on September 30, 2011, concluded authorization of the Gulf reef fish fishery managed under this management plan is not likely to jeopardize the continued existence of sea turtles (loggerhead, Kemp's ridley, green, hawksbill, and leatherback) or smalltooth sawfish (See Section 3.2 for more information on ESA species). An incidental take statement was issued specifying the amount of anticipated take, along with reasonable and prudent measures and associated terms and conditions deemed necessary and appropriate to minimize the impact of these takes. Other listed species and designated critical habitat in the Gulf were determined not likely to be adversely affected. NMFS also determined that the reef fish fishery was not likely to adversely affect *Acropora* because of where the fishery operates, the types of gear used in the fishery, and that other regulations protect *Acropora* where they are most likely to occur.

With regards to the Marine Mammal Protection Act, fishing activities under the Reef Fish Fishery Management Plan should have no adverse impact on marine mammals (See Section 3.2). The proposed actions are not expected to substantially change the way the fishery is currently prosecuted (e.g., types of methods, gear used, etc.). Gear used by the reef fish fishery was still classified in the 2014 List of Fisheries as a Category III fishery (79 FR 14418, April 14, 2014) because it is prosecuted primarily with longline and hook-and-line gear. This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from any fishery is less than or equal to one percent of the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock, while allowing that stock to reach or maintain its optimum sustainable population.

CHAPTER 5. REGULATORY IMPACT REVIEW

CHAPTER 6. REGULATORY FLEXIBILITY ACT ANALYSIS

CHAPTER 7. LIST OF PREPARERS

PREPARERS

Name	Expertise	Responsibility	Agency
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Peter Hood	Fishery biologist	Co-Team Lead – Amendment development, biological analyses, cumulative effects analysis	SERO
Stephen Holiman	Economist	Economic analyses	SERO
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GMFMC = Gulf of Mexico Fishery Management Council; NOAA GC = National Oceanic and Atmospheric Administration General Counsel; SEFSC = Southeast Fisheries Science Center; SERO = Southeast Regional Office of the National Marine Fisheries Service.

CHAPTER 8. LIST OF AGENCIES, ORGANIZATIONS AND PERSONS TO WHOM A COPY OF THE EIS WAS SENT

National Marine Fisheries Service

- Southeast Fisheries Science Center
- Southeast Regional Office
- Office for Law Enforcement

NOAA General Counsel

Environmental Protection Agency

United States Coast Guard

United States Fish and Wildlife Services

Texas Parks and Wildlife Department

Alabama Department of Conservation and Natural Resources/Marine Resources Division

Louisiana Department of Wildlife and Fisheries

Mississippi Department of Marine Resources

Florida Fish and Wildlife Conservation Commission

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APPENDIX A. OTHER APPLICABLE LAW

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.) provides the authority for fishery management in federal waters of the exclusive economic zone. However, fishery management decision-making is also affected by a number of other federal statutes designed to protect the biological and human components of U.S. fisheries, as well as the ecosystems that support those fisheries. Major laws affecting federal fishery management decision-making are summarized below.

Administrative Procedures Act

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (APA) (5 U.S.C. Subchapter II), which establishes a “notice and comment” procedure to enable public participation in the rulemaking process. Under the APA, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider, and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day waiting period from the time a final rule is published until it takes effect.

Coastal Zone Management Act

Section 307(c)(1) of the federal Coastal Zone Management Act of 1972 (CZMA), as amended, requires federal activities that affect any land or water use or natural resource of a state’s coastal zone be conducted in a manner consistent, to the maximum extent practicable, with approved state coastal management programs. The requirements for such a consistency determination are set forth in NMFS regulations at 15 C.F.R. part 930, subpart C. According to these regulations and CZMA Section 307(c)(1), when taking an action that affects any land or water use or natural resource of a state’s coastal zone, NMFS is required to provide a consistency determination to the relevant state agency at least 90 days before taking final action.

Upon submission to the Secretary, NMFS will determine if this plan amendment is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, Mississippi, and Texas to the maximum extent possible. Their determination will then be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management programs for these states.

Data Quality Act

The Data Quality Act (DQA) (Public Law 106-443) effective October 1, 2002, requires the government to set standards for the quality of scientific information and statistics used and disseminated by federal agencies. Information includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, cartographic, narrative, or audiovisual forms (includes web dissemination, but not hyperlinks to information that others disseminate; does not include clearly stated opinions).

Specifically, the DQA directs the Office of Management and Budget to issue government wide guidelines that “provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies.” Such guidelines have been issued, directing all federal agencies to create and disseminate agency-specific standards to: 1) ensure information quality and develop a pre-dissemination review process; 2) establish administrative mechanisms allowing affected persons to seek and obtain correction of information; and 3) report periodically to Office of Management and Budget on the number and nature of complaints received.

Scientific information and data are key components of fishery management plans (FMPs) and amendments and the use of best available information is the second national standard under the Magnuson-Stevens Act. To be consistent with the Act, FMPs and amendments must be based on the best information available. They should also properly reference all supporting materials and data, and be reviewed by technically competent individuals. With respect to original data generated for FMPs and amendments, it is important to ensure that the data are collected according to documented procedures or in a manner that reflects standard practices accepted by the relevant scientific and technical communities. Data will also undergo quality control prior to being used by the agency and a pre-dissemination review.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. Section 1531 et seq.) requires federal agencies use their authorities to conserve endangered and threatened species. The ESA requires NMFS, when proposing a fishery action that “may affect” critical habitat or endangered or threatened species, to consult with the appropriate administrative agency (itself for most marine species, the U.S. Fish and Wildlife Service for all remaining species) to determine the potential impacts of the proposed action. Consultations are concluded informally when proposed actions may affect but are “not likely to adversely affect” endangered or threatened species or designated critical habitat. Formal consultations, including a biological opinion, are required when proposed actions may affect and are “likely to adversely affect” endangered or threatened species or adversely modify designated critical habitat. If jeopardy or adverse modification is found, the consulting agency is required to suggest reasonable and prudent alternatives.

On September 30, 2011, the Protected Resources Division released a biological opinion which, after analyzing best available data, the current status of the species, environmental baseline (including the impacts of the recent Deepwater Horizon MC 252 oil release event in the northern Gulf of Mexico), effects of the proposed action, and cumulative effects, concluded that the continued operation of the Gulf of Mexico reef fish fishery is also not likely to jeopardize the continued existence of green, hawksbill, Kemp’s ridley, leatherback, or loggerhead sea turtles, nor the continued existence of smalltooth sawfish (NMFS 2011a). On December 7, 2012, NMFS published a proposed rule to list 66 coral species under the ESA and reclassify *Acropora* from threatened to endangered (77 FR 73220). In a memorandum dated February 13, 2013, NMFS determined the reef fish fishery was not likely to adversely affect *Acropora* because of where the fishery operates, the types of gear used in the fishery, and that other regulations protect *Acropora* where they are most likely to occur.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas, and on the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce (authority delegated to NMFS) is responsible for the conservation and management of cetaceans and pinnipeds (other than walruses). The Secretary of the Interior is responsible for walruses, sea and marine otters, polar bears, manatees, and dugongs.

Part of the responsibility that NMFS has under the MMPA involves monitoring populations of marine mammals to make sure that they stay at optimum levels. If a population falls below its optimum level, it is designated as “depleted,” and a conservation plan is developed to guide research and management actions to restore the population to healthy levels.

In 1994, Congress amended the MMPA, to govern the taking of marine mammals incidental to commercial fishing operations. This amendment required the preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction, development and implementation of take-reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fisheries, and studies of pinniped-fishery interactions.

Under Section 118 of the MMPA, NMFS must publish, at least annually, a List of Fisheries that places all U.S. commercial fisheries into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishery. The categorization of a fishery in the List of Fisheries determines whether participants in that fishery may be required to comply with certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements. The primary gears used in the Gulf of Mexico reef fish fishery are still classified in the proposed 2014 MMPA List of Fisheries as Category III fishery (December 6, 2013; 78 FR 73477). The conclusions of the most recent List of Fisheries for gear used by the reef fish fishery can be found in Section 3.3.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 et seq.) regulates the collection of public information by federal agencies to ensure the public is not overburdened with information requests, the federal government’s information collection procedures are efficient, and federal agencies adhere to appropriate rules governing the confidentiality of such information. The PRA requires NMFS to obtain approval from the Office of Management and Budget before requesting most types of fishery information from the public. Setting red snapper allocation would likely not have PRA consequences.

Executive Orders

E.O. 12630: Takings

The Executive Order on Government Actions and Interference with Constitutionally Protected Property Rights that became effective March 18, 1988, requires each federal agency prepare a Takings Implication Assessment for any of its administrative, regulatory, and legislative policies and actions that affect, or may affect, the use of any real or personal property. Clearance of a regulatory action must include a takings statement and, if appropriate, a Takings Implication Assessment. The National Oceanic and Atmospheric Administration Office of General Counsel will determine whether a Taking Implication Assessment is necessary for this amendment.

E.O. 12866: Regulatory Planning and Review

Executive Order 12866: Regulatory Planning and Review, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, NMFS prepares a Regulatory Impact Review (RIR) for all fishery regulatory actions that either implement a new fishery management plan or significantly amend an existing plan (See Chapter 5). RIRs provide a comprehensive analysis of the costs and benefits to society of proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Analysis. A regulation is significant if it a) has an annual effect on the economy of \$100 million or more or adversely affects in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments and communities; b) creates a serious inconsistency or otherwise interferes with an action taken or planned by another agency; c) materially alters the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or d) raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

E.O. 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

This Executive Order mandates that each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions. The Executive Order is described in more detail relative to fisheries actions in Section 3.5.1.

E.O. 12962: Recreational Fisheries

This Executive Order requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, it establishes a seven-member National Recreational Fisheries Coordination Council (Council) responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The Council also is responsible for developing, in cooperation with federal agencies, States and Tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the Order requires NMFS and the U.S. Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

E.O. 13132: Federalism

The Executive Order on Federalism requires agencies in formulating and implementing policies, to be guided by the fundamental Federalism principles. The Order serves to guarantee the division of governmental responsibilities between the national government and the states that was intended by the framers of the Constitution. Federalism is rooted in the belief that issues not national in scope or significance are most appropriately addressed by the level of government closest to the people. This Order is relevant to FMPs and amendments given the overlapping authorities of NMFS, the states, and local authorities in managing coastal resources, including fisheries, and the need for a clear definition of responsibilities. It is important to recognize those components of the ecosystem over which fishery managers have no direct control and to develop strategies to address them in conjunction with appropriate state, tribes, and local entities (international, too).

E.O. 13158: Marine Protected Areas

This Executive Order requires federal agencies to consider whether their proposed action(s) will affect any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural or cultural resource within the protected area. There are several marine protected areas, habitat areas of particular concern, and gear-restricted areas in the eastern and northwestern Gulf of Mexico.

Essential Fish Habitat

The amended Magnuson-Stevens Act included a new habitat conservation provision known as essential fish habitat (EFH) that requires each existing and any new FMPs to describe and identify EFH for each federally managed species, minimize to the extent practicable impacts from fishing activities on EFH that are more than minimal and not temporary in nature, and identify other actions to encourage the conservation and enhancement of that EFH. To address these requirements the Council has, under separate action, approved an Environmental Impact Statement (GMFMC 2004a) to address the new EFH requirements contained within the Magnuson-Stevens Act. Section 305(b)(2) requires federal agencies to obtain a consultation for any action that may adversely affect EFH. An EFH consultation will be conducted for this action.

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APPENDIX B. BYCATCH PRACTICABILITY ANALYSIS

Introduction

Bycatch is defined as fish harvested in a fishery, but not sold or retained for personal use. This definition includes both economic and regulatory discards, and excludes fish released alive under a recreational catch-and-release fishery management program. Economic discards are generally undesirable from a market perspective because of their species, size, sex, and/or other characteristics. Regulatory discards are fish required by regulation to be discarded, but also include fish that may be retained but not sold.

Agency guidance provided at 50 CFR 600.350(d)(3) identifies ten factors to consider in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable. These are:

1. Population effects for the bycatch species;
2. Ecological effects due to changes in the bycatch of that species (effects on other species in the ecosystem);
3. Changes in the bycatch of other species of fish and the resulting population and ecosystem effects;
4. Effects on marine mammals and birds;
5. Changes in fishing, processing, disposal, and marketing costs;
6. Changes in fishing practices and behavior of fishermen;
7. Changes in research, administration, and enforcement costs and management effectiveness;
8. Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources;
9. Changes in the distribution of benefits and costs; and
10. Social effects.

The Regional Fishery Management Councils are encouraged to adhere to the precautionary approach outlined in Article 6.5 of the Food and Agriculture Organization of the United Nations Code of Conduct for Responsible Fisheries when uncertain about these factors.

Bycatch practicability analyses of the reef fish fishery have been provided in several reef fish amendments and focused to some degree on the component of the fishery affected by the actions covered in the amendment. For red snapper, bycatch practicability analyses were completed for Amendments 22 and 27 to the Fishery Management Plan (FMP) for the Reef Fish Resources of the Gulf of Mexico (GMFMC 2004a and 2007). Other bycatch practicability analyses were conducted in the following amendments (component of the fishery affected by the actions): Amendment 23 (vermillion snapper; GMFMC 2004b), Amendment 30A (greater amberjack and gray triggerfish; GMFMC 2008a), Amendment 30B (gag, red grouper, and other shallow-water grouper; GMFMC 2008b), Amendment 31 (longline sector; GMFMC 2009), Amendment 32 (gag and red grouper; GMFMC 2011a), Amendment 35 (greater amberjack; GMFMC 2012a); Amendment 37 (gray triggerfish; GMFMC 2012b), and Amendment 38 (shallow-water grouper;

GMFMC 2012c). In addition, a bycatch practicability analysis was conducted for the Generic Annual Catch Limits/Accountability Measures Amendment (GMFMC 2011b) that covered the Reef Fish, Coastal Migratory Pelagics, Red Drum, and Coral FMPs. In general, these analyses found that reducing bycatch provides biological benefits to managed species as well as benefits to the fishery through less waste, higher yields, and less forgone yield. However, in some cases, actions are approved that can increase bycatch through regulatory discards such as increased minimum sizes and closed seasons. In these cases, there is some biological benefit to the managed species that outweighs any increases in discards.

Red Snapper Bycatch

The Gulf of Mexico (Gulf) reef fish fishery directed at red snapper has been regulated to limit harvest in order for the stock to recover from an overfished condition. Regulations for the recreational sector include catch quotas, minimum size limits, bag limits, and seasonal closures. These are used to limit the harvest to levels allowed under the rebuilding plan. For the commercial sector, regulations previously included quotas, minimum size limits, seasonal closures, and trip limits. Now the sector is managed under an individual fishing quota (IFQ) program that was established in 2007. The program eliminates the need for seasonal closures and trip limits. Red snapper regulations have been generally effective in limiting fishing mortality, the size of fish targeted, the number of targeted fishing trips, and/or the time fishermen spend pursuing a species. However, these management tools have the unavoidable adverse effect of creating regulatory discards, which makes reducing bycatch challenging, particularly in the recreational sector.

An important aspect to red snapper bycatch is the penaeid shrimp fishery as previously described in Amendment 27/14 (GMFMC 2007). The shrimp fishery catches primarily 0-2 year old red snapper. To reduce red snapper bycatch, the Gulf of Mexico Fishery Management Council (Council) implemented regulations requiring the use of bycatch reduction devices (GMFMC 2002) and setting bycatch reduction targets (currently a 67% reduction from the baseline years 2001-2003; GMFMC 2007). Between the use of bycatch reduction devices and reductions in shrimp effort due to economic factors (Figure 1), the target reductions have been met.

Although red snapper bycatch in the shrimp fishery is an important source of mortality for this stock, this bycatch practicability analysis will focus on the directed reef fish fishery managed under the FMP for Reef Fish Resources of the Gulf of Mexico. Bycatch from the shrimp fishery has been and will be analyzed in the FMP for the Shrimp Fishery of the Gulf of Mexico, U.S. Waters.

Figures 2 and 3 show the relative number of discards for the recreational and commercial sectors as estimated by SEDAR 31 (2013). For the recreational sector, open season discards estimated through the Marine Recreational Information Program (MRIP) (charter and private angler) declined around 2007 as the recreational season got shorter due lower quotas. This trend is also apparent in the headboat data for the western Gulf. However, with shorter seasons of the past few years, the number of discards during the longer closed seasons increased (Figure 2). For the commercial sector, discards in the eastern handline and longline sectors have increased since the implementation of the IFQ program relative to the western Gulf (Figure 3). This may reflect a

shift in fishing effort that has resulted in the program. Note that for the commercial sector, closed season discards after the IFQ program was implemented refers to vessels with little or no red snapper allocation (see SEDAR 31 2013).

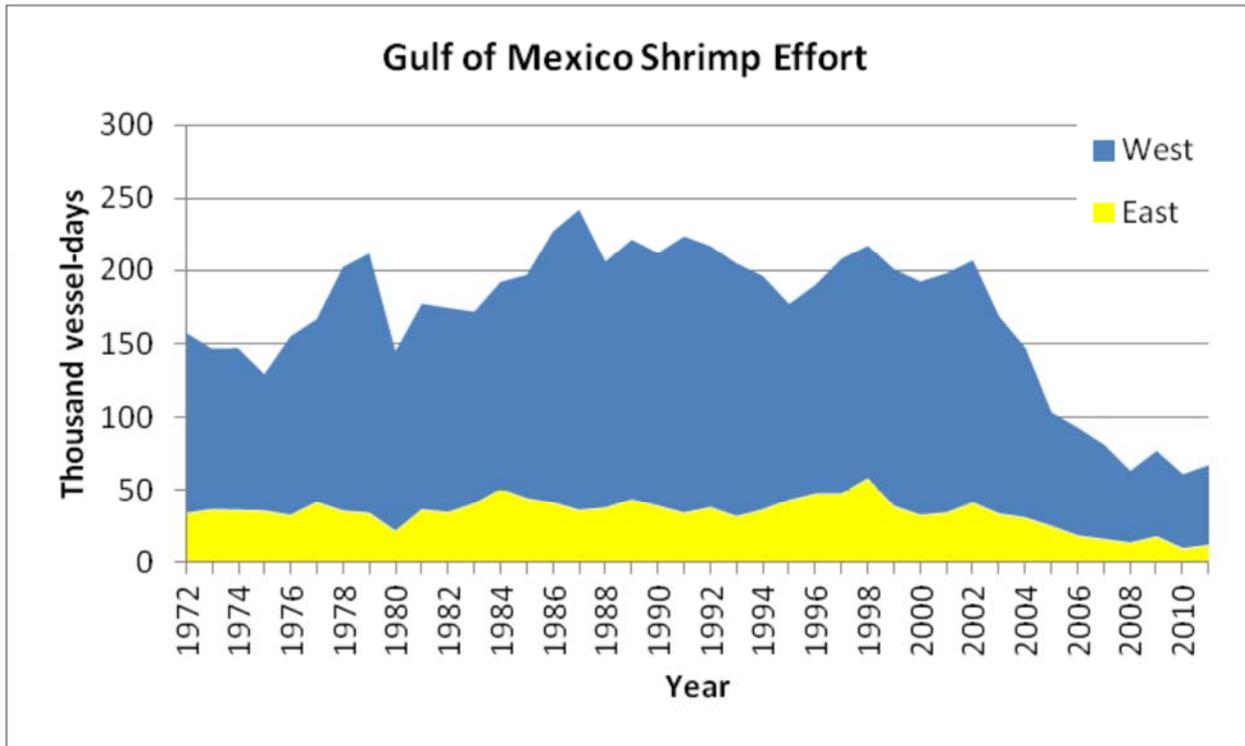


Figure 1. Gulf shrimp fishery effort (thousand vessel-days) provided by the National Marine Fisheries Service Galveston Lab. The reported effort does not include the average effort values used to fill empty cells. Source: Linton 2012.

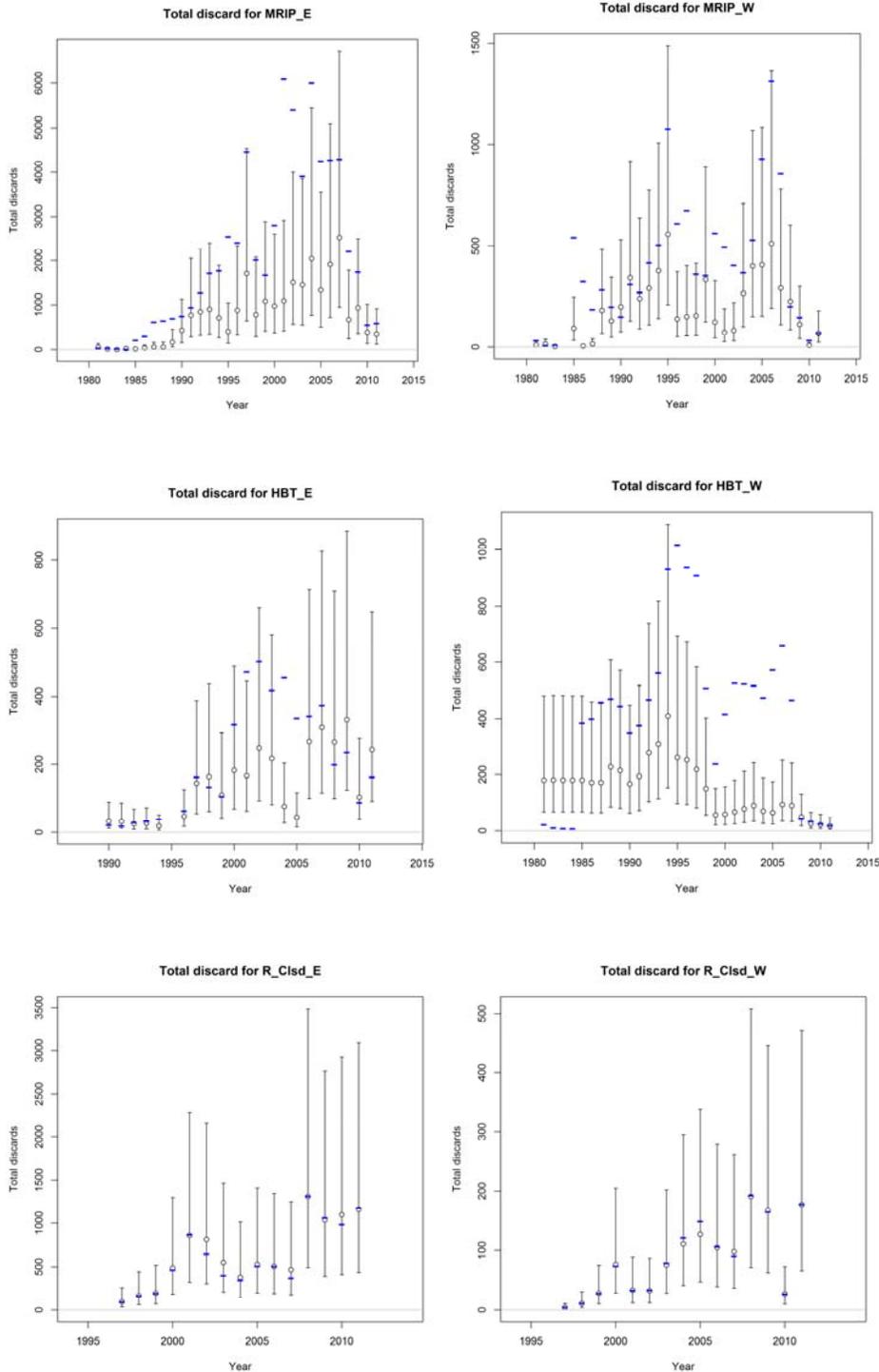


Figure 2. Observed (open circles) and predicted total discards (blue dashes) of red snapper from the private angler open season (top), headboat open season (middle), and recreational closed season in the eastern (left) and western (right) Gulf, 1997-2011. Source: SEDAR 31 2013.

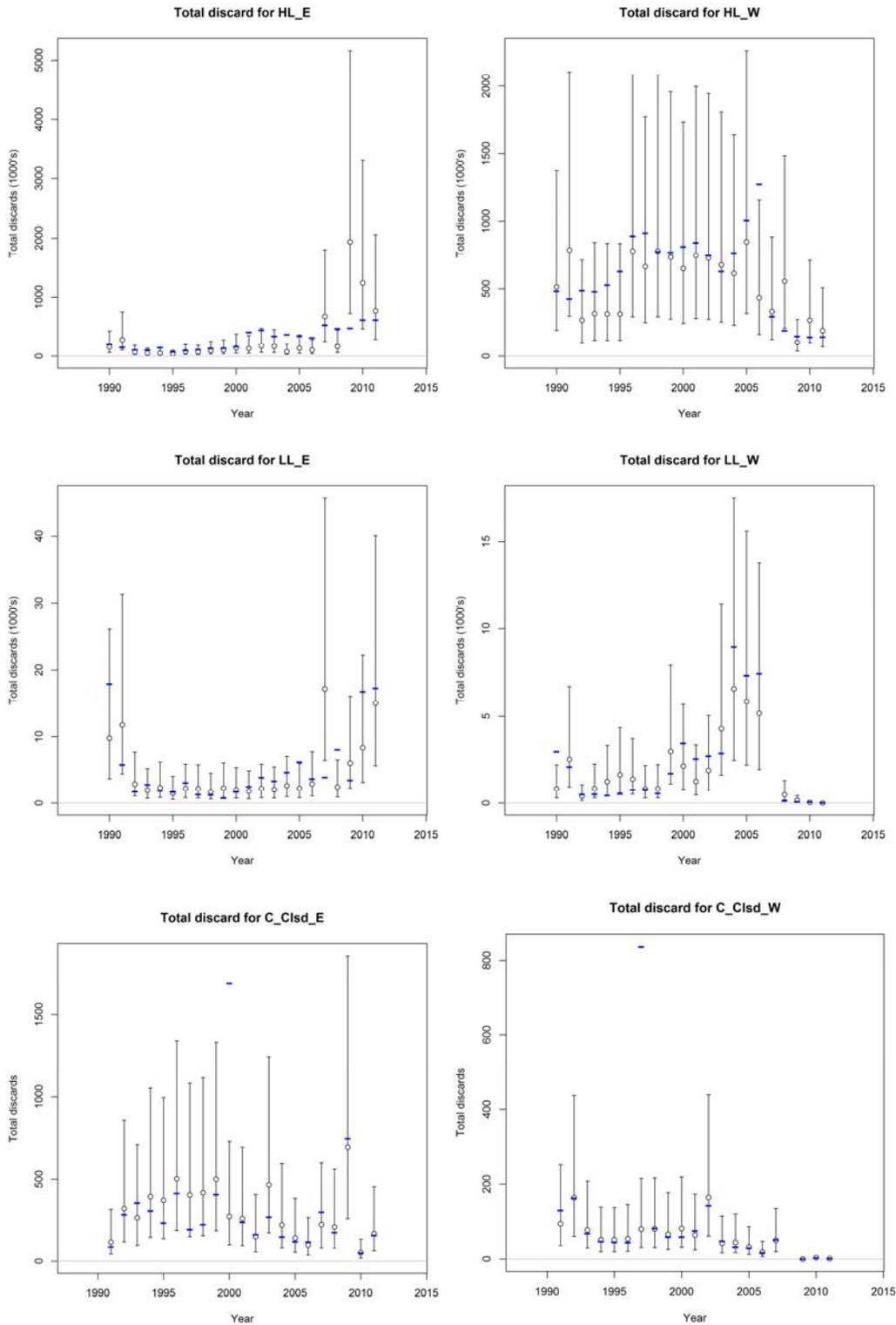


Figure 3. Observed (open circles) and predicted total discards (blue dashes) of red snapper from the commercial handline open season (top), longline open season (middle), and commercial closed season in the eastern (left) and western (right) Gulf, 1997-2011. Source: SEDAR 31 2013.

Campbell et al. (2012) identified several causes of red snapper discard mortality in their review of discard mortality in the directed reef fish fishery. These included hooking injuries, thermal stress, and barotrauma. Campbell et al. (2012) reviewed 11 studies that listed discard (release) mortality rates ranging from 0 to 79%. They reported that mortality tended to increase with capture depth, increasing water temperature, or from some compounding effect of these two factors. Burns et al. (2004) and Burns and Froeschke (2012) examined the feeding behavior of red snapper and found red snapper quickly chew and swallow their prey. As a result, there is less time to set a hook while fishing, resulting in greater probability of hooking related injuries. Burns et al. (2004) concluded hook-related trauma accounted for a greater portion of discard mortality than depth, despite catching red snapper at depths ranging from 90 to 140 feet.

Although Campbell et al. (2012) did not specifically address surface interval and predation, these factors were identified in GMFMC (2007) as contributing to discard mortality. Burns et al. (2002) found survival of red snapper increased the faster red snapper were returned to the water, thus they considered any reductions in surface interval/handling time an important way to reduce discard mortality. Several studies have documented predation on released red snapper. Dolphins and pelicans are the two most commonly observed predators and are known to pursue released fish, as well as fish before they are landed (SEDAR 7 2005). Several studies, which assessed discard mortality through surface observations, accounted for predation when estimating discard mortality (Patterson et al. 2001; Burns et al. 2004; Wilson et al. 2004).

A variety of discard mortality rates have been used in different stock assessment. The 1999 red snapper stock assessment (Schirripa and Legault 1999) assumed discard mortality rates of 33 percent for the commercial fishery and 20 percent for the recreational fishery. These discard mortality rates were derived from the literature and were determined by the Council's Reef Fish Stock Assessment Panel to be the best available estimates at the time (RFSAP 1999). During development of the 2005 red snapper stock assessment, the SEDAR 7 data workshop panel (SEDAR 7 2005) reviewed available information on depth of fishing and discard mortality by depth to produce fishery specific discard mortality rates by region (eastern and western Gulf), season (open and closed), and by sector (commercial and recreational). Applied estimates of discard mortality rates ranged 15% for recreationally caught and released red snapper in the eastern Gulf to 88% for commercially caught and released red snapper in the western Gulf caught during a season closure (Table 1).

Table 1. Mean/median depth of fishing and corresponding discard mortality rates for red snapper by fishery, region, and season.

Fishery	Region	Season	Depth of Capture	Release Mortality
Commercial	East	Open	180 ft (55 m)	71%
	East	Closed	180 ft (55 m)	71%
	West	Open	190 ft (58 m)	82%
	West	Closed	272 ft (83 m)	88%
Recreational	East	Open	65-131 ft (20-40 m)	15%
	East	Closed	65-131 ft (20-40 m)	15%
	West	Open	131 ft (40 m)	40%
	West	Closed	131 ft (40 m)	40%

Source: SEDAR 7 2005.

In the most recent benchmark stock assessment (SEDAR 31, 2013), a meta-analysis was used to estimate red snapper discard mortality using the 11 studies reviewed by Campbell et al. (2012). A venting/no venting component was added to account for the requirement to vent reef fish put in place through Amendment 27 (GMFMC 2007) as well as a gear component. For the commercial sector, average depths at which discards occurred for each gear (handline or long line), region (eastern or western Gulf), and season (open or closed) were calculated using commercial observer program data. Consistent with how commercial discards have been treated in other parts of the assessment, discards from trips with IFQ allocation were considered open season discards, while discards from trips with no IFQ allocation were considered closed season discards. For the recreational sector, average depths at which discards occurred for each region (eastern or western Gulf) and season (open or closed) were calculated using self-reported data from the iSnapper program. Estimated discard mortality rates ranged from 10 to 95% with commercial discard mortality rates greater than recreational discard mortality rates (Tables 2 and 3).

SEDAR 31 (2013) estimated the total number of fish killed (landed and discarded dead) by the commercial and recreational sectors from 1983 to 2011 (Table 4). For the recreational sector, the percentage of dead discards to total fish killed has declined since a peak in 2001. However, it was not until 2007 that the number of dead discards was consistently less than the number of landed fish. For the commercial sector, the percentage of dead discards peaked in 2000, but it was not until 2010 that the number of dead discards declined to less than 40% of the total fish killed.

Since 1996, more red snapper have been landed in the eastern Gulf than the western Gulf by the recreational sector (Table 5). A drop in the percentage of dead discards relative to the total number of fish killed occurred in both regions in 2008. The percentage of dead discards fell from 49.4% to 36.7% between 2007 and 2008 for the eastern Gulf and from 50.0% to 20.3% between 2007 and 2008 in the western Gulf. For the commercial sector, in the eastern Gulf the number of dead discards has generally been above 50% indicating that there are more discards were killed than landed (Table 5). In contrast, in the western Gulf there has been a falling off in the percentage of dead discards relative to the total number of killed fish since 2006 to well below 50%.

Table 2. Average depths and associated discard mortality rates for commercial discards of red snapper in the Gulf.

Gear	Handline				Longline			
Region	East		West		East		West	
Season	Closed	Open	Closed	Open	Closed	Open	Closed	Open
Average Depth (m)	24	45	84	53	66	62	132	104
Disc Mort - no venting	0.74	0.75	0.87	0.78	0.82	0.81	0.95	0.91
Disc Mort - venting	0.55	0.56	0.74	0.60	0.66	0.64	0.88	0.81

Source: SEDAR 31 2013.

Table 3. Average depths and associated discard mortality rates for recreational discards of red snapper in the Gulf.

Gear	Recreational			
Region	East		West	
Season	Open	Closed	Open	Closed
Average Depth (m)	33	34	36	35
Disc Mort - no venting	0.21	0.21	0.22	0.22
Disc Mort - venting	0.10	0.10	0.11	0.10

Source: SEDAR 31 2013.

Table 4. Estimates of the total number of red snapper landed, the number of dead discards, and percent dead discards for all killed fish for the recreational and commercial sectors by year in the Gulf.

Year	Recreational			Commercial		
	Landed	Dead Discards	Percent dead discards	Landed	Dead Discard	Percent dead discards
1983	3,314,185	8,599	0.3%	4,559,794	80,758	1.7%
1984	1,232,024	2,699	0.2%	2,775,042	33,579	1.2%
1985	1,427,026	255,716	15.2%	1,234,986	351,105	22.1%
1986	1,265,955	223,079	15.0%	875,494	304,026	25.8%
1987	1,022,844	271,426	21.0%	661,469	277,787	29.6%
1988	1,241,859	302,800	19.6%	950,904	366,876	27.8%
1989	1,060,456	289,201	21.4%	742,388	296,024	28.5%
1990	625,933	270,824	30.2%	703,020	549,250	43.9%
1991	1,060,610	353,327	25.0%	691,943	635,961	47.9%
1992	1,609,040	434,448	21.3%	995,013	817,581	45.1%
1993	2,202,931	581,455	20.9%	1,011,914	781,941	43.6%
1994	1,615,241	695,102	30.1%	869,075	796,390	47.8%
1995	1,384,049	1,008,873	42.2%	698,404	767,187	52.3%
1996	1,180,361	859,431	42.1%	1,011,328	1,120,205	52.6%
1997	1,547,317	1,342,121	46.4%	1,122,447	1,674,115	59.9%
1998	1,235,683	679,689	35.5%	1,167,877	949,481	44.8%
1999	1,031,284	549,708	34.8%	1,190,580	1,063,684	47.2%
2000	1,002,899	985,281	49.6%	1,088,667	2,065,579	65.5%
2001	1,075,115	1,792,155	62.5%	1,030,580	1,214,566	54.1%
2002	1,372,415	1,586,095	53.6%	1,145,169	1,171,069	50.6%
2003	1,224,547	1,204,754	49.6%	1,080,662	996,171	48.0%
2004	1,365,946	1,677,071	55.1%	1,036,860	1,027,510	49.8%
2005	1,024,641	1,433,508	58.3%	973,109	1,170,293	54.6%
2006	1,196,183	1,533,800	56.2%	1,193,134	1,343,644	53.0%
2007	1,397,237	1,370,519	49.5%	851,537	903,242	51.5%
2008	821,804	417,509	33.7%	671,979	481,599	41.7%
2009	979,945	339,988	25.8%	656,148	772,463	54.1%
2010	447,991	170,959	27.6%	833,253	472,930	36.2%
2011	670,910	220,515	24.7%	808,582	533,198	39.7%

Source: Recreational data is from MRIP; headboat and commercial data is from the logbook and SEDAR 31 2013; Jacob Tetzlaff, pers. comm. Southeast Fisheries Science Center, Miami, Florida.

Table 5. Estimates of the total number of red snapper landed the number of dead discards, and percent dead discards for all killed fish for the recreational and commercial sectors by year and region of the Gulf.

Year	Recreational						Commercial					
	East			West			East			West		
	Landed	Dead Discard	Percent dead discards	Landed	Dead Discard	Percent dead discards	Landed	Dead Discard	Percent dead discards	Landed	Dead Discard	Percent dead discards
1983	1,055,691	4,455	0.4%	2,258,494	4,144	0.2%	1,851,965	23,983	1.3%	2,707,829	56,775	2.1%
1984	192,098	332	0.2%	1,039,926	2,367	0.2%	1,077,487	5,872	0.5%	1,697,555	27,707	1.6%
1985	482,587	51,497	9.6%	944,439	204,219	17.8%	575,540	109,179	15.9%	659,446	241,926	26.8%
1986	574,495	63,839	10.0%	691,460	159,240	18.7%	237,499	31,193	11.6%	637,996	272,833	30.0%
1987	548,813	129,871	19.1%	474,031	141,555	23.0%	179,088	35,679	16.6%	482,381	242,108	33.4%
1988	524,591	137,182	20.7%	717,268	165,618	18.8%	197,784	72,004	26.7%	753,120	294,872	28.1%
1989	474,670	147,657	23.7%	585,786	141,544	19.5%	166,355	59,518	26.4%	576,033	236,506	29.1%
1990	314,036	161,286	33.9%	311,897	109,538	26.0%	208,799	169,101	44.7%	494,221	380,150	43.5%
1991	548,912	202,238	26.9%	511,698	151,089	22.8%	156,339	187,293	54.5%	535,604	448,669	45.6%
1992	886,594	272,181	23.5%	722,446	162,267	18.3%	155,044	294,315	65.5%	839,969	523,266	38.4%
1993	1,336,961	366,226	21.5%	865,970	215,229	19.9%	160,428	346,349	68.3%	851,486	435,592	33.8%
1994	819,900	379,092	31.6%	795,341	316,010	28.4%	161,842	341,927	67.9%	707,233	454,464	39.1%
1995	664,786	547,997	45.2%	719,263	460,876	39.1%	47,994	234,693	83.0%	650,411	532,493	45.0%
1996	608,817	519,005	46.0%	571,544	340,426	37.3%	66,458	384,466	85.3%	944,870	735,739	43.8%
1997	966,914	992,702	50.7%	580,403	349,419	37.6%	52,616	231,911	81.5%	1,069,832	1,442,204	57.4%
1998	814,811	485,790	37.4%	420,872	193,899	31.5%	112,125	271,377	70.8%	1,055,751	678,104	39.1%
1999	788,097	413,395	34.4%	243,187	136,313	35.9%	148,788	407,417	73.2%	1,041,792	656,267	38.6%
2000	741,378	753,560	50.4%	261,521	231,721	47.0%	169,886	1,375,667	89.0%	918,781	689,912	42.9%
2001	858,210	1,559,948	64.5%	216,905	232,208	51.7%	209,036	487,449	70.0%	821,544	727,118	47.0%
2002	1,137,262	1,374,869	54.7%	235,153	211,226	47.3%	300,706	459,631	60.5%	844,463	711,438	45.7%
2003	956,693	992,640	50.9%	267,854	212,113	44.2%	281,921	459,040	62.0%	798,741	537,130	40.2%
2004	1,128,710	1,429,531	55.9%	237,236	247,540	51.1%	251,425	392,841	61.0%	785,435	634,669	44.7%
2005	759,036	1,071,240	58.5%	265,605	362,268	57.7%	220,412	352,853	61.6%	752,697	817,440	52.1%
2006	839,855	1,076,677	56.2%	356,328	457,123	56.2%	212,766	329,879	60.8%	980,368	1,013,764	50.8%

2007	1,087,060	1,059,975	49.4%	310,177	310,544	50.0%	311,729	626,004	66.8%	539,808	277,238	33.9%
2008	642,570	371,930	36.7%	179,233	45,579	20.3%	284,937	366,341	56.2%	387,042	115,258	22.9%
2009	773,394	303,722	28.2%	206,551	36,266	14.9%	302,568	682,585	69.3%	353,579	89,878	20.3%
2010	360,404	162,119	31.0%	87,587	8,840	9.2%	413,808	384,519	48.2%	419,445	88,411	17.4%
2011	552,878	192,184	25.8%	118,032	28,331	19.4%	423,809	445,771	51.3%	384,773	87,427	18.5%

Source: Recreational data is from MRIP; headboat and commercial data is from the logbook and SEDAR 31 2013; Jacob Tetzlaff, pers. comm. Southeast Fisheries Science Center, Miami, Florida.

Other Bycatch

Species incidentally encountered by the directed red snapper fishery include sea turtles, sea birds, and reef fishes. The primary gears of the Gulf reef fish fishery (longline and handline) are classified in the List of Fisheries for 2014 (79 FR 14418, April 14, 2014) as Category III gear. This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from any fishery is less than or equal to one percent of the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock, while allowing that stock to reach or maintain its optimum sustainable population.

The most recent biological opinion for the Reef Fish FMP was completed on September 30, 2011 (NMFS 2011). The opinion determined the continued authorization of the Gulf reef fish fishery managed under this FMP is not likely to adversely affect Endangered Species Act-listed marine mammals or coral, and would not likely jeopardize the continued existence of sea turtles (loggerhead, Kemp's ridley, green, hawksbill, and leatherback), or smalltooth sawfish. However, in the past, actions have been taken by the Council and NMFS to increase the survival of incidentally caught sea turtle and smalltooth sawfish by the commercial and recreational sectors of the fishery. These include the requirements for permitted vessels to carry specific gear and protocols for the safe release in incidentally caught endangered sea turtle species and smalltooth sawfish (GMFMC 2005) as well as restrictions on the longline portion of the commercial sector. Restrictions for longlines in the reef fish fishery include a season-area closure, an endorsement to use longline gear, and a restriction on the total number of hooks that can be carried on a vessel (GMFMC 2009).

Three primary orders of seabirds are represented in the Gulf, Procellariiformes (petrels, albatrosses, and shearwaters), Pelecaniformes (pelicans, gannets and boobies, cormorants, tropic birds, and frigate birds), and Charadriiformes (phalaropes, gulls, terns, noddies, and skimmers) (Clapp et al., 1982; Harrison, 1983) and several species, including: piping plover, least tern, roseate tern, bald eagle, and brown pelican (the brown pelican is endangered in Mississippi and Louisiana and delisted in Florida and Alabama) are listed by the U.S. Fish and Wildlife Service as either endangered or threatened. Human disturbance of nesting colonies and mortalities from birds being caught on fishhooks and subsequently entangled in monofilament line are primary factors affecting sea birds. Oil or chemical spills, erosion, plant succession, hurricanes, storms, heavy tick infestations, and unpredictable food availability are other threats. There is no evidence that the directed red snapper fishery is adversely affecting seabirds. However, interactions, especially with brown pelicans consuming red snapper discards and fish before they are landed, are known to occur (SEDAR 7 2005).

Other species of reef fish are also incidentally caught when targeting red snapper. In the western Gulf, vermilion snapper and some deep-water groupers are incidentally caught as bycatch when harvesting red snapper. In the eastern Gulf, various species of shallow-water grouper and vermilion snapper are the primary species caught as bycatch when targeting red snapper. Vermilion snapper are not overfished or undergoing overfishing (SEDAR 9 Update 2011) and bycatch is not expected to jeopardize the status of this stock. Deep-water groupers are caught both in the eastern and western Gulf primarily with longline gear (> 80 percent). The deep-water grouper fishery was managed with a 1.02 million pound quota. From 2004 until the

implementation of the grouper/tilefish IFQ program in 2010 (SERO 2012a), the fishery met their quota and closed no later than July 15 each year. Deep-water grouper closures during this time period may have resulted in some additional discards of grouper by longliners targeting red snapper. Since the IFQ program was implemented, deep-water grouper species are landed year-round by holders of IFQ allocation and the quota has not been exceeded. Longliners account for approximately 5% of the annual commercial red snapper landings since 2000 (SEDAR 31 2013). It is unknown how increases in closed season discards might have affected the status of deep-water grouper stocks or the change to an IFQ managed sector. An updated assessment for yellowedge grouper found the stock was not overfished or undergoing overfishing (SEDAR 22 2011).

Red grouper and gag are the two most abundant shallow-water grouper species in the Gulf and primarily occur on the west Florida shelf. Gag was recently assessed (SEDAR 10 Update 2009) and determined to be overfished and undergoing overfishing. A rebuilding plan that takes into account gag dead discards was implemented through Amendment 32 (GMFMC 2011a). Red grouper were found not to be in an overfished condition and not undergoing overfishing (SEDAR 12 Update 2009). Within the reef fish fishery, discards represent a large and significant portion of mortality for gag and red grouper. In the past, these species were managed under a shallow-water grouper quota which was met prior to the end of the 2004 and 2005 fishing years. For the recreational sector, shallow-water grouper including gag and red grouper are managed with size limits, bag limits, and season and area closures. The recreational gag season begins July 1 and extends until the catch target is projected to be caught. Since 2010, the commercial harvest of gag, red grouper, and other shallow-water grouper are managed under an IFQ program and the commercial sector has not exceeded its quota under the program. Prior to the IFQ program, quota closures at the end of the year have likely resulted in some additional commercial discards when the red snapper fishery is open. However, most commercial landings of red snapper occur in the western Gulf where gag and red grouper are less abundant or infrequently caught.

Practicability of current management measures in the directed red snapper fishery relative to their impact on bycatch and bycatch mortality.

The bycatch practicability analysis in Amendment 27 (GMFMC 2007) indicated directed fishery bycatch was believed to have a greater effect on red snapper stock recovery than the shrimp fishery. Although shrimp bycatch still accounts for a majority of bycatch, bycatch from the directed fishery is now known to have a greater effect on stock recovery. A quota, 16-inch total length (TL) minimum size limit, 2-fish bag limit, closed season, and gear restrictions are presently used to manage the recreational fishery. The commercial fishery is managed with an IFQ program, a quota, a 13-inch TL minimum size limit, and gear restrictions. Prior to 2007 when the red snapper IFQ program was implemented, the commercial fishery was also managed with closed seasons and trip limits. The following discusses current and historic management measures with respect to their relative impacts on bycatch.

Closed Seasons

Prior to 1997, the recreational sector was able to fish for red snapper year round. To prevent the recreational quota from being exceeded, recreational fishing for red snapper was closed on November 27, 1997, September 30, 1998, and August 29, 1999. In 2000, an April 21 through October 31 red snapper season was established. This was modified to a June 1 through October 31 season in 2008 by Amendment 27 (GMFMC 2007). Currently, the recreational directed red snapper fishery is closed in the exclusive economic zone from January 1 through May 31 each year through a 2012 framework action. However, since 2008, the sector has been closed early when the quota is projected to be caught. In addition, since 2008, the length of time red snapper fishing has been open has become increasingly shorter such that for 2011, 2012, and 2013, the season length has shrunk to 48, 46, and 42 days, respectively. With these shorter seasons, the number of released fish has decreased during the open season, but the number of releases during the closed season has increased (Figure 2; SEDAR 31 2013). Reflected in this trend is that although the estimated number of dead discards has decreased during the fishing season, the number of dead discards has increased during the longer closed periods (Figure 4). For 2014, the season length was decreased to 9 days. This was in response to a decision by the U.S. District Court for the District of Columbia (Court) in *Guindon v. Pritzker*, 2014 WL 1274076 (D.D.C. Mar. 26, 2014). NMFS, at the request of the Council, took emergency action to implement an in-season accountability measure for the recreational harvest of red snapper in the Gulf. The action set an annual catch target (ACT) equal to 80% of the 5,390 mp quota (ACT = 4,312 mp). The resultant 9-day season was based on the ACT and has only a 15% probability of exceeding the quota.

With the implementation of the IFQ program, there is no closed season for the commercial sector. However, commercial vessels with little or no red snapper allocation cannot land red snapper on most or all their trips. Thus, they effectively operate under closed season conditions. GMFMC (2013) indicated most discards were likely due to insufficient allocation, rather than the minimum size limit, especially in the longline fleet. Most of these discards were recorded as released alive.

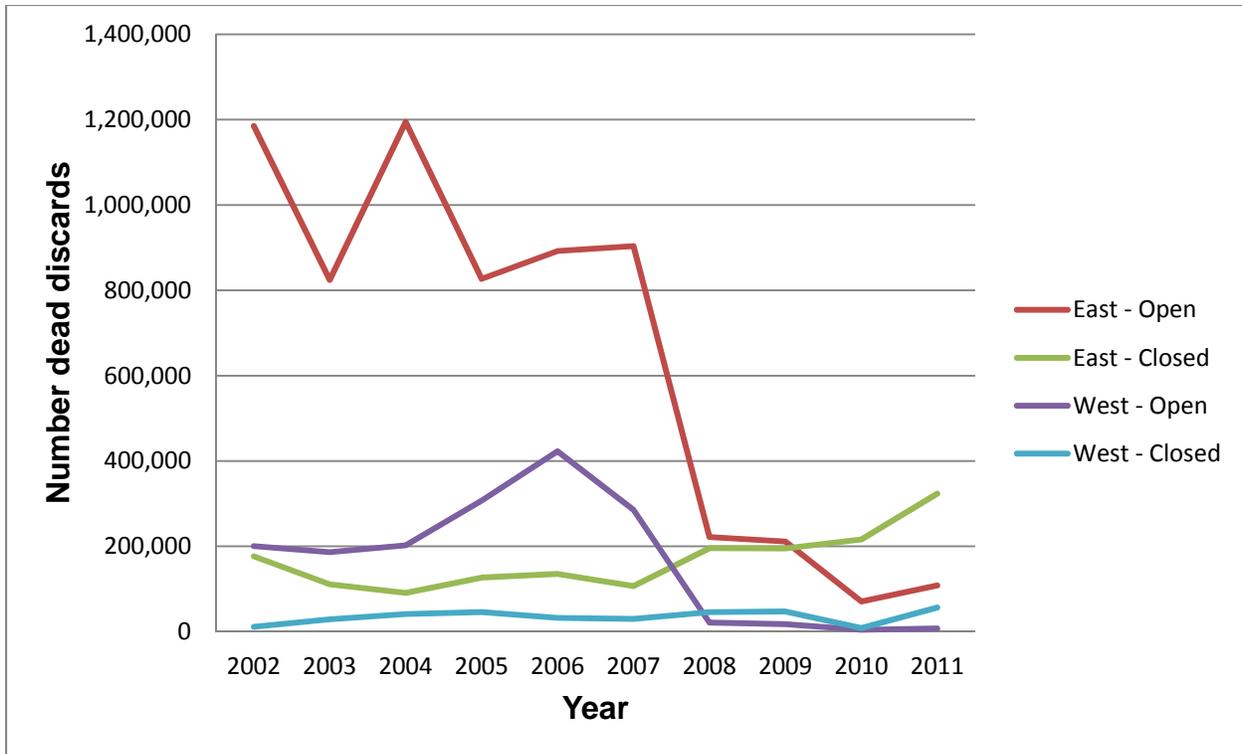


Figure 4. The number of Gulf red snapper dead discards from the recreational sector by year and by area. Source: Jakob Tetzlaff., pers. comm. Southeast Fisheries Science Center, Miami, Florida.

Bag Limits

The recreational fishery is regulated by a 2-red snapper daily bag limit per person. Red snapper discards while harvesting the daily bag limit are a result of incidental capture of undersized fish prior to reaching the bag limit and targeting of other reef fish residing in similar habitat as red snapper after bag limits have been reached. SERO (2012b) reported for-hire anglers, on average, landed 1.23 red snapper per trip and private anglers landed 1.58 red snapper per trip when the season is open. Based on average catch rates, the current two red snapper bag limit is not a limiting factor for some trips, but likely occurs on others. Therefore, the release of undersized fish while harvesting the bag limit is still an important factor contributing to discards in addition to the release of legal-sized red snapper after the bag limit is reached.

Size limits

The 16-inch recreational and 13-inch commercial TL minimum size limits are important factors when considering bycatch in the directed fishery. Size limits are intended to protect immature fish and reduce fishing mortality. The recreational minimum size limit is above the size at 50% maturity and the commercial size limit is near the size at 50% maturity. Size-at-maturity varies by region, with 75% of eastern Gulf female red snapper mature by 12-inches TL and 50% of western Gulf red snapper mature by 13-14-inches TL (Fitzhugh et al. 2004).

Several yield-per-recruit (YPR) analyses have previously been conducted to identify the size that balances the benefits of harvesting fish at larger sizes against losses due to natural mortality. Goodyear (1995) concluded YPR was maximized in the red snapper fishery between 18 and 21-inches TL, assuming 20 and 33% discard mortality in the recreational and commercial red snapper fisheries, respectively. A subsequent YPR analysis by Schirripa and Legault (1997) indicated increasing the minimum size limit above 15-inches TL would result in no gains in yield. Analyses of minimum size limits conducted for Amendment 27 (GMFMC 2007) indicated red snapper projected recovery rates are slightly faster if the commercial minimum size limit is reduced or eliminated, but increasingly slowed by smaller recreational minimum size limits (Porch 2005). Decreasing the recreational and commercial minimum size limits was projected to increase stock recovery slightly over the short term, but stock recovery would be increasingly slowed if the recreational size limit were lowered over the long term (Porch 2005). However, as discussed in Amendment 27, changes in spawning potential and the rate of stock recovery were found to be negligible for recreational size limits ranging from 13 to 15-inches TL. An YPR analysis conducted by SERO (2006), using current fishery selectivities and discard mortality rates from SEDAR 7 (2005) supported Porch's (2005) findings. SERO (2006) examined four commercial minimum size limits (12-, 13-, 14-, and 15-inches TL) and five recreational minimum size limits (6-, 13-, 14-, 15-, and 16-inches TL). Based on the range of size limits analyzed, YPR was maximized at 16-inches TL in both the eastern and western Gulf recreational fisheries, 12-inches TL in the western Gulf commercial fishery, and 15-inches TL in the eastern Gulf commercial fishery. However, there was virtually no difference in maximum YPR (< 0.3 percent) for any of the eastern Gulf commercial size limits analyzed. In a study by Wilson et al. (2004) aboard commercial vessels using bandit rigs, 61% of red snapper released were greater than 13 inches and 86% were greater than 12 inches.

For Amendment 39 (still under development; GMFMC 2014a), an YPR analysis was applied to the recreational sector (SERO 2013). This analysis indicates the Gulf-wide YPR is maximized at a recreational size limit of 15-inches TL. However, there was not much of a change in YPR between lengths of 13- and 18-inches TL. Thus, if the minimum size limit were changed from 16- to 15-inches TL, any gain in YPR would be minimal. SERO (2013) also showed that any increase in the minimum size limit would reduce the number of fish landed. This would probably result in more regulatory discards and an increase in the number of dead discards.

Given the above discussion, a larger recreational minimum size limit is considered to be more effective than a similar sized commercial minimum size limit because of lower discard mortality rates in the recreational fishery (Tables 2 and 3). High discard mortality rates in the commercial fishery provide little, if any, protection to the stock because the released fish mostly die rather than contribute to filling the quota. In contrast, the current 16-inch TL minimum recreational size limit was found to afford some protection to the stock, because a greater percentage of discarded fish will survive to spawn and later contribute to the quota as larger animals.

Area closures

Although the Council has not developed area closures specifically for red snapper, the Council has created areas to protect other species. For example, two restricted fishing areas were developed to specifically protect spawning aggregations of gag in 2000 (GMFMC 1999). The

Madison-Swanson and Steamboat Lumps marine restricted fishing areas are located in the northeastern Gulf at a depth of 40 to 60 fathoms. Both areas prohibit bottom fishing. Bottom fishing is also prohibited in the Tortugas North and South marine reserves in the southern Gulf near the Dry Tortugas. Marine reserves and time/area closures benefit fish residing within reserve boundaries by prohibiting their capture during part or all of the year. Within marine reserves, fish that are undersized potentially have an opportunity to grow to legal size and are no longer caught as bycatch. If these fish emigrate from the marine reserve (i.e., spillover effect), then they may be caught as legal fish outside the reserve, thereby reducing bycatch. However, anglers and commercial fishermen may redistribute their effort to areas surrounding the area closure. If fishing pressure in these areas is increased, then any benefits of reduced bycatch of fish in the marine reserve will likely be offset by increases in bycatch of fish residing outside the marine reserve. Within restricted fishing areas or time/area closures, fishing is allowed under restrictions that are intended to protect certain components of the populations within the area (e.g., prohibitions on bottom fishing gear), or to protect populations during a critical phase of their life history, such as during spawning.

The Council did develop a season area closure to reduce bycatch of sea turtles for the longline component of the commercial sector. The use of longlines had been prohibited from waters less than 20 fathoms east of Cape San Blas, Florida, and 50 fathoms west of Cape San Blas; however, due to higher estimates of sea turtles caught in longline gear, measures were put in place through Amendment 31 (GMFMC 2009) to reduce this bycatch. One of these measures was the prohibition of the use of bottom longline gear in the Gulf reef fish fishery, shoreward of a line approximating the 35-fathom contour east of Cape San Blas, Florida from June through August. Most sea turtle takes by longline occur during the summer months.

Allowable gear

Vertical hook-and-line gear (bandit rigs, manual handlines) is the primary gear used in the commercial fishery (> 96% of annual landings). Longlines, spears, and fish traps account for a small portion of the commercial harvest (< 5%). Longlines account for only a small fraction of red snapper dead discards as most of the landings come from handline-caught fish (Table 6). In addition, longlines are fished in deeper water, particularly in the west, and select for larger, legal-sized red snapper. Longline vessels east of Cape San Blas, Florida are also restricted to carrying 1,000 hooks onboard (only 750 rigged for fishing at any given time) as part of a suite of measures put in place through Amendment 31 (GMFMC 2009) to reduce sea turtle bycatch.

Rod-and-reel is the primary gear used in the recreational fishery. Recreational anglers also use spears to capture red snapper. Spearfishing does not affect discard mortality since all fish caught are killed. Only undersized red snapper mistakenly killed while spearfishing would contribute to discard mortality. During the red snapper recreational fishing season, discards are primarily due to the recreational size limit; however, allowable gears can affect discard mortality rates.

Fishermen in both the commercial and recreational sectors are required to use non-stainless steel circle hooks, if using natural baits, to reduce discard mortality. The size of circle hooks used in the fishery varies by manufacturer, gear type, and species targeted (i.e., if targeting vermilion snapper, smaller circle hooks may be used). Although circle hooks may not work as well to

reduce red snapper discard mortality, they are effective in reducing mortality in other species such as red grouper (Burns and Froeschke 2012).

In addition to the circle hook requirement, Amendment 27 (GMFMC 2007) also put in place requirements for both commercial and recreational fishermen in the reef fish fishery to carry onboard dehooking devices. These gears are all intended to reduce bycatch and discard mortality. A dehooking device is a tool intended to remove a hook embedded in a fish. It reduces the handling time releasing a fish from a hook and allows a fish to be released with minimum damage.

IFQ program

The commercial sector was previously regulated by 2,000-lb and 200-lb trip limits. With the establishment of the red snapper IFQ program, red snapper discards after a trip limit was reached are no longer a factor. However, reef fish observer data since the IFQ program was implemented indicate a large proportion of legal-sized red snapper continue to be discarded by both the handline and longline fleets (2013). Discard rates do vary by gear. In 2011, 3.5 red snapper were landed for every fish released in the vertical line fleet compared to a 0.5 red snapper landed for each fish released in the longline fleet (SERO 2012b). Discard rates greatly varied by region. In 2011, 87% of observed red snapper caught in the Florida Panhandle were landed, compared to 79% off Louisiana and Texas, and 47% off the Florida Peninsula. There was also a noticeable difference in the size of red snapper caught, with red snapper along the Florida Peninsula (mostly 19-24-inches TL) generally larger than fish caught in other areas of the Gulf (mostly 15-21-inches TL). Most discards were estimated to be released alive, regardless of gear type used. Discards were likely due to insufficient allocation, rather than the minimum size limit, especially in the longline fleet. In a study by Wilson et al. (2004) aboard commercial vessels using bandit rigs, 61% of red snapper released were greater than 13-inches TL, the minimum size limit.

Table 6. Commercial red snapper landings and dead discards in the Gulf by year and area.

Year	Eastern Gulf				Western Gulf			
	Landings		Dead discards		Landings		Dead discards	
	Handline	Longline	Handline	Longline	Handline	Longline	Handline	Longline
1983	1,646,550	205,415	1,587	1,237	2,698,740	9,089	56,690	85
1984	949,341	128,146	309	388	1,625,800	71,755	27,160	547
1985	550,063	25,477	79,906	2,239	608,624	50,822	233,753	8,173
1986	222,738	14,761	21,314	646	564,277	73,719	261,093	11,740
1987	168,788	10,300	20,091	743	412,668	69,713	229,400	12,708
1988	186,924	10,860	51,433	738	686,680	66,440	285,429	9,443
1989	156,071	10,284	32,961	1,714	531,066	44,967	230,318	6,188
1990	198,778	10,021	94,242	4,552	482,224	11,997	377,444	2,706
1991	152,971	3,368	79,800	1,647	527,667	7,937	332,927	1,905
1992	153,940	1,104	54,930	484	837,699	2,270	380,571	460
1993	157,367	3,061	57,447	843	849,065	2,421	375,085	471
1994	160,369	1,473	87,448	568	705,354	1,879	412,546	407
1995	46,528	1,466	54,453	658	648,399	2,012	491,941	501
1996	65,129	1,329	62,736	925	941,768	3,102	695,812	699
1997	51,767	849	79,005	515	1,066,360	3,472	713,290	729
1998	111,068	1,057	99,004	494	1,052,750	3,001	605,570	522
1999	147,499	1,289	102,825	340	1,032,070	9,722	602,380	1,564
2000	168,301	1,585	107,368	556	899,899	18,882	634,841	3,146
2001	207,257	1,779	278,236	894	809,218	12,326	658,252	2,334
2002	297,471	3,235	319,910	1,555	830,146	14,317	584,024	2,481
2003	279,295	2,626	235,502	1,190	782,006	16,735	492,094	2,618
2004	247,833	3,592	251,909	1,633	741,737	43,698	598,933	8,157
2005	216,596	3,816	230,654	2,081	725,819	26,878	785,721	6,686
2006	209,704	3,062	221,631	1,394	955,637	24,731	992,193	6,781
2007	308,237	3,492	949,770	14,520	521,931	17,877	231,164	443
2008	277,716	7,221	660,738	24,096	381,349	5,693	115,150	108
2009	299,480	3,088	748,261	10,548	347,913	5,666	89,641	68
2010	398,806	15,002	1,111,727	53,620	415,081	4,364	85,851	56
2011	408,346	15,463	1,274,735	60,252	382,630	2,143	86,460	18

Source: SEDAR 31 2013; Jacob Tetzlaff, pers. comm. Southeast Fisheries Science Center, Miami, Florida)

Alternatives being considered and bycatch minimization

The proposed allocations and accountability measures discussed in Amendment 28 (GMFMC 2014b) can indirectly affect bycatch in the Gulf reef fish fishery. These actions are primarily administrative. They would change the apportionment of fish between the commercial and recreational sector as well as affect how the recreational season is calculated. Depending on which alternatives are selected for each action, they could either reduce or increase bycatch in the reef fish fishery.

Practicability Analysis

Criterion 1: Population effects for the bycatch species

This action would revise the current red snapper allocation between the recreational and commercial sectors and so would not directly affect bycatch minimization. As discussed in Section 4.1.2 of Amendment 28 (GMFMC 2014b), the number of dead discards is estimated to be lower as a result of more recreational allocation because some fish caught could be retained rather than discarded under an increased quota. For the commercial sector, a decrease in the allocation would likely lead to more discards as a result of a reduced quota. Thus, any benefit to the red snapper stock from increasing the recreational allocation in Alternatives 2-7 would likely be offset by increases in dead discards as a result of a reduced commercial quota. As a result, it is difficult to assess whether this action, in terms of dead discards, would be beneficial, adverse, or have no effect on the red snapper stock.

This action also would add accountability measures for the management of red snapper. The proposed accountability measures, as discussed in Sections 4.2.2 and 4.3.2 of Amendment 28 (GMFMC 2014b) could also indirectly affect bycatch, but it is difficult to assess whether they would provide any benefits or not. For red snapper, the consequences of selecting accountability measures that would lead to a shorter fishing season would reduce discards during the season. However, because the reef fish fishery is a multispecies fishery, fishing effort would likely shift to some other species after the red snapper season closes. During the closure, any red snapper caught would be discarded. Given that some of these discarded fish would die, a shorter season could result in more red snapper being discarded dead.

As described earlier in this bycatch practicability analysis, the Council and NMFS have developed a variety of management measures to reduce red snapper bycatch and these measures are thought to benefit the status of the stock. These include bycatch reduction devices and effort targets in the shrimp fishery, size limit reductions and the IFQ program for the commercial sector, and gear requirements, such as dehooking devices and the use of circle hooks by the reef fish fishery. In addition, any increases in bycatch resulting from proposed management actions are accounted for when reducing directed fishing mortality. Any reductions in bycatch not achieved must be accounted for when setting the annual catch limits; the less bycatch is reduced, the more the annual catch limits must be reduced.

Criterion 2: Ecological effects due to changes in the bycatch of red snapper (effects on other species in the ecosystem)

The relationships among species in marine ecosystems are complex and poorly understood, making the nature and magnitude of ecological effects difficult to predict with any accuracy. The most recent red snapper stock assessment (SEDAR 31 2013) indicated the stock is rebuilding. Consequently, it is possible that forage species and competitor species could decrease in abundance in response to an increase in red snapper abundance. Changes in the bycatch of red snapper are not expected to directly affect other species in the ecosystem. Although birds, dolphins, and other predators may feed on red snapper discards, there is no evidence that any of these species rely on red snapper discards for food.

Criterion 3: Changes in the bycatch of other species of fish and invertebrates and the resulting population and ecosystem effects

Population and ecosystem effects resulting from changes in the bycatch of other species of fish and invertebrates are difficult to predict. As discussed in Amendment 27 (GMFMC 2007), groupers, snappers, greater amberjack, gray triggerfish and other reef fishes are commonly caught in association with red snapper. Many of these species are in rebuilding plans (gag, gray triggerfish, and greater amberjack) with the stocks improving. Regulatory discards significantly contribute to fishing mortality for all of these reef fish species, with the exceptions of gray triggerfish and vermilion snapper.

No measures are proposed in this amendment to directly reduce the bycatch of other reef fish species. Bycatch minimization measures implemented through Amendment 18A (GMFMC 2005), Amendment 27 (GMFMC 2007), and Amendment 31 (GMFMC 2009) are expected to benefit reef fish stocks, sea turtles, and smalltooth sawfish. As mentioned, this action would revise the red snapper allocation between the commercial and recreational sectors. For species with quotas (greater amberjack, gray triggerfish, and recreational red snapper), this could lead to a shift in fishing effort during red snapper season closures and negatively impact reef fish stocks not currently constrained by annual quotas or IFQ programs. The magnitude of this impact would depend on the size of the resultant quotas, the length of the red snapper closure, and the amount of effort shifting that occurs. Annual catch limits and accountability measures are now in effect for species not considered undergoing overfishing or overfished, thus potential for effort shifting and changes in bycatch may be lessened for these species.

Criterion 4: Effects on marine mammals and birds

The effects of current management measures on marine mammals and birds are described above. Bycatch minimization measures evaluated in this amendment are not expected to significantly affect marine mammals and birds. There is no information to indicate marine mammals and birds rely on red snapper for food, and the measure in this amendment is not anticipated to alter the existing prosecution of the fishery, and thus interactions with marine mammals or birds.

Criterion 5: Changes in fishing, processing, disposal, and marketing costs

Reducing the commercial allocation in Action 1, Alternatives 2-7 would result in fewer fish being landed and certainly affect fishing, processing, disposal, and marketing costs. However, because red snapper is a part of a multispecies fishery, other species could be targeted to fill any losses from reduced red snapper quotas. This action would not be expected to result in any changes in fishing, processing, disposal, or marketing costs of recreationally harvested red snapper because these fish may not be sold.

Criterion 6: Changes in fishing practices and behavior of fishermen

It is not possible to determine whether bycatch, including the amount of regulatory discards, will be affected following implementation of these actions. For the recreational sector, Action 1, Alternatives 2-7 are expected to increase the season length, albeit only a few days, and thus reduce discards. However, Action 2, Alternatives 2-5, could cancel out any increase in season length through the establishment of ACTs. In addition, reef fish fishing will occur when recreational fishing for red snapper is closed, so regulatory discards red snapper will occur. Thus, it is possible that the amount of recreational regulatory discards remains more or less the same with the proposed shift in allocation and additional accountability measures. For the commercial sector, individual fishing quota shareholders will need to determine if their red snapper allocation is sufficient to target red snapper, or to use the allocation to keep incidentally caught red snapper while targeting other species.

Criterion 7: Changes in research, administration, and enforcement costs and management effectiveness

The proposed management measures are not expected to significantly impact administrative costs. Quotas and ACTs based on stock allocation measures are currently used to regulate the commercial and recreational sectors harvesting red snapper. None of the resultant quotas from this action are expected to diminish regulatory effectiveness. All of these measures will require additional research to determine the magnitude and extent of impacts to bycatch and bycatch mortality. Administrative activities such as quota monitoring and enforcement should not be affected by the proposed management measures.

Criterion 8: Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources

Red snapper is a highly desirable target species and the proposed shift in allocation (Action 1) is intended to increase the percentage of the red snapper quota allocated to the recreational sector (and decrease the commercial sector's share by an equivalent percentage). This would be expected to improve fishing opportunities for the recreational sector, thereby increasing the economic and social benefits for recreational anglers and associated coastal businesses and communities as modified by the Action 2 and 3 accountability measures. However, this amendment would also decrease fishing opportunities for commercial fishermen, thereby adversely impacting associated businesses and communities. No effects would be expected on the non-consumptive uses of the fishery resources.

Criterion 9: Changes in the distribution of benefits and costs

The net effects of the proposed management measures in this amendment on bycatch are unknown because the resultant management measures could increase dead discards for the commercial sector and decrease dead discards for the recreational sector. The proposed management measures would not be expected to affect the total amount of red snapper normally harvested by anglers and commercial fishermen. However, increases in the recreational red snapper quota and decreases in the commercial quota (Action 1) are expected to result in economic benefits for the recreational sector as modified by Actions 2 and 3, and losses to the commercial sector.

Criterion 10: Social effects

Bycatch is considered wasteful by fishermen and it reduces overall yield obtained from the fishery. Minimizing bycatch to the extent practicable will increase efficiency, reduce waste, and benefit stock recovery, thereby resulting in net social benefits. It is expected that these actions would result in benefits for the recreational sector and adverse effects for the commercial sector.

Conclusion

Analysis of the ten bycatch practicability factors indicates there would be positive biological impacts associated with further reducing bycatch in the recreational sector. However, these benefits have to be balanced against the expected increases in bycatch in the commercial sector. The main benefits of reducing red snapper bycatch are less waste and increased yield in the directed fishery. Reducing discards and discard mortality rates would result in less forgone yield.

When determining reductions associated with various management measures, discard mortality is factored into the analyses to adjust the estimated reductions for losses due to dead discards. Changes in discards associated with each of these management measures are contingent on assumptions about how fishermen's behavior and fishing practices will adjust. In these actions, establishing a new red snapper allocation and adding recreational accountability measures would indirectly affect discards and bycatch. Discards and bycatch would be affected depending on the magnitude of allocation change allowed under **Action 1** and how recreational harvest is constrained under **Actions 2 and 3**.

The Council needed to consider the practicability of implementing the bycatch minimization measures discussed above with respect to the overall objectives of the Reef Fish FMP and Magnuson-Stevens Fishery Conservation and Management Act. Therefore, given actions in this amendment combined with previous actions, management measures, to the extent practicable, minimize bycatch and to the extent bycatch cannot be avoided, minimize the mortality of that bycatch.

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APPENDIX C. SUMMARY OF HABITAT UTILIZATION BY LIFE HISTORY STAGE FOR SPECIES IN THE REEF FISH FMP.

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Red Snapper	Pelagic	Pelagic	Hard bottoms, Sand/ shell bottoms, Soft bottoms	Hard bottoms, Sand/ shell bottoms, Soft bottoms	Hard bottoms, Reefs	Sand/ shell bottoms
Queen Snapper	Pelagic	Pelagic	Unknown	Unknown	Hard bottoms	
Mutton Snapper	Reefs	Reefs	Mangroves, Reefs, SAV, Emergent marshes	Mangroves, Reefs, SAV, Emergent marshes	Reefs, SAV	Shoals/ Banks, Shelf edge/slope
Blackfin Snapper	Pelagic		Hard bottoms	Hard bottoms	Hard bottoms, Shelf edge/slope	Hard bottoms, Shelf edge/slope
Cubera Snapper	Pelagic		Mangroves, Emergent marshes, SAV	Mangroves, Emergent marshes, SAV	Mangroves, Reefs	Reefs
Gray Snapper	Pelagic, Reefs	Pelagic, Reefs	Mangroves, Emergent marshes, Seagrasses	Mangroves, Emergent marshes, SAV	Emergent marshes, Hard bottoms, Reefs, Sand/ shell bottoms, Soft bottoms	
Lane Snapper	Pelagic		Mangroves, Reefs, Sand/ shell bottoms, SAV, Soft bottoms	Mangroves, Reefs, Sand/ shell bottoms, SAV, Soft bottoms	Reefs, Sand/ shell bottoms, Shoals/ Banks	Shelf edge/slope
Silk Snapper	Unknown	Unknown	Unknown	Unknown	Shelf edge	
Yellowtail Snapper	Pelagic		Mangroves, SAV, Soft bottoms	Reefs	Hard bottoms, Reefs, Shoals/ Banks	

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Wenchman	Pelagic	Pelagic			Hard bottoms, Shelf edge/slope	Shelf edge/slope
Vermilion Snapper	Pelagic		Hard bottoms, Reefs	Hard bottoms, Reefs	Hard bottoms, Reefs	
Gray Triggerfish	Reefs	Drift algae, <i>Sargassum</i>	Drift algae, <i>Sargassum</i>	Drift algae, Reefs, <i>Sargassum</i>	Reefs, Sand/ shell bottoms	Reefs, Sand/ shell bottoms
Greater Amberjack	Pelagic	Pelagic	Drift algae	Drift algae	Pelagic, Reefs	Pelagic
Lesser Amberjack			Drift algae	Drift algae	Hard bottoms	Hard bottoms
Almaco Jack	Pelagic		Drift algae	Drift algae	Pelagic	Pelagic
Banded Rudderfish		Pelagic	Drift algae	Drift algae	Pelagic	Pelagic
Hogfish			SAV	SAV	Hard bottoms, Reefs	Reefs
Blueline Tilefish	Pelagic	Pelagic			Hard bottoms, Sand/ shell bottoms, Shelf edge/slope, Soft bottoms	
Tilefish (golden)	Pelagic, Shelf edge/ Slope	Pelagic	Hard bottoms, Shelf edge/slope, Soft bottoms	Hard bottoms, Shelf edge/slope, Soft bottoms	Hard bottoms, Shelf edge/slope, Soft bottoms	
Goldface Tilefish	Unknown					
Speckled Hind	Pelagic	Pelagic			Hard bottoms, Reefs	Shelf edge/slope
Yellowedge Grouper	Pelagic	Pelagic		Hard bottoms	Hard bottoms	

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Atlantic Goliath Grouper	Pelagic	Pelagic	Mangroves, Reefs, SAV	Hard bottoms, Mangroves, Reefs, SAV	Hard bottoms, Shoals/ Banks, Reefs	Reefs, Hard bottoms
Red Grouper	Pelagic	Pelagic	Hard bottoms, Reefs, SAV	Hard bottoms, Reefs	Hard bottoms, Reefs	
Warsaw Grouper	Pelagic	Pelagic		Reefs	Hard bottoms, Shelf edge/slope	
Snowy Grouper	Pelagic	Pelagic	Reefs	Reefs	Hard bottoms, Reefs, Shelf edge/slope	
Black Grouper	Pelagic	Pelagic	SAV	Hard bottoms, Reefs	Hard bottoms, Mangroves, Reefs	
Yellowmouth Grouper	Pelagic	Pelagic	Mangroves	Mangroves, Reefs	Hard bottoms, Reefs	
Gag	Pelagic	Pelagic	SAV	Hard bottoms, Reefs, SAV	Hard bottoms, Reefs	
Scamp	Pelagic	Pelagic	Hard bottoms, Mangroves, Reefs	Hard bottoms, Mangroves, Reefs	Hard bottoms, Reefs	Reefs, Shelf edge/slope
Yellowfin Grouper			SAV	Hard bottoms, SAV	Hard bottoms, Reefs	Hard bottoms

Source: Adapted from Table 3.2.7 in the final draft of the EIS from the Generic EFH Amendment (GMFMC 2004a) and consolidated in this document.

APPENDIX D. SUMMARIES OF PUBLIC COMMENTS RECEIVED

This section includes four sets of public comment summaries on Reef Fish Amendment 28, Red Snapper Allocation:

- Summary of written comments received between the October 2013 and February 2014 Council meetings.
- Summary of written comments received between the February and April 2014 Council meetings.

Both sets of comments can be viewed at:

http://www.gulfcouncil.org/fishery_management_plans/scoping-thru-implementation.php

- Summary of scoping comments received by NOAA Fisheries on the Notice of Intent to prepare an Environmental Impact Statement (EIS)
- Summaries of comments received at public hearings (March 10-20, 2014).

I. Summary of written comments received between the October 2013 and February 2014 Council meetings

- Take no action/Status quo – commercial sector supplies red snapper to the majority of the population
- Shift 5% of the existing quota to the recreational sector
- Shift 10% (or more) of the existing quota to the recreational sector
- Increase recreational quota by 8%
- Allocate 100% of future quota increases to the recreational sector if the allowable red snapper quota is in excess of 9.12 million pounds.
- Allocate 75% of quota increases if the allowable red snapper quota is in excess of 9.12 million pounds.
- Allocate 60% of the quota to the recreational sector
- Allocate 65% recreational and 35% commercial
- Allocate 75% recreational and 25% commercial
- Allocate 50/50 plus 100% of any quota increases to the recreational sector
- Allocate 55% recreational and 45% commercial
- Allocate 90% recreational and 10% commercial
- Allocate 67% recreational and 33% commercial – with the charter for-hire classified as commercial
- Allocate 50/50 quota
- Please oppose Amendment 28 and focus on real solutions for recreational anglers that will extend the season over the long-term.

- A 10% increase in allocation for the recreational sector would not increase the season length by much – but it would reduce the commercial sector’s ability to supply America with red snapper.
- Any change in allocation would have a negative effect on the commercial sector’s ability to make a living.
- Amendment 28 would hurt the region’s seafood industry by giving more allocation to a poorly managed recreational sector at the expense of commercial fishermen, restaurants, seafood markets, and the millions of Americans who don’t have the means to catch their own fish.

Other suggestions

- Eliminate commercial fishing until the fishery is no longer overfished, then allow commercial fishing under the same bag/size/season/gear restrictions as recreational, and auction off any commercial fishing permits.
- 4-6 month season with 4-fish bag limit
- 3-5 fish with one fish under 16” and a May 1 – October 1 weekend and holiday season.
- Charter for-hire should get 50% of the quota and each permit should receive the same amount of allocation.
- Giving more quota to the recreational sector will not solve their overfishing problem.
- 3-day weekend only fishing season.
- Close the season every ten years for one full season.
- Would support a 5-fish bag limit and 12” minimum size limit – keep the first 5 fish.
- Keep the first 4 fish – no size limit.
- Increase recreational bag limit to 10 fish.
- Allocation of any wild fish species should be relative to the numbers of recreational and commercial fishermen.
- 12” size limit/4 per person bag limit with an open season of 30 fishing days throughout the year – anglers would have to login to a computer system to declare a fishing day.

II. Summary of written comments received between the February and April 2014 Council meetings

Comments include:

- Support for all of the Alternatives, including new Alternative 7
- Alternatives 1, 5, and 6 appear to be most popular
- Many offered support for some sort of reallocation in favor of the recreational sector, but did not specify an Alternative.

Others offered Alternatives not included in the document:

- A 50/50 split in allocation.

- 60% recreational allocation/30% commercial allocation, and a longer recreational season.
- 65% recreational allocation/35% commercial allocation.
- 65% recreational allocation/35% commercial allocation with a 4-fish bag limit and a longer recreational season.
- 75% recreational allocation/25% commercial allocation.
- 80% recreational allocation/20% commercial allocation.
- 95% recreational allocation/5% commercial allocation.

General Comments regarding the Amendment include:

- A shift in allocation in favor of the recreational sector, but not unless some sort of recreational accountability is put in place.
- Allocation of red snapper to the recreational fishery should be accompanied with accountability measures (AMs) to more effectively constrain the recreational sector to the prescribed annual catch limit (ACL).
- This amendment does not meet or address the stated purpose and need because increasing allocation on its own does not stabilize the fishery or prevent overfishing, nor is the amendment consistent with MSA (does not address AMs).
- Current allocation causes an increase in recreational fishing pressure.
- Reconsider the effects of removing the “30B permit provision”, sector separation and other management strategies, as well as changes to the management goal for red snapper in conjunction with this amendment.

Other Red Snapper Comments Received:

- There is a need for better quality data, which can only come from improved funding, partnerships, and proper auditing.
- Current recreational regulations promote mortality by requiring fish to be thrown back only to die.
- Support Sector Separation.
- Make red snapper a sport fish.
- If the recreational season cannot be at least three months implement some type of days at sea program.
- Open amberjack and gray triggerfish during the same time as red snapper so there are other species to fish for, making the offshore trip more worthwhile.
- Captains should not be able to have a commercial license and a Charter-for-Hire license at the same time.
- Consider allowing the commercial sale of spear fishing catches.
- Recreational sector puts more money into the economy.
- Recreational sector loses a lot of days to bad weather.
- Louisiana is ready and able to manage snapper in federal and state waters off of Louisiana.
- More artificial reefs will provide more habitat and help the stock grow.
- A viable solution is to set a minimum distance (50-75 miles) from any shoreline for commercial fishing operations.
- Eliminate the size limit.

- Better way to manage – keep every snapper caught regardless of size and set a limit per angler.
- Allow anglers to keep a 5 gallon bucket of “first caught” reef fish.
- Close the fishery during spawning season.
- Develop a program that would allow private recreational anglers to pick and choose the days they can fish for red snapper.
- Implementing a tag program or a recreational red snapper license would help the recreational sector stay within its quota as well as contribute to data collection.
- Give recreational anglers six months to fish for red snapper.
- Decrease size limit to 13 or 14”.
- Increase the red snapper bag limit.
- Increase the bag limit to 3-5 fish.
- Implement a 4-fish bag limit.
- Open red snapper season and leave it open.
- Adjust the season to accommodate the Friday before Memorial Day through Labor Day.
- Season should begin the first Friday in July and last through the last Saturday in July, but the five states should adopt the same seasons, with state waters abiding by a 2-fish bag limit while the federal bag limit increases to 4 fish.
- Implement a July – September season.
- Need separate seasons for different areas in the gulf by population.
- Implement a split, multi-season to accommodate more people.
- There should be no private “ownership” of red snapper (IFQ).
- Extend the season by 4 weeks.
- Delay the start of the season to July 1.
- Implement a 6 month season.
- If there cannot be a reasonable recreational season, there should be no commercial fishery.
- Unfair to reward the recreational sector that has consistently exceeded its quota.
- Allocating more fish to the recreational sector cannot increase the stability of the red snapper fishery, as stated in the purpose and need, because you are giving more fish to the sector that continues to exceed its quota.
- Allocation should be reviewed frequently.
- Amendment 28 is not a real solution. This amendment will only hurt more coastal businesses and commercial fishermen who depend on this fishery for a living.
- Recreational anglers should be able to keep a 2-day bag limit when on a trip in excess of 24 hours.
- Mid water trawlers should be using TEDs.

III. Summary of scoping comments received by NOAA Fisheries on the Notice of Intent to prepare an Environmental Impact Statement (EIS) for Reef Fish Amendment 28

The comment period was open from November 7 through December 9, 2013, and 159 comments were received. These comments may be viewed at <http://www.regulations.gov/#!documentDetail;D=NOAA-NMFS-2013-0146-0001>.

Comments in support of increasing the recreational sector’s share of the annual catch limit often cited socioeconomic gains, reducing restrictions, and providing a better sense of fairness in setting the allocation. Comments in support of the status quo or increasing the commercial share of the annual catch limit often cited fairness because the commercial sector does not exceed their quota due to better accountability of catches, the importance of providing seafood to the non-fishing public, and protecting commercial sector investments in the fishery.

The following is a breakdown of the comments. Table 1 shows the number of comments supporting each of the alternatives in Amendment 28.

Table 1. The number of scoping comments recommending each Amendment 28 alternative.

Alternative	Number of comments recommending the alternative
1	29
2	1
3	0
4	3
5	2*
6	19

*Two commenters in support of Alternative 6 indicated they could also support Alternative 5

Other allocation alternatives were recommended by commenters and are shown Table 2.

Table 2. Other allocations recommended in scoping comments on Amendment 28.

Recreational:commercial allocation	Number of comments in support of the allocation
10:90	1
50:50	3
60:40	3
75:25	1
100:0	6

Twenty-one comments recommended an alternative similar to Alternative 5 except that if the red snapper quota is greater than 9.12 million pounds (mp), allocate 90% rather than 75% of the amount in excess of 9.12 mp to the recreational sector and 10% rather than 25% to the commercial sector.

IV. Summaries of comments received at public hearings (March 10-20, 2014).

Orange Beach, Alabama March 10, 2014

Council/Staff

Johnny Green
Assane Diagne
Charlotte Schiaffo

68 members of the public attended.

Gary Royal- Charter

Mr. Royal noted that he had been running a charterboat since 1997, and stated that the only sector being punished was the commercial sector. He did not support taking any commercial allocation away and suggested that the commercial sector be allocated on historical numbers. He supported Alternative 5. He added that the fishery needed to work under a system that allowed the recreational sector to fish year-round, maybe with tags, and that flexibility in regulations was needed so that everyone could catch more fish.

Randy Boggs- Charter

Mr. Boggs supported Alternative 1 and stated that the Council was pitting the sectors against each other and he could not support reallocation, or anything else, until the recreational sector was brought into compliance. He added that Alabama could not control compliance by other states and should not be punished because recreational fishers in other states were going over their quotas. He advocated making the recreational sector more accountable.

Troy Frady- Charter

Mr. Frady noted that he had been attending Council meetings for five years. He stated that all sectors needed to move towards a system that allowed flexibility. He said that the recreational harvest was running 54-56% each year even though their quota was 49%, and that about 140,000lbs of snapper were being fished across the Gulf daily. He believed that Amendment 28 was premature and suggested a fish tag system. He recommended tabling Amendment 28 until a better data collection plan was in place for about two years in order to get accurate data.

David Walker- Commercial

Mr. Walker supports Alternative 1 and stated that the amendment would cause instability in the commercial sector and rewarded the recreational sector for going over their allocation. He said that the IFQ program had been a success and that it should not be changed by the Council. He added that any allocation taken away from the commercial sector took fish away from the American consumer and that reallocation unfairly penalized the commercial sector, which followed the rules. He noted that the commercial sector had already taken a huge quota reduction while the recreational sector kept going over theirs. He believed that the commercial sector deserved to keep their historical quota and that the recreational sector needed to be held accountable. He indicated that SESSC votes are in question because one of the members may be

ineligible. He suggested that the SESSC needed to review all data on the Amendment, and that the Council should take no action until this was done.

Shawn Miller- Recreational

Mr. Miller felt that the amendment was good. He suggested that the fishery be shut down in June for a few years to allow the fish to spawn, and maybe even shut down for three months to all sectors, even though people would lose money in the short term. He believed such an action would allow longer seasons eventually due to more fish being spawned, thus benefitting all sectors.

Blakeley Ellis- Recreational

Mr. Blakely supported Preferred Alternative 5. He felt it was long overdue and was happy with any increase.

Ben Fairy- Charter

Mr. Fairy supported Alternative 1 (No Action). He noted that there was a commercial lawsuit against NMFS because of the recreational sector continuously going over their quota, and that the length of the season depended on the upcoming ruling. He did not support reallocation and stated that there needed to be three sectors: recreational, charter, and commercial.

Tom Ard- Charter

Mr. Ard supported Alternative 1. He stated that the amendment was a band aid, and that he supported dividing the charterboat industry from the recreational.

Bobby Kelly- Charter

Mr. Kelly supported Alternative 1 and the separation of the charterboat industry from recreational. He wanted better data collection methods and supports sector separation.

Joe Nash- Charter

Mr. Nash supported sector separation and believed the commercial and charterboat industries were penalized for the recreational fishers going over the allocation. He advocated more accountability in the recreational sector and noted that derby fishing was too hard on the charterboat industry.

Dale Woodruff- Charter

Mr. Woodruff advocated tabling Amendment 28 and expressed concern over there being no accountability in the recreational fishery. He stated that if the commercial sector had to give up some of its allocation, that it should be put in a program for everybody. He urged everyone to contact their representatives in Congress to have a plan applying only to Alabama, since other states were being non-compliant and punishing Alabama. He stated there needed to be a better reporting system.

Gary Malin- Recreational

Mr. Malin did not believe the recreational sector was going over its limit. He noted that bad weather had limited fishing days and advocated a tag system for all sectors.

Mike Rowell- Charter

Mr. Rowell expressed concern that the sectors were being pitted against one another. He supported Alternative 1. He felt that Alabama was being punished because of non-compliance by other states.

Scott Drummond- Founder of an outdoor trade organization

Mr. Drummond stated that the data the Council uses are not accurate, and that economic studies needed to be done for each amendment. He said that commercial fish landings had to be documented while recreational did not, and that estimates were used instead of hard data. He supported Alternative 1.

Jim Tinker- Recreational

Mr. Tinker agreed with other speakers that the sectors were being pitted against each other. He believed the Council was not dealing with issues or solving problems and that there were plenty of snapper in the Gulf. He stated that the season was too short, which was economically devastating and that the size limits caused too many fish to be thrown back, increasing mortality. He said the recreational industry supported the Gulf economy, and that the percentage of quota was not the problem, the counting of the fish was the problem. He did not support the amendment and believed the recreational fishery in Alabama was being destroyed. He also stated that red snapper were overwhelming other fisheries and the Council was practicing poor conservation.

Angelo Depaula- Recreational

Mr. Depaula stated that the problem was not the amount of fish being caught, but the counting method being used. He advocated a smaller limit, noting the mortality rate was over 50%. He supported an increased quota and a longer season (6 months).

**Mobile, Alabama
March 11, 2014**

Council/Staff

Kevin Anson
Assane Diagne
Charlotte Schiaffo

46 members of the public attended.

Ben Fairy- Charter

Mr. Fairy supported Alternative 1. He noted that there was a federal lawsuit by the commercial industry over the recreational overages, and that the outcome of that lawsuit could determine allocations. He urged the recreational sector to be accountable and advised against the sectors pitting themselves against each other.

George Null- Boat dealership

Mr. Null stated that his business' sales of offshore boats had decreased in the last 3-4 years causing an economic impact to his business.

Larry Huntley- Commercial

Mr. Huntley supported Alternative 1, noting that giving more fish to the recreational sector took fish away from consumers, and that increasing their allocation would reward them for going over their allocation.

David Walker- Commercial

Mr. Walker supported Alternative 1, stating that allocation was not the problem; it was the fishery management process that was the problem. He stated that the SESSC needed to review the amendment before the Council made a decision and said that the Council should reconvene the SESSC because one vote was cast by someone who may not be eligible to serve on the SESSC.

Donald Waters- Commercial

Mr. Waters said that numerous fish species were given to recreational fishers and that to give them more of the red snapper quota was unfair. He stated that the recreational fishery needed to be held accountable and supported Alternative 1.

Edwin Lamberth- Recreational

Mr. Lamberth supported Alternative 6, but would be satisfied with Alternative 5. He stated that the recreational fishery provided \$10 billion in economic impacts. He emphasized that the Council needed to reallocate fairly based on the recreational industry's economic impact and that the data the Council was currently using to reach its allocation decisions was over thirty years old.

Charles Rodriguez- Boat dealer

Mr. Rodriguez did not have a preferred alternative, but suggested that there be a 3-month season with a 3-fish limit. He did not feel any of the sectors should have fish taken away from them and that the red snapper population had rebounded enough for everyone's allotment to be increased.

Scott Drummond- Outdoor trade organization

Mr. Drummond stated that the data the Council used are bad and that no one should have any fish taken from their sector. He advocated cancelling the amendment, saying it was not needed.

Charles Beach- Charter

Mr. Beach supported Alternative 1. He stated that the stock had recovered and that the Council was not taking into account that the commercial fishery was dealing in pounds and not numbers. He pointed out that the shrimping industry had collapsed so there was very little bycatch of juveniles which increased the stock. He added that a 40-day season was too short and that the Council needed to reassess its stock assessment methods and lower the commercial size limit since it was hurting the commercial industry.

Tom Steber- Alabama Charter Association

Mr. Steber supported Alternative 1 and stated that the Council was pitting the sectors against each other.

Avery Bates- Commercial

Mr. Bates advocated more reef building to increase stocks, noting that Alabama had a successful program. He stated that the commercial fishery was being pushed out by too much regulation, and that the fish count was incorrect. He wanted fair and equitable allocation and emphasized that the best scientific data needed to be used in Council decisions. He did not support the amendment.

**Panama City, Florida
March 12, 2014**

Council/Staff

Pam Dana
Assane Diagne
Charlotte Schiaffo

93 members of the public attended.

John Anderson- Commercial

Mr. Anderson supported Alternative 1 and stated that taking fish away from the commercial sector would punish the consumer and the industry that followed the rules.

BJ Burkett- Charter

Mr. Burkett supported Alternative 1 and stated that there were too many loopholes for the recreational industry. He advocated a 150-day recreational season.

Jack Melancon- Commercial

Mr. Melancon supported Alternative 1.

Pam Anderson- Charter

Ms. Anderson supported Alternative 5, stating it was the most fair to all sectors and would create more stability in the fishery. She noted that an economic study had been done showing that taking away fish from the commercial sector was equitable and would be best for the nation. She stated that the overages reported in the recreational sector were due to bad data from NOAA. She suggested a Gulf reef permit to give researchers more accurate data.

Ron Schoenfeld- Recreational

Mr. Schoenfeld supported Alternative 4. He suggested an odd-even day season in order to double fishing days, and to have fish counted when boats come in to dock.

Bart Niquet- Commercial

Mr. Niquet supported Alternative 1 and stated that recreational anglers needed to be held accountable.

Bob Zales- Charter

Mr. Zales supported Alternative 5 and stated that sector separation would not work, and that separation would increase the commercial quota at the expense of the recreational. He added that data being used were not accurate.

Jackie Rinker- Media

Ms. Rinker supported Alternative 4 or 5, stating that money spent in the communities by recreational anglers was important to keep local communities viable.

Chuck Guilford- Charter

Mr. Guilford supported Alternative 6. He stated that allocation had put a lot of people out of business.

Kenyon Gandy- Charter

Mr. Gandy supported Alternative 1 and noted that there was too much discards in the industry because of size restrictions.

David Krebs- Dealer

Mr. Krebs supported Alternative 1. He advocated getting rid of the size limit. He stated that the current recreational management system was designed for failure.

Mike Whitfield- Charter

Mr. Whitfield supported Alternative 1. He stated that there were too many participants in the recreational fishery and that a count of them needed to be done.

Dewey Destin- Charter

Mr. Destin supported Alternative 1. He stated that the Council needed to change its management plan and get rid of kill and release. He stated that taking away fish from the commercial sector was not fair, and that while he did not object to an increase in the recreational quota, it should not be done at the expense of the commercial sector.

Curtis Culwell- Recreational

Mr. Culwell supported Alternative 5.

Russell Underwood- Commercial

Mr. Underwood supported Alternative 1. He stated that the commercial IFQ system was working well, and that the Council recreational management system was flawed. He suggested a tag system.

Candy Ansard- Recreational

Ms. Ansard did not support the amendment, saying none of the options solved the problem. She suggested building more artificial reefs and pursuing an aggressive program against lionfish.

Charlie Saleby- Charter

Mr. Saleby supported Alternatives 4, 5, and 6. He stated that the size limit needed to be smaller and that the season was too short, noting that smaller boats were put in danger by having to go far out in bad weather to fish.

Donald Whitecotton- Charter

Mr. Whitecotton supported Alternative 6, and agreed that bad weather limited fishing days.

Stewart Miller- Charter and commercial

Mr. Miller supported Alternative 1.

Billy Archer- Recreational, charter, and commercial

Mr. Archer supported Alternative 1 and suggested tabling the amendment. He also recommended a tag system for the recreational sector and sector separation.

Kerry Hurst- Commercial

Mr. Hurst supported Alternative 1. He recommended a national plan for both sectors and more accountability for the recreational sector.

Dean Preston- Recreational

Mr. Preston supported Alternative 6. He agreed that lionfish were a problem and stated that the amendment pitted the sectors against each other. He believed that the commercial sector had too large an allotment of a public resource.

Frank Gomez- Commercial

Mr. Gomez supported Alternative 1.

Ken Vandirzeyne- Recreational

Mr. Vandirzeyne supported Alternative 6.

Gary Jarvis- Charter and commercial

Mr. Jarvis supported Alternative 1 and advocated a management plan for the recreational sector. He encouraged Amendment 40 to be taken to public hearings and stated that Amendment 28 was the result of recreational lobbying.

Mike Guidry- Recreational

Mr. Guidry supported Alternative 4. He encouraged more accountability in his sector and also asked for more fishing days.

David Underwood- Commercial

Mr. Underwood supported Alternative 1.

Bruce Craul- Restaurant owner

Mr. Craul supported Alternative 1 and stated that better data were needed.

Chris Niquet- Commercial

Mr. Niquet supported Alternative 1 and urged the Council to get more accurate data. He stated that reallocation would cause instability in the fishery.

Ben Seltzer- Commercial

Mr. Seltzer supported Alternative 1.

Frank Bowling- Recreational

Mr. Bowling supported Alternative 5.

Jason Smith- Charter

Mr. Smith did not support the amendment, stating there was not enough data to make a choice.

Gulfport, Mississippi

March 12, 2014

Council/Staff

Corky Perret

Emily Muehlstein

Phyllis Miranda

45 members of the public attended.

Robert Cullimber-

Mr. Cullimber supports Alternative 4.

Tony Dees- Owner of retail fishing store

Mr. Dees supports Alternative 4 because in the last ten years he has seen an approximately 80% decrease in tackle sales and 90% decrease in SCUBA sales for spearfishing.

Donny Waters- Commercial

Mr. Waters said the ITQ program initiated 8 years ago is probably the most successful program initiated by Council; 40% less fish are killed to bring quota to the dock. He doesn't feel it's right to reallocate fish from a sector that has been accountable, and commercial fishermen should not be penalized for the Council's inability to create a good fishing plan for the recreational fishery. He feels that the recreational sector wants to be accountable. The commercial sector cannot take a fish home, and they are feeding 97% of the population that cannot go recreational fishing. He does not want to take anything away from anybody but feels that this allocation will wreak havoc in the commercial fishery. His money goes back into his business. The answer is not to take from one sector to give it to another. This amendment does not promote any conservation because of the bycatch in the recreational fishery and it will create bycatch in the commercial fishery.

FJ Eicke- Recreational

Mr. Eicke supports Alternative 5 because the commercial sector won't lose anything. The recreational sector has increased in numbers significantly since the initial allocation was set.

Recreational angling has a tremendous economic and social value. The initial allocation was set using the time period of 1979-1987 and there was no recreational data at that time so the initial allocation was flawed from the start. The recreational fishery has put up with limited seasons and limited bag limits, and he feels that now there is a chance to do something right. The Council should reallocate on a fair and equitable basis.

Jordan White- Recreational

Mr. White prefers Alternative 1 because he doesn't support taking any red snapper quota away from commercial fishermen.

David Walker- Commercial

Mr. Walker does not want to attack the recreational fishermen themselves; it's their management plan that is the problem. The seafood industry is not the problem. Less than 2% of anglers in the U.S. are recreational and most of the nation depends on the seafood supply chain to get seafood. The commercial management plan is working. A new management plan needs to be developed for the recreational fishery, and reallocation is not the answer. Recreational fishermen need to get proactive not just in developing a new management system for themselves. Robbing from Peter to pay Paul is not the answer. Commercial fishermen had to make sacrifices. Alternative 5 does not enhance the net benefits of fishing, it only increases fishing days in a minor way. You could reallocate 100% to the recreational sector and they would still continue to lose days. Economic value cannot be the sole purpose for allocation. He supports Alternative 1: no action, because the commercial sector should not be penalized for following the rules. Reallocation is not justified when it comes to conservation. Also, there should be an outreach program (like the RAP sessions) for the seafood supply chain.

JR Titnus- Recreational

Mr. Titnus said the recreational season lengths projections are dependent on estimated weights and catches. Commercial fishing harvest is not an estimation. He has only been asked about his harvest once. There needs to be reliable data to make any decisions.

Tom Becker- President of Mississippi Charter Boat Captains Association

Mr. Becker said the fishing season is too short and he has different feelings about when to fish throughout the year. He supports Alternative 5. He has seen that commercial fishermen will drive by while he's fishing, take his number, and then fish his spot and empty them out.

John Bullok- Recreational

Mr. Bullok supports Alternative 1. Before the Council decides where the fish go, there needs to be a better way to check the recreational fishermen to determine if they deserve more pounds. When he goes out to the rig under this 2-snapper per person limit, he sees dead discards all over. Recreational fishermen are hi-grading and not venting. Stability of the recreational fishing sector should not be measured in length of season or allocation, but in the quality of fish. Commercial fishermen are checked 100% of the time for both harvest and other regulatory compliance, but he as a recreational angler hasn't been checked in 5 years.

Johnny Marquez- Executive Director of CCA Mississippi

Mr. Marquez supports Alternative 5 because for many years the season has gotten shorter and shorter and something different needs to be done. The initial allocation is outdated, it didn't take into account the economic and social concerns for the fishery. There have been tremendous changes in the fishery since that initial split. Economics should play an important role in the allocation decision. As the species rebounds, Alternative 5 wouldn't take away from the commercial fishery; it only takes the excess. We're back at the high-water mark for the commercial fishery and it's fair and equitable to give more to the recreational sector.

Nathan Witonovich

Mr. Witonovich supports Alternative 5.

Phillip Horn- 3rd generation seafood dealer and former Council member

Mr. Horn has been involved in the red snapper war since it began. He was involved in the development of the IFQ program and supports Alternative 1. The commercial industry has a tough row to hoe. Texas has never closed their state waters; Florida left their fishery open one year for a rodeo; Louisiana is open on weekends and claiming 10 miles; yet, the states all receive money for enforcement. The commercial industry suffered when quotas began and snapper needed help. The industry was closed over and over, and the agencies and the charter captains used to say 'catch something else.' Alternative 5 would only increase the recreational season by 4 days. The year the 9.12 million pound quota was put in place, the recreational sector overfished their quota. Members of the commercial industry were forced out when the IFQ program was put in place and the same may need to happen in the recreational fishery to reduce effort. The biggest problem is stock assessments. We continue to increase quotas. The red snapper average size started at 2 pounds now we're catching bigger fish. We can't predict the weather with 8 different models, and the red snapper stock is managed under a single model; we need to argue about assessments not allocations.

Gary Smith- Recreational and AP member

Mr. Smith would like to correct some errors. Last year in a red snapper Advisory Panel meeting these issues came up: there needs to be a plan to let new people in. It needs to be addressed. He does not support any alternatives because none of them do anything to solve the recreational issues. The problem is the data and the people in charge. It's the NMFS's Council and the Council members just go along without doing anything. Dr. Crabtree is responsible because NMFS has openly said they want a catch and release fishery in the recreational sector. Mr. Smith wants accountability. He has asked for a boat permit and he only gets excuses as to why he can't do it. He does not believe it is possible that the recreational sector catches the number of fish that NMFS says they do. It is about shutting the Gulf down. He said we need to ban together and demand accountability.

Keith King- Owner of the largest boat dealer in Mississippi

Mr. King supports Alternative 5 because it's a compromise that doesn't impact the commercial sector in any way. Council needs to find a way to increase the accuracy of the data. The initial allocation split was determined long ago and was based on failed info. The data collection methodology is inaccurate. The economic benefits of the recreational sector are not being considered. The shortened season has impacted the sale of offshore boats and that needs to be

taken into consideration. He wants accurate data and feels decisions should not be made today based on the data we do have. The stocks are improving, and although there is a problem with the harvest count, it's obvious that effort is overstated.

David Floyd-

Mr. Floyd supports Alternative 1, do not reallocate red snapper.

Nicky Cvitanovich- Currently recreational; has done commercial and charter

Mr. Cvitanovich said this shouldn't be a commercial vs. recreational fight. The Council needs to fix the recreational management plan so that the season isn't so short. It's also a problem that you can't catch snapper and amberjack at the same time. The fishery service doesn't want you to catch fish. Most everyone has shifted to inshore speckled trout fishing now. He supports Alternative 5, but would rather the recreational management plan be fixed.

Dustin Trochesset- 3rd generation charter captain

Mr. Trochesset supports Alternative 5. He is displeased with the handling of the red snapper fishery in the MSA. The Act was created to be fair and equitable to all fishermen. How is it fair for the commercial guys to have more fish and the luxury under the IFQ program to fish when they want? The recreational guys are given condensed time and commercial fishermen can target the spots before recreational anglers are allowed to fish. There is nothing fair and equitable about that. The charter industry is negatively impacted by the short season. They were cut short last year and had to cancel trips. He doesn't believe that 200 boats are fishing every day and wonders if the weather is taken into account. He would like the Council to be fair and equitable and there is not much that is fair about the commercial fishermen getting more allocation. The other states open their seasons and that hurts Mississippi, because the stuff they're catching counts against the Gulf-wide quota.

Scott Drummond- President of an outdoor trade organization

Mr. Drummond supports Alternative 1, because we don't understand the economic impact of what we do.

**Kenner, Louisiana
March 13, 2014**

Council/Staff

Harlon Pearce
Emily Muehlstein
Phyllis Miranda

48 members of the public attended.

Pierre Villere-

Mr. Villere said the current recreational allocation was set in the 1970's based purely on catch history. Using only catch history is a bad way to determine allocation. There are fewer boats in the commercial fishery than ever, and they continue to have the most harvest. What is the

impact of shorter seasons on bait shops, marinas, and hotels? At such a high price per pound, red snapper is not protein for America. Pollock is a more accurate example; it's cheap and there's lots of it. Counting every fish is the wrong path and it's a waste of time and resources. Trying to manage 1 million recreational fishermen is unusual and can't be done. The Council should set a bag limit and a decent season of 2-fish for the summer months, especially if the stock keeps expanding like it is.

James Schere- Charter and commercial

Mr. Schere supports Alternative 1. Transferring quota to the recreational sector won't help anyone, especially if the season remains open during the hottest time of the year. No one goes fishing only for red snapper; they catch 100 trout then go out for snapper. It takes one stop and 30 minutes of fishing and makes up a fraction of what's being caught in a fishing day. Customers don't book charter trips based on red snapper. It doesn't affect his [charter] business at the busiest fishing time of the year. Adding a few days won't help him and won't hardly affect any charter folks. Also, he doesn't think it will help private recreational anglers that much, because they're not targeting just red snapper on their trips.

George Heuey- Recreational

Mr. Heuey supports Alternative 5. From his fish camp, he catches trout near shore and then he runs his bay boat out to catch his two fish. His big problem is the verification of the recreational catch. If there was a way to count the recreational catch like the commercial catch is counted, then it would solve problems. But, that will never happen because of the number of ports and boats that recreational fishermen are using. The recreational sector gets the short end of the stick, and he thinks the allocation should expand in their favor. He loves to eat red snapper and wants it to remain in restaurants, and he wants charter fishermen to continue to have their business.

Dax Nelson – Commercial

Amendment 28 is wrong and Mr. Nelson supports Alternative 1. We've built this fishery. He remembers when we didn't have any snapper at all. Adding allocation to the recreational fishery won't help the recreational sector. The recreational sector has gone over its allocation in 6 of the last 7 years. If we do this amendment, it will only add two days to fish.

Steve Loop- Recreational

Mr. Loop is in favor of reallocation since it hasn't happened for the last 20 years, and the recreational sector is in need of a greater share of the snapper in the Gulf. The recreational sector gives more income to the government with all the taxes and money they spend to fish. The recreational sector has never caught over their limit, the federal government overestimates. Commercial fishermen are sitting at home making money renting out their licenses; that's not right and it's not fair. The Council should do the right thing and reallocate to the recreational sector.

Louis Valet- Recreational

Mr. Valet supports reallocation. He has seen so many changes in the Gulf since he started fishing. He doesn't think the changes in stock abundance happen because of fishermen fishing. God intended to feed the world with fish; that's why a fish lays a million eggs. What needs to be

done to promote those million eggs to grow into a million fish? We need to focus on clean water, habitat, and food. Farmers understand how to plant and grow plants but the stupid people regulating fish in the Gulf don't. Fish need to eat, but we wipe out porgy so that the red snapper won't be able to eat and grow. These fish have to eat something and they'll eat little red snapper and trout. The bonita and triggerfish are gone because they have nothing to eat.

Thally Stone- Commercial

Mr. Stone supports Alternative 1. He is just now making a decent living as a commercial fisherman. He earned every pound of allocation he got and nothing was given to him.

Doug Hawkins-

Mr. Hawkins supports Alternative 1. The fish are coming back and the Council shouldn't change things. Giving the allocation to recreational fishermen won't solve the problems in the recreational fishery.

Russell Underwood – Commercial

Mr. Underwood supports Alternative 1. We have rebuilt the fishery both commercially and recreationally. It took seven years to get a true stock assessment before the quota was increased. The problem is not the average guy who wants to catch a red snapper in the afternoon; the problem is with the Council system itself and whether the use of all the tools in the toolbox has been considered. He is worried about the resource. Seven years ago, there were hardly any people at these meetings. There was hardly any fish either; now, we have brought the fishery back. It was overcapitalized commercially, and there used to be a lot more boats. But, the IFQ program reduced the fleet and brought the fishery back. Recently, the commercial sector got a quota increase, and now they want to take it back. 500,000 pounds of snapper will only give an extra 2-3 days for recreational fishing. Is it fair for Texas to fish year round and the rest [of the Gulf] has a 30 to 40-day season? The problem is not allocation, the problem is the Council system.

Charlie Capplinger - Recreational

Mr. Capplinger said the system doesn't work. Recreational fishermen spend a lot of money on fishing. He supports Alternative 5, because it does not take any fish from the commercial sector. If there is additional allocation, than everyone will get more fish. The allocation is based on old data from 20 years ago. The demographics in the Gulf have changed. The economic value of the recreational fishery is enormous, and the number of fishermen targeting red snapper commercially is small. The allocation should have been different a long time ago. No one targets only red snapper, and no fisherman can fish during the week. The season is not set up for a recreational fisherman at all. The Council should increase the recreational sector's allocation to achieve the greatest economic impact and social impact for the largest user group.

Daryl Prince- Commercial

Mr. Prince supports Alternative 1. When he first started, there was hardly any fish in the Gulf. All the regulations have allowed the stock to improve because commercial fishermen have stopped hammering them. There are plenty of fish. Taking them from the commercial guys will not solve a thing. Sports fishermen won't have a better fishery by taking away allocation from the commercial sector.

Christopher Gray - Commercial

He used to wonder where the fish were, and now they're starting to see lots of fish. If you take 500,000 pounds from him by selecting Alternative 5, you're throwing him in the back of the bus. He should be standing in the front, because he made the fishery better as a commercial fisherman, by making sacrifices to rebuild the stock. He supports Alternative 1.

Michelle Malony- Louisiana Wildlife Federation

Ms. Malony said that outdoor recreational public access is just as important as habitat, and she expects improvement in data collection to show a robust recovering stock. She supports Alternative 5.

Gunner Waldmann- Recreational

Mr. Waldmann supports Alternative 5 with some caveats. The data collection is antiquated and needs to be improved. Alternative 5 does not take anything away from commercial fishermen. If the quota is over 9.12 mp, then the commercial sector will still gain 25% more of the allocation. As a safety consultant, he won't work for a company that removes oil platforms. It shouldn't be okay for them to blow up platforms and kill thousands of pounds of fish without anything being allocated for that damage.

Chuck Laday- Recreational

Mr. Laday is a member of CCA and an avid inshore angler. He occasionally fishes for red snapper. He would like to fish more but due to the short season, weather, and fatherhood, he doesn't have as much opportunity as he wants. His sons would really like to fish if there is a longer season. He supports Alternative 5 and applauds the Council. It's a fair and modest change to the current allocation that is based on old data. Under Alternative 5, the commercial sector loses nothing.

Robert- Recreational

Robert believes Alternative 5 seems like the right thing to do, adding that we all agree that something needs to be done for the management of the resource for our kids and grandkids. We need to work with the Council to come up with a different way to manage. We all need to come together to solve the problem because the fish are here. We don't see the croakers and triggerfish like we used to and we need to use data that isn't 25 years old. The Council is managing for the whole Gulf, and Louisiana is different than the other states. We need to come up with a subcommittee to recommend to the Council how to manage Louisiana. CCA is a good group that cares about conservation, and everyone should ban together to come up with meaningful management and [supporting] studies.

Chris Marcusio-

Mr. Marcusio is in favor of Alternative 5. In the last year, he has worked with some recognizable and seasoned fishery managers, economists, and advocates across the country to develop a report to reflect the culture and needs of the saltwater fishing public. One recommendation that came from the report was to examine allocation. It is set based on old data. If we're not managing fish for the best socioeconomic value and for conservation, then why are we managing? All allocations need to be examined, not just red snapper.

Woody Cruse- Recreational

Mr. Cruse said commercial and recreational fishermen are being pitted against each other, and it's unfortunate that we can't manage the resource together. He is a private angler and time on the water with his family is being limited. He has an expensive boat and he targets red snapper. It is terrible that amberjack is closed when red snapper is open. He is not anti-commercial, he just wants more time to fish. He has little confidence in the recreational harvest numbers.

Steve Tomeny- Commercial

Mr. Tomeny supports the Alternative 1 -no action. At this time, taking fish away from the commercial sector to add an extra two days to the recreational season is a no win situation. The system the recreational anglers are fishing under is broken. Adding pounds won't fix it, and the allocation is always overrun. The recreational fishery is an unlimited user group and as the fishery has recovered, more and more people want to go. The numbers should be lower than they are and he advocates a tag system. Sector separation would create more accountability, and we're still pushing for alternative management ideas. The SESSC should review Amendment 28 before final action is taken.

Ed Petrey- Charter and commercial

Mr. Petrey is against reallocation and supports Alternative 1. Reallocation won't solve anything and the only way we will solve something for the recreational sector is using some type of tag system to figure out what they're catching. The population has increased a lot and we're doing a lot better charter-wise. We need to leave allocation the way it is.

James Bruce- Commercial

Mr. Bruce said that when the industry signed up and voted for the IFQ program, they got cut off. Now for the first time, people are here in the room saying they're not taking fish from the commercial guys that made sacrifices. The recreational fishermen need sector separation and a tag system. The pie is only so big, and not everyone can catch fish. That's what the commercial guys had to do; limit entry. It's time for the recreational sector to do something. Keep allocation at status quo and choose Alternative 1.

Bobby Jackson-

Mr. Jackson is in favor of Alternative 1. He feels that everything should be left as it is now. All the people should be glad they live in Louisiana where you can go out and catch trout and mangrove snapper, and the state is giving us extra days in state waters. He doesn't think that 2 or 3 more days of fishing is worth taking away from the commercial fishermen.

Brent Fay- Recreational

Mr. Fay thinks the population is healthy and that management is flawed. He supports Alternative 5. As a citizen of Louisiana, he thinks it's wrong if he can't fish but he can go to the grocery store and buy fish. He thinks he should be able to catch red snapper at any time.

Andy Leblanc- Recreational

Mr. Leblanc is more of an inshore fisherman and only has a 22 foot boat. The weather limits his red snapper fishing. He supports Alternative 5, because it's not doing any harm to the commercial guys. The restaurants and stores won't run out of fish.

Joe Macaluso-

Mr. Macaluso said the Council has driven a wedge between the commercial and recreational sectors. We have fish in Louisiana; Florida and Alabama don't. We have fish and we're fighting about who gets to catch more than the other guys. He has seen more than his share of mismanagement, but in this instance, there is a problem that won't be solved by Alternative 1 or 5. We have fish and we need to make sure that Louisiana has the right amount of red snapper they deserve (70% of the fish with 20% of the effort). This is a band-aid and we need the wound to heal.

Bill LaJune- Recreational

Mr. LaJune supports Alternative 5 with some changes. A recreational season should be on weekends, and the state does a good job of knowing how to best govern.

John Abair-

Mr. Abair supports Alternative 5 because it's a fair distribution of the resource. We all need to ban together and attack the administration that is removing rigs. We don't need to argue over the amendments as much as we need to stop rig removal.

John Cappell- Recreational

Mr. Cappell supports Alternative 5. He advocates for future generations. The fishery has improved and it's easy to wipe the snapper out. We need a bigger pot and we need habitat. We need to stop [removing] idle iron. The vertical reef structures hold fish and make fish. We also need better data collection. We don't need to fight each other; we need a bigger, better managed pot of fish.

Walter Heathcock- Commercial

Mr. Heathcock is against Amendment 28 and prefers Alternative 1. Changing the allocation won't solve anything. Red snapper is already a pricey fish, and he doesn't want to increase the price any more. All the fish commercial fishermen catch are going to the American public. This quota was set a long time ago and it has been fair for 24 years, but somehow it's a problem this year.

Andre Thomas-

Mr. Thomas supports Alternative 5. He feels it is a public resource and should not belong to the private sector. He said we need to address how fish are counted. He would like to divide the Gulf and manage fish separately.

Archie-

He is against any type of reallocation and supports Alternative 1 because it's a public resource. Not everyone that wants to eat fish has the opportunity to fish. The American public needs access to seafood. There are lots of fish that commercial fishermen can't catch, and it seems like the recreational fishermen always want more.

Dante Nelson-

Supports Alternative 1 because the commercial fishermen should still have fish. Fish are going to continue to be here until we're dead and gone.

Corpus Christi, Texas
March 17, 2014

Council/Staff

Robin Riechers
Emily Muehlstein
Karen Hoak

38 members of the public attended.

Charlie Alegria- Morgan Street Seafood owner

Mr. Alegria supports Alternative 1 because the commercial guys seem to give things up and never get them back. He thinks we should do nothing and leave businessmen alone.

Blaine Wise-

Mr. Wise supports Alternative 5 because it's a win-win situation for both sides.

Shane Cantrell- Charter

Mr. Cantrell supports Alternative 1. He opposes action because it gives a false promise to the recreational sector and won't increase their season at all. We will actually still be losing days because Florida is non-compliant. This isn't a sustainable fishery management plan. It violates National Standards 1 and 4, and is missing accountability measures to keep recreational anglers within their allocation.

Alan West- Recreational

Mr. West supports Alternative 5, as it would benefit recreational fishermen without cutting into commercial fishermen's allocation. He believes it makes good sense, because there are a substantial number of recreational fishermen in the state.

Ron Dollins- Recreational

Mr. Dollins supports Alternative 5. He supports the 400 commercial fishermen, but it's time to give fairness to thousands of recreational fishermen. Recreational fishing supports many varied industries, and they don't fish for profit; they fish for the love of it. The value of fishing is not measured by numbers at the dock. It's the time they [recreational anglers] spend on the water and building relationships, and the large number of people using the resource need the support of fisheries managers.

Don Wilkinson-

Mr. Wilkinson supports Alternative 5 because it offers the best economic benefit. The commercial harvest wouldn't be diminished, it would actually increase. He suggests the following: adopt an adaptive management plan that has demonstrated its effectiveness in other fisheries such as Atlantic striped bass. Stop all fishing during spawning and allow commercial fishing to be done after peak spawning in June-August. This would allow an increase in productivity because you're not removing the larger spawning fish from the resource, and this wouldn't cause any net loss for the commercial fisherman. Consider segmenting the Gulf

according to recruitment; he has heard and supports the idea of dividing the stock, perhaps at the Mississippi River.

CJ Garcia- Business owner, commercial red snapper fisherman

Mr. Garcia supports Alternative 1 and opposes reallocation because it won't solve the problems in the recreational fishery. Anglers consistently overharvest in the recreational fishery and if given more fish, will over harvest more. It will also cause instability in the commercial fishery. Increasing the amount of pounds won't decrease the recreational overage. He suggests working with the recreational fishermen to give them a real solution to the problems in the recreational fishery. The SESSC should review the analysis of Amendment 28 before the Council takes final action; their vote was null and void because a member of the SESSC shouldn't have been there. They should re-vote before the Council takes final action. This is honestly offensive to those who make a living on the water.

Tylor Scott- Commercial

Mr. Scott is new to the fishery and opposes reallocation because it doesn't solve the problems of the recreational fishery and will cause instability in the commercial sector. He supports Alternative 1.

Nena Hale- Owns a business catering to recreational fishermen

Ms. Hale said it's hard for her to have to take a stance on this issue, because without commercial and recreational fishermen, Port Aransas wouldn't be the town that it is. There is an abundance of fish now, and there are so many that you have to release that die while targeting other species. She is not sure where she stands on this issue but feels that there has to be a middle ground that will help both sectors. It is recreational fishers who come to her boutique; they support her business and she depends on them for her livelihood, so she wants them to have more fishing opportunities.

Ken Sims- Boat captain; has worked in both sectors

Mr. Sims opposes reallocation and supports Alternative 1 because it won't solve any problems. This needs to be solved with a different way of managing the recreational sector. We should try tags or licenses like the red fish program in Texas. Giving more fish to the recreational sector will ensure higher discard mortality, because they continue to fish and discarded fish float off dead and are then eaten by other predators, which is ridiculous. Fifteen years ago, fishermen used to struggle to catch fish. What we are doing is working. Today, the snapper are huge. Commercial fishermen are not harming the rebuilding plan because they are accountable. What we're doing in the recreational sector is wrong; charter guys need their own regulations, and everyone needs to play by the rules.

Scott Hickman- Charter and commercial

Mr. Hickman said the CFA has been begging for a new management system for the recreational fishery for 5 years, and he is disappointed that this is what we get. We're going to take fish from an accountable fishery and dump it into the unaccountable side for two more fishing days? That is silly and won't help his charter business. Until we work to get a new management system, we're never going to fix our problems. Why are we working on this instead of Amendment 39 [regional management], where Texas can manage their own fish through tags, or however they

want? The Council needs to do something different. He supports Alternative 1, no action on this amendment.

Pete Petropoulos- Recreational

Mr. Petropoulos is a capitalist and believes there is no reason to take anything from the commercial fisherman. He supports Alternative 1.

Kevin Haller- Charter and commercial

Mr. Haller sees both sides and opposes reallocation because it doesn't solve the problems in the recreational fishery. It will cause instability to the commercial fishery, and the recreational sector will continue to overharvest their allocation without accountability. He supports Alternative 1, status quo. The recreational sector needs a real solution to protect the resource. The SESSC should review the analysis, and it should be re-done before the Council takes final action.

Mike Hurst- Representing S.E.A.

Mr. Hurst does not think it's right that anglers have 20 days to fish during the worst wind of the year. He prefers Alternative 6, but since that option was not on the table to solve that problem, they would like to ask for Alternative 5.

Norman Oats- Recreational

Mr. Oats was fishing in the 1980's when the stock was ok. He then came back in 2001 when it was very hard to catch a snapper. Now, for 10 years they have only had a month of fishing. If we don't increase the quota, we're all in trouble. He supports Alternative 5 because he wants to fish more than 30 days a year. Under that alternative, if the ACL is increased we all benefit. The Council is losing credibility because the ACL is wrong. Nice size snapper are everywhere. He says to do more offshore research and see; don't just look at the closest rigs, but study some hilltops and use data that is not 20 years old. Start with a 3 month season and a 4-fish per person bag limit and if the stock decreases, then cut it. Do real research. He catches snapper in 35' of water.

Corey Garcia- Commercial

Mr. Garcia opposes reallocation and supports Alternative 1 because it will not solve problems in the recreational fishery, overharvests will continue, and [reallocation] will cause instability in the commercial sector. He suggests working with recreational fishermen to give them a real solution like tags so they can fish year round. There are plenty of fish out there and the Council needs to find a way to let them fish. The SESSC should review the amendment before the Council takes final action.

Mike Miglini-

Mr. Miglini said Amendment 28 is an insult to those trying to actually get a fishery management plan in place that will bring results. It will not solve the problems of the recreational fishery and will result in further overharvest. It's not the private recreational angler or the charter industry's fault that the Council has consistently failed to address a management system that provides both accountability and flexibility. The recreational sector needs to end derby fishing and start using tags for private anglers, just like the red drum system in Texas, so they can fish on their schedule

not when the government tells them to fish. The charter guys need their own sector allocation. Fishermen need to give up good harvest data from recreational anglers on private boats, from charter/headboats, and continue to get data from the commercial industry. This amendment and this reallocation is a false promise and the Council must develop a management plan that works. It's like putting more fuel in a boat that has autopilot moving in the wrong direction. We'll continue to see shorter and shorter seasons even with the reallocation of fish. We need to manage in a way that is efficient. Dumping fish back instead of using a tag system is an insult to conservation and the MSA. He supports status quo (Alternative 1). The SESSC should review Amendment 28 before the Council takes final action, because the initial vote to accept the methodology was null as a member was in conflict [of interest]. We have more than a ton of red snapper here, and we need a world class management system that allows us to harvest recreationally, in a sustainable manner, without wasting fish. Amendment 28 will not do that.

Gus Lopez- Commercial

Mr. Lopez supports Alternative 1, no action. They do this for a living; it's not for fun. If you're here you like to fish, but for commercial guys, it's their livelihood. It seems unfair to take from them and give it away for recreational purposes. It doesn't solve problems. Instead, he suggests letting the recreational sector fish whenever they want using a tag system. World class red snapper fishing is in our back yard, so why strip it back to making it hard to fish? Why take fish from an accountable sector and dump them into a system that isn't accountable? There are a lot of changes that will have to take place to make the recreational sector accountable like the commercial sector, which is law abiding, non-wasteful, and protective for the future generations. The SESSC needs to review Amendment 28 before the Council takes final action. What are the real reasons for changing allocation? He wondered what net benefits we were striving for.

Michael Matthews- Commercial and former headboat fisherman

Mr. Matthews is against the amendment; he supports Alternative 1, no action. He opposes reallocation because it won't solve the issues in the fishery and will cause problems on the commercial side. We need to work with recreational fishermen and find something that will work for them. Reallocation will only make things worse for the recreational fishery and for him.

Brenda Ballard- Recreational

Ms. Ballard supports Alternative 5. She doesn't want to take anything away from commercial fishermen. She doesn't have a yacht; she has a 25-foot boat and it's hard for them to get out. The inshore rigs are fished out and they have to go further. She only gets to fish five days out of the year, because she works for a living and she wants more opportunities to fish. She does not believe that Alternative 5 will hurt commercial fishermen in any way. Fishing is fun and she wants to be able to use the additional 75% to increase their opportunity for more fishing days.

Russell Sanguinet- Headboat operator

Mr. Sanguinet does not support any part of the amendment because there is an overabundance of fishing regulations. He is an active participant in the headboat cooperative (EFP) and he is 100% accountable. The problem is not the fish, it's the lack of enforcement and the bad management. The enforcement needs to account for everyone, not just the for-hire sector. This is a temporary patch on the problem, and it's not going to fix anything.

Paul Kennedy, III- Recreational

Mr. Kennedy gets out 8-10 times a year and he likes to take friends and family fishing. Red snapper is his most consistent fish. He doesn't understand the way it's managed and the limits put on them. The fish are so plentiful, he needs to avoid them and he doesn't understand management. He wants to bring a few home to eat and he can catch them in state waters. These are the strictest limits we have on any fish and they are the most abundant species. These regulations are ridiculous. Recreational fishermen are not being tracked like the headboats. It's his goal that recreational fishermen can fish year round. With a 2-fish per person bag limit, we will never overfish the red snapper. He is allowed to catch 10 speckled trout in the bays, but can rarely catch the limit. Red snapper is a mismanaged resource and the Council should give a longer season because it's not overfished. He wants to see some better data on catch. He wonders about how the management system is set up so when everyone goes out, they can catch their limit, but they are only allowed 2 fish.

Gary Hough- Recreational

Mr. Hough has seen a major comeback in the number of fish that are available in both the well-known and the more secretive spots. He supports an increased allocation for the recreational fishermen. Alternative 5 is the most palatable. He does think it should be tilted even more towards the recreational fishermen. On this side of the coast, it is dangerous to fish the first two weekends of snapper season because of the wind. The first of June is a horrible time to fish. There is no way the amount of recreational fish being caught could be harming the population.

Jerry Bravenec-

Mr. Bravenec said one of the biggest issues is accountability. The thing that concerns him most is that Texas continues to be penalized for other areas overharvesting red snapper. Red snapper don't move around too much. There has been a major rebound in the past five years, and he does not want to be penalized by the other areas overfishing. Alternative 5 is good for recreational fishermen without harming the commercial sector. TPWD needs to manage the resource and we need to be managing based on the fish we have locally.

**San Antonio, Texas
March 18, 2014**

Council/Staff

Patrick Riley
Emily Muehlstein
Karen Hoak

36 members of the public attended.

Jason Belz- Recreational

Mr. Belz wants a longer snapper season. It's rough in Texas and they like to catch billfish, but it's nice to have something to eat, something that they can catch on the way back in especially since they burn a lot of fuel. Red snapper are everywhere; they come to the surface in 300 feet of water. He does not want commercial fishermen to have 51% while the public has only 49%.

David Triplett- Recreational

Mr. Triplett questions the red snapper data and where the statistics are coming from that says recreational fishermen are catching the amount of pounds that they are. He does it as a hobby for his family, and there are very few days they can get out, especially with the high winds in June. The statistics seem very inaccurate, and he can't catch anything else. They run into them everywhere and, if you catch red snapper while trolling there is something wrong; the system is broken. He wants to see a longer season and he thinks there is a better way to count the catch in the recreational sector.

Michael Jacob-

Mr. Jacob said the rules don't reflect what anglers are seeing. He is conservation minded and follows the rules all the time. He used to have trouble catching snapper, but now you can free-line dead shrimp or troll wahoo lures in 200 feet of water and catch red snapper during amberjack season. He kills 10 snapper for every amberjack he catches. There is a nuisance with dolphin; you feed red snapper directly to them or the sharks. They are not releasing any of the fish. He catches between 25 and 75 fish during the entire season and feeds around 500 fish to predators. The commercial guys are likely more important and he doesn't want to take away from them. The amount of fish that go to the dolphins and sharks is insane. We are doing nothing about it but sitting on our hands. The numbers are inaccurate and it's getting hard to follow the rules.

Liz Hewitt-

Ms. Hewitt supports Alternative 5, or possibly Alternative 6. She wonders why we don't have a federal fishing license to track catch.

Ray Weldon-Recreational

Mr. Weldon supports Alternative 6, although it's not really reallocation. According to the American Sportfishing Association, recreational fishermen catch 2% of fish but provide 3 times more value to the gross domestic product than commercial landings. For every 1 pound of fish caught, they add \$152 to the GDP. There are about 400 shareholders holding 51% of the red snapper fishery and they don't even put enough money back to cover the cost of monitoring the program itself. The EDF, restaurant chefs, and fishermen are using the slogan "protein for America," but they are getting wealthy providing fish for the wealthy at \$18 a pound. No one will be put out of business with any of these reallocation options. There are less commercial fishermen now than ever catching more fish than ever. They are looking towards sector separation and inter-sector trading so they can sell quota to charter captains who will then sell them back to the recreational fishermen. I guess the commercial fishermen don't really care about feeding America. Mr. Weldon sat on the Ad Hoc Private Recreational Data Collection Advisory Panel and has not seen the improvements he's looking for. The MRIP data is messed up and NMFS is still not getting the data they need from the MRIP states. Louisiana dropped out [of MRIP] and is now getting their own data, just like Texas. It's not the best, but when in 1996 you could catch 7 fish per person for 360 days and catch 4 million pounds and now, in 2012, you can catch 2 fish per person and fish for 30 days and you are catching 5 million pounds? Impossible!

Jean Streetman- Recreational

Mr. Streetman supports Alternative 5 and agreed with the comments of others.

Norman Long- Recreational

Mr. Long has been fishing for over 50 years. Alternative 5 is his choice if he has to pick one. They are using a 30-year old allocation and data, and everything is out of whack and in need of a total overhaul. Last summer, he fished 20 days and left state waters once or twice because he didn't need to. There are more red snapper out there than he can chase. You can catch all you want at 8-9 pounds. Why can't we seem to get a longer season in federal waters? We need new science, new data, and new rules. It's ludicrous to give 51% of the fishery to 400 people. They have a place in the overall picture but not a guaranteed deal like they have now. There are plenty of fish out there. He remembers days when that was not the case so we need to be careful to not overharvest. By setting good limits, we now have plenty again.

Jerry Walker-

Mr. Walker said we need to have a new look at what's going on in the Gulf. You try to catch a different species and you're inevitably catching snapper because they're everywhere, top to bottom, every wreck, every rig, solid fish. The ecosystem is out of sync; we need to increase the limit and the number of days to fish.

Gary Johnson- Texas Restaurant Association

Mr. Johnson said that at current levels, the commercial industry stands to lose ½ million pounds with the current allocation, which will affect the portion sizes on plates for people supplied with fish. There are places not near the water, customers that don't fish, all who want to eat snapper. We need to somehow look into regional management. He supports Alternative 1, no action.

Leonard Philipp-

Mr. Phillip supports Alternative 5 and agrees with the others.

Michael Miglini-

Mr. Miglini supports Alternative 1, no reallocation. He thinks it's a false promise for the recreational fishery. For years the charter boats have tried to bring real solutions to the Council. Reallocating only feeds more fish to a broken management plan. There are a ton of red snapper out there and reallocation is barely going to give more days. There needs to be a fish tag program like the red drum that allows 365 days of fishing a year, along with accountability and reliable data on the total count of fish harvested. The charter industry needs their own allocation and the private sector needs a system that doesn't force them to throw back dead fish. He suggests focusing on meaningful solutions to the problems in the recreational fishery.

Bobby Hinds- Recreational

Mr. Hinds supports Alternative 5. There are so many fish out there, it's ridiculous. They can limit out a full boat without going into federal waters. The quota should be raised and the season should be longer in federal waters.

Pam Baker – Environmental Defense Fund

Ms. Baker supports Alternative 1. Allocation has been on the table for a really long time and is choking progress on other issues such as federal fishing licenses and predators eating discards. The amendment doesn't have the opportunity to achieve its objectives, and it pits fishermen against each other. The demand for fresh fish is strong, but fishing recreationally is also a valuable use of the resource. The stated purpose of increasing net benefits cannot be achieved by increasing the number of fish in a common pool, managed by bag/size limits. No group or individual is benefiting from that. The other stated purpose is to increase stability of the fishery. Maybe reallocation will increase the recreational fishery by 2 or 3 days, but it doesn't increase the stability or predictability of the season. Stability is about increasing opportunity and predictability. Reallocation does not do that. The Council is avoiding tackling the improvements that are needed to solve the issues with the fishery.

Wes Galloway- Recreational

Mr. Galloway doesn't want to change things for the commercial fishery; it's got the IFQ and that is fine. He felt that 51% of the public resource going for commercial use is backwards. Half of the alternatives are not reallocation at all. No movement can be made towards reallocation because IFQs are already out there. For alternatives beyond the quota, he supports Alternative 5.

Scott Hickman- Charter, commercial, boat dealer

Mr. Hickman supports Alternative 1. He is offended that the Gulf Council has come to the recreational fishermen with a plan offering two extra days. With Florida non-compliance, we likely won't even see that possible increase but rather, a reduction in days. It's ludicrous. He demands that the Council do something real. He asks why CCA is pushing Amendment 28; what about Amendment 39 so Texas can get its own piece of the pie? Reallocation is a poor plan for the recreational fisherman. If that's the best we can do, we're in trouble. He demands accountability and flexibility through tags or something else that allows fishermen to select when to fish. Amendment 28 is a joke and will not help. The Council has pitted fishermen against one another. He wants status quo (Alternative 1), and to go back to the table. Fix the problem so people can fish when they want to fish. He supports fish tags, regional management, and he likes iSnapper.

David Ruthmann- Recreational

Mr. Ruthmann is not opposed to any of the allocation options but that's not the end solution to the problem. We're talking about adding a few days to a 1 or 2 fish per person limit when it's too rough for Texans to get out on the water. There must be more to it. We are oversimplifying a process that is broken. Regional management is a good idea, especially because our water is shallower here than in other parts of the Gulf.

Buddy Guindon- Commercial

Mr. Guindon grew his family business around fixing the fishery. He believes that they [recreational anglers] should have the right to fish, but also to use a program to report data and get an accurate count. The Harte Research Institute already has a program that can be used for them to report their fish. As a commercial fisherman, he doesn't represent himself; he represents anyone who goes to a restaurant or grocery store or fish market and buys a fish to eat. You're not going to hurt him by taking 50% of his fish, but you'll harm the new entrants, the people who

are struggling to get IFQ and start in the industry. When you say 400 people, think of 400 businesses. If we don't allow them to grow, they're going to fail. They need the opportunity to be successful and to grow. Let these people do their job. Commercial fishermen are not at fault for the current situation. Force the fishery managers to do their job and let them know you want to be accountable. Also, understand that Florida has 250 fishermen for every one we have. The east is taking away your fish by allowing the other areas to harvest the fish. Of the fish consumed in this country, 97% of it comes from a grocery store. Commercial fishermen catch inexpensive fish as well as red snapper (blue fish). Don't listen to what CCA pounds into your head; get real solutions. Alternative 5 won't give you anything more. A good management system will give you what you want: year round fishing.

Shane Cantrell- Charter

Mr. Cantrell said it's a mess that we're here and discussing moving 500,000 pounds from the commercial industry to give the recreational sector 2-4 extra fishing days. He questions moving fish from the commercial fishery, which is accountable, and giving them to an unaccountable system for 4 extra days. That is a management issue. We need tags or regional management. He travels the coast and there is an incredible number of fishermen on the east side that take trips 2 and 3 times a day fishing red snapper. It's not fair to Texas. He has a hard time believing that Texas can't get past the 1% of the allocation from Florida to implement a regional management plan. Disturbing.

Brian Wyatt- Recreational

Mr. Wyatt got to this meeting and it seemed chaotic because everyone is passionate. He's been fishing for a long time and his dad was a commercial fisherman. The Gulf is broken due to federal management. Texas could manage the waters much better than the federal government. He doesn't like Alternative 5 fully; he supports it most because the economic value of the recreational fishery is much greater. This is a publicly owned resource and the 51/49% split is out of line. We all pay our fair share, but recreational fishers are stuck on the dock, some with a \$200,000 boat, and they can't fish unless they pay a charter boat? That is not right. Fish tags aren't right either. For private recreational anglers, these measures are nowhere near enough. For every 1 million pounds over the TAC that the federal government says can be caught, 25% goes to commercial and 75% to the recreational fishery. Every million pounds equates to \$35 million. Everyone should be able to fish every day they want to for red snapper because there are plenty of them.

**Galveston, Texas
March 19, 2014**

Council/Staff

Patrick Riley
Carrie Simmons
Emily Muehlstein

35 members of the public attended.

Scott Hickman- Charter and commercial

Mr. Hickman said the plan to save the recreational fishery only gives two days to the recreational sector. The plan is to take fish away from a system where people fish accountably and provide fresh fish year round and transfer it to a rotten system. You're not even going to see the fish you take from the commercial fishermen. Florida has just gone non-compliant and those extra fish are going to disappear. Mr. Hickman wants a completely different system; something that works like the commercial system. He says no to Amendment 28. He supports Alternative 1. The Council needs to find a better management system and leave us a legacy of fishing.

Steven Myer- Recreational

Mr. Myer has spoken to TPWD and knows they don't have landings on the recreational side, and he doesn't understand where we're getting our data. Nine times out of 10, the weather is too bad for fishing during the recreational season. There needs to be a better way to determine what we're landing, and the quota needs to be fixed.

Kristen McConnell- Environmental Defense Fund

Ms. McConnell encourages the Council to choose Alternative 1, no action, and move reallocation off the table to make room for better work. This issue has been choking progress on other management plans that will actually fix things. There is high demand for both fresh seafood and recreational fishing opportunities and we should not have to decide between the two. This document does nothing to meet the objectives stated in the document. The economic value won't be realized by the recreational fishery if you continue to use a common pool of fish regulated by days and bag limits. Stability is frustrating, because allocation won't change the stability of the recreational red snapper fishery. We've had increases in the TAC over the years and it hasn't solved the season problem or the issue of stability. Reallocation won't fix that problem. There are a variety of ideas; regional management, tags, charter IFQ, and days at sea, that could be actual solutions. The Council needs to stop this and do something real.

Billy Wright- Recreational and charter

Mr. Wright supports Alternative 1, No action. Moving fish to the unaccountable sector doesn't seem like the right thing to do.

Tom Hilton-

We've had this allocation for years and we should have looked at it according to the NOAA policy but, now there is staunch opposition. The commercial IFQ program has privatized our fish and turned them into stock basically. The commercial guys have a stock portfolio and he is in favor of Alternative 5. Recreational fishermen don't want to cut commercial fishing out or act like they don't have a place at the table. If we choose alternative 5 about 17 million dollars of fish will be transferred to the recreational fishery. A high-liner that owns 6% of the red snapper shares (share cap) is worth about 11 million dollars and he can retire sell them to make money for his retirement. I don't agree with any plan that privatized the resources. This is not the solution and wont fix our red snapper problems but Alternative 5 is a step in the right direction. We need data. We should implement Alternative 5 and let the states take the bull by the horns with data collection.

Bruce Daneki- Recreational

He doesn't begrudge anyone earning a living by catching red snapper. It is an endangered public resource and he's against anyone having ownership. There are clearly more fish but despite this the recreational fisherman continues to be penalized. While the TAC increases and the commercial fishery gets more pounds and money and the recreational fisherman gets a shorter season as the fish get bigger. Success of stock improvement isn't shared with the recreational fishery. He supports Alternative 5. We're not greedy and everyone should benefit but the recreational sector has been struggling in the recent past. Jim Donofrio said ownership of our nations public resourced are replenished and the commercial sector was gifted their allocation and they paid nothing for their private rights. Against catch shares and a special program for headboats.

Fred Howard- Recreational

He is in favor of Alternative 5, not because it's a solution but because it's a first step that needs to be taken. Why can't the Gulf Council separate the fishery from the fishery in Texas.

Bill Hull-

Mr. Hull is in favor of Alternative 5.

David Conrad- Charter

Mr. Conrad favors Alternative 1. We need to work on a system that makes the recreational sector accountable. We don't want to move fish from the accountable sector to the non accountable one.

David Cochraine- Charter

Mr. Cochraine supports Alternative 1 because reallocation is not a solution. We should not take fish from commercial fishermen to add 2 extra days to the recreational fishery. Recreational management needs to be improved. We have a management problem and a data collection/accountability problem not an allocation problem. Accountably is the key to a better management system.

David Cuiton-

It appears that the harvest data for the recreational fishermen is off. Whatever the solution is to the problem he hops that we can mutually work it out.

Jaron Cressi- Commercial and recreational

Mr. Cressi is against reallocation and supports Alternative 1.

Buddy Guindon- Commercial

Reallocation won't hurt him, he is a big share holder and he was catching fish before the catch share program was implemented. He knows how to fish. The problem he sees with reallocation is that it will hurt small businessmen the new entrants into the fishery. Taking 8% of the commercial quota and giving it to the recreational fishery will get 700 recreational fishermen to go out and catch a fish but it will put the little guy out of business. Recreational fishermen can catch what they want and when we consider what's best for the red snapper fishery we need to get an accountably system. We don't have to wonder if the federal management is doing a good

job because you'll be part of that system. Self reported data like the iSnapper system will ensure that the government knows exactly what was harvested. Reallocation is a game so the Council can say "look what we gave you", but it does nothing to solve the problem. I promise the recreational season will continue to collapse. We've rebuild the fishery but the federal government hasn't given recreational fishermen the tools to stay within the catch limits. The state representatives don't want accountability to happen. CCA doesn't bring solution to the table the only tell you what's wrong. They did this with redfish, trout, and flounder; they promised to give back commercial harvest once the stocks were healthy, but never did. I'll never have the opportunity to catch them again. We need a management plan to fix these problems.

Bill Cochraine-

Mr. Cochraine supports Alternative 1: no action. He thinks everyone agrees that there is a problem with recreational accountability. We all know that once there is an accountably system in place then we can get some real data. Were going in the wrong direction by trying to fix a problem with reallocation; there are more fish than ever but we need to count. Choosing any of the alternatives besides Alternative 1 will set a bad precedent; and if this is done he is worried that this will continue to happen. When 2 days are added then the recreational anglers are going to keep asking for more each year.

KP Burnette- Commercial

Supports Alternative 1; no action.

Sean Warren- Charter

Supports Alternative 1; no action, and suggests Council move forward with sector separation.

Dan Green-

Against reallocation and supports Alternative 1. Why take fish out of an accountable sector and give it to a non-accountable one. We work on a new management plan for the recreational anglers.

LG Boyd-

Supports Alternative 1 and suggests the Council fix management first.

Shane Cantrell- Charter

We're not trying to take anything from anyone. Commercial fishermen are not hoarding these fish in their house, they're harvesting them for the American public. The guy from Kansas who fishes with me doesn't want to own a boat and it makes no sense, but if he wants fish he should be able to buy fish from a restaurant or fish on my boat. You're proposing to take fish from the commercial fishermen to give recreational anglers 2 more days. It's a band-aid on a sinking ship and we need to find a real solution for the recreational fishery instead.

Garrett King- Charter and commercial

Supports Alternative 1; no action.

Mark Friedberg- Seafood dealer

Mr. Friedberg supports Alternative 1. NMFS is trying to pit the commercial fishermen against recreational fishermen. We commercial folks all started fishing as recreational fishermen. As a recreational fishermen I wouldn't settle on two extra days from the Council. Recreational anglers need to demand a different plan.

Jamie Cantu- Charter

Mr. Cantu supports Alternative 1 and supports sector separation

John Spike- Recreational

Mr. Spike wants to clarify that he is checked all the time for his data.

Jason Delgado- Recreational

He is a boat owner and went of 10 times last season with lots of friends. On average they took 18-20 pound fish. He would support Alternative 5 reasoning that if the rising tide lifts all boats then increases in ACL should benefit the recreational anglers as well. He has not heard anyone say that they don't want to be accountable and there have been conversations about tags and other methods of accomplishing that. He would like the recreational fishermen to have a better system. The people we fish with all follow the rules and we support better accountability.

Larry Millican- Recreational

Supports Alternative 5 because the numbers are skewed in the recreaitonal catch data. In the 1960's you could catch all kinds of fish whenever you tried. In the 70's and 80's it got tough, but recently that's drastically improved because of the rules. He doesn't like 2 fish bag and short season and he wants more, but he also cautions that when you take your boat offshore now he doesn't see may people even with all the technology we have. In the 80's and 90's there were people and boats everywhere, and has a hard time believing that effort is increasing because there's no one out there. I've never been stopped in all my days of fishing and he would like catch be recorded better. In his opinion the recreational fishermen are not taking near what Council thinks is being harvested.

Bill Evans –

Mr. Evans supports Alterative 5.

**St. Petersburg, Florida
March 24, 2014**

Council/Staff

Martha Bademan
Assane Diagne
Carrie Simmons

30 Members of public attended.

Steve Maisel- Commercial

Mr. Maisel was in favor of no reallocation of red snapper, No Action; Alternative 1.

Bill Tucker- Commercial

Mr. Tucker was in favor of No Action; Alternative 1. He said the recreational sector has already landed 56% of the quota, not the 49% they are currently allocated. He has no personal ill feelings about the recreational sector, but feels it is no surprise that the recreational sector is meeting their quota earlier and the season length is getting shorter. He believes that there are more people in the recreational fishery, with more access to the fishery due to the recovering red snapper stock and a more affluent society. Mr. Tucker stated he wanted the anglers from the recreational sector to discuss other avenues to increase the season length, such as agreeing to go down to a 1-fish bag limit, instead of taking fish away from the commercial sector. He also stated there was a lot of misinformation going around about charter vessels being tied to the dock when red snapper season is closed, but in reality they were out fishing. He asked why you would reallocate to 1-3% of the U.S. population, when it is clearly not good practice to reward a sector that is unaccountable.

Ed Maccini- Commercial, President of S.O.F.A.

Mr. Maccini is in favor of No Action; Alternative 1. He knows the red snapper stock is recovering in the Gulf of Mexico, and knows that the recreational sector is catching the bag limit and the red snapper are larger, due to the management efforts the Council has completed to date. Because of the rebuilding efforts both sectors participated in, both sectors need to fish as many days to achieve their limit. For example, since the commercial sector was moved to an IFQ system, he fishes fewer days, fishes when he wants, and his vessels yield greater catch in a shorter number of days. He said the consumer is involved in the recreational sector and he would like see the recreational sector develop a management plan to increase the season length on their own, with a program such as days-at-sea.

Jim Zurbrick- Commercial, Steinhatchee

Mr. Zurbrick stated he was in favor of No Action, Alternative 1. He said many of the recreational fishing clubs (CCA and FRA) claimed to be conservationists, but when he attended a meeting hosted by Florida FWC to improve data collection for offshore recreational fishermen, the idea was met with much resistance. He wants the recreational sector to come to the podium with a solution. If they don't want the FWC developed offshore vessel permit, then the recreational fishery should consider a days-at-sea program, tagging program, or any other fishery management plan that would address the problems in the recreational sector's accountability. He agrees the fishery in Florida is not the same as it was years ago and he believes it will never be the same, due to the number of people participating in the private recreational fishery. Mr. Zurbrick stated if the private recreational anglers do not become accountable for their own fishery and think outside the box, they could end up with a 20-day or less red snapper fishing season.

Mike Colby- Charter, Clearwater Marine Association and Charter Association

Mr. Colby said in preparation of this meeting he reviewed the comments online and a majority of them were rambling comments that had nothing to do with Reef Fish Amendment 28. He hopes the Council considers the quantity and quality of comments submitted online. He said he would like to see a sound recreational management plan. Mr. Colby stated the data being used for Reef

Fish Amendment 28, has been considered in the past to be fatally flawed. Yet now that same data is being used to reallocate in favor of the recreational sector. So, for reallocation some recreational anglers think it is okay to use the data, in fact embrace it, since it gives them the personal solution they are seeking. Further, if this same data is fatally flawed then there are no reasons or excuses why it can't be used in the development of Reef Fish Amendment 40-Sector Separation. Until a better data collection system is developed he can't endorse any of the alternatives, except No Action; Alternative 1.

Wayne Werner- Commercial, F/V Sea Quest

Mr. Werner stated he was in favor of No Action; Alternative 1. He stated he did not understand how anyone could be in favor of taking away 500,000 meals from consumers, for 2 extra days to fish in the recreational sector. He said he had great concerns about overharvest by the recreational sector and didn't see any justification for giving them any additional fishing days. Mr. Werner stated the recreational data used in the economic efficiency analysis was fatally flawed, in fact most of the recreational data used in that analysis came from recreational anglers in the South Atlantic. He suggested that Amendment 28 was a "feel-good" amendment for the CCA. He pointed out that there had been studies done by NMFS that showed recreational anglers would rather have 1 larger fish and more days than to catch 2 fish and have a shorter season. He stated he did not agree with the Council putting Mr. Gentner on the Socio-economic SSC. Mr. Gentner was the deciding vote and he was in violation of the Council's policies to serve on an advisory committee.

Thomas Shook- Seafood company owner, Clearwater

Mr. Shook stated he was in favor of No Action; Alternative 1. He said the commercial sector has to become accountable for every pound of red snapper landed and that he didn't see why there couldn't be more accountability for the recreational sector.

John Schmidt- Commercial

Mr. Schmidt is in favor of No Action; Alternative 1. He stated that Amendment 28 was supposed to increase net benefits to the nation, not net benefits to the recreational sector. Most of the American public doesn't have access to federal waters and must access the resource through the commercial fishery. Since the Council implemented a strict rebuilding plan, there has been an incredible recovery and advances in the fishery. During these rebuilding efforts, the commercial sector had never gone over its allocation and had never asked for any of the recreational sector's allocation. Mr. Schmidt stated he felt Amendment 28 had been rushed, more so than many of the other Council actions. He stated he was not happy with the membership on the Socio-economic SSC, especially when the deciding vote was cast by a CCA representative. He is unsure why the Council ever considered putting such an individual on the panel. He felt moving forward with Reef Fish Amendment 28 – reallocation was not a solution; instead it is unfair, and not based on sound science.

Tom Wheatley- PEW Charitable Trusts

Mr. Wheatley stated although this seems like a simple amendment (and he agrees that there should be a fair and systematic review of sector allocations), he does not think the current document supports the red snapper rebuilding plan. He would like to see in-season and post-season accountability measures added to the current draft of the amendment; without these, he

does not understand how these shifts in allocation could be biologically safe. Therefore, if a new action was added to this amendment that would ensure the rebuilding plan for red snapper was not compromised, he could see this document moving forward. But until then, PEW was not in support of this action.

Frank Chivas- Restaurateur and recreational

Mr. Chivas is in favor of No Action; Alternative 1. He noted that he had been fishing since 1968 and seen the results of overfishing happen in 3 years, (by 1971) red snapper were almost gone. He credited conservation measures with bringing the stock back. He knows red snapper is the fish of choice in many restaurants. In his restaurants, over 20% of fish sold is red snapper, and now more grocery stores are selling red snapper as the stock recovers. He personally has seen more red snapper in the last 3 years than ever before. He believes the rebuilding plan is working fine and should be left as is.

Eric Mercadante- Dual-permitted federal charter and commercial

Mr. Mercadante said he lands 90% of his red snapper commercially. He said he is closely checked and monitored when he lands his catch commercially, but none of his charter trips have ever been checked. He said, recreationally everyone wants a trophy fish, especially a large red snapper. He would like to see the recreational sector get away from a short derby fishing season. He is in agreement that the recreational sector should get together and discuss licenses, tagging, and accountability for what they are catching and landing. Until the recreational sector does this he is in favor of No Action; Alternative 1.

Shawn Watson- Commercial

Mr. Watson is in favor of No Action; Alternative 1.

Jason DeLaCruz- Commercial and seafood dealer

Mr. DeLaCruz is in favor of No Action; Alternative 1. He has a fuel dock at John's Pass and he is unsure how the two additional fishing days in the current preferred alternative are going to help the recreational sector or his business. He doesn't think fish should be taken away from the commercial sector and that such rules will make it hard for them to make a living. He thinks that is the real economic impact of the preferred alternative, versus the economic analysis cited in the amendment. He said the Socio-economic SSC said it was okay to move forward with reallocation, but voted it was based on poor economic data and the Socio-economic SSC were only in consensus on minimal changes to the current allocation.

Gregg Pruitt- Commercial and dealer Fish Busters, Madeira Beach

Mr. Pruitt is in favor of No Action; Alternative 1 until the recreational sector can be constrained to their current allocation and become more accountable. He stated that it is possible that the recreational sector may need to pay for a data collection system or program like the commercial sector does which contributes 3% of their ex-vessel value of landings to the agency for program operations.

Dennis O'Hern- Recreational, FRA

Mr. O'Hern stated the recreational sector has requested better data collection for years and it is the Office of Science and Technology's fault for not improving the survey system, not the

recreational anglers. In fact, recreational anglers have requested an improved survey system since 2000 and it still hasn't been completed. He emphasized that the recreational sector was being accountable every year. He complimented the State of Florida's efforts for taking the lead on strategies to improve data collection and applauded the efforts of the Louisiana Department of Fisheries and Wildlife. He stated if there was better data collection for the recreational sector, there would be a 6 month, 3-fish bag limit as once suggested by Dr. Shipp. He suggested more and better surveys of anglers would help this happen. Mr. O'Hern said until NMFS and the Office of Science and Technology improve the data collection program for recreational anglers, and were held accountable for their actions. The FRA was not in support of moving forward with this amendment, so he supports No action; Alternative 1.

Jim Bonnell- Commercial

Mr. Bonnell supports No Action; Alternative 1. He stated he has been fishing for 30 years and doesn't understand how commercial logbooks can be questioned, when recreational anglers can just tell the samplers how many fish they caught without any validation. He doesn't see how the recreational survey could be adequate to determine landings or support any modifications to the allocation.

Ricky Baker- Commercial

Mr. Baker is in favor of No Action; Alternative 1. He has spent 30 years commercial fishing and feels the recreational data collection system is flawed. He noted that there were worries when logbooks were first required, some people felt the government would know what they were doing and where they were fishing and of course people didn't like that, but the system worked. He explained that in 1980, red snapper were almost gone and now they are everywhere.

Sean Wert- Commercial

Mr. Wert is in favor of No Action; Alternative 1. He stated he does not understand how the agency can make commercial fishermen jump through so many hoops compared to the recreational sector, yet they are going to get more fish. Mr. Wert stated he didn't understand how the agency had any idea what the recreational landings are based on the current collection system.

Cody Chivas- Commercial and restaurateur

Mr. Chivas is in favor of No Action; Alternative 1. He stated that he did not understand how the commercial sector has to be accountable for every single pound, compared to the recreational sector, yet the agency is looking at giving them more fish.

Jackson Beatty- Recreational and diver

Mr. Beatty said he wanted to be an accountable angler and was willing to go to a 1-fish bag limit if it meant a longer fishing season. He wanted to work with other recreational anglers to improve accountability and increase fishing opportunities. He supported No Action; Alternative 1.

James Coble- Recreational and tackle shop owner

Mr. Coble stated he was in favor of Alternative 5: If the red snapper quota is less than or equal to 9.12 mp, maintain the commercial and recreational red snapper allocations at 51% and 49% of the red snapper quota, respectively. If the red snapper quota is greater than 9.12 mp, allocate

75% of the amount in excess of 9.12 mp to the recreational sector and 25% to the commercial sector.). He felt it was the most viable option in the amendment. He didn't understand why it was such a bad alternative for the commercial sector. He stated that the recreational fishery has to get more bang out of every fish they catch, and needs to be more accountable. He noted that no recreational fishers had VMS on their boats and that they didn't report their catches. He urged recreational anglers to step up to the plate and help get the fishery in shape.

**Webinar
March 20, 2014**

Staff

Emily Muehlstein
Charlene Ponce

10 members of the public attended.

David Krebs- Commercial

Supports Alternative 1; no action. Flexibility and accountability need to be built into the recreational sector before any other action is taken.

Eric Brazer-

Supports Alternative 1. There are no effective accountability measures for the recreational fishing sector. Until we solve that problem the recreational sector will continue to over harvest their portion of the allocation. Do not take final action on Amendment 28 until or unless the SESSC does a final analysis of the methodology used.

Brian Jilek-

Meetings should be held on weekends so that more people have an opportunity to attend.

Ken Haddad-

All the information that has come to the Council has said that the snapper allocation needs to be revisited. The recreational sector is in agreement that Alternative 5 is a stabilizing action that will allow the Council to focus on a new management regime for red snapper.

APPENDIX E. FISHERY ALLOCATION POLICY

Gulf of Mexico Fishery Management Council Fishery Allocation Policy

This allocation policy was developed by the Gulf of Mexico Fishery Management Council to provide principles, guidelines, and suggested methods for allocation that would facilitate future allocation and reallocation of fisheries resources between or within fishery sectors.

Issues considered in this allocation policy include principles based on existing regulatory provisions, procedures to request and initiate (re)allocation, (re)allocation review frequency, tools and methods suggested for evaluating alternative (re)allocations.

1. Principles for Allocation

- a. Conservation and management measures shall not discriminate between residents of different states.
- b. Allocation shall:
 - (1) be fair and equitable to fishermen and fishing sectors;
 - (i) fairness should be considered for indirect changes in allocation
 - (ii) any harvest restrictions or recovery benefits be allocated fairly and equitably among sectors
 - (2) promote conservation
 - (i) connected to the achievement of OY
 - (ii) furtherance of a legitimate FMP objective,
 - (iii) promotes a rational, more easily managed use
 - (3) ensure that no particular individual, corporation, or other entity may acquire an excessive share.
- c. Shall consider efficient utilization of fishery resources but:
 - (1) should not just redistribute gains and burdens without an increase in efficiency
 - (2) prohibit measures that have economic allocation as its sole purpose.
- d. Shall take into account: the importance of fishery resources to fishing communities by utilizing economic and social data in order to:
 - (1) provide for the sustained participation of fishing communities
 - (2) minimize adverse economic impacts on fishing communities.

- e. Any fishery management plan, plan amendment, or regulation submitted by the Gulf Council for the red snapper fishery shall contain conservation and management measures that:
 - (1) establish separate quotas for recreational fishing (including charter fishing) and commercial fishing.
 - (2) prohibit a sector (i.e., recreational or commercial) from retaining red snapper for the remainder of the season, when it reaches its quota.
 - (3) ensure that the recreational and commercial quotas reflect allocation among sectors and do not reflect harvests in excess of allocations.

2. Guidelines for Allocation

- a. All allocations and reallocations must be consistent with the Gulf of Mexico Fishery Management Council's principles for allocation.
- b. An approved Council motion constitutes the only appropriate means for requesting the initiation of allocation or reallocation of a fishery resource. The motion should clearly specify the basis for, purpose and objectives of the request for (re)allocation.
- c. The Council should conduct a comprehensive review of allocations within the individual FMPs at intervals of no less than five years.
- d. Following an approved Council motion to initiate an allocation or reallocation, the Council will suggest methods to be used for determining the new allocation. Methods suggested must be consistent with the purpose and objectives included in the motion requesting the initiation of allocation or reallocation.
- e. Changes in allocation of a fishery resource may, to the extent practicable, account for projected future socio-economic and demographic trends that are expected to impact the fishery.
- f. Indirect changes in allocation, i.e., shifts in allocation resulting from management measures, should be avoided or minimized to the extent possible.

3. Suggested Methods for Determining (Re)Allocation

a. Market-based Allocation

- (1) Auction of quota
- (2) Quota purchases between commercial and recreational sectors
 - (i) determine prerequisites and conditions:
 - (a) quota or tags or some other mechanism required in one or both sectors
 - (b) mechanism to broker or bank the purchases and exchanges

- (c) annual, multi-year, or permanent
- (d) accountability for purchased or exchanged quota in the receiving sector

b. Catch-Based (and mortality) Allocation

- (1) historical landings data
 - (i) averages based on longest period of credible records
 - (ii) averages based on a period of recent years
 - (iii) averages based on total fisheries mortality (landings plus discard mortality) by sector
 - (iv) allocations set in a previous FMP
 - (v) accountability (a sector's ability to keep within allocation)

c. Socioeconomic-based Allocation

- (1) socio-economic analyses
 - (i) net benefits to the nation
 - (ii) economic analysis limited to direct participants
 - (iii) economic impact analysis (direct expenditures and multiplier impacts)
 - (iv) social impact analysis
 - (v) fishing communities
 - (vi) participation trends
 - (vii) "efficiency" analysis
 - (a) lowest possible cost for a particular level of catch;
 - (b) harvest OY with the minimum use of economic inputs

d. Negotiation-Based Allocation

- (1) Mechanism for sectors to agree to negotiation and select representatives
- (2) Mechanism to choose a facilitator
- (3) Negotiated agreement brought to Council for normal FMP process of adoption and implementation.

APPENDIX F. CURRENT FEDERAL REGULATIONS FOR GULF OF MEXICO RECREATIONAL RED SNAPPER MANAGEMENT

1. § 622.9 Prohibited gear and methods--general.

(e) Use of Gulf reef fish as bait prohibited. Gulf reef fish may not be used as bait in any fishery, except that, when purchased from a fish processor, the filleted carcasses and offal of Gulf reef fish may be used as bait in trap fisheries for blue crab, stone crab, deep-water crab, and spiny lobster.

2. § 622.20 Permits and endorsements

(b) Charter vessel/headboat permits. For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess Gulf reef fish, in or from the EEZ, a valid charter vessel/headboat permit for Gulf reef fish must have been issued to the vessel and must be on board.

(1) Limited access system for charter vessel/headboat permits for Gulf reef fish. No applications for additional charter vessel/headboat permits for Gulf reef fish will be accepted. Existing permits may be renewed, are subject to the restrictions on transfer in paragraph (b)(1)(i) of this section, and are subject to the renewal requirements in paragraph (b)(1)(ii) of this section.

(i) Transfer of permits--(A) Permits without a historical captain endorsement. A charter vessel/headboat permit for Gulf coastal migratory pelagic fish or Gulf reef fish that does not have a historical captain endorsement is fully transferable, with or without sale of the permitted vessel, except that no transfer is allowed to a vessel with a greater authorized passenger capacity than that of the vessel to which the moratorium permit was originally issued, as specified on the face of the permit being transferred. An application to transfer a permit to an inspected vessel must include a copy of that vessel's current USCG Certificate of Inspection (COI). A vessel without a valid COI will be considered an uninspected vessel with an authorized passenger capacity restricted to six or fewer passengers.

(B) Permits with a historical captain endorsement. A charter vessel/headboat permit for Gulf coastal migratory pelagic fish or Gulf reef fish that has a historical captain endorsement may only be transferred to a vessel operated by the historical captain, cannot be transferred to a vessel with a greater authorized passenger capacity than that of the vessel to which the moratorium permit was originally issued, as specified on the face of the permit being transferred, and is not otherwise transferable.

(C) Procedure for permit transfer. To request that the RA transfer a charter vessel/headboat permit for Gulf reef fish, the owner of the vessel who is transferring the permit and the owner of the vessel that is to receive the transferred permit must complete the transfer information on the reverse side of the permit and return the permit and a completed application for transfer to the RA. See § 622.4(f) for additional transfer-related requirements applicable to all permits issued under this part.

(ii) Renewal. (A) Renewal of a charter vessel/headboat permit for Gulf reef fish is contingent upon the permitted vessel and/or captain, as appropriate, being included in an active

survey frame for, and, if selected to report, providing the information required in one of the approved fishing data surveys. Surveys include, but are not limited to—

(1) NMFS' Marine Recreational Fishing Vessel Directory Telephone Survey (conducted by the Gulf States Marine Fisheries Commission);

(2) NMFS' Southeast Headboat Survey (as required by § 622.26(b)(1));

(3) Texas Parks and Wildlife Marine Recreational Fishing Survey; or

(4) A data collection system that replaces one or more of the surveys in paragraph (b)(1)(ii)(A),(1),(2), or (3) of this section.

(B) A charter vessel/headboat permit for Gulf reef fish that is not renewed or that is revoked will not be reissued. A permit is considered to be not renewed when an application for renewal, as required, is not received by the RA within 1 year of the expiration date of the permit.

(iii) Requirement to display a vessel decal. Upon renewal or transfer of a charter vessel/headboat permit for Gulf reef fish, the RA will issue the owner of the permitted vessel a vessel decal for Gulf reef fish. The vessel decal must be displayed on the port side of the deckhouse or hull and must be maintained so that it is clearly visible.

(2) A charter vessel or headboat may have both a charter vessel/headboat permit and a commercial vessel permit. However, when a vessel is operating as a charter vessel or headboat, a person aboard must adhere to the bag limits. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

(3) If Federal regulations for Gulf reef fish in subparts A or B of this part are more restrictive than state regulations, a person aboard a charter vessel or headboat for which a charter vessel/headboat permit for Gulf reef fish has been issued must comply with such Federal regulations regardless of where the fish are harvested.

3. § 622.26 Recordkeeping and reporting.

(b) Charter vessel/headboat owners and operators—(1) Reporting requirement. The owner or operator of a vessel for which a charter vessel/headboat permit for Gulf reef fish has been issued, as required under § 622.20(b), or whose vessel fishes for or lands such reef fish in or from state waters adjoining the Gulf EEZ, who is selected to report by the SRD must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD and must submit such record as specified in paragraph (b)(2) of this section.

(2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1) of this section for charter vessels must be submitted to the SRD weekly, postmarked not later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

(ii) Headboats. Completed fishing records required by paragraph (b)(1) of this section for headboats must be submitted to the SRD monthly and must either be made available to an authorized statistical reporting agent or be postmarked not later than 7 days after the end of each month. Information to be reported is indicated on the form and its accompanying instructions.

4. § 622.27 At-sea observer coverage.

(a) Required coverage. A vessel for which a Federal commercial vessel permit for Gulf reef fish or a charter vessel/headboat permit for Gulf reef fish has been issued must carry a NMFS-approved observer, if the vessel's trip is selected by the SRD for observer coverage. Vessel permit renewal is contingent upon compliance with this paragraph (a).

(b) Notification to the SRD. When observer coverage is required, an owner or operator must advise the SRD in writing not less than 5 days in advance of each trip of the following:

- (1) Departure information (port, dock, date, and time).
- (2) Expected landing information (port, dock, and date).

(c) Observer accommodations and access. An owner or operator of a vessel on which a NMFS-approved observer is embarked must:

- (1) Provide accommodations and food that are equivalent to those provided to the crew.
- (2) Allow the observer access to and use of the vessel's communications equipment and personnel upon request for the transmission and receipt of messages related to the observer's duties.
- (3) Allow the observer access to and use of the vessel's navigation equipment and personnel upon request to determine the vessel's position.
- (4) Allow the observer free and unobstructed access to the vessel's bridge, working decks, holding bins, weight scales, holds, and any other space used to hold, process, weigh, or store fish.
- (5) Allow the observer to inspect and copy the vessel's log, communications logs, and any records associated with the catch and distribution of fish for that trip.

5. § 622.29 Conservation measures for protected resources.

(a) Gulf reef fish commercial vessels and charter vessels/headboats--(1) Sea turtle conservation measures. (i) The owner or operator of a vessel for which a commercial vessel permit for Gulf reef fish or a charter vessel/headboat permit for Gulf reef fish has been issued, as required under

§§ 622.20(a)(1) and 622.20(b), respectively, must post inside the wheelhouse, or within a waterproof case if no wheelhouse, a copy of the document provided by NMFS titled, "Careful Release Protocols for Sea Turtle Release With Minimal Injury," and must post inside the wheelhouse, or in an easily viewable area if no wheelhouse, the sea turtle handling and release guidelines provided by NMFS.

(ii) Such owner or operator must also comply with the sea turtle bycatch mitigation measures, including gear requirements and sea turtle handling requirements, specified in §§ 635.21(c)(5)(i) and (ii) of this chapter, respectively.

(iii) Those permitted vessels with a freeboard height of 4 ft (1.2 m) or less must have on board a dipnet, tire, short-handled dehooker, long-nose or needle-nose pliers, bolt cutters, monofilament line cutters, and at least two types of mouth openers/mouth gags. This equipment must meet the specifications described in §§ 635.21(c)(5)(i)(E) through (L) of this chapter with the following modifications: the dipnet handle can be of variable length, only one NMFS-approved short-handled dehooker is required (i.e., § 635.21(c)(5)(i)(G) or (H) of this chapter); and life rings, seat cushions, life jackets, and life vests or any other comparable, cushioned, elevated surface that allows boated sea turtles to be immobilized, may be used as alternatives to

tires for cushioned surfaces as specified in § 635.21(c)(5)(i)(F) of this chapter. Those permitted vessels with a freeboard height of greater than 4 ft (1.2 m) must have on board a dipnet, tire, long-handled line clipper, a short-handled and a long-handled dehooker, a long-handled device to pull an inverted "V", long-nose or needle-nose pliers, bolt cutters, monofilament line cutters, and at least two types of mouth openers/mouth gags. This equipment must meet the specifications described in § 635.21(c)(5)(i)(A) through (L) of this chapter with the following modifications: only one NMFS-approved long-handled dehooker (§ 635.21(c)(5)(i)(B) or (C)) of this chapter and one NMFS-approved short-handled dehooker (§ 635.21(c)(5)(i)(G) or (H) of this chapter) are required; and life rings, seat cushions, life jackets, and life vests, or any other comparable, cushioned, elevated surface that allows boated sea turtles to be immobilized, may be used as alternatives for cushioned surfaces as specified in § 635.21(c)(5)(i)(F) of this chapter.

(2) Smalltooth sawfish conservation measures. The owner or operator of a vessel for which a commercial vessel permit for Gulf reef fish or a charter vessel/headboat permit for Gulf reef fish has been issued, as required under §§ 622.20(a)(1) and 622.20(b), respectively, that incidentally catches a smalltooth sawfish must--

- (i) Keep the sawfish in the water at all times;
 - (ii) If it can be done safely, untangle the line if it is wrapped around the saw;
 - (iii) Cut the line as close to the hook as possible; and
 - (iv) Not handle the animal or attempt to remove any hooks on the saw, except for with a long-handled dehooker.
- (b) [Reserved]

6. § 622.30 Required fishing gear.

For a person on board a vessel to fish for Gulf reef fish in the Gulf EEZ, the vessel must possess on board and such person must use the gear as specified in paragraphs (a) through (c) of this section.

(a) Non-stainless steel circle hooks. Non-stainless steel circle hooks are required when fishing with natural baits.

(b) Dehooking device. At least one dehooking device is required and must be used to remove hooks embedded in Gulf reef fish with minimum damage. The hook removal device must be constructed to allow the hook to be secured and the barb shielded without re-engaging during the removal process. The dehooking end must be blunt, and all edges rounded. The device must be of a size appropriate to secure the range of hook sizes and styles used in the Gulf reef fish fishery.

(c) Venting tool. At least one venting tool is required and must be used to deflate the abdominal cavities of Gulf reef fish to release the fish with minimum damage. This tool must be a sharpened, hollow instrument, such as a hypodermic syringe with the plunger removed, or a 16-gauge needle fixed to a hollow wooden dowel. A tool such as a knife or an ice-pick may not be used. The venting tool must be inserted into the fish at a 45-degree angle approximately 1 to 2 inches (2.54 to 5.08 cm) from the base of the pectoral fin. The tool must be inserted just deep enough to release the gases, so that the fish may be released with minimum damage.

7. § 622.32 Prohibited gear and methods.

Also see § 622.9 for additional prohibited gear and methods that apply more broadly to multiple fisheries or in some cases all fisheries.

(a) Poisons. A poison may not be used to take Gulf reef fish in the Gulf EEZ.

(b) [Reserved]

8. § 622.33 Prohibited species.

(d) Gulf reef fish exhibiting trap rash. Possession of Gulf reef fish in or from the Gulf EEZ that exhibit trap rash is prima facie evidence of illegal trap use and is prohibited. For the purpose of this paragraph, trap rash is defined as physical damage to fish that characteristically results from contact with wire fish traps. Such damage includes, but is not limited to, broken fin spines, fin rays, or teeth; visually obvious loss of scales; and cuts or abrasions on the body of the fish, particularly on the head, snout, or mouth.

9. § 622.34 Seasonal and area closures designed to protect Gulf reef fish.

(a) Closure provisions applicable to the Madison and Swanson sites and Steamboat Lumps, and the Edges-- (1) Descriptions of Areas. (i) The Madison and Swanson sites are bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	29°17'	85°50'
B	29°17'	85°38'
C	29°06'	85°38'
D	29°06'	85°50'
A	29°17'	85°50'

(ii) Steamboat Lumps is bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	28°14'	84°48'
B	28°14'	84°37'
C	28°03'	84°37'
D	28°03'	84°48'
A	28°14'	84°48'

(iii) The Edges is bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	28°51'	85°16'
B	28°51'	85°04'
C	28°14'	84°42'
D	28°14'	84°54'
A	28°51'	85°16'

(2) Within the Madison and Swanson sites and Steamboat Lumps, possession of Gulf reef fish is prohibited, except for such possession aboard a vessel in transit with fishing gear stowed as specified in paragraph (a)(4) of this section.

(3) Within the Madison and Swanson sites and Steamboat Lumps during November through April, and within the Edges during January through April, all fishing is prohibited, and possession of any fish species is prohibited, except for such possession aboard a vessel in transit with fishing gear stowed as specified in paragraph (a)(4) of this section. The provisions of this paragraph, (a)(3), do not apply to highly migratory species.

(4) For the purpose of paragraph (a) of this section, transit means non-stop progression through the area; fishing gear appropriately stowed means--

(i) A longline may be left on the drum if all gangions and hooks are disconnected and stowed below deck. Hooks cannot be baited. All buoys must be disconnected from the gear; however, buoys may remain on deck.

(ii) A trawl net may remain on deck, but trawl doors must be disconnected from the trawl gear and must be secured.

(iii) A gillnet must be left on the drum. Any additional gillnets not attached to the drum must be stowed below deck.

(iv) A rod and reel must be removed from the rod holder and stowed securely on or below deck. Terminal gear (i.e., hook, leader, sinker, flasher, or bait) must be disconnected and stowed separately from the rod and reel. Sinkers must be disconnected from the down rigger and stowed separately.

(5) Within the Madison and Swanson sites and Steamboat Lumps, during May through October, surface trolling is the only allowable fishing activity. For the purpose of this paragraph (a)(5), surface trolling is defined as fishing with lines trailing behind a vessel which is in constant motion at speeds in excess of four knots with a visible wake. Such trolling may not involve the use of down riggers, wire lines, planers, or similar devices.

(6) For the purpose of this paragraph (a), fish means finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals and birds. Highly migratory species means tuna species, marlin (*Tetrapturus spp.* and *Makaira spp.*), oceanic sharks, sailfishes (*Istiophorus spp.*), and swordfish (*Xiphias gladius*).

10. § 622.35 Gear restricted areas.

(a) Reef fish stressed area. The stressed area is that part of the Gulf EEZ shoreward of rhumb lines connecting, in order, the points listed in Table 2 in Appendix B of this part.

(1) A powerhead may not be used in the stressed area to take Gulf reef fish. Possession of a powerhead and a mutilated Gulf reef fish in the stressed area or after having fished in the stressed area constitutes prima facie evidence that such reef fish was taken with a powerhead in the stressed area. The provisions of this paragraph do not apply to hogfish.

(2) A roller trawl may not be used in the stressed area. Roller trawl means a trawl net equipped with a series of large, solid rollers separated by several smaller spacer rollers on a separate cable or line (sweep) connected to the footrope, which makes it possible to fish the gear over rough bottom, that is, in areas unsuitable for fishing conventional shrimp trawls. Rigid framed trawls adapted for shrimping over uneven bottom, in wide use along the west coast of Florida, and shrimp trawls with hollow plastic rollers for fishing on soft bottoms, are not considered roller trawls.

(b) Seasonal prohibitions applicable to bottom longline fishing for Gulf reef fish. (1) From June through August each year, bottom longlining for Gulf reef fish is prohibited in the portion of the Gulf EEZ east of 85°30' W. long. that is shoreward of rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	28°58.70'	85°30.00'
B	28°59.25'	85°26.70'
C	28°57.00'	85°13.80'
D	28°47.40'	85°3.90'
E	28°19.50'	84°43.00'
F	28°0.80'	84°20.00'
G	26°48.80'	83°40.00'
H	25°17.00'	83°19.00'
I	24°54.00'	83°21.00'
J	24°29.50'	83°12.30'
K	24°26.50'	83°00.00'

(2) Within the prohibited area and time period specified in paragraph (b)(1) of this section, a vessel with bottom longline gear on board may not possess Gulf reef fish unless the bottom longline gear is appropriately stowed, and a vessel that is using bottom longline gear to fish for species other than Gulf reef fish may not possess Gulf reef fish. For the purposes of paragraph (b) of this section, appropriately stowed means that a longline may be left on the drum

if all gangions and hooks are disconnected and stowed below deck; hooks cannot be baited; and all buoys must be disconnected from the gear but may remain on deck.

(3) Within the Gulf EEZ east of 85°30' W. long., a vessel for which a valid eastern Gulf reef fish bottom longline endorsement has been issued that is fishing bottom longline gear or has bottom longline gear on board cannot possess more than a total of 1000 hooks including hooks on board the vessel and hooks being fished and cannot possess more than 750 hooks rigged for fishing at any given time. For the purpose of this paragraph, “hooks rigged for fishing” means hooks attached to a line or other device capable of attaching to the mainline of the longline.

(c) Reef fish longline and buoy gear restricted area. A person aboard a vessel that uses, on any trip, longline or buoy gear in the longline and buoy gear restricted area is limited on that trip to the bag limits for Gulf reef fish specified in § 622.38(b) and, for Gulf reef fish for which no bag limit is specified in § 622.38(b), the vessel is limited to 5 percent, by weight, of all fish on board or landed. The longline and buoy gear restricted area is that part of the Gulf EEZ shoreward of rhumb lines connecting, in order, the points listed in Table 1 in Appendix B of this part.

(d) Alabama SMZ. The Alabama SMZ consists of artificial reefs and surrounding areas. In the Alabama SMZ, fishing by a vessel that is operating as a charter vessel or headboat, a vessel that does not have a commercial permit for Gulf reef fish, as required under § 622.20(a)(1), or a vessel with such a permit fishing for Gulf reef fish is limited to hook-and-line gear with three or fewer hooks per line and spearfishing gear. A person aboard a vessel that uses on any trip gear other than hook-and-line gear with three or fewer hooks per line and spearfishing gear in the Alabama SMZ is limited on that trip to the bag limits for Gulf reef fish specified in § 622.38(b) and, for Gulf reef fish for which no bag limit is specified in § 622.38(b), the vessel is limited to 5 percent, by weight, of all fish on board or landed. The Alabama SMZ is bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	30°02.5'	88°07.7'
B	30°02.6'	87°59.3'
C	29°55.0'	87°55.5'
D	29°54.5'	88°07.5'
A	30°02.5'	88°07.7'

11. § 622.37 Size limits.

All size limits in this section are minimum size limits unless specified otherwise. A fish not in compliance with its size limit, as specified in this section, in or from the Gulf EEZ, may not be possessed, sold, or purchased. A fish not in compliance with its size limit must be released immediately with a minimum of harm. The operator of a vessel that fishes in the EEZ is responsible for ensuring that fish on board are in compliance with the size limits specified in this section. See § 622.10 regarding requirements for landing fish intact.

(a) Snapper—(1) Red snapper—16 inches (40.6 cm), TL, for a fish taken by a person subject to the bag limit specified in § 622.38 (b)(3) and 13 inches (33.0 cm), TL, for a fish taken by a person not subject to the bag limit.

12. § 622.38 Bag and possession limits.

(a) Additional applicability provisions for Gulf reef fish. (1) Section 622.11(a) provides the general applicability for bag and possession limits. However, § 622.11(a) notwithstanding, bag and possession limits also apply for Gulf reef fish in or from the EEZ to a person aboard a vessel that has on board a commercial permit for Gulf reef fish--

(i) When trawl gear or entangling net gear is on board. A vessel is considered to have trawl gear on board when trawl doors and a net are on board. Removal from the vessel of all trawl doors or all nets constitutes removal of trawl gear.

(ii) When a longline or buoy gear is on board and the vessel is fishing or has fished on a trip in the reef fish longline and buoy gear restricted area specified in § 622.35(c). A vessel is considered to have a longline on board when a power-operated longline hauler, a cable of diameter and length suitable for use in the longline fishery, and gangions are on board. Removal of any one of these three elements, in its entirety, constitutes removal of a longline.

(iii) For a species/species group when its quota has been reached and closure has been effected, provided that no commercial quantities of Gulf reef fish, i.e., Gulf reef fish in excess of applicable bag/possession limits, are on board as specified in paragraph (a)(2) of this section.

(iv) When the vessel has on board or is tending any trap other than a stone crab trap or a spiny lobster trap.

(2) A person aboard a vessel that has a Federal commercial vessel permit for Gulf reef fish and commercial quantities of Gulf reef fish, i.e., Gulf reef fish in excess of applicable bag/possession limits, may not possess Gulf reef fish caught under a bag limit.

(b) Bag limits--

(3) Red snapper--2. However, no red snapper may be retained by the captain or crew of a vessel operating as a charter vessel or headboat. The bag limit for such captain and crew is zero.

13. § 622.39 Quotas.

See § 622.8 for general provisions regarding quota applicability and closure and reopening procedures. This section, provides quotas and specific quota closure restrictions for Gulf reef fish.

(a) Gulf reef fish--

(2) Recreational quotas. The following quotas apply to persons who fish for Gulf reef fish other than under commercial vessel permits for Gulf reef fish and the applicable commercial quotas specified in paragraph (a)(1) of this section.

(i) Recreational quota for red snapper--4.145 million lb (1.880 million kg), round weight.

(c) Restrictions applicable after a recreational quota closure--

(1) After closure of the recreational quota for red snapper. The bag and possession limit for red snapper in or from the Gulf EEZ is zero.

APPENDIX G. ECONOMIC ANALYSIS OF RED SNAPPER ALLOCATION ALTERNATIVES FOR AMENDMENT 28 TO THE GULF OF MEXICO REEF FISH FMP

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Introduction

This report investigates the economic effects of the alternatives proposed in Amendment 28 to the Reef Fish Fishery Management Plan (FMP) of the Gulf of Mexico. Amendment 28 considers revising the 51% commercial/49% recreational allocation formula set in Amendment 1 to the Reef Fish FMP. Specifically, alternatives 2 through 4 consider increasing the recreational sector allocation by 3%, 5% and 10%, respectively; whereas alternatives 5 and 6 would only reallocate quota increases when the red snapper quota is greater than 9.12 million pounds (mp) whole weight (ww) (Table 2). Alternative 5 would allocate 75% of quota increases (above 9.12 mp) to the recreational sector and 25% to the commercial sector, whereas alternative 6 would allocate 100% of the quota increases (above 9.12 mp) to the recreational sector.

Conceptually, the economic value of a two-sector fishery, given a set quota level, reaches a maximum when quota is efficiently allocated among the two sectors. This occurs when the net benefit of the last unit of quota allocated to one sector equals the net benefit of the last unit of quota allocated to the other sector. If these marginal net benefits are not equal, then the economic benefits to the nation can be improved by shifting quota from the sector with the lower marginal net benefit to the sector with the higher marginal net benefit for a unit of quota.

In the 2012 red snapper allocation analysis (Agar and Carter 2012a), we found that the current allocation was not economically efficient because the marginal net benefit for an additional unit of quota differed between the commercial and recreational sectors. However, we cautioned that the extent to which economic benefits could be increased via reallocation could not be adequately determined at the time. We noted that additional research, improvements in the quality of existing data collections, and new data collections were necessary in order to estimate the economic effects of non-marginal changes to allocation. The caveats mentioned in Agar and Carter (2012a) also

apply to this analysis. The methods used in this analysis follow our earlier work with red snapper and grouper species (Agar and Carter 2012a, b; Carter et al. 2008).

The remainder of the report is structured as follows. Section 2 describes the estimation of the commercial net benefits for the proposed reallocation alternatives. Section 3 describes the calculation of the recreational net benefit for the proposed allocation changes. The last section summarizes the economic effects of the proposed reallocation alternatives and discusses the key results of the analysis.

Commercial Sector Analysis

We explored the economic effects of alternative red snapper quota reallocations using two alternative approaches. The first approach attempted to estimate a derived demand model for red snapper allocation (leased quota) from indirect, trip-level revenue (profit) functions analogous to the framework used by Squires and Kirkley (1995), Carter et al. (2008), and Gentner et al. (2010). Unfortunately, this approach proved unfruitful because the absence of data on rental prices limited our ability to estimate how quasi-fixed input usage would change in response to quota changes (see, Appendix A for discussion); hence, we pursued a second approach to estimate the economic effects of changes in the allocation formula. The second approach used a reduced form, linear equation to examine the relationship between red snapper allocation prices and quota levels (Newell et al. 2005). In the red snapper commercial fishery, IFQ allocation is the actual poundage of red snapper that shareholder or allocation holder can possess, land, or sell during a given calendar year.

We use allocation prices because they serve as sound proxies for net economic benefits because fishermen will only purchase additional units of allocation as long as the expected net revenue of the last unit of allocation purchased equals or exceeds the allocation price. At the margin, the

net revenue of last unit of allocation purchased should equal the allocation price. In other words, the market based allocation prices are expected to reflect the expected net revenue from holding additional units of allocation (Clark, 1982; Newell et al. 2005).

In well-behaved quota markets, we expect allocation prices to be a function of, among other things, output and factor prices, harvesting technology, fish abundance, and quota. In particular, we expect the allocation price for red snapper to be positively related to the dockside price of red snapper and negatively related to input prices such as fuel. Also, all other things being equal, as quota levels increase, allocation prices are expected to fall.

Specification and Data for the Allocation Price Regression

We used a specification for the allocation price equation that is similar to the one put forth by Newell et al. (2005). However, our specification is considerably more parsimonious given data limitations and the number of observations available. Specifically, we modelled the average monthly red snapper allocation prices as a function of red snapper dockside prices, diesel fuel price index, annual red snapper quota levels, and dummy variables for quarter and year.¹⁸

Data on quota levels, and allocation and dockside prices were obtained from the Southeast Regional Office (SERO) IFQ Database.¹⁹ The diesel (#2, WPU057303) price index was obtained from the U.S. Bureau of Labor Statistics along with the consumer price index (CUSR0000SA0) that was used to adjust all prices to 2012 dollars. The analysis focused on the 2007-2012 period when the IFQ program was in place. About 80 percent of the allocation transactions reported zero or very low allocation prices because many participants were concerned about privacy and also because many of the transactions are believed that to have involved non-arm length transfers

¹⁸ We tried other specification that regressed allocation prices against the number of monthly allocation transfers, monthly landings and cumulative landings but these were not statistically significant.

¹⁹ In the commercial red snapper fishery, landings are usually expressed in pounds gutted weight (gw) and dockside, share and allocation prices in dollars per pound of gw. The whole weight to gutted weight conversion factor is 1.11.

between related accounts. Therefore, we created monthly allocation price averages using only observations with values greater or equal \$1.2 but less or equal than \$5. In addition, because many dockside prices for red snapper were reported as net of allocation price (i.e., dockside price minus allocation price) we generated monthly dockside prices using observations with prices equal or greater than \$2.6 and but less than \$10. The values generated for monthly allocation and dockside prices follow the guidelines used in the 5 year review of the red snapper IFQ program. The descriptive statistics of the variables used in the analysis are found in Table 3.

Commercial Sector Results

Table 4 shows the OLS results of 4 different models that considered the relationship between red snapper allocation prices and dockside prices, diesel price index, quarterly and yearly variables, and quota levels. In general, the results show that much of the variation in average allocation prices is explained by yearly dummies. Most of the explanatory variables such as dockside prices, diesel 2 index, are not statistically significant when yearly dummy variables are included (Models 2 and 3). Only Model 4 yields a quota parameter that is negative and statistically significant at the 5% level.

To predict the effect of changing quotas on allocation prices while controlling for dockside price, diesel fuel prices and quarterly and yearly fixed effects we use Model 4. The predicted mean allocation price over a range of quotas levels is shown in Table 5 along with the lower (95Lower) and upper (95Upper) confidence estimates of the mean. Table 6 shows the estimated forgone annual net economic benefits from reallocating quota from the commercial to the recreational sector. Alternative 2 (3% change in allocation) was the least onerous alternative to the commercial sector resulting in a net annual loss of \$0.8 million, whereas alternative 4 (10% change in allocation) and 6 (100% allocation of quota increases above 9.12 mp) were the most onerous

alternatives to the commercial sector resulting in an annual loss in net benefits of \$2.9 million and \$2.5 million, respectively.

Recreational Sector Analysis

This section describes the methods used to determine the change in economic net benefits to the recreational sector associated with the allocation alternatives proposed for red snapper in the Gulf of Mexico. The general method is simple: the net benefits of a change in allocation equal the implied change in harvest times the net benefit per pound of fish. Most of this section is spent discussing the approach used to calculate the net benefit for a pound of fish in the recreational sector. We provide further discussion of the concept of net benefit, or willingness-to-pay (WTP), in our previous report on red snapper (Agar and Carter 2012b).

Background and Assumptions

There is no quota market (e.g., ITQ) for recreationally harvested red snapper in the Gulf of Mexico. Nor are harvest estimates timely enough to allow “real-time” quota monitoring in the recreational sector. Therefore, any additional quota allocated to the recreational sector must be distributed via changes in fishing regulations (e.g., bag limits and season length). The regulations used to distribute additional quota can influence the amount of economic benefit generated, if any. In fact, preliminary research at the University of Maryland suggests that the way the recreational sector is managed has important implications for the way we should *measure* the economic benefits of reallocation. Discussion of this issue is beyond the scope of this report, but should be kept in mind as many of the margins we discuss below (trips per season, harvest per trip, etc.) are irrelevant to the analysis if there is no mechanism in place to sort anglers along the margin according to their preferences.

Consider the ways in which aggregate recreational harvest might increase given a reallocation. That is, how can an increase in harvest allocated to the recreational sector be absorbed? In general, aggregate harvest can increase if more pounds are harvested per trip or if more trips are taken. Pounds per trip can increase when more or bigger fish are harvested per trip either because of improvements in the stock, a change in the bag or size limit, changes in technology, or an increase in the time spent fishing per trip. An increase in trips occurs when new anglers start fishing, existing anglers take more trips, or existing trips are redirected from other species to harvest red snapper.

Based on discussions with Council and SERO staff, we assume that there will be no change in the number of pounds harvested per trip, primarily because the Council is unlikely to change the bag or minimum size limits. The Council is likely to extend the red snapper fishing season to allocate additional harvest to the recreational sector. Given data and model limitations we are forced to take a narrow view regarding the effect of the longer season on fishing activity. Specifically, we assume that no new anglers will start fishing and that existing anglers will not change the number of trips they take when the season is extended. If there are no new anglers or trips and the harvest per trip is unchanged, then aggregate harvest can only increase if anglers previously fishing for other species *redirect* to harvest red snapper when the season is open. These assumptions were implicit in our previous analyses, but were somewhat less controversial because we were measuring economic value at the margin or evaluating very small allocation changes. Presently, the Council is considering relatively larger changes in allocation (e.g., 10 percent) and the assumptions of no new anglers or trips are more tenuous. In any case, if new anglers or trips result from the increase in allocation to the recreational sector and the extension of the season, then the increase in economic benefits would probably be higher than measured in this report.

We make five other methodological assumptions:²⁰ 1) anglers harvest the bag limit, i.e., harvest two red snapper per trip; 2) the average weight per red snapper is 6.34 based on the average from 2011; 3) the net benefit of two red snapper harvested per trip is the same for all trips taken over the season; 4) the net benefit curve for the number of red snapper harvested per trip is estimated using data from 2003; and 5) changes in net benefits to for-hire operators are not measured. Currently, the daily bag limit of red snapper is two fish. Figure 1 demonstrates the potential sensitivity of our results to the different assumptions about the average fish weight and the number of red snapper harvested per trip. In general, the heavier the fish on average, the lower the measures of net benefit. This somewhat counterintuitive outcome is because lower weight fish means more fish can be caught for a given quota increase. Similarly, if we were to assume that only one fish is harvested per trip, instead of two fish, then the measures of net benefit would be higher, as the preference for a second fish is less than for the first.

As we describe below, our estimate of angler benefit for fish on a trip is based on data from 2003 (inflation adjusted). Currently an economic survey of anglers in the Gulf of Mexico is being fielded and is scheduled to end in spring of 2014. We will have some preliminary results by the end of the year. Until then, however, we do not know whether estimates using more recent data would be higher or lower than the estimates from the 2003 data. Consequently, we cannot speculate as to how our measures of the economic value associated with increased quota in the recreational sector would change with more recent data.

We do not attempt to measure changes in economic value (producer surplus) accruing to operators/owners in the charter and head boat industry. In fact, by assuming that trips do not

²⁰ As in the previous analyses, we also ignore dynamic feedbacks (e.g., congestion or stock effects) because this type of response is unlikely to be significant in the short-term, i.e. one year.

change, we are also assuming that the only way to have changes in producer surplus would be for for-hire profits to be relatively higher on trips that offer red snapper. The angler benefit estimates described below suggest that some anglers are indeed willing to pay a premium for trips that offer red snapper. However, for the analysis we assume that trip costs are same regardless of species offerings such that the all economic value increase (surplus) from longer seasons accrues to anglers. Our estimates of the economic value associated with increased quota in the recreational sector would be higher if we were to include the value accruing to the for-hire sector operators/producers. The potential consequences for our results of relaxing the key assumptions we have described are summarized in Table 7 .

Calculation of the Net Benefit of Two Red Snapper Harvested per Trip

Following Agar and Carter (2012a,b) we use the results from an analysis of a stated preference choice experiment conducted in 2003 (Carter and Liese 2012). In this analysis, the total benefit²¹ for harvest of species j per trip by angler i is given by

$$(1) \quad TB_{ij}(h) = \beta_{ij} \sinh^{-1} h_j$$

where β_{ij} is a preference parameter for the harvest of h_j number of fish of species j . The preference parameters are randomly distributed and correlated across species as a multivariate normal: $\beta_{ij} \sim N(\bar{\beta}_j, \Omega)$ where a $\bar{\beta}_j$ is the mean vector and Ω is the covariance matrix for the joint distribution. Expression 1 measures the amount of money you would have to take from angler i to make him indifferent to harvesting h fish per trip versus no fish per trip. Figure 2 shows the total benefit function plotted over the number of fish harvested per trip for each species evaluated at the

²¹ Total benefit is measured by the compensating variation that equates the indirect utility of a trip harvesting h fish of species j with the indirect utility of a trip that harvests zero fish of species j .

mean value of the preference parameter.²² This figure suggests that the average angler would be willing to pay around \$200 to keep two red snapper on a trip versus a trip where no red snapper could be kept. Note, however, that we are assuming that red snapper harvest increases with an extended season because anglers redirect from harvesting another species. Therefore, we need to subtract the total anglers get from the harvest of their next preferred species to get a net benefit for the opportunity to harvest two red snapper on a trip. We used the following Monte Carlo simulation to estimate this net benefit and associated confidence bounds:

1. Draw 10,000 vectors of 14 parameters from the multivariate normal, including 4 species preference parameters, $(\bar{\beta}_1, \bar{\beta}_2, \bar{\beta}_3, \bar{\beta}_4)$, and the 10 components, $(\rho_{11}, \rho_{21}, \rho_{22}, \rho_{31}, \rho_{32}, \rho_{33}, \rho_{41}, \rho_{42}, \rho_{43}, \rho_{44})$, of the lower triangular Cholesky factorization matrix corresponding to the estimate of Ω . The mean preference parameters and Cholesky terms along with the corresponding covariance matrix are shown in the Appendix.
2. For each of the 10,000 vectors of preference parameters and lower triangular Cholesky factorization matrix elements drawn in step 1:
 - a. Draw 10,000 “anglers” or coefficient vectors, $(\bar{\beta}_{i1}, \bar{\beta}_{i2}, \bar{\beta}_{i3}, \bar{\beta}_{i4})$, from the multivariate normal using the mean preference parameters and the Cholesky factorization matrix terms as follows:

$$\begin{pmatrix} \beta_{i1} \\ \beta_{i2} \\ \beta_{i3} \\ \beta_{i4} \end{pmatrix} = \begin{pmatrix} \bar{\beta}_1 \\ \bar{\beta}_2 \\ \bar{\beta}_3 \\ \bar{\beta}_4 \end{pmatrix} + \begin{bmatrix} \rho_{11} & & & \\ \rho_{21} & \rho_{22} & & \\ \rho_{31} & \rho_{32} & \rho_{33} & \\ \rho_{41} & \rho_{42} & \rho_{43} & \rho_{44} \end{bmatrix} \begin{bmatrix} \zeta_{i1} \\ \zeta_{i2} \\ \zeta_{i3} \\ \zeta_{i4} \end{bmatrix}$$

²² The graph is plotted from zero to five fish, but the original experiment did not include alternative trips in which no fish were harvested. Hence the value of one fish is an out-of-sample extrapolation. Zero marginal value for zero fish is a quite plausible assumption.

where the ζ terms are drawn from the standard normal distribution.

- b. Calculate total benefit for two fish per trip for each species for each of the 10,000 “anglers” drawn in 2a using equation 1.
 - c. Based on the results in 2b, keep the “red snapper anglers” where the total benefit for red snapper is greater than the total benefit for other species.
 - d. For each “red snapper angler”, calculate the net benefit as the total benefit for red snapper minus the total benefit for the species with the next highest total benefit.
 - e. Return the mean (and median) net benefit over the vector calculated in 2d.
3. Calculate the mean and confidence bounds based on the 10,000 estimates of the mean and median net benefit generated by evaluating step 2 on each of the vectors drawn in step 1.

This measure of net benefit is converted to net benefit per pound by dividing by the pounds per fish and the number of fish harvested on the trip, assumed to be two fish based on the current bag limit.

The results of the simulation are shown in Table 8. On average around 20% of the 10,000 anglers “preferred” red snapper over the other three species, i.e., these anglers had a total benefit for red snapper that was higher than the total benefit for any other species. The mean and confidence bounds are shown for the simulated mean and median net benefit estimates in 2003 and 2012 dollars. We also show the results converted to the net benefit per pound. The estimates range from \$8 to \$12 per pound in 2012 dollars. Note that these confidence bounds only account for parameter uncertainty and the heterogeneity angler preferences. There are other potential sources (e.g., structural or model) of uncertainty that are not captured.

Recreational Sector Results

Table 9 shows the economic value of changes in the red snapper allocation to the recreational sector. The allocation is shown in the first column and the change in the allocation from the Alternative 1 (status quo) is shown in the second column. The numbers in the second column are multiplied by the *mean* net benefit per pound in 2012 dollars (\$11.21) from Table 8 to get the change in economic value relative to the status quo that is presented in the last column. This simple method ensures that the change in economic value moves in the same direction and is proportional to the change in allocation to the recreational sector.

Results and Conclusions

Amendment 28 to the GOM Reef Fish FMP is revisiting the existing allocation formula between the commercial and recreational sectors. Specifically, the Amendment is considering alternatives that would increase the recreational sector allocation between 3% and 10% or assigning 25% or 100% of the quota increases to the recreational sector when snapper quota is greater than 9.12 mp ww.

This analysis shows that on economic efficiency grounds, benefits to the nation could be increased by redistributing some of the quota from the commercial to the recreational sector. In general, the larger the share of quota redistributed to the recreational sector, the greater the economic benefits to the nation. The analysis suggests that the 10% redistribution alternative generates the most benefits to the nation, at about \$6.16 million annually whereas the 3% redistribution alternative generates the least benefits to the nation of about \$1.92 million annually. Table 9 summarizes the key results of the analysis. We caution, however, that the results of this analysis are conditional on a number of simplifying assumptions and, strictly speaking, apply at the margin and to the quota level at the time the data were collected. The methods and assumptions become tenuous at “large” reallocations. As emphasized in our previous allocation work (Agar

and Carter 2012a, b), more and better data and analysis are necessary to accurately measure the potential economic implications of relatively large reallocations of fishery stocks as well as adequately capture other economic surpluses in the wholesale and retail markets. However, some of these surpluses are not expected to be large due to the presence of substitutes.

Finally, it should be pointed out, that National Standard 5 of the Magnuson Stevens Reauthorization Act of 2006 states “Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.” In other words, economic efficiency considerations alone should not be the only guiding criteria for making re-allocation decisions.

Table 2. Gulf of Mexico Red Snapper Allocation Alternatives

Alternative	Commercial Sector		Recreational Sector	
	Quota (Million Pounds Whole Weight)	%	Quota (Million Pounds Whole Weight)	%
1 (Status Quo)	5.610	51.0	5.390	49.0
2	5.280	48.0	5.720	52.0
3	5.060	46.0	5.940	54.0
4	4.510	41.0	6.490	59.0
5	5.121	46.6	5.879	53.4
6	4.651	42.3	6.349	57.7

Table 3. Descriptive Statistics of the Variables Used in the Analysis (n=72)

Variable	Mean	Median	Std. dev.	Min	Max
Red snapper monthly allocation price (\$/lb)	2.84	2.98	0.34	1.99	3.31
Red snapper monthly dockside price (\$/lb)	4.37	4.42	0.13	4.05	4.54
Diesel #2 price index	0.85	0.83	0.21	0.44	1.36
Red Snapper commercial quota (Million Pounds Gutted Weight)	2.81	2.99	0.52	2.30	3.71

Sources: NOAA IFQ Database and BLS. All prices are adjusted to 2012 dollars using the CPI.

Table 4. Allocation Price Regression Results (n=72)

Independent Variables	Model 1	Model 2	Model 3	Model 4
Intercept	-6.70523*** (0.61902)	-6.81492*** (0.60554)	0.77921 (1.31535)	1.51673 (1.43179)
Monthly dockside price	2.13208*** (0.14335)	2.15326*** (0.14021)	0.45214 (0.29226)	0.34118 (0.30846)
Diesel #2 price index	-0.12826 (0.09848)	-0.16243** (0.09714)	-0.15544 (0.13327)	-0.23727* (0.13504)
Commercial Quota	0.11914*** (0.04145)	0.13078*** (0.04237)	-0.09668 (0.06520)	-0.20046** (0.08734)
Quarter 2		0.05893 (0.05162)		0.05401 (0.04198)
Quarter 3		0.05534 (0.05287)		0.13020** (0.04961)
Quarter 4		-0.06062 (0.05252)		0.06270 (0.05119)
Year 2008			0.20261** (0.08427)	0.20201*** (0.08185)
Year 2009			0.52325*** (0.09461)	0.50200*** (0.09345)
Year 2010			0.68000*** (0.10973)	0.72767*** (0.11596)
Year 2011			0.74341*** (0.12851)	0.85477*** (0.14463)
Year 2012			0.76603*** (0.14856)	0.91003*** (0.17169)
R Squared	0.7976	0.8176	0.8851	0.8978
Adjusted R Squared	0.7886	0.8008	0.8705	0.8791
F Value	89.31	48.56	60.66	47.92
Prob.> F	<.0001	<.0001	<.0001	<.0001

Table 5. Predicted Mean Allocation Price at Different Quota Levels

Quota (Million Pounds Gutted Weight)	Predicted Price (\$/lb)		
	Mean	95Lower	95Upper
4.06	2.95	2.69	3.21
4.19	2.93	2.66	3.19
4.56	2.85	2.56	3.15
4.61	2.84	2.55	3.14
4.76	2.81	2.50	3.12
5.06	2.75	2.41	3.10

Table 6. Annual Economic Cost (Losses) to the Commercial Sector of the Various Reallocation Alternatives.

Alternative	Quota (Million Pounds Gutted Weight)	Quota share (%)	Poundage lost relative to Alt. 1	Economic cost (losses) (\$ million/year)
1 (Status quo)	5.06	51	-	-
2	4.76	48	0.30	0.8 (0.7-0.9)
3	4.56	46	0.50	1.4 (1.2-1.6)
4	4.06	41	1.00	2.9 (2.6-3.2)
5	4.61	46.6	0.45	1.3 (1.1-1.4)
6	4.19	42.3	0.87	2.5 (2.2-2.7)

Table 7. Effect of Relaxing Key Assumptions in Recreational Sector Analysis

Assumption	Relaxing Assumption Makes Results
No new anglers or trips	Higher
All trips harvest two red snapper	Higher
Data from 2003	?
Only measured value to angler (i.e., for-hire operators not included)	Higher

Table 8. Net Benefit for Two Red Snapper Keep Calculated from the Simulation

	Simulated Mean	Simulated Median
--Net Benefit (2003 dollars)--		
Mean	\$114.06	\$92.75
95Lower	\$104.71	\$84.09
95Upper	\$123.73	\$101.74
--Net Benefit (2012 dollars)--		
Mean	\$142.11	\$115.56
95Lower	\$130.46	\$104.76
95Upper	\$154.16	\$126.76
--Net Benefit per pound (2012 dollars)--		
Mean	\$11.21	\$9.11
95Lower	\$10.29	\$8.26
95Upper	\$12.16	\$10.00

Notes: The 2003 dollars are inflated to 2012 dollars using the January CPI from series CUSR0000SA0. The net benefit per pound is based on two fish at 6.34 pounds each.

Table 9. Economic Value of Changes in the Red Snapper to the Recreational Sector

Alternative	Recreational Allocation (Million Pounds Whole Weight)	Change in Recreational Allocation from Alt1	Change in Economic Value to Anglers Relative to Alt1 (Millions\$)
1 (Status Quo)	5.39		
2	5.72	0.33	\$2.72
3	5.94	0.55	\$4.53
4	6.49	1.1	\$9.06
5	5.88	0.49	\$4.03
6	6.35	0.96	\$7.90

Table 10. Change in Benefits (Millions of Dollars) to the Commercial and Recreational Sectors and the Net Benefits of the Alternative Allocations Relative to the Status Quo (Alternative 1)

Alternative	Commercial	Recreational	Net
2	-\$0.80	\$2.72	\$1.92
3	-\$1.40	\$4.53	\$3.13
4	-\$2.90	\$9.06	\$6.16
5	-\$1.30	\$4.03	\$2.73
6	-\$2.50	\$7.90	\$5.40

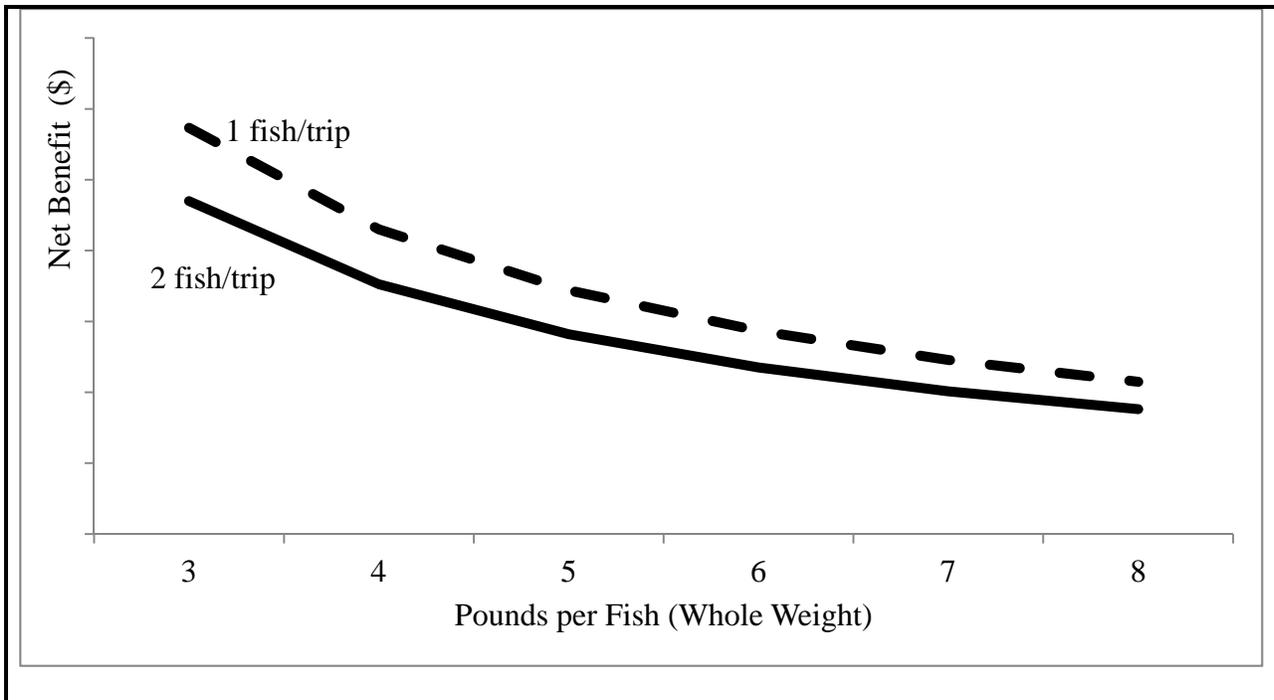


Figure 1. Sensitivity of Recreational Net Benefit Calculations to Pounds per Fish and the Number of Fish Harvested per Trip.

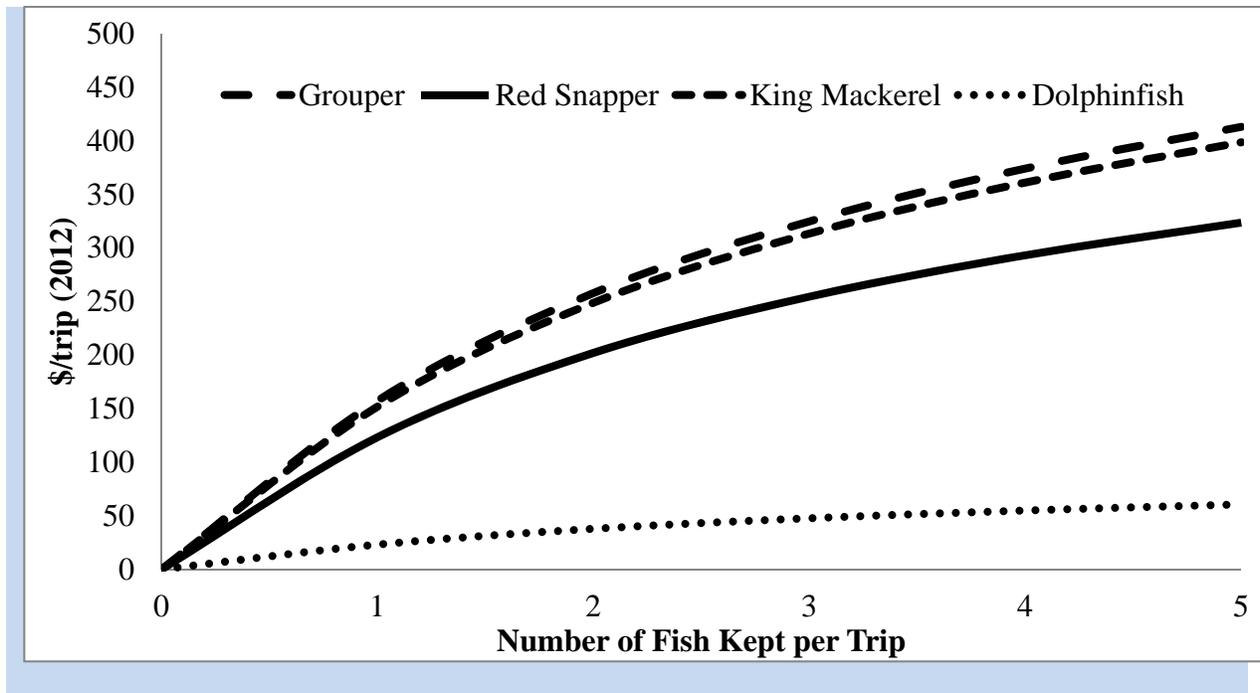


Figure 2. Average Angler Total Benefit by Number of Fish Kept per Trip for each Species

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Appendix A: Discussion of the Derived Demand Approach to Benefits Estimation in the Commercial Sector

This approach models how fishermen choose their profit maximizing species mix at the trip level given quasi-fixed inputs (e.g., capital and labor available), weather, resource constraints, relative product prices, etc. These models can examine how fishermen would change their harvest mix and revenue stream if either quota(s) were imposed or quota levels were changed. This can be done by imputing a *virtual or net dockside price* (i.e., *dockside price minus allocation price*) for each of the quota-constrained species.²³ After determining the impact of virtual prices on the harvest level and mix of the fleet, the economic impact of quota changes can be calculated by integrating under the allocation price curve.

For the red snapper allocation analysis, we estimated the output (harvest) supply functions derived from two different Leontief revenue specifications. The first specification included two species (i.e., red snapper and other species) and the second one included three species (i.e., red snapper, other mid-water snappers-mainly vermilion snapper, and other species). These models regressed each species (or species' group) harvest per trip against relative dockside prices (virtual price for red snapper since it was quota constrained), quasi-fixed input (i.e., crewdays*vessel length), and dummy variables for quarter, year, and region (i.e., Panhandle Florida plus Alabama and Mississippi, Non-Panhandle Florida, Texas, Louisiana).

In general, we found that own-price elasticity of supply of red snapper was positive but fairly inelastic suggesting that fishermen have limited ability to re-adjust their production of red snapper in response to changes in its own-virtual price. To examine the economic effect of changing quota levels, we assumed that fishermen would take same number of trips as in 2012 and would readjust

²³ Virtual prices are equivalent to those 'net' dockside prices (i.e., dockside price minus allocation price) that would induce a fishing vessel operating without quota constraints to operate in the same manner as when faced with quotas (Squires and Kirkley, 1991).

their catch mix in response to changes in red snapper's virtual price. Unfortunately, these models predicted that the fleet could not exhaust the 36.4% increase in red snapper quota, from 3.71 mp gutted weight (gw) in 2012 to 5.06 mp gw in 2013, by re-organizing their product mix at the 2012 effort levels indicating that the relatively large quota increase could only be absorbed with additional trips. Because we do not have the information on rental prices for quasi-fixed inputs (i.e., of crew days times vessel length) currently we cannot determine how effort would change in response to changes in the quota/virtual price (Squires and Kirkley, 1991).

Appendix B: Materials for the Monte Carlo Simulation in the Recreational Sector Analysis

Table B.1. Mean Parameters

Species	Type	Symbol	Mean Estimate	Covariance Matrix Label
dolphin	Beta	β_3	2.1	d
dolphin, grouper	Cholesky	ρ_{13}	0.549	dg
dolphin, red snapper	Cholesky	ρ_{23}	0.423	dr
grouper	Beta	β_1	1.43	g
king mackerel	Beta	β_4	1.38	k
king mackerel, dolphin	Cholesky	ρ_{34}	0.985	kd
king mackerel, grouper	Cholesky	ρ_{14}	0.813	kg
king mackerel, red snapper	Cholesky	ρ_{24}	0.0242	kr
red snapper	Beta	β_2	1.12	r
red snapper, grouper	Cholesky	ρ_{12}	0.859	rg
dolphin, dolphin	Cholesky	ρ_{33}	10.7	dd
grouper, grouper	Cholesky	ρ_{11}	1.51	gg
king mackerel, king mackerel	Cholesky	ρ_{44}	1.69	kk
red snapper, red snapper	Cholesky	ρ_{22}	1.03	rr

Table B.2. Covariance Matrix

	d	dg	dr	g	k	kd	kg	kr	r	rg	dd	gg	kk	rr
d	0.0873	0.00136	0.00101	0.00349	0.00422	0.00201	0.00111	2.96E-05	0.0028	0.00115	-0.00072	0.00217	0.00243	0.00158
dg	0.00136	0.00159	0.000848	0.000605	0.00048	0.00111	0.000153	3.24E-05	0.000396	0.000316	0.00495	0.000587	0.000635	0.000371
dr	0.00101	0.000848	0.00127	0.000445	0.000372	0.000806	0.000184	-5.6E-05	0.000309	0.000256	0.00438	0.000434	0.0005	0.000343
g	0.00349	0.000605	0.000445	0.00365	0.00171	0.000997	0.00079	6.19E-05	0.00131	0.000792	0.00982	0.00159	0.00168	0.00102
k	0.00422	0.00048	0.000372	0.00171	0.00416	0.000905	0.000852	3.23E-05	0.0012	0.000784	0.00925	0.00134	0.00166	0.000872
kd	0.00201	0.00111	0.000806	0.000997	0.000905	0.00269	0.000479	5.12E-05	0.000694	0.000566	0.00843	0.000982	0.00114	0.000656
kg	0.00111	0.000153	0.000184	0.00079	0.000852	0.000479	0.0022	-0.00019	0.000613	0.000656	0.00636	0.000971	0.000918	0.000552
kr	2.96E-05	3.24E-05	-5.6E-05	6.19E-05	3.23E-05	5.12E-05	-0.00019	0.000841	1.44E-05	-5.6E-05	-0.00015	6.38E-05	0.000101	6.16E-05
r	0.0028	0.000396	0.000309	0.00131	0.0012	0.000694	0.000613	1.44E-05	0.00291	0.000575	0.00713	0.00106	0.00118	0.00071
rg	0.00115	0.000316	0.000256	0.000792	0.000784	0.000566	0.000656	-5.6E-05	0.000575	0.00146	0.00632	0.00103	0.000991	0.000559
dd	-0.00072	0.00495	0.00438	0.00982	0.00925	0.00843	0.00636	-0.00015	0.00713	0.00632	0.132	0.0103	0.012	0.00657
gg	0.00217	0.000587	0.000434	0.00159	0.00134	0.000982	0.000971	6.38E-05	0.00106	0.00103	0.0103	0.00239	0.00172	0.00101
kk	0.00243	0.000635	0.0005	0.00168	0.00166	0.00114	0.000918	0.000101	0.00118	0.000991	0.012	0.00172	0.00312	0.00111
rr	0.00158	0.000371	0.000343	0.00102	0.000872	0.000656	0.000552	6.16E-05	0.00071	0.000559	0.00657	0.00101	0.00111	0.00144

Mathematica Notebook for the Net Benefit of 2 Red Snapper Harvested on a Trip (referred to as “Net WTP” in the Notebook)

Total willingness-to-pay (WTP) function

```
twtp=b ArcSinh[h];
```

Parameters from the 2003 SPCE model (grouper, red snapper, dolphinfish, and king mackerel)

Mean (scaled) random parameter vector and corresponding covariance matrix

```
betas={1.430,1.120,2.100,1.380} ;  
cov={{3.450,1.510,5.901,0.205},  
      {1.510,1.970,4.543,0.557},  
      {5.901,4.543,115.000,10.579},  
      {0.205,0.557,10.579,4.840} };
```

Select the number corresponding to the species for the rest of the analysis (red snapper is species 2)

```
sn=2.;
```

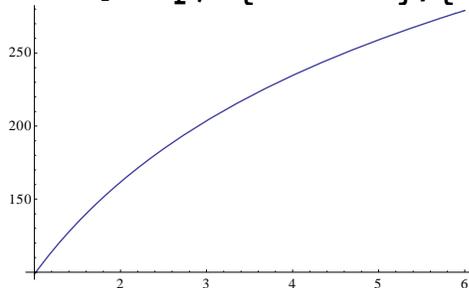
Plot of total willingness-to-pay parameterized with the mean species parameter from the 2003 SPCE model

Select the mean parameter of the species of interest and rescale

```
beta=betas[[sn]] 100.;
```

Plot of the total from one to six fish

```
Plot[twtp/.{b→beta},{h,1,6}]
```



Total WTP per trip at one and two fish

```
twtp/.{b→beta, h→1}  
twtp/.{b→beta, h→2}
```

```
98.7138
161.687
```

Set seed for random draws

```
SeedRandom[1234];
```

Function to select rows from a matrix based on criteria applied to one column.

```
select[table:{colNames_List,rows_List},where[condition_] :=
With[{self=Apply[Function,Hold[condition]/.Dispatch[Thread
[colNames→Thread[Slot[Range[Length[colNames]]]]]]},Select[
{rows},self@#&]];
```

Parameter estimates and related covariance matrix from the RPL model, including the heterogeneity (covariance) terms.

```
betas0={2.1,0.549,0.423,1.43,1.38,0.985,0.813,0.0242,1.12,0
.859,10.7,1.51,1.69,1.03};
cov0=Import["C:\\Users\\dcarter\\Desktop\\working\\projects
\\seConjoint2003\\output\\BIOGEME\\runToGetVCOV\\vcov.csv"]
;
```

Create a multivariate normal distribution with the mean parameter estimates and related covariance matrix from the RPL model.

```
betasn0=MultinormalDistribution[betas0,cov0];
```

Draw 10,000 vectors of the parameter estimates from the RPL model, including the heterogeneity (covariance) terms.

```
betasn0100=RandomVariate[betasn0,10000.] ;
```

Functions to correctly order the parameter vector and Cholesky matrix and to reconstruct the covariance matrix of the random parameters.

```
cbetas[b_] := {b[[4]], b[[9]], b[[1]], b[[5]]}
ccol[c_] :=
(
cc={
{c[[12]],0,0,0},
{c[[10]],c[[14]],0,0},
{c[[2]],c[[3]],c[[11]],0},
{c[[7]],c[[8]],c[[6]],c[[13]]}
}
)
ccov[c_] :=
(
ccol[c].ConjugateTranspose[ccol[c]]
)
```

```

)
MatrixForm[ccol[betas0]]
MatrixForm[ccov[betas0]]
MatrixForm[cov]
(
  {
    {1.51, 0, 0, 0},
    {0.859, 1.03, 0, 0},
    {0.549, 0.423, 10.7, 0},
    {0.813, 0.0242, 0.985, 1.69}
  }
)
(
  {
    {2.2801, 1.29709, 0.82899, 1.22763},
    {1.29709, 1.79878, 0.907281, 0.723293},
    {0.82899, 0.907281, 114.97, 10.9961},
    {1.22763, 0.723293, 10.9961, 4.48788}
  }
)
(
  {
    {3.45, 1.51, 5.901, 0.205},
    {1.51, 1.97, 4.543, 0.557},
    {5.901, 4.543, 115., 10.579},
    {0.205, 0.557, 10.579, 4.84}
  }
)

```

Function to calculate the net WTP for *fish* red snapper on a trip when red snapper is available given d draws from a multivariate normal distribution of random parameters given a vector *betasa* including the four preference parameters and the 10 elements of the lower triangular Cholesky matrix corresponding with the preference parameter covariance matrix.

```

netWTP[fish_,d_,betasa_]:=
(
betasns100=Table[cbetas[betas]+Transpose[ccol[betas]].RandomVariate[NormalDistribution[],4],{i,1,d}] 100;
wtp2=Table[twtp/.{b->betasns100[[All,i]],
h->fish},{i,1,4}];
wtp2[[3,All]]=wtp2[[3,All]]/10;
wtp2t=Transpose[wtp2];
tt=Table[Max[wtp2t[[i,All]]]==wtp2t[[i,2]],{i,d}];
wtp2tf=MapThread[Prepend,{wtp2t,tt}];
wtp2tff=Prepend[wtp2tf,{"rsmax","wtp2g","wtp2r","wtp2d","wtp2k"}];
wtp2tff0=select[wtp2tff,where["rsmax"==True]];
tt2=Table[wtp2tff0[[i,3]]-
Max[wtp2tff0[[i,{2,4,5}]]],{i,Length[wtp2tff0]};
drs=Length[tt2];

```

```
{N[drs/d], If[drs<=0, 0, Mean[tt2]], If[drs>0, 0, Median[tt2]]}
)
```

Test evaluation for 2 fish using 10,000 draw and the means of the four preference parameters and the 10 elements of the lower triangular Cholesky matrix

```
netWTP[2, 10000., Mean[betasn0]]
{0.2328, 114.867, 93.2638}
```

Launch the kernels used for parallel evaluation and distribute the netWTP function to each kernel.

```
LaunchKernels[]
DistributeDefinitions[netWTP]

{KernelObject[1, local], KernelObject[2, local], KernelObject[3,
local], KernelObject[4, local], KernelObject[5, local], KernelO
bject[6, local]}
```

Use the 10,000 vectors of the parameter estimates from the RPL model to run the net red snapper WTP function 10,000 times.

```
netWTPmc=ParallelTable[netWTP[2, 10000., RandomVariate[Multin
ormalDistribution[betas0, cov0]]], {i, 1., 10000.}];
```

Summary statistics from the run of the net red snapper WTP function 10,000 times

```
Mean[netWTPmc]
Median[netWTPmc]
Quantile[netWTPmc, 1-.975]
Quantile[netWTPmc, .975]
(Quantile[netWTPmc, .975] - Mean[netWTPmc]) / Mean[netWTPmc]
(Quantile[netWTPmc, .025] - Mean[netWTPmc]) / Mean[netWTPmc]
{0.22749, 114.063, 92.7491}
{0.2274, 114.066, 92.6894}
{0.2032, 104.709, 84.086}
{0.2525, 123.732, 101.737}
{0.109939, 0.084772, 0.0969103}
{-0.106774, -0.0822161, -0.0934628}
```

SENSITIVITY RUNS TO EVALUATE THE EFFECT OF RECALIBRATED RECREATIONAL REMOVALS AND RECREATIONAL SELECTIVITY ON ESTIMATES OF OFL, ABC AND MSY FOR GULF RED SNAPPER

Southeast Fisheries Science Center

March 9, 2015

1. INTRODUCTION

During the January 2015 Gulf of Mexico Fishery Management Council (Council) Standing and Special Reef Fish SSC meeting, the Southeast Fisheries Science Center presented the results of the Red Snapper assessment update. Center staff noted that estimates of the overfishing limit (OFL), acceptable biological catch (ABC) and maximum sustainable yield (MSY) were higher for the update than for the most recent benchmark stock assessment (SEDAR 31) and noted that this disparity likely resulted from a recent recalibration of recreational landing and discard estimates (MRIP) and a new selectivity time-block (2011-2014) added to the update assessment to accommodate a recent increase in the size of red snapper landed in the recreational sector. The Council requested two sensitivity analyses to further elucidate the reason for this disparity:

1. Project the annual OFLs at $F_{26\%SPR}$ and the ABCs at $F_{REBUILD}$ from 2015-2032 using pre-MRIP recalibrated estimates.
2. Project the annual OFLs at $F_{26\%SPR}$ and the ABCs at $F_{REBUILD}$ from 2015-2032 using pre-MRIP recalibrated estimates and no new recreational selectivity block for 2011-2013.

2. METHODS

The requested sensitivity runs are based on the 2014 update of the SEDAR 31 Gulf of Mexico red snapper assessment (SEDAR 31). Like SEDAR 31, the update assessment and associated projections were conducted using Stock Synthesis (SS: V3.24U¹). SS is an integrated statistical catch-at-age model which is widely used for stock assessments in the United States and throughout the world. The model, and accompanying documentation and examples are available on the NOAA Toolbox website (NOAA 2011: <http://nft.nefsc.noaa.gov/SS3.html>). Descriptions of SS algorithms and options were also summarized by Methot (2000) and Methot and Wetzel (2013).

Deterministic projections were run to evaluate stock status and associated retained yields for the specified sensitivity runs. Projections were run from 2015 to 2032 using the base model configuration with provisional 2014 catches as reviewed by the GMFMC SSC on February 19, 2015. Projections were run assuming that selectivity, discarding, and retention would continue as they had in three most recent years (2011-2013). The expected fishing effort levels for the 6 bycatch fleets (shrimp, recreational closed season, and commercial without IFQ allocation) in 2015-2032 were assumed be the same as in 2013. Forecast recruitments were derived from the model estimated Beverton-Holt stock-recruitment relationship, based on the recent time period (i.e., 1984-2013).

The overfishing limit (OFL) and acceptable biological catch (ABC) were calculated as stipulated by the GMFMC SSC during their January 2015 meeting in Tampa, Florida. OFL was calculated as the median (50th percentile) of the probability density function (PDF) of retained yield (millions of lbs) using the projection of $F_{SPR26\%}$. The acceptable biological catch (ABC) was calculated at a P^* of 0.427 (the 42.7th percentile) of the PDF of retained yield using the projection of $F_{REBUILD}$, which achieves a gulfwide spawning potential ratio (SPR) of 26% in 2032. A P^* of

¹ Stock Synthesis Version 3.24U was made available by Richard Methot (Richard.Methot@noaa.gov) on March 4, 2015. This version allows allocation fractions to vary annually during the projection.

0.427 implies a 42.7% probability of overfishing in any given year. Both sensitivity runs used a 51% commercial: 49% recreational allocation (2015-2032) when projecting OFLs and ABCs.

3. RESULTS AND DISCUSSION

Two important changes were made to the 2014 red snapper update assessment: (1) recent recreational removals were increased owing to a recent recalibration of MRIP recreational landing and discard estimates (**Figure 1**), and (2) a new selectivity time-block (2011-2014) which was added to accommodate a recent increase in the size of red snapper landed in the recreational sector (**Figure 2**). These modifications did not notably affect annual estimates of spawning stock biomass relative to the unfished condition (SSB/SSB₀; **Figure 3**) or fishing mortality (**Figure 4**) but had a modest effect on estimated recruitment (**Figure 5**).

Estimates of OFL and ABC were sensitive to the treatment of MRIP removals and recent recreational selectivity (**Table 1-2, Figure 6-7**). The lowest estimated OFL and ABC values occurred when using the pre-recalibrated MRIP estimates without allowing new estimates of 2011-2014 selectivity for the recreational fisheries. Intermediate OFL estimates resulted from using pre-recalibrated MRIP estimates while allowing the new selectivity estimates, and the highest OFL estimates were associated with the approved base model (Recalibrated MRIP, New Selectivity Block).

The results described in this report are dependent on a number of strong assumptions: (1) that selectivity, discarding, and retention will continue as they have in the three most recent years (2011-2013); (2) that the expected fishing effort levels for the 6 bycatch fleets will continue at 2014 levels; and (3) that forecast recruitments will continue at the average of the recent time period (i.e., 1984-2013). If any of these assumptions are violated (e.g. by a change in selectivity, retention/high-grading, environmentally driven recruitment fluctuations) the projected yields will be lower/higher than those required to permit recovery of the red snapper stock by 2032.

4. ACKNOWLEDGMENTS

Stock assessment products depend on a large team of data providers and analysts. In addition to the analytical team (Shannon Cass-Calay (lead), Clay Porch, John Walter and Jake Teztlaff, this update assessment would not have been possible without the substantial efforts of Refik Orhun, Neil Baertlein, Jessica Stephen and Andy Strelcheck (Commercial Catch), Vivian Matter (Recreational Catch and Discards), Kevin McCarthy (Commercial Discards and CPUE), Adyan Rios (Recreational CPUE), Robert Allman, Beverley Barnett and Linda Lombari-Carlson (Life History), Adam Pollock and Walter Ingram (Fishery Independent CPUE), Rick Hart and Jeff Isely (Shrimp Bycatch), Ching-Ping Chih (Size and Age Composition), Sean Powers and John Walter (ROV age composition), Matthew Campbell (Discard Mortality) Beverly Sauls and Alisha Gray (Headboat/Charter Discard Size/Age Comp), and Elizabeth Scott-Denton (Shrimp Bycatch Size/Age Comp).

5. LITERATURE CITED

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Table 1. OFL (retained yield in millions of lbs whole weight) for the base model and two sensitivity runs. OFL was calculated as the median (50th percentile) of the probability density function (PDF) of retained yield (millions of lbs) using the projection of FSPR26%.

YEAR	BASE	Pre-MRIP Recalibration	Pre-MRIP Recalibration No Sel Block
2015	16.10	15.12	13.42
2016	15.31	14.38	12.68
2017	14.79	13.90	12.31
2018	14.25	13.35	12.04
2019	13.60	12.71	11.69
2020	13.17	12.31	11.49
2021	12.93	12.08	11.36
2022	12.79	11.94	11.27
2023	12.77	11.90	11.25
2024	12.77	11.90	11.26
2025	12.78	11.90	11.26
2026	12.78	11.89	11.26
2027	12.78	11.89	11.27
2028	12.79	11.89	11.27
2029	12.79	11.89	11.27
2030	12.80	11.89	11.28
2031	12.80	11.89	11.28
2032	12.80	11.89	11.28
EQUIL	12.91	11.96	11.37

Table 2. ABC (retained yield in millions of lbs whole weight) for the base model and two sensitivity runs. ABC was calculated at a P* of 0.427 (the 42.7th percentile) of the PDF of retained yield using the projection of F_{REBUILD}, which achieves a gulfwide spawning potential ratio (SPR) of 26% in 2032. A P* of 0.427 implies a 42.7% probability of overfishing in any given year.

Year	BASE	Pre-MRIP Recalibration	Pre-MRIP Recalibration No Sel Block
2015	14.29	13.63	11.97
2016	13.96	13.27	11.59
2017	13.75	13.03	11.43
2018	13.39	12.63	11.28
2019	12.85	12.08	11.03
2020	12.49	11.74	10.90
2021	12.29	11.56	10.82
2022	12.18	11.44	10.75
2023	12.17	11.42	10.75
2024	12.19	11.42	10.76
2025	12.21	11.43	10.78
2026	12.22	11.43	10.77
2027	12.23	11.43	10.78
2028	12.24	11.44	10.79
2029	12.25	11.44	10.80
2030	12.26	11.44	10.80
2031	12.27	11.45	10.78
2032	12.27	11.45	10.84
EQUIL	12.40	11.53	10.93

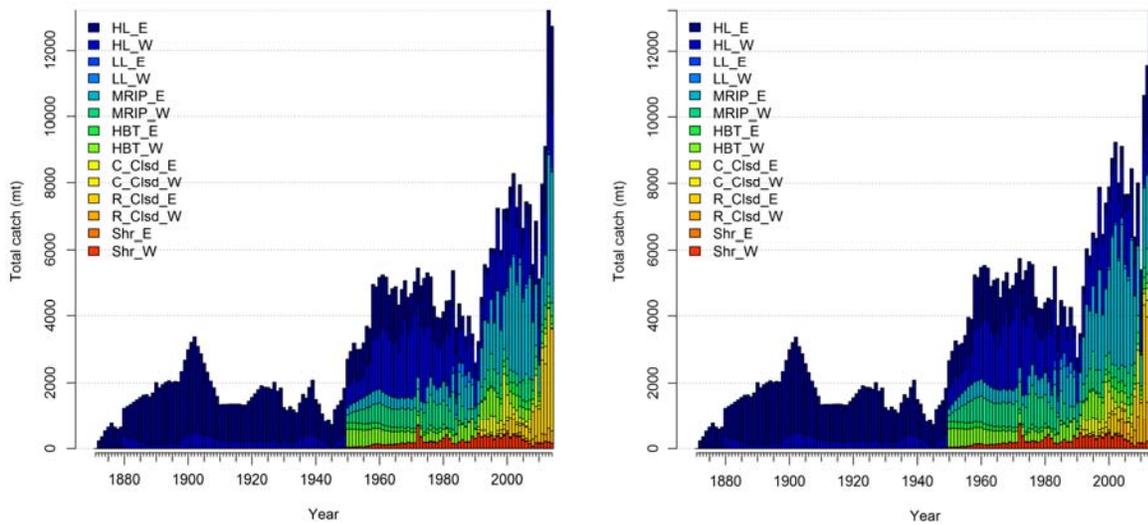


Figure 1. Gulfwide estimated red snapper removals before (left) and after (right) the MRIP recalibration.

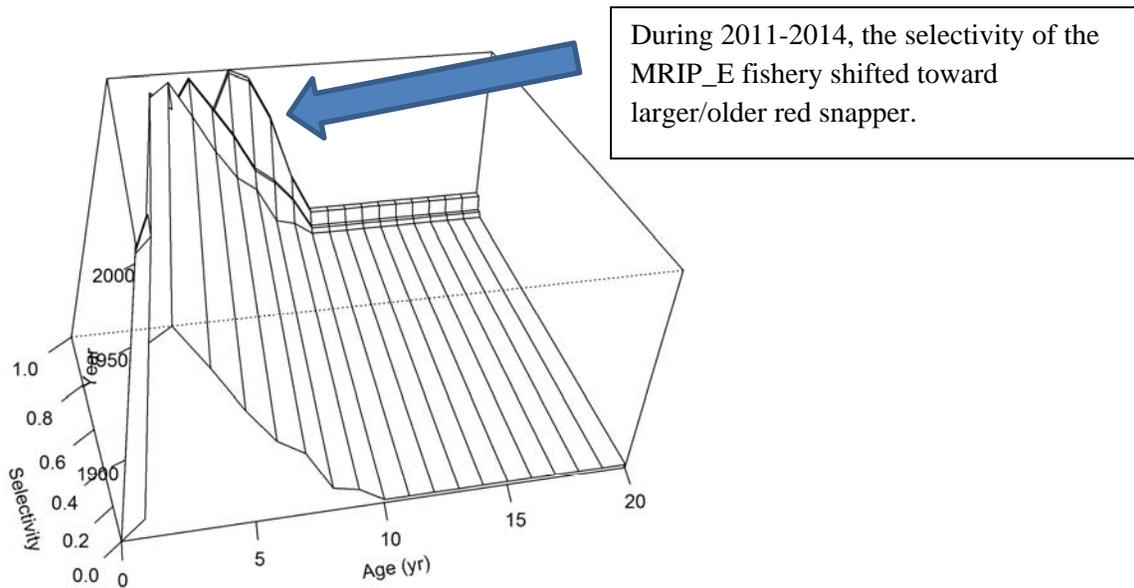


Figure 2. A representative example of the change in the selectivity of the recreational fisheries during 2011-2014. Data indicates that recreational fishers have shifted to larger/older red snapper in the most recent years.

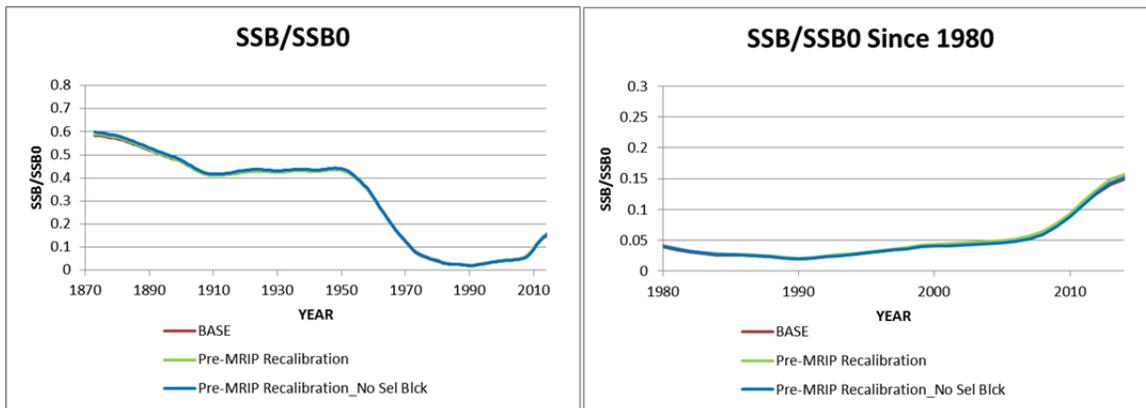


Figure 3. Annual estimates of spawning stock biomass relative to unfished levels during 1872-2013 (left) and in the recent period (right).

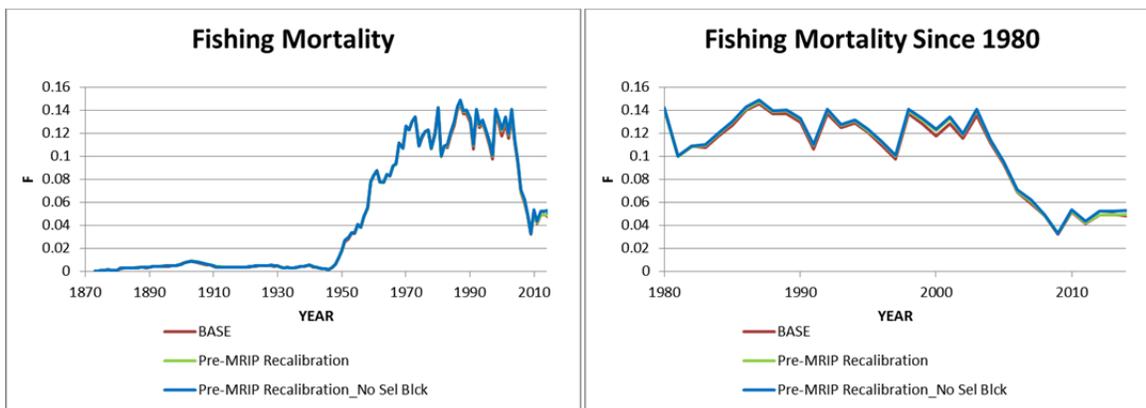


Figure 4. Annual estimates of fishing mortality (computed across all ages) during 1872-2013 (left) and in the recent period (right).

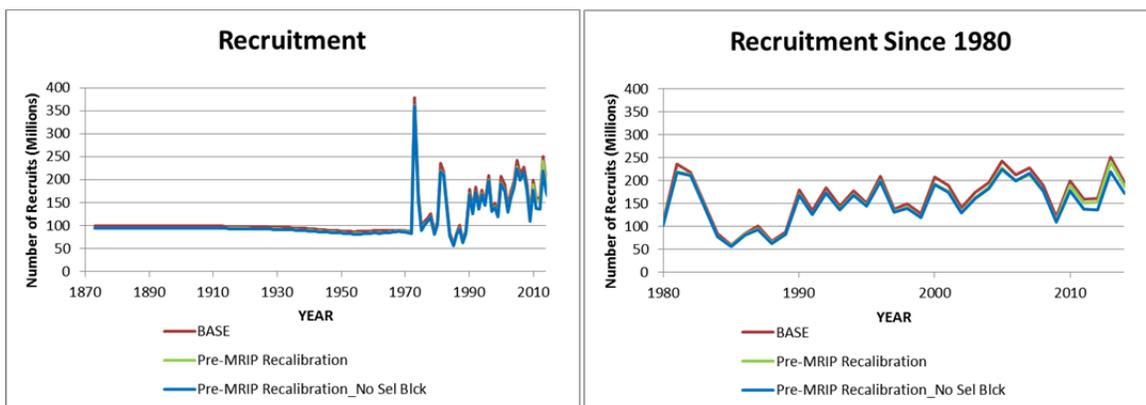


Figure 5. Annual estimates of recruitment (Age 0) during 1872-2013 (left) and in the recent period (right).

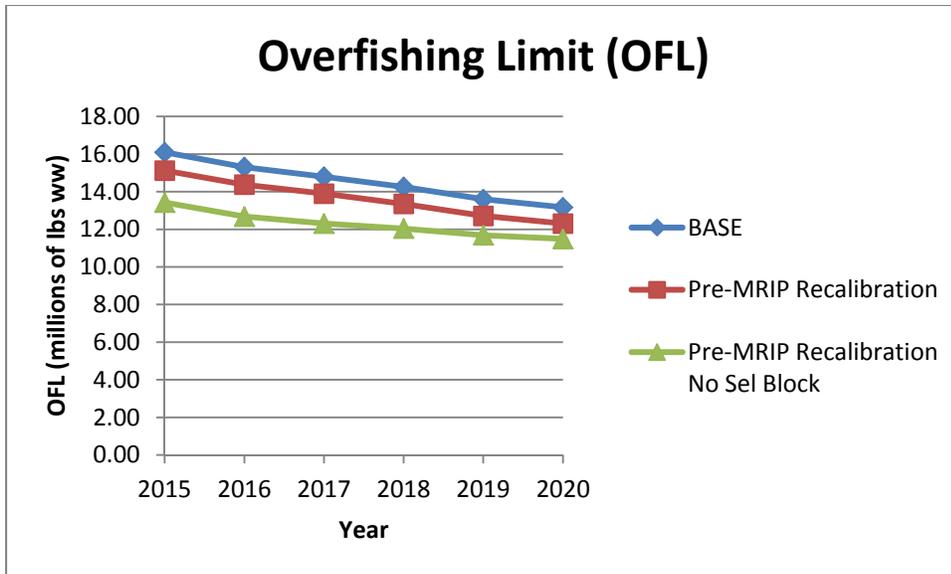


Figure 6. OFL (retained yield in millions of lbs whole weight) for the base model and two sensitivity runs. OFL was calculated as the median (50th percentile) of the probability density function (PDF) of retained yield (millions of lbs) using the projection of FSPR26%.

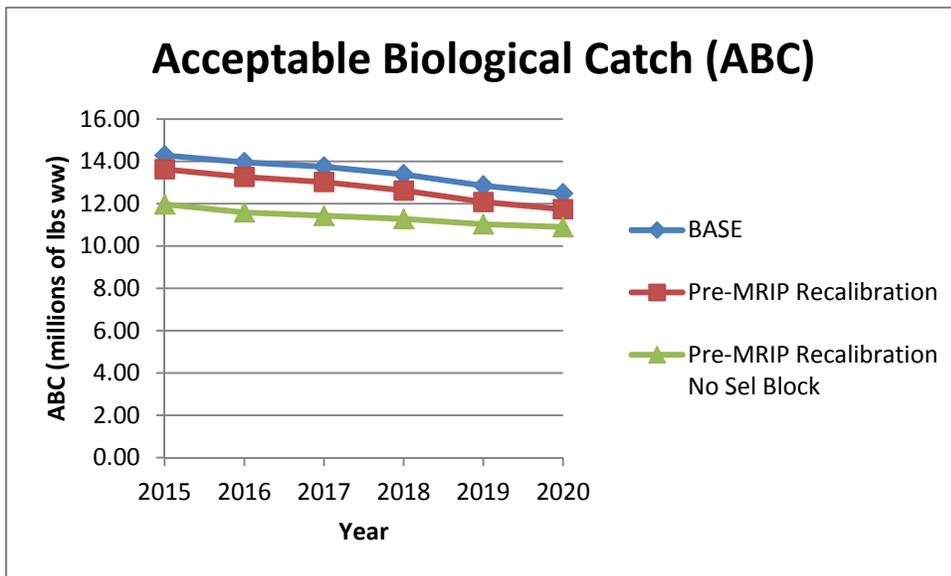


Figure 7. ABC (retained yield in millions of lbs whole weight) for the base model and two sensitivity runs. ABC was calculated at a P* of 0.427 (the 42.7th percentile) of the PDF of retained yield using the projection of $F_{REBUILD}$, which achieves a gulfwide spawning potential ratio (SPR) of 26% in 2032. A P* of 0.427 implies a 42.7% probability of overfishing in any given year.

Draft: Amendment 39- Plan Approval

- Each State would have the opportunity to submit a Conservation Equivalency Plan (CEP) to establish regionalized regulations for the recreational harvest of red snapper on a yearly basis.
- Timeline (on or before the following dates):
 - **July 1st:** The State provides a brief written description of its preliminary CEP for the following year (e.g., the regulations they hope to implement the following year if supported by the current year landings and effort data) to NMFS. At this time, NMFS may flag any high-level concerns or alternative process requirements (e.g., additional National Environmental Policy Act (NEPA) documentation required if the proposed regulations are outside the scope of analysis in Amendment 39).
 - **September 1st:** The State submits the CEP to NMFS for review.
 - **October 1st:** NMFS responds to the State with the preliminary determination whether the plan is a conservation equivalent to the federal default regulations. At this time, NMFS may approve the plan or request a revised CEP.
 - **October 15th:** The State provides a revised CEP to NMFS for approval, if necessary.
 - **November 1st:** NMFS provides final approval for CEPS. If a State's CEP was not approved or did not submit a CEP, then the State would be subject to the federal default regulations.
 - **January 1st (or sooner):** NMFS publishes a notice in the federal register identifying States with approved CEPs. States without approved CEPs would be subject to the federal default regulations.
- Contents of a CEP
 - Point of Contact for the CEP
 - Point of Contact with the authority to close the fishery
 - Proposed CEP including season structure, bag limit, and size limit.
 - Specify if the CEP is intended to be applicable for one or two years. Prior to approving the second year of the plan, it would be evaluated based on data from the first year. The plan may require revisions based on the NMFS review.
 - Analysis demonstrating the ability of the CEP to constrain recreational harvest of red snapper to the allocated quota with a description of the methodology.
 - Summarize the previous year's performance (e.g., Was the harvest constrained at or below the regional quota?).
 - Explain how the CEP will be enforced
 - If applicable, provide a description of the in-season monitoring program and plan to close the fishery if the quota is reached.
 - If necessary, the NEPA documentation supporting the proposed CEP. This would only apply for a CEP management strategies beyond the range analyzed in Amendment 39.
 - Any other supporting documentation for the CEP, such as scientific research.

Notes:

- The September 1st deadline for submitting the CEP would allow the States an opportunity to use preliminary data from their monitoring plans and Wave 4 of MRIP.
- The timeline allows the State an opportunity to submit a revised CEP for approval.
- NMFS anticipates providing guidance to the states if they need to prepare an EA; however, the state would need to take the lead on the document development and understand that it may take longer to process the CEP and require additional rulemaking.
- If NMFS recommends preparing an EA, the state should submit the documents as early as possible to allow time for processing and implementation.

Regional Management of Recreational Red Snapper



Updated Draft Actions and Alternatives for Amendment 39 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

March 2015



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Gulf of Mexico Reef Fish Amendment 39

Draft Environmental Impact Statement (DEIS) Cover Sheet

Regional Management of Recreational Red Snapper Amendment 39 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico.

Abstract:

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Type of Action

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Legislative
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Filing Dates with EPA

Notice of intent (NOI) to prepare EIS published: May 13, 2013
Draft environmental impact statement (DEIS) filed with EPA:
DEIS comment period ended:
EPA comments on DEIS:

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
ACT	annual catch target
ALS	Accumulated Landings System
AM	accountability measure
BP	British Petroleum
CE	conservation equivalency
Council	Gulf of Mexico Fishery Management Council
DEIS	Draft Environmental Impact Statement
EEZ	exclusive economic zone
EFH	Essential Fish Habitat
EFP	exempted fishing permit
EIS	Environmental Impact Statement
EJ	Environmental Justice
ESA	Endangered Species Act
FMP	Fishery Management Plan
Gulf	Gulf of Mexico
HBS	Southeast Headboat Survey
IFQ	individual fishing quota
LDWF	Louisiana Department of Wildlife and Fisheries
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
mp	million pounds
MRFSS	Marine Recreational Fisheries Survey and Statistics
MRIP	Marine Recreational Information Program
MSST	minimum stock size threshold
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
OFL	overfishing limit
PDF	probability density function
SAV	submerged aquatic vegetation
SEAMAP	Southeast Area Monitoring and Assessment Program
Secretary	Secretary of Commerce
SEDAR	Southeast Data Assessment and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office of NMFS
SSB	spawning stock biomass
SSC	Scientific and Statistical Committee
SPR	spawning potential ratio
TAC	total allowable catch
TL	total length
TPWD	Texas Parks and Wildlife Department
VEC	valued environmental components
ww	whole weight
YPR	yield per recruit

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EXECUTIVE SUMMARY

[To be completed.]

FISHERY IMPACT STATEMENT

[To be completed. Not a part of the DEIS.]

CHAPTER 1. INTRODUCTION

1.1 Background

Currently, the recreational harvest of red snapper in the Gulf of Mexico (Gulf) exclusive economic zone (EEZ) is constrained by a 2-fish bag limit, 16-inch total length (TL) minimum size limit, and a fishing season that begins on June 1 and closes when the quota is projected to be caught. Additional federal regulations pertaining to recreational red snapper,¹ such as permit requirements and gear restrictions, are provided in Appendix G. Since 1996, the recreational fishing season for red snapper has become progressively shorter (Table 1.1.1). Shorter seasons have continued despite an annual increase in the quota since 2010, as the quota continues to be caught in a shorter amount of time. In 2013, the federal season was initially estimated to be 28 days. The results of the benchmark assessment (SEDAR 31 2013) were released shortly before the start of the season and allowed for an increase in the recreational and commercial quotas. With these increases, the National Marine Fisheries Service (NMFS) opened a supplementary recreational season for October 1 through 14. In 2014, red snapper harvest in federal waters was open for nine days.

Regional Management

- Would allow regions (i.e., Gulf States) to specify optimal management measures for anglers' recreational harvest of red snapper.
- The **Delegation** provision in Magnuson-Stevens Act can be used to provide authority to a state to regulate fishing vessels beyond their state waters, provided its regulations are consistent with the fishery management plan and rebuilding timeline. Requires $\frac{3}{4}$ vote of Council members to pass.
- **Conservation equivalency** refers to allowing individual regions to propose and establish varied regional management measures such that the aggregate harvest and impacts on the stock from all regions is equivalent to the conservation protections on the resource provided by Gulf-wide management measures.

Fishermen from different areas of the Gulf have requested more flexibility in recreational red snapper management so that regulations provide greater socioeconomic benefits to their particular area. Therefore, the Gulf of Mexico Fishery Management Council (Council) is considering regional management as a way to provide greater flexibility in the management of recreational red snapper. Here, regional management refers to allowing regulations to be different for identified regions of the Gulf, in contrast to uniform recreational regulations applied to the entire EEZ. This document considers two alternatives for implementing regional

¹ Recreational red snapper refers to red snapper harvested by the recreational sector.

management (Action 1): 1) delegation of limited authority to regions to specify management measures and 2) development of conservation equivalency proposals, in which each region specifies the management measures (season structure, bag limit, and size limit) to be used to constrain harvest to its regional portion of the recreational quota. Under either alternative, regionally specific management measures may be more appropriate to the fishing preferences of local fishermen. For example, regional regulations could accommodate different tourist seasons or rough weather conditions, thereby optimizing fishing opportunities around the Gulf.

Table 1.1.1. Recreational red snapper federal season lengths, quotas, and landings.

Year	Federal season dates	Number of Days	Recreational Quota	Recreational Landings
1996	January 1 – December 31	365	4.47 mp	5.339 mp
1997	January 1 – November 27	330	4.47 mp	6.804 mp
1998	January 1 – September 30	272	4.47 mp	4.854 mp
1999	January 1 – August 29	240	4.47 mp	4.972 mp
2000	April 21 – October 31	194	4.47 mp	4.750 mp
2001	April 21 – October 31	194	4.47 mp	5.252 mp
2002	April 21 – October 31	194	4.47 mp	6.535 mp
2003	April 21 – October 31	194	4.47 mp	6.105 mp
2004	April 21 – October 31	194	4.47 mp	6.460 mp
2005	April 21 – October 31	194	4.47 mp	4.676 mp
2006	April 21 – October 31	194	4.47 mp	4.131 mp
2007	April 21 – October 31	194	3.185 mp	5.809 mp
2008	June 1 – August 4	65	2.45 mp	4.056 mp
2009	June 1 – August 14	75	2.45 mp	5.597 mp
2010	June 1 – July 23; Oct 1 – Nov. 21 (Fri, Sat., & Sun.)	77	3.403 mp	2.651 mp
2011	June 1 – July 18	48	3.866 mp	6.734 mp
2012	June 1 – July 16	46	3.959 mp	7.524 mp
2013	June 1 – June 28	42	5.390 mp	9.639 mp
2014	June 1 – June 9	9	5.390 mp	T.B.D.

Quotas and landings are in millions of pounds (mp) whole weight. In 2014, the season length was estimated based on an ACT of 4.312 mp, reduced from the 5.390 mp quota. Source: Southeast Fisheries Science Center (SEFSC) annual catch limit dataset, including calibrated landings from the Marine Recreational Information Program (MRIP), Texas Parks and Wildlife Department (TPWD), and the Southeast Headboat Survey (HBS) (January 2015).

Regional management would allow for certain management measures (such as bag limits and season dates) to vary around the Gulf, enabling the establishment of recreational red snapper management measures most suited to a given region. Regional management may not result in additional fishing days. However, providing flexibility to the regions to establish management measures most appropriate locally is expected to result in social and economic benefits by providing optimal fishing opportunities for a region’s share of the quota. Nevertheless, proposed regional measures must achieve the same conservation goals as the federal management measures in existence at a given time (i.e., constrain the catches of participating fishermen to the region’s allocation of the total recreational quota). Red snapper would remain a federally

managed species. The Council and NMFS would continue to oversee management of the stock. This includes continuing to comply with the mandate to ensure the red snapper annual recreational quota is not exceeded and that conservation objectives are achieved. The Scientific and Statistical Committee would continue to determine the acceptable biological catch (ABC), while the Council and NMFS would determine the total recreational red snapper quota which would be allocated among the regions. All federal regulations for the harvest of red snapper would remain effective. The existing bag limit, minimum size limit, and season start date would be designated the default federal regulations, and would be applied to a region not participating in regional management or to a region for which regional management is not active. NMFS would retain authority for the remaining management components, provided in Appendix G, including implementing quota adjustments, regulating permits, and managing the commercial red snapper individual fishing quota (IFQ) program.

There are benefits and challenges to adopting regional management. The benefits include providing regional level flexibility in the design of management measures. The consideration of regional differences in regulations may allow for optimization of social and economic benefits. For example, the distance from shore that anglers must travel to fish and the optimal times of year for fishing due to weather conditions or tourist seasons may vary, favoring different fishing seasons around the Gulf. The challenges of a regional management approach include a more complex regulatory program, because the single quota would need to be divided and managed separately for each region. Regional management also requires cooperation among federal and state marine resource managers. Effort shifting between regions may reduce the effectiveness of regionalized management. Also, the geographic distribution of the stock may change as the stock rebuilds, resulting in a pattern of landings that may not reflect the original allocation that is distributed. Monitoring catches on a regional level may be more costly than on a Gulf-wide level and require increased sample sizes for data collection. There may also be enforcement concerns, especially at regional boundaries, should fishing seasons and bag limits vary between regions.

History of Council Discussion on Regional Management

The Council has explored the concept of regional management for red snapper for several years. Regional management was discussed by the Ad Hoc Recreational Red Snapper Advisory Panel at its October 2008 meeting, and the Red Snapper Advisory Panel at its December 2009 meeting. Staff presented papers exploring red snapper regional management to the Council at the January 2009, August 2010, and October 2010 meetings (http://www.gulfcouncil.org/resources/briefing_book_archive.php).

In June 2012, the Louisiana Department of Wildlife and Fisheries presented a proposal to the Council for a recreational red snapper regional management pilot program. The Council requested that Louisiana provide further details of their proposed regional management plan for red snapper, and instructed staff to begin developing a plan amendment for regional management of recreational red snapper. At the August 2012 meeting, the Council requested development of a scoping document for regional management of recreational red snapper, which was then discussed at the October 2012 meeting. Scoping meetings were held in January 2013 (Appendix

C). The Council reviewed an options paper at its April 2013 meeting, and the first public hearing draft at its June 2013 meeting.

At the February 2013 meeting, the Council passed a motion granting NMFS the authority to reduce the recreational red snapper season in the EEZ off a Gulf state that implements less restrictive regulations for their state-water seasons. This reduction of the federal season was to compensate for the additional harvest that would occur in state waters as a result of the incompatible regulations. In response to the Council's motion, NMFS implemented a temporary emergency rule for the 2013 season (SERO 2013a) and announced the resulting state-specific seasons. On May 31, 2013, the U.S. District Court in Brownsville, Texas, voided the emergency rule. As a result, a Gulf-wide federal recreational red snapper season was established in the EEZ off of all five Gulf States. For 2013, the federal season length was 28 days, followed by a supplemental fall red snapper season for 14 days. In 2014, the season length in federal waters was 9 days long.

NMFS determines the length of the season based on the amount of the quota, the average weight of fish landed, the amount of fish estimated to be caught in extended state water seasons, and the estimated catch rates over time. Per the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), NMFS closes all federal waters for the recreational harvest of red snapper when the quota is projected to be met to ensure the entire recreational harvest, including the harvest in state waters, does not exceed the recreational quota.

1.2 Purpose and Need

The purpose of this action is to provide flexibility in the management of the red snapper recreational component in the reef fish fishery by restructuring the federal fishery management strategy to allow for the regional variation of regulations, and developing AMs for recreational overages to better account for biological, social, and economic differences among the regions of the Gulf.

The need is to adhere to the national standards (NSs) of the Magnuson-Stevens Act and to reconsider fishery management within the context of the regions of the Gulf. This reconsideration is intended to better prevent overfishing while achieving, on a continuing basis, the optimum yield from the harvest of red snapper by the recreational sector (NS 1); take into account and allow for variations among, and contingencies in the fisheries, fishery resources, and catches (NS 6); and provide for the sustained participation of the fishing communities of the Gulf and to the extent practicable, minimize adverse economic impacts on such communities (NS 8).

1.3 History of Management

This history of management covers events pertinent to recreational red snapper and the Council's consideration of regional management for the recreational harvest of red snapper. A complete history of management for the FMP is available on the Council's website:

http://www.gulfcouncil.org/fishery_management_plans/reef_fish_management.php

Prior to 1997, the recreational red snapper season was open year-round. Catch levels were controlled through minimum size limits and bag limits. The Sustainable Fisheries Act of 1996 required the establishment of quotas for recreational and commercial red snapper that, when reached, result in a prohibition on the retention of fish caught by each sector, respectively, for the remainder of the fishing year. From 1997 through 1999, NMFS implemented the recreational quota requirement through an in-season monitoring process that projected closing dates a few weeks in advance. For the years 1997 through 1999, the recreational red snapper season was closed earlier each year (Table 1.1.1). In 1999, an emergency rule temporarily raised the recreational red snapper minimum size limit from 15 to 18 inches TL towards the end of the season from June 4 through August 29 in an attempt to slow down the retained harvest rate. Without this emergency rule, the season would have closed on August 5. However, the rule resulted in a large increase in dead discards and the size limit was allowed to revert back to 15 inches TL the following year. Additional details regarding the seasons and regulation changes for red snapper are presented in Hood et al. (2007).

A February 2000 regulatory amendment (GMFMC 2000) replaced the system of in-season monitoring and closure projections with a fixed season based on a pre-season projection of when the recreational quota would be reached. The season for 2000 and beyond was initially set at April 15 through October 31, with a 16-inch TL minimum size limit, 4-fish bag limit, and zero bag limit of red snapper by the captain and crew of for-hire vessels. Shortly before the regulatory amendment was submitted to NMFS, the Council, at the request of representatives of the for-hire industry, withdrew the zero bag limit proposal for captain and crew. NMFS recalculated the season length under the revised proposal, and as a result, implemented the regulatory amendment with a recreational fishing season of April 21 through October 31. This recreational fishing season remained in effect through 2007.

In 2008, Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007) revised the rebuilding plan for red snapper. For the recreational sector, the rule implemented a June 1 through September 30 fishing season in conjunction with a 2.45 million pound (mp) recreational quota, 16-inch TL minimum size limit, 2-fish bag limit, and zero bag limit for captain and crew of for-hire vessels. The implementing regulations for this amendment created the June 1 through September 30 season by establishing fixed closed seasons of January 1 through May 31, and October 1 through December 31.

The amendment also addressed differences in shrimp and red snapper fishing effort between the western and eastern Gulf, and the impacts of fishing on the red snapper rebuilding plan. The Council considered options for modifying recreational red snapper fishing effort, including different season opening dates and weekend only or consecutive seasons, for the following regions: Texas and the rest of the Gulf; east and west of the Mississippi River; and maintaining consistent Gulf-wide regulations. The Council ultimately opted to maintain consistent Gulf-wide regulations, with a recreational season from June 1 through September 15. Early versions of the amendment proposed establishing regulations for commercial red snapper fishing for the eastern and western Gulf. The action was considered but rejected because establishing different regulations would compromise the objectives of the IFQ program and reduce the flexibility and efficiency of IFQ program participants.

The Southeast Data Assessment and Review (SEDAR) 7 red snapper assessment provided an option to set two regional total allowable catches with the Mississippi River as the dividing line (SEDAR 7 2005; SEDAR 7 Update 2009). These assessments assume there are two sub-units of the red snapper stock within this region, separated commercially by the Mississippi River (shrimp statistical grids 12 and 13) and recreationally at the Mississippi/Louisiana state line. The most information collected and developed thus far is based on the assessment process and follows this particular split, which is included as an alternative for regional management.

The Sustainable Fisheries Act required the NMFS Regional Administrator to close the recreational red snapper season when the quota is projected to be met. When Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007) was submitted to NMFS, the Council requested that the five Gulf States adopt compatible regulations in state waters. Florida adopted a compatible 2-fish bag limit, but maintained its state red snapper fishing season of April 15 through October 31, 78 days longer than the federal fishing season. Texas also maintained its 4-fish bag limit and year-round fishing season in its state waters. Prior to the start of the 2008 season, NMFS recalculated its projections for the recreational red snapper season in light of the state regulations, and projected that there would be a 75% probability that the recreational quota would not be exceeded if the season closed on August 5. As a result, NMFS set the 2008 season to be June 1 through August 4. In 2009, NMFS again recalculated its projections for the season length prior to the start of the recreational season and announced that the recreational season would be June 1 to August 15.

A February 2010 regulatory amendment (GMFMC 2010) increased the total allowable catch from 5.0 mp to 6.945 mp, which increased the recreational quota from 2.45 mp to 3.403 mp. However, NMFS estimated that in 2009, the recreational sector overharvested its quota by approximately 75%. In recalculating the number of days needed to fill the recreational quota, even with the quota increase, NMFS projected that the 2010 season would need to be shortened to June 1 through July 24, and published notice of those dates prior to the start of the recreational fishing season.

In April 2010, the Deepwater Horizon MC252 deep-sea drilling rig exploded and sank off the coast of Louisiana. Because of the resulting oil spill, approximately one-third of the Gulf was closed to fishing for much of the summer months. The direct loss of fishing opportunities due to the closure, plus the reduction in tourism throughout the coastal Gulf, resulted in a much lower catch than had been projected. After the recreational season closed on July 24, NMFS estimated that 2.3 mp of the 3.4 mp recreational quota remained unharvested (NMFS 2010). However, due to the fixed October 1 through December 31 closed season, NMFS could not reopen the recreational season without an emergency rule to suspend the closure. Consequently, the Council requested an emergency rule to provide the NMFS Regional Administrator with the authority to reopen the recreational red snapper season. After considering various reopening scenarios, the Council requested that the season be reopened for eight consecutive weekends (Friday, Saturday and Sunday) from October 1 through November 21 (24 fishing days).

A January 2011 regulatory amendment (GMFMC 2011a) increased the red snapper total allowable catch to 7.185 mp, with a 3.521 mp recreational quota and a 3.664 mp commercial quota. The final rule also established a 48-day recreational red snapper season, running June 1

through July 19. On August 12, 2011, NMFS published an emergency rule that, in part, increased the recreational red snapper quota by 345,000 lbs for the 2011 fishing year and provided the agency with the authority to reopen the recreational red snapper season later in the year, if the recreational quota had not been filled by the July 19 closing date. However, based on available recreational landings data through June, NMFS calculated that 80% of the recreational quota had been caught. With the addition of July landings data plus Texas Parks and Wildlife Department survey data, NMFS estimated that 4.4 to 4.8 mp were caught, well above the 3.865 mp quota. Thus, no unused quota was available to reopen the recreational fishing season.

A March 2012 regulatory amendment (GMFMC 2012d) increased the commercial and recreational quotas and removed the fixed recreational season closure date of October 1. The recreational season opened June 1 through July 11. However, the north-central Gulf experienced extended severe weather during the first 26 days of the 2012 recreational red snapper fishing season, including Tropical Storm Debby. Because of the severe weather, NMFS extended the season by six days and closed on July 17.

A March 2013 framework action (GMFMC 2013a) increased the commercial and recreational red snapper quotas from a combined 8.08 mp to 8.46 mp. This was the result of new rebuilding projections based on the 2009 update assessment (SEDAR 7 Update 2009) that were revised to account for actual landings during 2009-2012. The resulting sector allocations were 4.315 mp (commercial) and 4.145 mp (recreational). NMFS published the final rule increasing the quota based on state-specific recreational red snapper seasons, which NMFS had previously announced it would do in a March 2013 emergency rule. On May 31, 2013, the U.S. District Court in Brownsville, Texas voided the emergency rule, and the Gulf-wide federal recreational red snapper season was established from June 1 through June 28. In July, the Council reviewed a new benchmark assessment (SEDAR 31 2013) which showed that the red snapper stock was rebuilding faster than projected, partly due to strong recruitment in some recent years. Combined with a new method for calculating the ABC, the SSC increased the ABC for 2013 to 13.5 mp, but warned that the catch levels would have to be reduced in future years if recruitment returned to average levels. After incorporating a buffer to reduce the possibility of having to later reduce the quota, the Council further increased the 2013 commercial and recreational quotas to a combined 11.0 mp (5.61 mp and 5.39 mp, respectively) (GMFMC 2013b). This increase occurred too late to extend the June recreational season, so the Council requested that NMFS reopen the recreational season. NMFS announced a supplemental season of October 1 through 14, 2013. In 2014, the recreational fishing season in federal waters was nine days long.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 –Regional Management

Alternative 1: No Action – Retain current federal regulations for management of recreational red snapper in the Gulf of Mexico (Gulf) exclusive economic zone (EEZ).

Alternative 2: Establish a regional management program that **delegates** some management authority to a state or group of states (regions). These regions must establish the red snapper season structure, bag limit, and size limits for the harvest of an assigned portion of the recreational red snapper quota. If a region does not participate or is determined to be inconsistent with the requirements of delegation, the recreational harvest of red snapper in the EEZ off such region would be restricted to the federal default regulations for red snapper.

Preferred Alternative 3: Establish a regional management program in which a state or group of states (regions) submit proposals to **NMFS** describing the **conservation equivalent measures** the region will adopt for the management of its portion of the red snapper quota. Conservation equivalency proposals must specify the red snapper season structure, bag limit, and size limits for the harvest of an assigned portion of the recreational red snapper quota. If a region does not participate or its proposal is determined by NMFS to not satisfy the conservation equivalency requirements, the recreational harvest of red snapper in the EEZ off such region would be restricted to the federal default regulations for red snapper.

Alternative 4: Establish a regional management program in which a state or group of states (regions) submit proposals to a **technical review committee** describing the **conservation equivalent measures** the region will adopt for the management of its portion of the red snapper quota. Conservation equivalency proposals must specify the red snapper season structure, bag limit, and size limits for the harvest of an assigned portion of the recreational red snapper quota. The technical review committee reviews and may make recommendations on the proposal, which is either returned to the region for revision or forwarded to NMFS for final review. If a region does not participate or its proposal is determined by NMFS to not satisfy the conservation equivalency requirements, the recreational harvest of red snapper in the EEZ off such region would be restricted to the federal default regulations for red snapper.

Alternative 5: Establish a provision to sunset regional management after:

Option a: 10 calendar years of the program.

Option b: 5 calendar years of the program.

Option c: 3 calendar years of the program.

Option d: 2 calendar years of the program.

Discussion:

Federal default regulations refer to the Gulf-wide regulations governing the recreational harvest of red snapper in the Code of Federal Regulations (50 CFR Part 622). To implement regional management by delegation or conservation equivalency (CE) measures, the current federal

regulations in the Code of Federal Regulations (50 CFR Part 622) would need to be suspended while consistent delegation or CE measures are in effect. Federal default regulations for the recreational harvest of red snapper would be applied to the exclusive economic zone (EEZ) off that region in the event a region's delegation or CE measures are suspended or deemed inconsistent, or if a region does not participate in regional management. If the federal default regulations are implemented for a region, NMFS would publish a notice with the Office of the Federal Register announcing such an action. Currently, the federal regulations concerning bag limit, size limit, and season length include a 2-fish bag limit, minimum size limit of 16 inches total length (TL), and season opening June 1 and closing when the recreational quota is reached or projected to be met.² The current federal regulations will serve as the default regulations for inactive regional management. These regulations have been established and revised over time through framework and regulatory amendments, which considered many ranges of reasonable alternatives and those analyses support utilizing the current federal regulations as the federal default measures.

Alternative 1 (no action) would retain current management measures for the recreational harvest of red snapper in the Gulf of Mexico (Gulf) EEZ. Currently, these measures include a 2-fish per angler per day bag limit, a 16-inch TL minimum size limit, and a June 1 fishing season start date. **Alternative 2, Preferred Alternative 3, and Alternative 4** propose different approaches to regional management for recreational red snapper. Under all of the alternatives, red snapper would remain under federal management jurisdiction, subject to Gulf-wide closure when the annual recreational quota is met. Essentially, while a state or states would be given some management authority to determine the regulations to be applied in their region, it is not the complete authority advocated for by some supporters of regional management. Only the season start and end dates, season structure, bag limit, and potentially, the size limit would be eligible for modification at the regional level. Any management measures implemented for a region must adhere to the goals of the rebuilding plan and be consistent with federal and other applicable laws.

Under **Alternative 2**, regional management is defined as the delegation of limited management authority to a state or contiguous states, which would then establish appropriate management measures to constrain recreational harvest to the assigned portion of the recreational red snapper quota. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) allows for the delegation of management to a state to regulate fishing vessels beyond their state waters, provided its regulations are consistent with the fishery management plan (FMP; Appendix D). The delegation of management authority to the states (**Alternative 2**) requires a three-quarters majority vote of the voting members of the Gulf of Mexico Fishery Management Council (Council) members.

If **Alternative 2** is selected, it is possible that not all states will participate. Non-participating states or regions would be required to adhere to the federal default regulations, which would be applied to the adjacent EEZ for the recreational harvest of red snapper. Because participating states would still receive their allocation (Action 4), a non-participating state's season length

² Recreational red snapper management measures are codified as follows in the *Federal Register*: season opening 50 CFR 622.34(b); size limit 50 CFR 622.37(a); and bag limit 50 CFR 622.38(b)(3). The regulations are also provided in Appendix G.

would be determined based on the remaining quota balance after subtracting the quota for participating states. Thus, a single non-participating state's season length would be projected based on the amount of quota it would have received if participating.

Preferred Alternative 3 and **Alternative 4** would adopt a process by which regions submit proposals describing the conservation equivalency of their intended management measures for the recreational harvest of red snapper. While **Preferred Alternative 3** and **Alternative 4** would grant less management authority directly to the states or regions than **Alternative 2**, all three alternatives provide comparable flexibility to the regions to modify the season structure, bag limit, and (potentially) size limit for the harvest of their portion of the recreational red snapper quota.

Preferred Alternative 3 and **Alternative 4** differ based on the review process for the CE proposals. Under **Preferred Alternative 3**, regions would submit proposals directly to NMFS for review while under **Alternative 4**, regions would submit CE proposals to a technical review committee. The proposed process under **Alternative 4** is most similar to the Mid-Atlantic Council's management of summer flounder. The technical review committee would need to be created and populated, such as by members of the Council's Scientific and Statistical Committee. The technical review committee would provide the initial review of CE proposals and may make recommendations on the proposal, which is either returned to the region for revision or forwarded to NMFS for final review. Because of the additional time needed for the technical review committee to meet and review proposals, **Alternative 4** would entail a longer process for consistency determination than under **Preferred Alternative 3**. On the other hand, the process under **Alternative 4** provides for greater participation and input by state-level managers and stakeholders, increasing the involvement of local-level entities in the regional management process.

Alternative 5 provides sunset options for ending regional management after a specified number of years (**Options a-d**) and may be selected with any of the **Alternatives 2-4**. At the time of the sunset, all associated actions in this amendment would end at that time. **Alternative 5** and an option need not be selected as preferred. If **Alternative 5** is not selected, no sunset date will be established. Should **Alternative 5** be selected as preferred and the Council decides subsequently to continue regional management, the Council would need to extend regional management through the appropriate document and process.

If selected, regional management would end after 10 calendar years (**Options a**), 5 years (**Options b**), 3 years (**Option c**), or 2 years (**Options d**). For all options, regional management would expire at the end of the tenth, fifth, third, or second calendar year of the program, regardless of the implementation date of this amendment. For example, if this amendment were to be implemented in May 2016 with **Option c** selected as preferred, regional management would end December 31, 2018. All regulations associated with all actions in this plan amendment would expire at the sunset date, including any accountability measures.

Requirements of Delegation Provision (Alternative 2)

If delegation of recreational red snapper management is adopted (**Alternative 2**), then the management measures delegated to the individual states or groups of states must be consistent with the Reef Fish Fishery Management Plan (FMP), including the rebuilding plan, and the Magnuson-Stevens Act. Consistency with the FMP requires, among other things, rebuilding declining reef fish stocks, monitoring the reef fish fishery, conserving reef fish habitats and increasing fish habitats, and minimizing conflicts between user groups.

The Magnuson-Stevens Act (16 U.S.C. §1856(a)(3)) outlines the procedure in the case of a state's regulations not being consistent with the FMP (Appendix D). If NMFS determines that a state's regulations are not consistent with the FMP, NMFS shall promptly notify the state and the Council of the determination and provide an opportunity for the region to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the region does not correct the inconsistencies identified by NMFS, then the delegation to the region shall not apply until NMFS and the Council find that the region has corrected the inconsistencies.

In application, the response times between NMFS' determination of inconsistency and the implementation of corrective action by the state would be case specific. The timelines for correction of inconsistencies would be decided by NMFS on a case by case basis, as it determines whether inconsistencies exist. The timeline for the region's response would be dependent on the nature of the inconsistency. Due to the short season lengths and high catch rates for the recreational harvest of red snapper, the implementation of corrective actions may need to occur very quickly. Under such circumstances, the region would need to establish a process to implement corrective actions very quickly.

As a hypothetical example, if the region implemented the delegated management measures shortly before the season opened, any notification of inconsistency and the implementation of corrective action would need to occur quickly. To accomplish this, the region would need to have the authority to close the season and adjust the bag limit perhaps without having an opportunity to discuss the issue at a formal commission meeting. Alternatively, if the region implemented regulations several months before the opening of the red snapper recreational season, then a longer response time would be possible. This scenario may also allow for the discussion of the issue at a formal commission meeting. These scenarios exemplify the need for case-by-case timelines for the region's response to a notification of inconsistency.

A region may decide to opt out of delegation and request the federal default measures be applied to the adjacent EEZ (Figure 2.1.1) for the recreational harvest of red snapper. To opt out of delegation, the region should send a letter to NMFS requesting the federal default regulations be applied to their region for the fishing year. A season length would be calculated by NMFS based on the region's quota as apportioned in Action 6. Inherently, if only one region opts-out, then it would still essentially be constrained by the terms of delegation as per the regional area and quota apportionment.

Under delegation, the EEZ could potentially remain open year-round, and anglers' access to harvesting red snapper from the EEZ would be constrained by the management measures established for their region. Each region would prohibit further landings after its portion of the quota has been caught. Under certain conditions, the EEZ off a given region could be closed. To be consistent with national standard 4 (NS 4) of the Magnuson-Stevens Act, these closures should apply to all recreational vessels.

Requirements of Conservation Equivalency (Preferred Alternative 3 and Alternative 4)

If the conservation equivalency model for regional red snapper management is adopted (**Preferred Alternative 3 or Alternative 4**), then the management measures developed by the regions must be consistent with the FMP, including the rebuilding plan, and the Magnuson-Stevens Act. Consistency with the FMP requires, among other things, rebuilding declining reef fish stocks, monitoring the reef fish fishery, conserving reef fish habitats and increasing fish habitats, and minimizing conflicts between user groups. Furthermore, the adopted management measures must be compatible with the region's projected season length and apportioned quota. This means that the selected suite of management measures must be reasonably expected to constrain the region's harvest to its portion of the Gulf-wide recreational quota, to avoid the region's proposal being deemed inconsistent. Corrective action is required should a region's conservation equivalency measures be deemed inconsistent, to avoid application of the federal default measures. NMFS has provided a supplemental document outlining a proposed process for submitting and approving CE proposals.

Application of Federal Default Regulations

Under **Alternative 2, Preferred Alternative 3, or Alternative 4**, the selected suite of management measures to be established for a region could consist of numerous combinations and ranges. Although there is flexibility in the assemblage of management measures to be adopted for a region, each region must establish its season dates and structure, bag limit, and minimum size limit. If a region does not establish a season, bag limit, and minimum size limit, then NMFS will deem the region's regulations inconsistent. If the inconsistency is not resolved and NMFS suspends the region's regional management, the federal default regulations will go into effect for the region's portion of the EEZ (Figure 2.1.1), until the region receives approval by NMFS that the inconsistency has been remedied.

At any time, a region or regions could opt out and not participate in regional management. Although regional management would be inactive and such a region would fish under the federal default regulations, related actions in this amendment would remain effective. If one or more regions opt out of regional management, the regulations implementing the preferred alternatives selected under Actions 6 (apportioning the quota) and 7 (post-season accountability measures) would remain effective and applicable toward those regions until modified through a plan amendment.

If a region chooses to opt out of regional management, then federal default regulations would be necessary. A region may decide not to participate and request the federal default measures be applied to the adjacent EEZ for the recreational harvest of red snapper. This would constitute the

region opting out. To opt out, the region would send a letter requesting the federal default regulations be applied to their region for the fishing year. NMFS would publish a notice in the *Federal Register* to implement the federal default regulations in the region's adjacent EEZ (Figure 2.1.1). The season length would be calculated by NMFS based on the region's quota as apportioned in Action 6. Inherently, if only one region opts out, then they would still essentially be constrained by the terms of regional management as per the regional area and quota apportionment. If more than one region opted out of delegation, their regional quotas could be combined into a single quota, and then NMFS would calculate the season for those portions of the EEZ no longer managed by the regions. It would be expected that these regions would adopt regulations consistent with the federal default regulations that would apply to all recreational vessels in the EEZ off such region. In turn, if a region does not set the bag limit, minimum size limit, or season length, then it is assumed that the region is opting out of regional management and the federal default management measures would apply. As per the Magnuson-Stevens Act, it would still be necessary for NMFS to prohibit the recreational harvest of red snapper if the Gulf-wide recreational quota is reached or projected to be met.

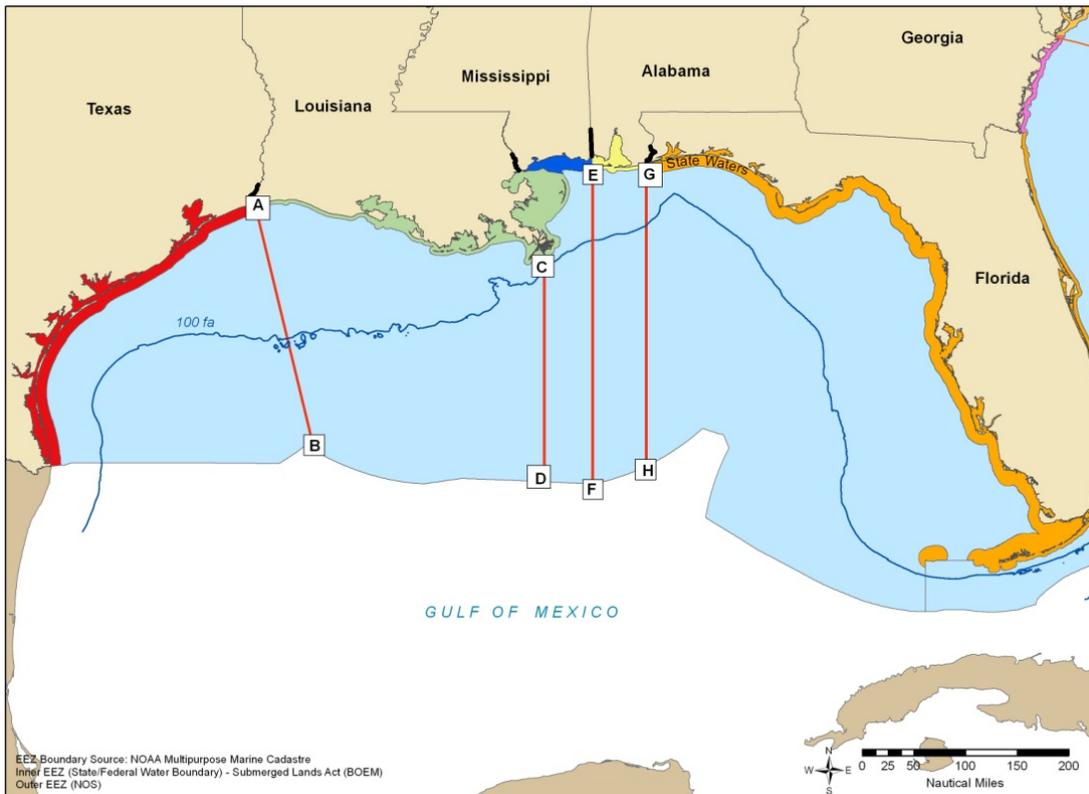


Figure 2.1.1. Map of state waters and the EEZ with established and proposed boundaries between states. These boundaries were agreed upon at the February 2013 Council meeting.

Boundary Description for Figure 2.1.1.

The boundaries in Figure 2.1.1 were agreed upon by the representatives from each state marine resource agency at the February 2013 Council meeting. All lines begin at the boundary between

state waters and the EEZ. Line A-B, defining the EEZ off Texas, is already codified as a line from 29°32.1' N latitude, 93°47.7' W longitude to 26°11.4' N latitude, 92°53.0' W longitude, which is an extension of the boundary between Louisiana and Texas (50 CFR 622.2). Likewise, line G-H, defining the EEZ off Florida, is codified as a line at 87°31.1' W longitude extending directly south from the Alabama/Florida boundary (50 CFR 622.2). The other two lines have not been codified, but were negotiated between the adjacent states prior to the February 2013 meeting. Line E-F is a line at 88°23.1' W longitude extending directly south from the boundary between Alabama and Mississippi.

Line C-D is a line at 89°10.0' W longitude extending directly south from the South Pass Light in the Mississippi River delta in Louisiana. Unlike the other lines, this line is not based on the boundary between Louisiana and Mississippi because doing so would be impracticable. Louisiana has jurisdiction over the Chandeleur Islands, which extend into waters south of Mississippi. A line based on the state waters boundary just north of the islands could result in inequitable impacts on Mississippi anglers as it would identify federal waters that are off both Mississippi and Louisiana as being exclusively off Louisiana. A line based on the state land boundary would be even further west and would reduce the size of the EEZ off Louisiana. Therefore, this line was considered a fair compromise by representatives of both states.

2.2 Action 2 – Regional Management and Sector Separation

Alternative 1: No Action – Retain current federal management of recreational red snapper in the Gulf exclusive economic zone (EEZ). For the years 2015-2017, establish separate quotas for the federal for-hire and private angling components as specified in Reef Fish Amendment 40.

Alternative 2: Extend the separate management of the federal for-hire and private angling components of the recreational sector and have this amendment apply to the private angling component, only. The private angling component would be managed by each region under the regional quotas that are based on the allocation selected in Action 4 and the federal for-hire component would continue to be managed Gulf-wide under a quota that is based on the allocation selected in Amendment 40.

Alternative 3: Extend the separate management of the federal for-hire and private angling components of the recreational sector and have this amendment apply to both components in the regions selected below. The private angling and federal for-hire components would be managed by each region under separate quotas that are based on the component allocation selected in Amendment 40 and the regional allocation selected in Action 4. In all other regions, the private angling component would be managed by each region under the regional quotas that are based on the allocation selected in Action 4 and the federal for-hire component would continue to be managed Gulf-wide under a quota that is based on the allocation selected in Amendment 40.

Option a: Florida

Option b: Alabama

Option c: Mississippi

Option d: Louisiana

Option e: Texas

Alternative 4: End the separate management of the federal for-hire and private angling components upon implementation of this amendment, and have this amendment apply to the entire recreational sector. The private angling and federal for-hire components would be managed by each region under common regional quotas based on the allocation selected in Action 6.

Discussion:

In October 2014, the Council took final action on Amendment 40 to adopt sub-quotas for the federal for-hire and private angling components of the recreational sector for a period of three years. This Action 2 is only applicable in the event this amendment is implemented while the sub-quotas are still in effect. **Alternative 1** (no action) would continue management of the for-hire and private angling components until the end of 2017, as specified in Amendment 40 (GMFMC 2014). It is possible that this alternative would allow for the component quotas to remain in place when regional management is implemented, only to be vacated at the specified time. This may complicate the development of regional management measures. Table 2.2.1

provides a comparison of how the regions would manage the federal for-hire component and private angling component under **Alternatives 1-4**.

Table 2.2.1. Comparison of regional management under Alternatives 1-4 for the private angling and federal for-hire components, assuming implementation of Amendment 40 (sector separation).

Under...	Regional Management...	Sector Separation...
Alternative 1	Establishes separate quotas (2015-2017) for the private angling and for-hire components.	Ends at time of sunset (end of 2017).
Alternative 2	Applies to the private angling component, only.	Is extended and the sunset is removed. The for-hire component's management will be established in Amendments 41 and 42.
Alternative 3	Applies to private angling and for-hire components in the regions selected as preferred, managed under separate quotas. In regions not selected as preferred, regional management applies to private angling component only.	Is extended and the sunset is removed. In regions selected as preferred, the for-hire component is managed by the region under the for-hire component quota; in non-selected regions, for-hire component managed under Gulf-wide management, established in Amendments 41 and 42.
Alternative 4	Applies to the entire recreational sector, managed under a single quota.	Ends when regional management is implemented.

Alternative 2 would remove the sunset provision specified in Amendment 40 upon implementation of this amendment and continue separate management of the for-hire and private angling components. Under this alternative, regional management would apply to the private angling component, only. Management of the federal for-hire component would be established through Amendments 41 and 42, which the Council requested to be developed at its January 2014 meeting.

Like **Alternative 2**, **Alternative 3** would remove the sunset provision specified in Amendment 40 upon implementation of this amendment and continue managing the for-hire and private angling components separately. **Alternative 3** differs from **Alternative 2**, by providing **Options a-e** representing each of the States. If a State's option is selected as preferred in **Alternative 3** that State would manage its private angling and federal for-hire fleets under the separate quotas established in Amendment 40. States for whose option is not selected as preferred would manage their private angling component, only; authority to manage the for-hire component would remain with NFMS, under a Gulf-wide for-hire component quota. For example, if **Option b** is selected as preferred, Alabama would first receive its portion of the recreational quota selected in Action 6, which Alabama would then further divide into component quotas of 57.7% private angling and 42.3% for-hire. Alabama's regional management plan would specify how it would manage the separate components, constraining the harvest of each component to its portion of the quota. Continuing with the example, **Option c** is *not* selected as preferred. Mississippi would be assigned its portion of the recreational quota selected in Action 6, which

would then be reduced by 42.3%. The total pounds corresponding with 42.3% of Mississippi's regional quota would be applied to the Gulf-wide for-hire component quota. Mississippi would manage its private angling component with 57.7% of the recreational quota it received.

Alternative 4 would end the separate component quotas concurrent with implementation of this amendment, even if the three year period of sector separation has not expired. Adopting **Alternative 4** would apply regional management and the actions herein to the entire recreational sector.

This action does not include an alternative for regional management to apply to the federal for-hire component alone and not to private anglers. At the January 2015 meeting, the Council initiated the development of separate plan amendments for charterboats and headboats, respectively. Further, regional management considers granting greater authority to the Gulf States for the management of red snapper. Gulf States have the authority to specify fishing regulations in their state waters; opportunities which may be enjoyed by participants in the private angling component, only. For-hire vessels with federal permits must abide by more restrictive federal regulations, even when fishing in state waters. Thus, it would not be reasonable for this greater authority to exclude the state-licensed private angling component, and include only the for-hire fleet which would be prohibited from fishing in state waters when federal waters are closed.

2.3 Action 3 – Establish Regions for Management

Alternative 1: No Action – Retain current federal regulations for management of recreational red snapper in the Gulf EEZ.

Alternative 2: Establish an east (Florida, Alabama, Mississippi) and west (Louisiana, Texas) region and allow for different management measures for each region.

Alternative 3: Establish an east (Florida, Alabama) and west (Mississippi, Louisiana, Texas) region and allow for different management measures for each region.

Preferred Alternative 4: Establish five regions representing each Gulf state.

Alternative 5: Establish five regions representing each Gulf state, which may voluntarily form larger multistate regions with adjacent states.

Discussion:

Under **Alternative 1** (no action), management measures would remain the same for the recreational harvest of red snapper in the entire Gulf EEZ. Currently those regulations specify a June 1 fishing season start date, a 16-inch TL minimum size limit, and a 2-fish per angler per day bag limit. Additionally, captain and crew are prohibited from retaining a bag limit while under charter. The remaining alternatives propose to divide the Gulf into regions, using the boundaries specified in Figure 2.3.1.

Alternatives 2 and 3 would establish two regions: eastern and western Gulf. In both alternatives, Florida and Alabama make up the eastern region, and Louisiana and Texas make up the western region. The alternatives differ in that Mississippi is part of the eastern region under **Alternative 2**, and is part of the western region in **Alternative 3**. Because **Alternatives 2 and 3** include more than one state in a region, the states sharing a region would need to agree on the set of shared management measures and to close the region's red snapper season when the quota is reached or projected to be reached.

Alternative 2 would divide the Gulf into regions that most closely approximate the eastern and western sub-units used in the red snapper stock assessment, thereby affording the possibility to adopt regional management measures based on the differences in biological abundance. The Red Snapper Benchmark Assessment (SEDAR 31 2013) estimated that the western Gulf sub-unit would carry a disproportionate burden of stock recovery. This is true for two reasons, first because it is currently estimated to have higher stock biomass and second because the average fishing mortality rate at age is estimated to be lower in the western Gulf compared to the eastern Gulf (SEDAR 31 2013). Therefore, the eastern and western sub-units of the red snapper stock are projected to rebuild at different rates based on current estimates of population abundance. However, the ultimate result of increasing fishing pressure on the eastern sub-unit compared to the western sub-unit is that the eastern component is projected to continue to be prosecuted on mostly small, young fish which is projected to result in a truncated population age distribution.

A red snapper larval transport study in the northern Gulf examined the potential for repopulating the eastern Gulf stock through larval transport from the more populous western stock (Johnson et al. 2009). Red snapper larval abundance was determined to be twice as great over the Louisiana-Texas shelf as over the Mississippi-Alabama shelf and four times as great over the Mississippi-Alabama shelf as over the west Florida shelf (Hanisko et al. 2007). Hanisko et al. (2007) compared the larval abundance from fall plankton studies in the eastern Gulf and determined the area off Mississippi/Alabama was disproportionately smaller than off west Florida, but accounted for half the abundance of red snapper larvae in the eastern Gulf.

A problem with using the sub-units of the stock assessment is that the dividing line used in the assessment does not fall precisely along a state boundary. Thus, there would be a difference in using the proportion of the red snapper suggested by the stock assessment that could be taken from each sub-unit (Action 4, Alternative 5), and the proportion of aggregated states' landings coinciding with the selection of **Alternative 2**, which most closely approximates the boundary used in the stock assessment. This difference would be even greater if **Alternative 3** is selected as preferred, as the western region's boundary would also include Mississippi. Although the regional boundary under **Alternative 3** is further to the east than **Alternative 2** (and thus deviates further from the sub-units of the stock assessment), including Mississippi in the same region as Louisiana rectifies the issue that the eastern portion of Louisiana's state water boundary essentially obstructs Mississippi's access to the EEZ from its state waters (Figure 2.3.1). **Preferred Alternative 4** would establish each Gulf state as its own region. This alternative would provide the most flexibility to individual states to determine their choice of management measures. Should a region fail to implement regional regulations consistent with the FMP, that region would harvest red snapper under the federal default management measures.

Generally, establishing more regions (such as under **Preferred Alternative 4** or **Alternative 5**) will mean a more subdivided quota and entail more complicated management. For example, under current management, state and federal waters Gulf-wide are open during the red snapper season. By allowing regions to set their own fishing seasons, some regions of the Gulf could be open while others are closed. Bag limits and size limits may also vary among regions. Therefore, enforcement will be conducted dockside, primarily. At sea enforcement could be most complicated near the boundaries between regions with different management measures, as it could be difficult for enforcement agents to determine which region's jurisdiction applies to a recreational vessel. In these cases, it is assumed that enforcement agents would consider the most liberal of the regions' management measures in place at the time, to serve as guidelines for determining regulatory compliance. For example, if no region has a bag limit greater than four red snapper per person per day, then a vessel possessing red snapper in excess of this bag limit, regardless of where in the EEZ it is fishing, could be in violation if stopped by enforcement agents.

Alternative 5 is most similar to **Preferred Alternative 4**, but would allow one or more regions to choose to form multistate regions with adjacent states. While this additional measure of flexibility could allow regions to pool their portions of the recreational quota, it would also require cooperation among states included in the region.

There are also issues with using the Marine Recreational Information Program (MRIP) catch estimates for states where species are infrequently sampled. This may occur if a given species is rarely captured or if there are relatively few sample locations in a state. These situations increase proportional variability, resulting in additional scientific or management uncertainty that could affect the use of these data. These problems can be mitigated by increasing: 1) the intensity of sampling, 2) spatial extent of the sample frame (e.g., Gulf-wide variability is less than estimates for individual states), or 3) lengthening the time-period used to develop catch estimates (i.e., wave-length). In practice, each of these measures has impediments. For example, funding may be inadequate to support additional monitoring and temporal or spatial resolution may not match management needs. This should be considered when developing management frameworks. In addition, Texas Parks and Wildlife Department (TPWD) uses its own survey for estimating catches, using a different methodology than MRIP. Also, Louisiana Department of Wildlife and Fisheries announced on September 5, 2013 that the state will no longer participate in MRIP. If regional management is established at the state level, this could create a question of whether the catch estimates for Texas and Louisiana are comparable to those of the other states.

If one or more states are combined into a region (**Alternatives 2, 3, and 5**), then the outermost state boundaries would be used to define the geographic region (Figure 2.1.1). In addition, the Council could choose to establish new jurisdictional lines to define regions.

2.4 Action 4 – Modify the Federal Minimum Size Limit

Alternative 1: No Action – Retain current federal regulations for the minimum size limit for recreational red snapper in the Gulf EEZ. The minimum size limit is 16” total length (TL).

Alternative 2: Reduce the federal minimum size limit to 14 inches TL.

Preferred Alternative 3: Reduce the federal minimum size limit to 15 inches TL.

Alternative 4: Increase the federal minimum size limit to 17 inches TL.

Alternative 5: Increase the federal minimum size limit to 18 inches TL.

Discussion:

Varying the minimum size limit among regions may pose additional issues in terms of the stock assessment. Currently, the minimum size limit for red snapper is 16 inches total length (TL) (**Alternative 1**) in the Gulf for recreational anglers and for all Gulf States except Texas. In the state waters off Texas the current recreational red snapper minimum size limit is 15 inches TL. During early deliberations on regional management, the Council expressed their intent to establish limitations on the minimum size limits which may be adopted by the regions at their April and June 2013 Council meetings due to biological concerns such as high-grading and discard mortality. Red snapper is still under a rebuilding plan and stock assessments must take into account minimum size limits for each sector and gear type.

Discard mortality plays a large factor in considering minimum and maximum size limits in the Gulf. The current commercial minimum size limit is 13 inches TL. One of the original reasons the Council decided to allow the commercial sector to harvest red snapper at 13 inches TL was due to the number of dead discards (GMFMC 2007). The commercial sector is estimated to have greater discard mortality rates than the recreational sector due to gear types and depth fished (GMFMC 2007; SEDAR 7 2005; SEDAR 31 2013). Based on the yield-per-recruit (YPR) analysis conducted by the Southeast Fisheries Science Center (SEFSC) in 2013, yield is maximized at 15 inches TL. Due to the status of the red snapper stock and selectivity patterns, minimum size limits from 14 to 18 inches TL are considered effective and are included in the alternatives. It should be noted that spawning potential ratio (SPR) increases for red snapper as the minimum size limit increases

(<http://gulfcouncil.org/docs/Presentations/Gulf%20Red%20Snapper%20Size%20Limit%20Analysis%20-%20Presentation.pdf>).

The Council requested an interim rule during the June through August 1999 recreational red snapper fishing season, that increased the minimum size limit from 15 to 18 inches TL (64 FR 30455-Interim Rule Red Snapper). The Council requested this increase in minimum size limit to slow harvest and increase the recreational fishing season length by 24 days. The interim rule was initially supported by fishermen; however, the Council received numerous complaints from fishermen after the season about releasing dead red snapper. Consequently, since that time the Council has not considered raising the red snapper minimum size limit above 18 inches TL.

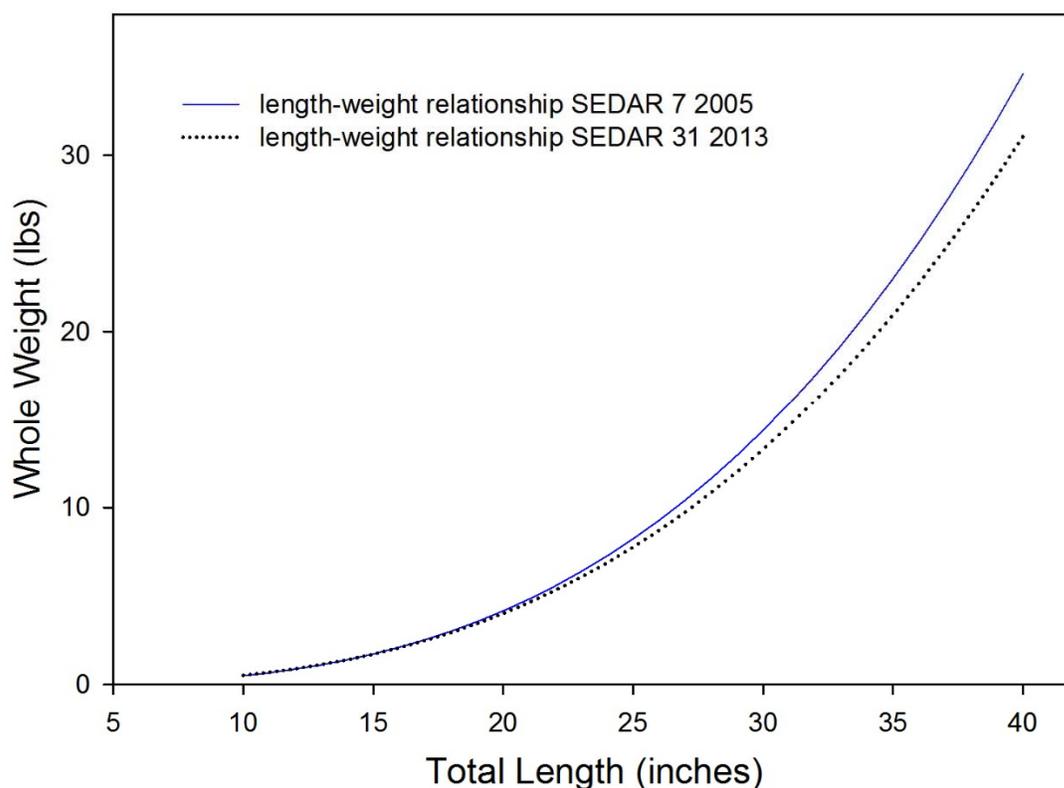


Figure 2.4.1. Red snapper length-weight relationship. Source: Conversion factors from SEDAR 7 2005, Appendix 1, Table 12 and SEDAR 31 2013, page 89 of the assessment report.

Based on length-weight relationship of red snapper used during SEDAR 7 (2005) and SEDAR 31 (2013), a 16-inch TL red snapper is estimated to weigh 2 lbs ww and a 28-inch TL red snapper is estimated to weigh 11 lbs ww (Figure 2.4.1). The average size of recreational red snapper landed in 2012 was 8 lbs ww and approximately 24 inches TL (SERO 2012b). Larger older females produce more eggs and spawn more frequently throughout the season than younger, smaller red snapper (Collins et al. 2001; Porch et al. 2013-SEDAR 31-AW03).

Discard mortality of red snapper could increase from the regional modification of seasons, bag limits, and size limits. Recreational discard mortality of red snapper was estimated by eastern and western region in SEDAR 7 (2005) and in SEDAR 31 (2013). The report found regardless of study methodology or eastern versus western Gulf, a consistent trend among discard mortality data was suggested by a positive correlation between depth and release mortality. The release mortality for recreational caught red snapper was averaged by eastern and western Gulf and estimated at 21% (Table 6.5 in SEDAR 7 2005). The most recent stock assessment estimated discard mortality for the recreational sector at 10% for the eastern and western Gulf (SEDAR 31 2013). However, the data workshop report noted that release mortality was related less to region and more on a combination of factors including, but not limited to, depth, thermal stress, venting versus non-venting, and handling time.

2.5 Action 5 – Closures in the Gulf EEZ

Alternative 1: No action – The recreational season for red snapper in or from the Gulf EEZ is closed from January 1 through May 31, each year. During the closure, the bag and possession limit for red snapper in or from the Gulf EEZ is zero.

Preferred Alternative 2: Remove the fixed closed season of January 1 – May 30 for the harvest of red snapper from the Gulf EEZ. A region may establish closed areas within the EEZ adjacent to their region in which the recreational harvest of red snapper is prohibited.

Option a: Areas of the Gulf EEZ may be closed year round.

Option b: Areas of the Gulf EEZ may be closed for up to six months of the year.

Option c: No more than 50% of the area of the EEZ adjacent to a region may be closed during the year.

Alternative 3: Remove the fixed recreational closed season of January 1 – May 30 for the harvest of red snapper from the Gulf EEZ. A selected region may establish closed areas within the EEZ adjacent to their region in which the recreational harvest of red snapper is prohibited.

Option a: Florida

Option b: Alabama

Option c: Mississippi

Option d: Louisiana

Option e: Texas

Alternative 4: Remove the fixed recreational closed season of January 1 – May 30 for the harvest of red snapper from the Gulf EEZ. Establish a Gulf-wide boundary within the EEZ shoreward of which the recreational harvest of red snapper is permitted.

Option a: The recreational harvest of red snapper is permitted within **10 nautical miles** from shore, only.

Option b: The recreational harvest of red snapper is permitted within **20 nautical miles** from shore, only.

Option c: The recreational harvest of red snapper is permitted within the **20-fathom curve** (approximating 120 feet/36.6 meters depth), only.

Option d: The recreational harvest of red snapper is permitted within the **30-fathom curve** (approximating 180 feet/54.9 meters depth), only.

Discussion:

Under **Preferred Alternative 2** and **Alternatives 3-4**, the fixed recreational closed season for red snapper in the Gulf EEZ would be removed but remain as part of the federal default regulations. (See the discussion under Action 1, page 8-9.) Removal of the fixed closed season would be for the purpose of allowing individual regions to establish their season structure under either delegation or a conservation equivalency determination, and to consider alternative closures in the Gulf EEZ.

In general under regional management, the Gulf EEZ would remain open year round to the recreational harvest of red snapper. To constrain effort, regions (states) would announce the dates for the recreational harvest of red snapper, and enforcement would be carried out dockside. When a state closes the recreational harvest of red snapper, this would not prevent recreational vessels from other regions (states) fishing in the EEZ off the state with the closed season.

Preferred Alternative 2 would allow a region to restrict recreational vessels from harvesting red snapper from a designated part of the EEZ adjacent to their region (Figure 2.1.1), during a specified time of the year. Authority already rests with the states to establish closures within their state waters and to prohibit landings in their state waters. The intent of this alternative is to provide the regions with flexibility to spatially control where their apportioned part of the quota is harvested within their region. For example, Florida may want to establish different fishing seasons for the Panhandle and west Florida due to variations in weather conditions or tourism seasons. This alternative would not allow regions to establish marine protected areas within their portion of the EEZ nor restrict commercial vessels from harvesting red snapper from these areas.

The authority to close areas of a region's EEZ (**Preferred Alternative 2**) could unintentionally allow, or prohibit, some harvest of red snapper to occur. These issues could be most problematic near state boundaries. For example, a region could use this alternative to prohibit recreational vessels from retaining red snapper from its portion of the EEZ (Figure 2.1.1) while allowing its state waters to remain open. This use of the closed area alternative could be expected to extend the fishing season by constraining the harvest coming from part of the region's jurisdiction. To provide a hypothetical example, say Alabama were to close its portion of the EEZ but allow state waters to remain open, while Florida and Mississippi have both their state waters and federal portion of the EEZ open (Figure 2.5.1). Under this scenario, vessels from Alabama would not be prohibited from harvesting red snapper from the EEZ off Florida and Mississippi, and landing in Alabama, provided they do not transit through Alabama's portion of the EEZ. Although Alabama intended to extend its fishing season by constraining where harvest may occur (only in its state waters), the additional harvest from the EEZ off neighboring Mississippi or Florida could result in Alabama's quota being caught faster. Conversely, vessels from Mississippi and Florida, where the red snapper season is open in both state and federal waters, would be prohibited from retaining red snapper from Alabama's portion of the EEZ, even though those fish would only count against the quota of the state where landed, i.e., Mississippi or Florida. Thus, this hypothetical use of the closed area alternative unintentionally allowed for greater landings by Alabama anglers and unintentionally restricted fishing opportunities for Mississippi and Florida's anglers.

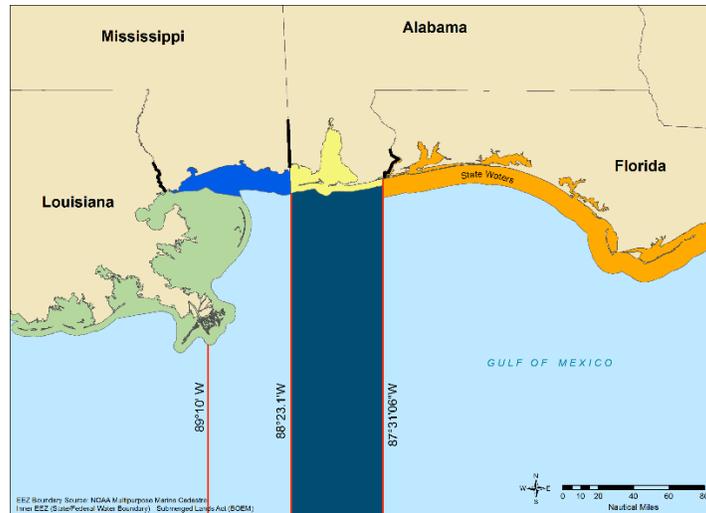


Figure 2.5.1. Visualization of the hypothetical example described for Preferred Alternative 2. The dark shaded area represents Alabama’s portion of the EEZ (see Figure 2.1.1).

Under **Alternative 4**, the recreational harvest of red snapper would only be permitted shoreward of the boundary specified in the selected option. Regardless of the recreational fishing season established by a region, the recreational harvest of red snapper would be prohibited seaward of the boundary for any selected option, year round. **Options a and b** propose a fixed distance from shore (10 or 20 nautical miles, respectively), while **Options c and d** propose a fixed depth (20 or 30 fathoms, respectively) beyond which the recreational harvest of red snapper would be prohibited.

2.6 Action 6 – Apportioning the Recreational Quota among Regions

Alternative 1: No Action – Retain current federal regulations for management of recreational red snapper in the Gulf EEZ. Do not divide the recreational quota or component quotas among regions.

Alternative 2: Apportion the recreational quota (or component quotas) among the regions selected in Action 3, based on the average of historical landings for the years **1986-2013**.

Alternative 3: Apportion the recreational quota (or component quotas) among the regions selected in Action 3, based on the average of historical landings for the years **1996-2013**.

Alternative 4: Apportion the recreational quota (or component quotas) among the regions selected in Action 3, based on the average of historical landings for the years **2006-2013**.

Preferred Alternative 5: Apportion the recreational quota (or component quotas) among the regions selected in Action 3, based on **50%** of average historical landings **from 1986-2013** and **50%** of average historical landings **from 2006-2013**.

Preferred Alternative 6: In calculating regional apportionments, exclude from the selected time series:

Preferred Option a: 2006 landings

Preferred Option b: 2010 landings

Alternative 7: Establish eastern and western recreational red snapper quotas (or component quotas) divided at the Mississippi River, based on the regional biogeographical differences in the stock used in the stock assessments.

Proposed Alternative 8: Apportion the recreational quota (or component quotas) among the regions selected in Action 3, such that each region’s allocation provides an equivalent amount of fishing days.

Discussion:

The adoption of regional management for the recreational red snapper quota will require the quota to be apportioned, or allocated, among the selected regions. Allocation is an inherently controversial issue because a limited resource is divided among competing user groups, each of which benefits from receiving the largest portion possible. Allocation decisions would need to follow the Principles and Guidelines for Allocation adopted by the Council (Appendix E).

Alternative 1 (no action) would maintain a single red snapper quota for the recreational sector. Currently, there is no expressed state allocation; the proportion of the total recreational landings made up by each state varies from year to year, as seen in Table 2.6.1. If Alternative 1 (no action) is selected as preferred in Action 2 and this plan amendment is implemented before sector separation sunsets, it is possible that 10 allocations of the recreational quota would be necessary.

Alternatives 2-4 and Preferred Alternative 5 propose methods for apportioning the recreational red snapper quota based on the average of historical landings for different time series. Regardless of the alternative selected, in some years, each state's landings exceed their average. This means that requiring the states to constrain their catches to a percentage of the total quota could restrict the fluctuations in annual landings that occur in some years.

Table 2.6.1. Percentage of annual recreational red snapper landings by state (1986-2013), based on whole weight (ww) of fish.

Year	Alabama	Florida	Louisiana	Mississippi	Texas
1986	11.3%	55.5%	18.1%	0.1%	15.0%
1987	18.5%	43.7%	13.5%	2.6%	21.7%
1988	16.5%	29.9%	33.1%	0.7%	19.8%
1989	18.4%	12.4%	24.1%	11.7%	33.3%
1990	39.5%	18.0%	16.9%	3.4%	22.2%
1991	30.1%	15.1%	33.2%	6.2%	15.5%
1992	32.7%	8.0%	24.5%	16.6%	18.2%
1993	29.2%	17.6%	22.7%	12.7%	17.9%
1994	32.1%	13.9%	21.1%	8.1%	24.7%
1995	32.1%	10.2%	28.3%	2.9%	26.6%
1996	32.9%	18.6%	16.6%	4.0%	27.9%
1997	39.3%	14.6%	16.8%	9.8%	19.5%
1998	29.6%	28.9%	14.9%	3.9%	22.8%
1999	39.5%	28.9%	15.8%	4.1%	11.8%
2000	29.5%	35.9%	18.6%	1.1%	14.9%
2001	42.4%	39.8%	6.0%	2.1%	9.7%
2002	40.3%	38.5%	6.2%	3.6%	11.4%
2003	37.9%	36.3%	8.9%	6.0%	10.9%
2004	30.0%	53.9%	5.8%	0.4%	9.9%
2005	29.1%	48.0%	10.4%	0.1%	12.5%
2006	20.3%	50.7%	12.2%	0.8%	16.0%
2007	19.7%	56.6%	15.6%	0.1%	8.0%
2008	17.2%	57.4%	15.7%	1.0%	8.6%
2009	21.7%	46.9%	18.8%	0.8%	11.8%
2010	21.4%	55.8%	5.0%	0.4%	17.3%
2011	53.6%	29.3%	8.9%	1.0%	7.2%
2012	36.1%	32.3%	19.2%	4.2%	8.2%
2013	43.9%	40.8%	6.0%	4.5%	4.9%

Source: Southeast Fisheries Science Center (SEFSC) annual catch limit dataset, including Calibrated MRIP, TPWD, and Southeast Headboat Survey (HBS) landings. Alabama and the Florida Panhandle HBS landings are initially reported to the same headboat fishing area. Landings have been assigned to each state based on the HBS vessel landing records (December 2014). Actual landings are provided in the Appendix (Table F-1).

Alternatives 2-5 present four options for apportioning the recreational quota using averages of historical landings for varying time series (Table 2.6.2). **Preferred Alternative 6** provides options for excluding particular years from the historical landings averages, due to impacts that affected recreational fishing opportunities during or immediately preceding those years (e.g., fishing closures following the Deepwater Horizon MC252 oil spill). The two years provided were discussed at a joint meeting of the five Gulf States' respective heads of their natural resource departments. Hurricane Katrina struck late in the fishing season of 2005, therefore landings from 2006 are proposed for exclusion. The Deepwater Horizon MC252 oil spill began in April 2010, prior to the opening of the 2010 recreational red snapper season (see Figure 3.3.1 for the extent of the fishing closures). **Option a** would exclude landings from 2006 from each time series (Table 2.6.3), and **Option b** would exclude landings from 2010 from the time series (Table 2.6.4). Resulting averages for landings if both options are selected are provided in Table 2.6.5. The exclusion of landings from 2006 (**Option a**), 2010 (**Option b**), or both (**Options a and b**) could be selected alongside one of **Alternatives 2-5**. In Amendment 40, currently under secretarial review, the Council chose to exclude landings from 2010 (**Preferred Option b**) from the allocation formula, but did not exclude landings from 2006 (**Preferred Option a**).

Table 2.6.2. Resulting proportions of the recreational red snapper quota that could be apportioned to each state based on four options (Alternatives 2-5) of historical landings time series.

Alternative	Years	Alabama	Florida	Louisiana	Mississippi	Texas
2	1986-2013	30.2%	33.5%	16.3%	4.0%	16.0%
3	1996-2013	32.5%	39.6%	12.3%	2.7%	13.0%
4	2006-2013	29.2%	46.2%	12.7%	1.6%	10.3%
5	50% (1986-2013), 50% (2006-2013)	29.7%	39.9%	14.5%	2.8%	13.1%

Note: Actual landings on which Tables 2.4.2 – 2.4.5 are based can be found in the Appendix (Table F-1).

Table 2.6.3. Resulting proportions of the recreational red snapper quota that could be apportioned to each state based on four options (Alternatives 2-5) of historical landings time series, excluding landings from 2006.

Alternatives 2 -5 with Pref. Alt. 6 Pref. Option a	Years	Alabama	Florida	Louisiana	Mississippi	Texas
Alternative 2	1986-2013	30.5%	32.8%	16.5%	4.1%	16.0%
Alternative 3	1996-2013	33.2%	39.0%	12.3%	2.8%	12.8%
Alternative 4	2006-2013	30.5%	45.6%	12.8%	1.7%	9.4%
Alternative 5	50%:50%	30.5%	39.2%	14.6%	2.9%	12.7%

Table 2.6.4. Resulting proportions of the recreational red snapper quota that could be apportioned to each state based on four options (Alternatives 2-5) of historical landings time series, excluding landings from 2010.

Alternatives 2-5 with Pref. Alt. 6 Pref. Option b	Years	Alabama	Florida	Louisiana	Mississippi	Texas
Alternative 2	1986-2013	30.5%	32.7%	16.7%	4.2%	16.0%
Alternative 3	1996-2013	33.1%	38.7%	12.7%	2.8%	12.7%
Alternative 4	2006-2013	30.4%	44.9%	13.8%	1.8%	9.2%
Alternative 5	50%:50%	30.4%	38.8%	15.3%	3.0%	12.6%

Table 2.6.5. Resulting proportions of the recreational red snapper quota that could be apportioned to each state based on four options (Alternatives 2-5) of historical landings time series, excluding landings from 2006 and 2010.

Alternatives 2-5 with Pref. Alt. 6 Pref. Options a & b	Years	Alabama	Florida	Louisiana	Mississippi	Texas
Alternative 2	1986-2013	30.9%	32.0%	16.9%	4.3%	16.0%
Alternative 3	1996-2013	33.9%	37.9%	12.8%	2.9%	12.5%
Alternative 4	2006-2013	32.0%	43.9%	14.1%	1.9%	8.1%
Alternative 5	50%:50%	31.5%	37.9%	15.5%	3.1%	12.0%

Alternative 7 considers apportioning the quota based on the projected yields for the ABC for the eastern and western Gulf, as derived from the updated projections from the 2009 assessment (Linton 2012a), and may be selected as preferred if Alternatives 2 or 3 are selected as preferred in Action 3. The resulting apportionments of the ABC from that assessment would be 48.5% for the eastern and 51.5% for the western Gulf (Linton 2012a).

As discussed in the previous action, all options for creating regions fall along state boundaries. Although the eastern and western regions proposed under Action 3’s Alternative 2 most closely approximate the eastern and western components used in the stock assessment, they do not overlap exactly. There would be a difference in using the proportion of red snapper suggested by the stock assessment that could be taken from each sub-unit, and the proportion of aggregated states’ landings coinciding with the selection of Action 2’s Alternative 2. Nevertheless, **Alternative 7** would provide a biologically based apportionment for regional management. Action 2’s Alternative 3 would also divide the Gulf into eastern and western regions, but its regional boundary, between Mississippi and Alabama, deviates further from the eastern and western components of the stock assessment than Action 2’s Alternative 2.

It is possible that one or more states may opt out and not participate in regional management. If only one state opts out, the remaining four states would still receive their portion of the quota, as specified in the selected preferred alternative. This means that a single non-participating state’s

landings would be restricted to the remaining balance of the quota, equivalent to the share it would receive if participating in regional management. Should more than one state choose to opt out, the participating states would still receive their respective portions of the quota. The quota which would have been distributed to each non-participating state would be pooled and NMFS would estimate the length of the fishing season based on the aggregate quota. Those states would then fish under the federal default regulations and a shared fishing season (Action 7).

An additional issue may arise for individual regions to monitor and constrain catches to their apportioned quota. NMFS regularly issues exempted fishing permits (EFPs) for research or activities which would otherwise be considered fishing. Fish harvested under an EFP are exempt from specific regulations such as bag limits, size limits, and fishing seasons. Because the fish landed under a research activity EFP are normally accounted for in the stock assessment process, before any quotas or allocations are established, these fish are not deducted from the quota. However, there are instances where NMFS may determine that an EFP is specific to a fishing quota or allocation, and may require the regions to account for those fish during a fishing season. If a quantity of fish under an EFP is required to be monitored and accounted for by regions under regional management, the region will be responsible for accounting for these landings, along with their other monitoring to assure they do not exceed their portion of the quota.

Projections on which to base the apportionment under *Proposed Alternative 8* are not yet available.

2.7 Action 7 – Post-Season Accountability Measures (AMs)

Alternative 1: No action – Retain current federal regulations for managing overages of the recreational red snapper quota in the Gulf EEZ. While red snapper are overfished (based on the most recent Status of U.S. Fisheries Report to Congress), if the recreational red snapper quota is exceeded, reduce the **recreational sector** quota in the following year by the full amount of the overage unless the best scientific information available determines that a greater, lesser, or no overage adjustment is necessary. The recreational ACT will be adjusted to reflect the previously established percent buffer.

Preferred Alternative 2: While red snapper are overfished (based on the most recent Status of U.S. Fisheries Report to Congress), if the combined recreational landings from all regions exceed the recreational sector quota, then reduce in the following year the quota of any **region** which exceeded its regional quota by the amount of the region’s quota overage in the prior fishing year. The recreational ACT will be adjusted to reflect the previously established percent buffer.

Alternative 3: While red snapper are overfished (based on the most recent Status of U.S. Fisheries Report to Congress), if the combined recreational landings from all regions exceed the red snapper recreational quota, then reduce in the following year the quota of the **component** (for-hire and/or private angling) by the full amount of the respective component’s overage unless the best scientific information available determines that a greater, lesser, or no overage adjustment is necessary. The recreational ACT will be adjusted to reflect the previously established percent buffer.

Alternative 4: While red snapper are overfished (based on the most recent Status of U.S. Fisheries Report to Congress), if the combined recreational landings from all regions exceed the red snapper recreational quota, in the following year: reduce the **for-hire component**’s quota by the full amount of the component’s overage; for the private angling component’s quota, reduce the quota of any **region** which exceeded its regional quota by the amount of the region’s quota overage in the prior fishing year. The recreational ACTs will be adjusted to reflect the previously established percent buffer.

Note: If the total landings from all regions do not exceed the Gulf-wide recreational quota in that year, the region’s quota would not need to be reduced to account for the region’s overage.

Discussion:

Section 407(d) of the Magnuson-Stevens Act requires that the Council ensure the FMP (and its implementing regulations) have conservation and management measures that establish a separate quota for recreational fishing (private and for-hire vessels) and prohibit the retention of red snapper caught for the remainder of the fishing year once that quota is reached. The national standard 1 guidelines identify two types of accountability measures (AMs): in-season and post-season. These AMs are not mutually exclusive and should be used together where appropriate. In 2014, the Council adopted an in-season AM to create an annual catch target (ACT) determined by deducting 20% from the ACL. To correct or mitigate any overages during a specific fishing year (50 CFR 600.310(g)), the Council also adopted a post-season AM which

would reduce the recreational quota in the year following an overage by the full amount of the overage (**Alternative 1**).

Alternative 1 (no action), would continue to apply the recently adopted post-season AM Gulf-wide. Although the possibility of triggering an overage adjustment would encourage regions to constrain harvest to the region's quota, the Gulf-wide approach may be perceived as inequitable across regions. For example, if a particular region greatly exceeded their regional quota, then the necessary overage adjustment may restrict the length of the following year's fishing season both in the region with the overage and the other regions which did not exceed their regional quotas. If this occurs, this may reduce the flexibility provided to the regions under regional management.

Preferred Alternative 2 would apply the post-season AM only to a region or regions which exceeded its portion of the recreational quota. With the apportionment of regional quotas, **Preferred Alternative 2** would prevent the overage adjustment from affecting regions that do not exceed their regional quota. However, if a region's overage is greater than the following year's regional quota, then the region may not have a recreational red snapper season. The overage adjustments would need to be taken into account when regions develop their management strategy, including the length of the fishing season for the following year.

Preferred Alternative 2 would encourage a region to constrain harvest to the regional quota to ensure that the overage adjustment is not applied to the recreational season for the following year. Regardless of a region exceeding its quota, an overage adjustment would only need to be applied if the Gulf-wide recreational sector quota was exceeded.

Alternative 3 would apply the post season AM to the component (for-hire or private angling) that exceeds its component quota in the prior fishing year. In the event the Gulf-wide recreational quota is exceeded, the quota of the component that exceeded its portion of the quota would have its quota reduced in the following year by the amount of the overage. This alternative would prevent the overage adjustment from affecting a component of the recreational sector that does not exceed its component quota. If Alternative 3 in Action 2 is selected as preferred, this alternative would not be applicable.

Alternative 4 combines both **Preferred Alternative 2** and **Alternative 3**, by applying the post-season AM to both a region and component that has exceeded its portion of the recreational quota in the previous year. Although the possibility of triggering an overage adjustment would encourage both regions and the components to constrain harvest to the respective quotas, a region and sector-wide approach may be perceived as inequitable by the different regions and components. If Alternative 3 in Action 2 is selected as preferred, this alternative would not be applicable.

Additional preferred alternative from 2014 public hearing draft:

Action – For-Hire Vessels Federal Permit Restrictions

Alternative 1: No action – Retain current federal regulations for management of recreational red snapper in the Gulf EEZ. If federal regulations for reef fish are more restrictive than state regulations, a person aboard a charter vessel or headboat for which a charter vessel/headboat permit for reef fish has been issued must comply with such federal regulations regardless of where the fish are harvested.

Preferred Alternative 2: Exclude the provision requiring the vessels with Gulf charter vessel/headboat permit for reef fish to comply with the more restrictive of federal recreational red snapper regulations when fishing in state waters.

Proposed Alternative 3: For regions actively participating in regional management, exclude the provision requiring the vessels with a Gulf charter vessel/headboat permit for reef fish to comply with the more restrictive of federal recreational red snapper regulations when fishing in state waters.

CHAPTER 3. AFFECTED ENVIRONMENT

The actions considered in this environmental impact statement (EIS) would affect recreational fishing for red snapper in federal and state waters of the Gulf of Mexico (Gulf). Descriptions of the physical, biological, economic, social, and administrative environments were completed in the EIS for Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007), the Generic Essential Fish Habitat (EFH) Amendment (GMFMC 2004a), and the Generic Annual Catch Limits/Accountability Measures (ACL/AM) Amendment (GMFMC 2011b). Below, information on each of these environments is summarized or updated, as appropriate.

3.1 Description of the Red Snapper Component of the Reef Fish Fishery

A description of the fishery and affected environment relative to red snapper was last fully discussed in joint Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007). This section updates the previous description to include additional information since publication of that EIS.

General Features

Commercial harvest of red snapper from the Gulf began in the mid-1800s (Shipp 2001). In the 1930s, party boats built exclusively for recreational fishing began to appear (Chester 2001). The commercial sector operates under an individual fishing quota (IFQ) program. In 2011, 362 vessels participated in the IFQ program (NMFS 2012a). The recreational sector operates in three modes, charter boats, headboats, and private vessels. In 2012, private vessels accounted for 70.1% of recreational red snapper landings, followed by charter boats (20.3%) and headboats (9.6%). On a state-by-state basis, Alabama accounted for the most landings (36.1%), followed by Florida (32.3%), Louisiana (19.2%), Texas (8.2%), and Mississippi (4.2%) (Table 3.1.1).

Table 3.1.1. Recreational red snapper landings in 2012 by state and mode.

State	Landings (lbs whole weight)				% by State
	Charter	Headboat	Private	All Modes	
FL (west)	806,118	205,830	1,420,620	2,432,569	32.3%
AL	445,816	71,482	2,197,377	2,714,675	36.1%
MS	1,406	5,894	306,854	314,154	4.2%
LA	236,145	21,199	1,188,763	1,446,106	19.2%
TX	39,128	419,671	157,937	616,736	8.2%
Total	1,528,613	724,077	5,271,550	7,524,239	
% by Mode	20.3%	9.6%	70.1%		100%

Source: NMFS 2014.

The red snapper stock has been found to be in decline or overfished in every stock assessment conducted, beginning with the first assessment in 1986 (Parrack and McClellan 1986).

Implemented in 1990, Amendment 1 (GMFMC 1989) established the first red snapper rebuilding plan. From 1990 through 2009, red snapper harvest was managed through the setting of an annual total allowable catch (TAC), which has been divided into allocations of 51% commercial, and 49% recreational. Beginning in 2010, TAC was phased out in favor of an ACL. The red snapper rebuilding plan has not formally adopted the use of the term ACL. However, by allocating the acceptable biological catch (ABC) between the commercial and recreational sectors, and then setting quotas for each sector that do not exceed those allocations, the terminology and approaches used in the red snapper rebuilding plan are consistent with the use of ACLs, and optionally annual catch targets as discussed in the national standard 1 guidelines. Such alternative terminology is allowed under the guidelines.

Also in 1990, Amendment 1 established a commercial red snapper quota of 2.65 million pounds (mp) whole weight (ww). There was no explicit recreational allocation specified, only a bag limit of 7 fish and a minimum size limit of 13 inches total length. Based on the 51:49 commercial to recreational sector allocation, the commercial quota implied a TAC of about 6.0 mp in 1990, followed by explicit TACs of 4.0 mp in 1991 and 1992, 6.0 mp in 1993 through 1995, and 9.12 mp from 1996 through 2006. The TAC was reduced to 6.5 mp in 2007 and 5.0 mp in 2008 and 2009.

In 2010, the ABC was increased to 6.945 mp. In 2011, it was initially raised to 7.185 mp, and then increased in August by another 345,000 lbs (7.530 mp total) which was allocated to the recreational sector. In 2012 the ABC was raised to 8.080 mp. A scheduled increase in 2013 to 8.690 mp was cancelled due to an overharvest in 2012 by the recreational sector. After an analysis of the impacts of the overharvest on the red snapper rebuilding plan, the 2013 ABC was increased to 8.460 mp. In July 2013, the Council reviewed a new benchmark assessment (SEDAR 31 2013) which showed that the red snapper stock was rebuilding faster than projected, partly due to strong recruitment in some recent years. Combined with a new method for calculating the ABC, the Scientific and Statistical Committee (SSC) increased the ABC for 2013 to 13.5 mp, but warned that the catch levels would have to be reduced in future years if recruitment returned to average levels. After incorporating a buffer to reduce the possibility of having to later reduce the quota, the Gulf of Mexico Fishery Management Council (Council) further increased the 2013 commercial and recreational quotas to a combined 11.0 mp (5.61 mp and 5.39 mp respectively) (GMFMC 2013b). This increase occurred too late to extend the June recreational season, so the Council requested that the National Marine Fisheries Service (NMFS) reopen the recreational season on October 1 for whatever number of days would be needed to harvest the additional quota. NMFS estimated that the additional recreational quota would take 14 days to be caught, and therefore announced a supplemental season of October 1 through 14.

Both the commercial and recreational sectors have had numerous allocation overruns. Table 3.1.2 shows a comparison of quotas and actual harvests from 1990 through 2013. The recreational sector has had allocation overruns in 21 out of 23 years in which an allocation was specified, while the commercial sector has had overruns in 10 of 23 years. The commercial sector has not had overruns since 2005. Since 2007, commercial harvest of red snapper has operated under an IFQ program.

Table 3.1.2. Red snapper landings and overage/underage by sector, 1986-2013. Landings are in mp ww. Commercial quotas began in 1990. Recreational allocations began in 1991 and recreational quotas began in 1997. Summing the recreational allocation/quota and the commercial quota yields the total allowable catch (TAC) for the years 1991-2009 and the acceptable biological catch (ABC) for 2010-2013.

Year	Recreational			Commercial			Total		
	Alloc. Quota	Actual landings	Difference	Quota	Actual landings	Difference	Quota	Actual landings	Difference
1986	na	2.770	na	na	3.700	na	na	6.470	na
1987	na	1.814	na	na	3.069	na	na	4.883	na
1988	na	2.568	na	na	3.960	na	na	6.528	na
1989	na	2.656	na	na	3.098	na	na	5.754	na
1990	na	1.614	na	3.1	2.650	-0.450	na	4.264	na
1991	1.96	2.917	+0.957	2.04	2.213	+0.173	4.0	5.130	+1.130
1992	1.96	4.618	+2.658	2.04	3.106	+1.066	4.0	7.724	+3.724
1993	2.94	7.161	+4.221	3.06	3.374	+0.314	6.0	10.535	+4.535
1994	2.94	6.076	+3.136	3.06	3.222	+0.162	6.0	9.298	+3.298
1995	2.94	5.464	+2.524	3.06	2.934	-0.126	6.0	8.398	+2.398
1996	4.47	5.339	+0.869	4.65	4.313	-0.337	9.12	9.652	+0.532
1997	4.47	6.804	+2.334	4.65	4.810	+0.160	9.12	11.614	+2.494
1998	4.47	4.854	+0.384	4.65	4.680	+0.030	9.12	9.534	+0.414
1999	4.47	4.972	+0.502	4.65	4.876	+0.226	9.12	9.848	+0.728
2000	4.47	4.750	+0.280	4.65	4.837	+0.187	9.12	9.587	+0.467
2001	4.47	5.252	+0.782	4.65	4.625	-0.025	9.12	9.877	+0.757
2002	4.47	6.535	+2.065	4.65	4.779	+0.129	9.12	11.314	+2.194
2003	4.47	6.105	+1.635	4.65	4.409	-0.241	9.12	10.514	+1.394
2004	4.47	6.460	+1.990	4.65	4.651	+0.001	9.12	11.111	+1.991
2005	4.47	4.676	+0.206	4.65	4.096	-0.554	9.12	8.772	-0.348
2006	4.47	4.131	-0.339	4.65	4.649	-0.001	9.12	8.780	-0.340
2007	3.185	5.809	+2.624	3.315	3.153	-0.162	6.5	8.962	+2.462
2008	2.45	4.056	+1.606	2.55	2.461	-0.089	5.0	6.517	+1.517
2009	2.45	5.597	+3.147	2.55	2.461	-0.089	5.0	8.058	+3.058
2010	3.403	2.651	-0.752	3.542	3.362	-0.180	6.945	6.013	-0.932
2011	3.866	6.734	+2.868	3.664	3.562	-0.102	7.53	10.296	+2.766
2012	3.959	7.524	+3.565	4.121	4.000	-0.121	8.08	11.524	+3.444
2013	5.390	9.639	+4.249	5.610	5.399	-0.211	11.00	15.038	+4.038

Sources: For recreational landings, Southeast Fisheries Science Center (SEFSC) including landings from the Calibrated Marine Recreational Information Program (MRIP), Texas Parks and Wildlife Department (TPWD), and the Southeast Headboat Survey (HBS) (December 2014). For commercial landings, Southeast Data Assessment and Review (SEDAR) 31 Data Workshop Report (1990-2011), commercial quotas/catch allowances report from NMFS/Southeast Regional Office (SERO) IFQ landings website (2012 commercial):

<http://sero.nmfs.noaa.gov/sf/ifq/CommercialQuotasCatchAllowanceTable.pdf>.

Commercial quotas/landings in gutted weight were multiplied by 1.11 to convert to ww. Values highlighted in red are those where landings exceeded quotas.

Recreational Red Snapper Sector

Red snapper are an important component of the recreational sector's harvest of reef fish in the Gulf. Recreational red snapper fishing includes charter boats, headboats (or party boats), and private anglers fishing primarily from private or rental boats. As with the commercial fishery, red snapper are primarily caught with hook-and-line gear in association with bottom structures. Recreational red snapper harvest allocations since 1991 have been set at 49% of the TAC, or 1.96 mp in 1991 and 1992, 2.94 mp for 1993 through 1995, and 4.47 mp from 1996 through 2006. In 2007, the recreational quota was reduced to 3.185 mp. It was reduced again to 2.45 mp in 2008 and 2009. Since 2010, the recreational quota has been increased each year: 3.403 mp in 2010, 3.866 mp in 2011, and 3.959 mp in 2012 (Table 3.1.3).

Before 1984, there were no restrictions on the recreational harvest of red snapper. In November 1984, a 12-inch total length size limit was implemented, but with an allowance for five undersized fish per person. In 1990, the undersized allowance was eliminated, and the recreational sector was managed through bag and size limits with a year-round open season. In 1997, the recreational red snapper allocation was converted into a quota with accompanying quota closure should the sector exceed its quota. Recreational quota closures occurred in 1997, 1998, and 1999, becoming progressively shorter each year even though the quota remained a constant 4.47 mp.

A fixed recreational season of April 21 through October 31 (194 days) was established for 2000 through 2007. However, NMFS returned to variable length seasons beginning in 2008. Under this management approach, due to a lag in the reporting of recreational catches, catch rates over the course of the season were projected in advance based on past trends and changes in the average size of a recreationally harvested red snapper. The recreational season opened each year on June 1 and closed on the date when the quota was projected to be reached. In 2008, the season length was reduced from 194 days to 65 days in conjunction with a reduction in quota to 2.45 mp. The season length then increased to 75 days in 2009. In 2010, the recreational red snapper season was originally projected to be 53 days. However, due to reduced effort and large emergency area closures resulting from the Deepwater Horizon MC252 oil spill, catches were below projections, and a one-time supplemental season of weekend only openings (Friday, Saturday, and Sunday) was established from October 1 through November 22. This added 24 fishing days to the 2010 season for a total of 77 days. In 2011, the season was reduced to 48 days despite an increase in the quota, due to an increase in the average size of a recreationally harvested fish. In 2012 the season was initially scheduled to be 40 days, but was extended to 46 days to compensate for the loss of fishing days due to storms (Table 3.1.3).

During the six years when the recreational harvest was an allocation, not a quota (1991 – 1996), actual recreational harvests in pounds of red snapper exceeded the allocation every year. During the period when the recreational harvest was managed as a quota (1997 – 2013), actual recreational harvest in pounds of red snapper exceeded the quota in 15 out of 17 years, including 5 of the last 6 years (Table 3.1.3). Historical recreational landings estimates have recently been revised to reflect changes in methodology under the Marine Recreational Information Program (MRIP).

Table 3.1.3. Red snapper recreational landings vs. allocation/quota and days open 1986-2012. Landings are in mp ww. Recreational allocations began in 1991, and became quotas in 1997.

Year	Alloc. Quota	Actual landings	Difference	% over or under	Days open
1986	na	2.770	na		365
1987	na	1.814	na		365
1988	na	2.568	na		365
1989	na	2.656	na		365
1990	na	1.614	na		365
1991	1.96	2.917	+0.957	+49%	365
1992	1.96	4.618	+2.658	+136%	365
1993	2.94	7.161	+4.221	+144%	365
1994	2.94	6.076	+3.136	+107%	365
1995	2.94	5.464	+2.524	+86%	365
1996	4.47	5.339	+0.869	+19%	365
1997	4.47	6.804	+2.334	+52%	330
1998	4.47	4.854	+0.384	+9%	272
1999	4.47	4.972	+0.502	+11%	240
2000	4.47	4.750	+0.280	+6%	194
2001	4.47	5.252	+0.782	+17%	194
2002	4.47	6.535	+2.065	+46%	194
2003	4.47	6.105	+1.635	+37%	194
2004	4.47	6.460	+1.990	+45%	194
2005	4.47	4.676	+0.206	+5%	194
2006	4.47	4.131	-0.339	-8%	194
2007	3.185	5.809	+2.624	+82%	194
2008	2.45	4.056	+1.606	+66%	65
2009	2.45	5.597	+3.147	+128%	75
2010	3.403	2.651	-0.752	-22%	53 + 24 = 77
2011	3.866	6.734	+2.868	+74%	48
2012	3.959	7.524	+3.565	+90%	46
2013	5.390	9.639	+4.249	+79%	42

Source: Southeast Fisheries Science Center (SEFSC) including calibrated landings from MRIP, Texas Parks and Wildlife Department (TPWD), and the Southeast Headboat Survey (HBS) (December 2014). Values highlighted in red are those where landings exceeded quotas.

For-hire vessels have operated under a limited access system with respect to the issuance of new for-hire permits for fishing reef fish or coastal migratory pelagics since 2003. A total of 3,340 reef fish and coastal migratory pelagic charter permits were issued under the moratorium, and they are associated with 1,779 vessels. Of these vessels, 1,561 have both reef fish and coastal migratory pelagics permits, 64 have only reef fish permits, and 154 have only coastal migratory pelagics permits. About one-third of Florida charter boats targeted three or less species; two-thirds targeted five or less species; and 90% targeted nine or less species. About 40% of these charter boats did not target particular species. The species targeted by the largest proportion of

Florida charter boats were king mackerel (46%), grouper (29%), snapper (27%), dolphin (26%), and billfish (23%). In the eastern Gulf, the species receiving the most effort were grouper, king mackerel, and snapper. About 25% of Florida headboats targeted three or fewer species; 75% targeted four or fewer species; and 80% targeted five or fewer species. About 60% of headboats did not target any particular species. The species targeted by the largest proportion of Florida headboats are snapper and other reef fish (35%), red grouper (29%), gag grouper (23%), and black grouper (16%). In the eastern Gulf, the species receiving the most effort were snapper, gag, and red grouper (Sutton et al. 1999).

The majority of charter boats in Alabama, Mississippi, Louisiana, and Texas reported targeting snapper (91%), king mackerel (89%), cobia (76%), and tuna (55%). The species receiving the largest percentage of effort by charter boats in the four-state area were snapper (49%), king mackerel (10%), red drum (6%), cobia (6%), tuna (5%), and speckled trout (5%). The majority of headboat operators reported targeting snapper (100%), king mackerel (85%), shark (65%), tuna (55%), and amberjack (50%). The species receiving the largest percentage of total effort by headboats in the four-state area were snapper (70%), king mackerel (12%), amberjack (5%), and shark (5%) (Sutton et al. 1999).

Commercial Red Snapper Sector

In the Gulf, red snapper are primarily harvested commercially with hook-and-line and bandit gear, with bandit gear being more prevalent. Longline gear captures a small percentage of total landings (< 5%). Longline gear is prohibited for the harvest of reef fish inside of 50 fathoms west of Cape San Blas. East of Cape San Blas, longline gear is prohibited for harvest of reef fish inside of 20 fathoms, with a seasonal shift in the longline boundary to 35 fathoms during June through August to protect foraging sea turtles.

Between 1990 and 2006, the principal method of managing the commercial sector for red snapper was with quotas set at 51% of TAC and seasonal closures after each year's quota was filled. The result was a race for fish in which fishermen were compelled to fish as quickly as possible to maximize their catch of the overall quota before the season was closed. The fishing year was characterized by short periods of intense fishing activity with large quantities of red snapper landed during the open seasons rather than lower levels of activity with landings spread more uniformly throughout the year. The result was short seasons and frequent quota overruns (Table 3.1.4). From 1993 through 2006, trip limits, limited access endorsements, split seasons and partial monthly season openings were implemented in an effort to slow the race for fish. At the beginning of the 1993 season, 131 boats qualified for red snapper endorsements on their reef fish permits that entitled them to land 2,000 lbs of red snapper per trip.

In 2007, an IFQ program was implemented for the commercial red snapper sector. Each vessel that qualified for the program was issued an allocation of a percentage of the commercial quota based on historical participation. The allocations were issued as shares representing pounds of red snapper, which the fishermen could harvest, sell or lease to other fishermen, or purchase from other fishermen. Beginning in 2007, the commercial red snapper season is no longer closed, but a commercial vessel cannot land red snapper unless it has sufficient allocation in its vessel account to cover the landing poundage. As a result, there have not been any quota

overruns under the IFQ program (Table 3.1.4). The red snapper IFQ program is currently undergoing a 5-year review to determine if changes are needed to the program.

Table 3.1.4. Commercial red snapper harvest vs. days open, by sector, 1986-2012.

Year	Quota	Actual landings	Days Open (days that open or close at noon are counted as half-days) (“+” = split season)
1986	na	3.700	365
1987	na	3.069	365
1988	na	3.960	365
1989	na	3.098	365
1990	3.1	2.650	365
1991	2.04	2.213	235
1992	2.04	3.106	52½ + 42 = 94½
1993	3.06	3.374	94
1994	3.06	3.222	77
1995	3.06	2.934	50 + 1½ = 51½
1996	4.65	4.313	64 + 22 = 86
1997	4.65	4.810	53 + 18 = 71
1998	4.65	4.680	39 + 28 = 67
1999	4.65	4.876	42 + 22 = 64
2000	4.65	4.837	34 + 25 = 59
2001	4.65	4.625	50 + 20 = 70
2002	4.65	4.779	57 + 24 = 81
2003	4.65	4.409	60 + 24 = 84
2004	4.65	4.651	63 + 32 = 95
2005	4.65	4.096	72 + 48 = 120
2006	4.65	4.649	72 + 43 = 115
2007	3.315	3.183	IFQ
2008	2.55	2.484	IFQ
2009	2.55	2.484	IFQ
2010	3.542	3.392	IFQ
2011	3.664	3.594	IFQ
2012	4.121	4.036	IFQ

Sources: SEDAR 31 Data Workshop Report (1990-2011 landings), commercial quotas/catch allowances report from NMFS/Southeast Regional Office IFQ landings website (2012 landings): <http://sero.nmfs.noaa.gov/sf/ifq/CommercialQuotasCatchAllowanceTable.pdf>.

Commercial quotas/landings in gutted weight were multiplied by 1.11 to convert to ww. Values highlighted in red are those where landings exceeded quotas.

3.2 Description of the Physical Environment

The Gulf has a total area of approximately 600,000 square miles (1.5 million km²), including state waters (Gore 1992). It is a semi-enclosed, oceanic basin connected to the Atlantic Ocean

by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel (Figure 3.2.1). Oceanographic conditions are affected by the Loop Current, discharge of freshwater into the northern Gulf, and a semi-permanent, anti-cyclonic gyre in the western Gulf. The Gulf includes both temperate and tropical waters (McEachran and Fechhelm 2005). Gulf water temperatures range from 54° F to 84° F (12° C to 29° C) depending on time of year and depth of water. Mean annual sea surface temperatures ranged from 73 ° F through 83° F (23-28° C) including bays and bayous (Figure 3.2.1) between 1982 and 2009, according to satellite-derived measurements (NODC 2012: <http://accession.nodc.noaa.gov/0072888>). In general, mean sea surface temperature increases from north to south with large seasonal variations in shallow waters.

The physical environment for Gulf reef fish, including red snapper, is also detailed in the EIS for the Generic EFH Amendment and the Generic ACL/AM Amendment (refer to GMFMC 2004a; GMFMC 2011b).

In the Gulf, fish habitat for adult red snapper consists of submarine gullies and depressions; coral reefs, rock outcroppings, and gravel bottoms; oilrigs; and other artificial structures (GMFMC 2004b). Detailed information pertaining to the closures and preserves is provided in the February 2010 Regulatory Amendment (GMFMC 2010).

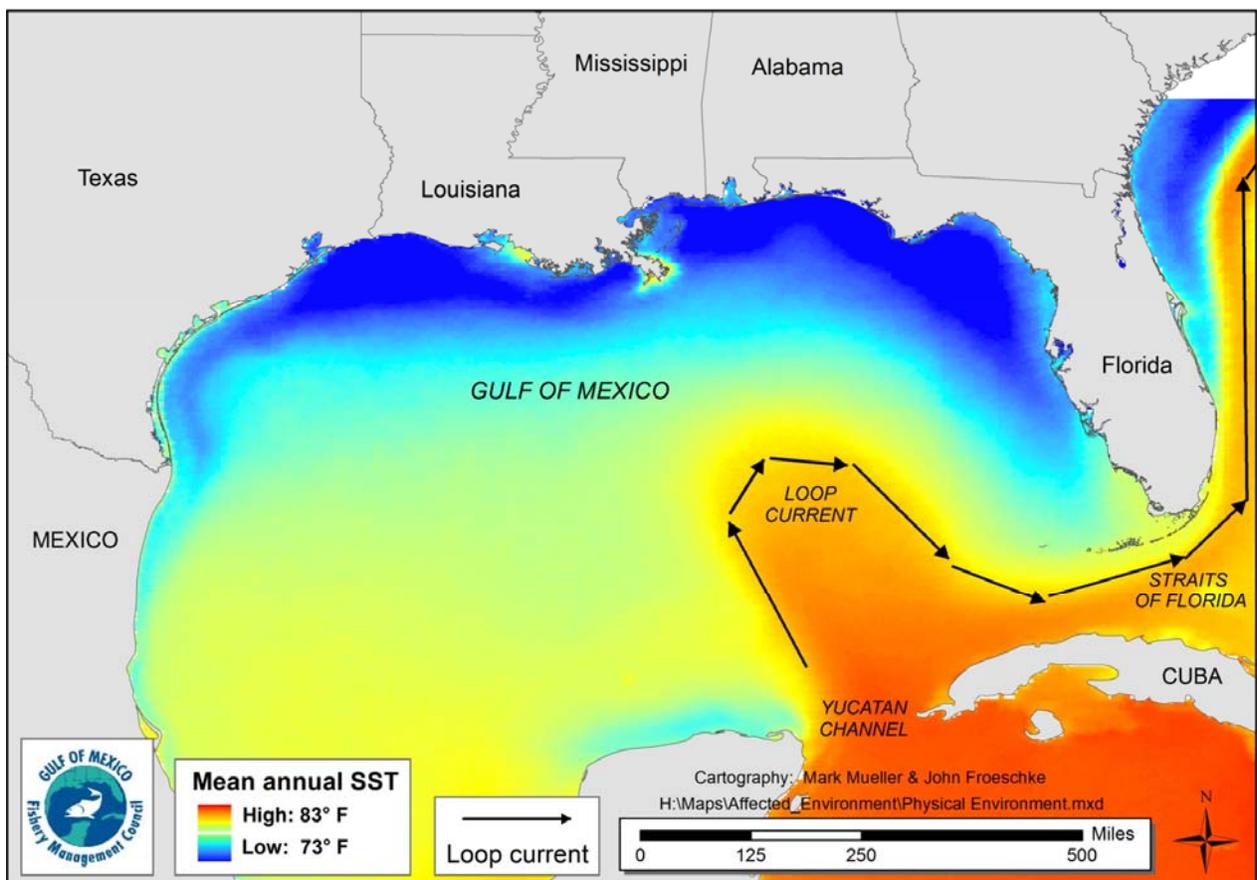


Figure 3.2.1. Physical environment of the Gulf including major feature names and mean annual sea surface temperature as derived from the Advanced Very High Resolution Radiometer Pathfinder Version 5 sea surface temperature data set (<http://accession.nodc.noaa.gov/0072888>)

3.3 Description of the Biological/Ecological Environment

The biological environment of the Gulf, including the species addressed in this amendment, is described in detail in the final EIS for the Generic EFH Amendment (GMFMC 2004a) and is incorporated here by reference.

Red Snapper Life History and Biology

Red snapper demonstrate the typical reef fish life history pattern (Table 3.3.1). Eggs and larvae are pelagic while juveniles are found associated with bottom features or over barren bottom. Spawning occurs over firm sand bottom with little relief away from reefs during the summer and fall. Adult females mature as early as two years and most are mature by four years (Schirripa and Legault 1999). Red snapper have been aged up to 57 years. Until recently, most caught by the directed fishery were 2- to 4-years old (Wilson and Nieland 2001), but a recently completed stock assessment suggests that the age and size of red snapper in the directed fishery has increased in recent years (SEDAR 31 2013). A more complete description of red snapper life history can be found in the EIS for the Generic EFH Amendment (GMFMC 2004a).

Status of the Red Snapper Stock

Southeast Data Assessment and Review (SEDAR) 31 Benchmark Stock Assessment

Commercial harvest of red snapper from the Gulf began in the mid-1800s (Shipp 2001). In the 1930s, party boats built exclusively for recreational fishing began to appear (Chester 2001). The first stock assessment conducted by NMFS in 1986 suggested that the stock was in decline (Parrack and McLellan 1986) and since 1988 (Goodyear 1988) the stock biomass has been found to be below threshold levels.

The most recent red snapper stock assessment was completed in 2013 (SEDAR 31 2013). The primary assessment model selected for the Gulf red snapper stock evaluation assessment was Stock Synthesis (Methot 2010). Stock Synthesis is an integrated statistical catch-at-age model which is widely used for stock assessments in the United States and throughout the world. Commercial landings data included commercial handline and longline landings from the accumulated landings system from 1964 through 2011. For landings between 1880 and 1963, previously constructed historical landings were used. Total annual landings from the IFQ program for years 2007-2011 were used to reapportion 2007-2011 accumulated landings system data across strata. Recreational landings data included the MRIP/Marine Recreational Fishery Statistics Survey (MRFSS) from 1981-2011, Southeast Headboat Survey for 1981-2011, and Texas Parks and Wildlife Department survey. For the years 2004-2011, MRIP landings are available. For earlier years, MRFSS data were calibrated to MRIP estimates using a standardized approach for calculating average weight that accounts for species, region, year, state, mode, wave, and area.

Standardized indices of relative abundance from both fishery dependent and independent data sources were included in the model. The fishery dependent indices came from the commercial handline fleet, recreational headboats, and recreational private/for-hire sectors. Fishery

independent indices came from the Southeast Area Monitoring and Assessment Program (SEAMAP) bottom trawl survey, SEAMAP reef fish video survey, NMFS bottom longline survey, and the SEAMAP plankton survey.

Red snapper discards in the Gulf were calculated from data collected by the self-reported commercial logbook data and the NMFS Gulf reef fish observer program. In addition to these directed fisheries discards, estimates of red snapper bycatch from the commercial shrimp fleet were also generated.

The results of the SEDAR 31 assessment, including an assessment addendum that was prepared after a review of the SEDAR Assessment Panel Report by the SEDAR Review Panel, was presented to the SSC in May 2013. Under the base model, it was estimated that the red snapper stock has been overfished since the 1960s.

Current (2011) stock status was estimated relative to two possible proxies for F_{MSY} : $F_{SPR26\%}$ (i.e., the fishing mortality rate that would produce an equilibrium spawning potential ratio (SPR) of 26%) and F_{MAX} , which corresponded to $F_{SPR20.4\%}$ (i.e., the fishing mortality rate that would produce an equilibrium SPR 20.4%). A proxy of $F_{SPR26\%}$ was previously used as the overfishing and F_{MSY} proxy in SEDAR 7 and the SEDAR 7 update assessment in 2009. F_{MAX} was evaluated as an alternative proxy because at high spawner-recruit steepness values near 1.0, such as the value of 0.99 fixed in the red snapper assessment, F_{MAX} approximates the actual estimate of F_{MSY} . However, the actual estimate of F_{MSY} is sensitive to the parameters of the spawner-recruit relationship. The SSC did not have confidence in using the direct F_{MSY} estimate due to the fact that the spawner-recruit function is poorly estimated and data exist for a very limited range of potential spawning stock biomass (SSB) for the stock. In addition, the SSC felt that the equivalent SPR for F_{MAX} (20.4%) was inappropriately low for species with life history parameters similar to red snapper. The SSC felt that the $F_{SPR26\%}$ proxy, while still somewhat low for species with life history parameters similar to red snapper, was more realistic than the 20.4% SPR associated with F_{MAX} . Furthermore, the $F_{SPR26\%}$ proxy is consistent with the current fishery management plan (FMP) and rebuilding plan for red snapper.

Although the red snapper stock continues to recover, spawning stock biomass is estimated to remain below both the minimum stock size threshold (MSST) and the spawning stock size associated with maximum sustainable yield ($SSB_{MSY\ proxy}$) using either proxy described above. Therefore, the SSC concluded that the stock remains overfished. With respect to overfishing, the current fishing mortality rate (geometric mean of 2009-2011) was estimated to be below both F_{MSY} proxies. Therefore, the SSC estimated the stock is not currently experiencing overfishing.

Based on an evaluation to the Tier 1 P* spreadsheet used for the ABC control rule, the SSC determined that the P* (probability of overfishing) should equal 0.427. This P* is applied to a probability density function (PDF) to determine an ABC that takes into account scientific uncertainty in the setting of the overfishing limit (OFL). In order to capture more of the scientific uncertainty, the SSC decided to use a weighted average of PDFs constructed for the base model (50% weighting), a high M model that assumed a higher natural mortality rate for age-0 and age-1 red snapper (25% weighting), and a lower M model that assumed a lower natural mortality rate for age-0 and age-1 red snapper (25% weighting). These model runs were

selected because they bracket the range of plausible results obtained from the base run and 15 alternative state model runs. Based on the results of the $P^* = 0.427$ applied to the weighted average PDF, the SSC set the following ABCs: 13.5 mp ww in 2013; 11.9 mp in 2014; 10.6 mp in 2015. A red snapper update assessment scheduled for 2014 is expected to re-evaluate the ABC for 2015 and beyond.

Definition of Overfishing

In January 2012, the Generic ACL/AM Amendment (GMFMC 2011b) became effective. One of the provisions in this amendment was to redefine overfishing. In years when there is a stock assessment, overfishing is defined as the fishing mortality rate exceeding the maximum fishing mortality threshold. In years when there is no stock assessment, overfishing is defined as the catch exceeding the OFL. Even though the recreational harvest exceeded its quota in 2012, the total catch (recreational and commercial combined) remained below the OFL. Therefore, as of 2012, overfishing is no longer occurring in the red snapper stock. Note that, because the overfishing threshold is now re-evaluated each year instead of only in years when there is a stock assessment, this status could change on a year-to-year basis.

General Information on Reef Fish Species

The National Ocean Service collaborated with NMFS and the Council to develop distributions of reef fish (and other species) in the Gulf (SEA 1998). The National Ocean Service obtained fishery-independent data sets for the Gulf, including SEAMAP, and state trawl surveys. Data from the Estuarine Living Marine Resources Program contain information on the relative abundance of specific species (highly abundant, abundant, common, rare, not found, and no data) for a series of estuaries, by five life stages (adult, spawning, egg, larvae, and juvenile) and month for five seasonal salinity zones (0-0.5, 0.5-5, 5-15, 15-25, and >25 parts per thousand). National Ocean Service staff analyzed these data to determine relative abundance of the mapped species by estuary, salinity zone, and month. For some species not in the Estuarine Living Marine Resources Program database, distribution was classified as only observed or not observed for adult, juvenile, and spawning stages.

In general, reef fish are widely distributed in the Gulf, occupying both pelagic and benthic habitats during their life cycle. Habitat types and life history stages are summarized in Table 3.3.1 and can be found in more detail in GMFMC (2004a). In general, both eggs and larval stages are planktonic. Larvae feed on zooplankton and phytoplankton. Exceptions to these generalizations include the gray triggerfish that lay their eggs in depressions in the sandy bottom, and gray snapper whose larvae are found around submerged aquatic vegetation (SAV). Juvenile and adult reef fish are typically demersal, and are usually associated with bottom topographies on the continental shelf (<328 feet; <100 m) which have high relief, i.e., coral reefs, artificial reefs, rocky hard-bottom substrates, ledges and caves, sloping soft-bottom areas, and limestone outcroppings. However, several species are found over sand and soft-bottom substrates. Juvenile red snapper are common on mud bottoms in the northern Gulf, particularly from Texas to Alabama. Also, some juvenile snappers (e.g. mutton, gray, red, dog, lane, and yellowtail snappers) and groupers (e.g. goliath grouper, red, gag, and yellowfin groupers) have been documented in inshore seagrass beds, mangrove estuaries, lagoons, and larger bay systems

(GMFMC 1981). More detail on hard bottom substrate and coral can be found in the FMP for Corals and Coral Reefs (GMFMC and SAFMC 1982).

Table 3.3.1. Summary of habitat utilization by life history stage for species in the Reef Fish FMP.

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Red Snapper	Pelagic	Pelagic	Hard bottoms, Sand/ shell bottoms, Soft bottoms	Hard bottoms, Sand/ shell bottoms, Soft bottoms	Hard bottoms, Reefs	Sand/ shell bottoms
Queen Snapper	Pelagic	Pelagic	Unknown	Unknown	Hard bottoms	
Mutton Snapper	Reefs	Reefs	Mangroves, Reefs, SAV, Emergent marshes	Mangroves, Reefs, SAV, Emergent marshes	Reefs, SAV	Shoals/ Banks, Shelf edge/slope
Blackfin Snapper	Pelagic		Hard bottoms	Hard bottoms	Hard bottoms, Shelf edge/slope	Hard bottoms, Shelf edge/slope
Cubera Snapper	Pelagic		Mangroves, Emergent marshes, SAV	Mangroves, Emergent marshes, SAV	Mangroves, Reefs	Reefs
Gray Snapper	Pelagic, Reefs	Pelagic, Reefs	Mangroves, Emergent marshes, Seagrasses	Mangroves, Emergent marshes, SAV	Emergent marshes, Hard bottoms, Reefs, Sand/ shell bottoms, Soft bottoms	
Lane Snapper	Pelagic		Mangroves, Reefs, Sand/ shell bottoms, SAV, Soft bottoms	Mangroves, Reefs, Sand/ shell bottoms, SAV, Soft bottoms	Reefs, Sand/ shell bottoms, Shoals/ Banks	Shelf edge/slope
Silk Snapper	Unknown	Unknown	Unknown	Unknown	Shelf edge	
Yellowtail Snapper	Pelagic		Mangroves, SAV, Soft bottoms	Reefs	Hard bottoms, Reefs, Shoals/ Banks	
Wenchman	Pelagic	Pelagic			Hard bottoms, Shelf edge/slope	Shelf edge/slope
Vermilion Snapper	Pelagic		Hard bottoms, Reefs	Hard bottoms, Reefs	Hard bottoms, Reefs	

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Gray Triggerfish	Reefs	Drift algae, <i>Sargassum</i>	Drift algae, <i>Sargassum</i>	Drift algae, Reefs, <i>Sargassum</i>	Reefs, Sand/ shell bottoms	Reefs, Sand/ shell bottoms
Greater Amberjack	Pelagic	Pelagic	Drift algae	Drift algae	Pelagic, Reefs	Pelagic
Lesser Amberjack			Drift algae	Drift algae	Hard bottoms	Hard bottoms
Almaco Jack	Pelagic		Drift algae	Drift algae	Pelagic	Pelagic
Banded Rudderfish		Pelagic	Drift algae	Drift algae	Pelagic	Pelagic
Hogfish			SAV	SAV	Hard bottoms, Reefs	Reefs
Blueline Tilefish	Pelagic	Pelagic			Hard bottoms, Sand/ shell bottoms, Shelf edge/slope, Soft bottoms	
Tilefish (golden)	Pelagic, Shelf edge/ Slope	Pelagic	Hard bottoms, Shelf edge/slope, Soft bottoms	Hard bottoms, Shelf edge/slope, Soft bottoms	Hard bottoms, Shelf edge/slope, Soft bottoms	
Goldface Tilefish	Unknown					
Speckled Hind	Pelagic	Pelagic			Hard bottoms, Reefs	Shelf edge/slope
Yellowedge Grouper	Pelagic	Pelagic		Hard bottoms	Hard bottoms	
Atlantic Goliath Grouper	Pelagic	Pelagic	Mangroves, Reefs, SAV	Hard bottoms, Mangroves, Reefs, SAV	Hard bottoms, Shoals/ Banks, Reefs	Reefs, Hard bottoms
Red Grouper	Pelagic	Pelagic	Hard bottoms, Reefs, SAV	Hard bottoms, Reefs	Hard bottoms, Reefs	

Common name	Eggs	Larvae	Early Juveniles	Late juveniles	Adults	Spawning adults
Warsaw Grouper	Pelagic	Pelagic		Reefs	Hard bottoms, Shelf edge/slope	
Snowy Grouper	Pelagic	Pelagic	Reefs	Reefs	Hard bottoms, Reefs, Shelf edge/slope	
Black Grouper	Pelagic	Pelagic	SAV	Hard bottoms, Reefs	Hard bottoms, Mangroves, Reefs	
Yellowmouth Grouper	Pelagic	Pelagic	Mangroves	Mangroves, Reefs	Hard bottoms, Reefs	
Gag	Pelagic	Pelagic	SAV	Hard bottoms, Reefs, SAV	Hard bottoms, Reefs	
Scamp	Pelagic	Pelagic	Hard bottoms, Mangroves, Reefs	Hard bottoms, Mangroves, Reefs	Hard bottoms, Reefs	Reefs, Shelf edge/slope
Yellowfin Grouper			SAV	Hard bottoms, SAV	Hard bottoms, Reefs	Hard bottoms

Source: Adapted from Table 3.2.7 in the final draft of the EIS from the Generic EFH Amendment (GMFMC 2004a) and consolidated in this document.

Status of Reef Fish Stocks

The Reef Fish FMP currently encompasses 31 species (Table 3.3.2). Eleven other species were removed from the FMP in 2012 through the Generic ACL/AM Amendment (GMFMC 2011b). Stock assessments and stock assessment reviews have been conducted for 13 species and can be found on the Council (www.gulfcouncil.org) and SEDAR (www.sefsc.noaa.gov/sedar) websites. The assessed species are:

- Red Snapper (SEDAR 7 2005; SEDAR 7 Update 2009; SEDAR 31 2013)
- Vermilion Snapper (Porch and Cass-Calay 2001; SEDAR 9 2006a; SEDAR 9 Update 2011a)
- Yellowtail Snapper (Muller et al. 2003; SEDAR 3 2003; O’Hop et al. 2012)
- Mutton Snapper (SEDAR 15A 2008)
- Gray Triggerfish (Valle et al. 2001; SEDAR 9 2006b; SEDAR 9 Update 2011b)
- Greater Amberjack (Turner et al. 2000; SEDAR 9 2006c; SEDAR 9 Update 2010)
- Hogfish (Ault et al. 2003; SEDAR 6 2004a)
- Red Grouper (NMFS 2002; SEDAR 12 2007; SEDAR 12 Update 2009)
- Gag (Turner et al. 2001; SEDAR 10 2006; SEDAR 10 Update 2009)
- Black Grouper (SEDAR 19 2010)
- Yellowedge Grouper (Cass-Calay and Bahnick 2002; SEDAR 22 2011a)
- Tilefish (Golden) (SEDAR 22 2011b)
- Atlantic Goliath Grouper (Porch et al. 2003; SEDAR 6 2004b; SEDAR 23 2011)

The NMFS Office of Sustainable Fisheries updates its Status of U.S. Fisheries Report to Congress on a quarterly basis utilizing the most current stock assessment information. The most recent update can be found at: (<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>). The status of both assessed and unassessed stocks as of the writing of this report is shown in Table 3.3.2.

Table 3.3.2. Species of the Reef Fish FMP grouped by family.

Common Name	Scientific Name	Stock Status
Family Balistidae – Triggerfishes		
Gray Triggerfish	<i>Balistes capriscus</i>	Overfished, no overfishing
Family Carangidae – Jacks		
Greater Amberjack	<i>Seriola dumerili</i>	Overfished, no overfishing
Lesser Amberjack	<i>Seriola fasciata</i>	Unknown
Almaco Jack	<i>Seriola rivoliana</i>	Unknown
Banded Rudderfish	<i>Seriola zonata</i>	Unknown
Family Labridae - Wrasses		
Hogfish	<i>Lachnolaimus maximus</i>	Unknown
Family Malacanthidae - Tilefishes		
Tilefish (Golden)	<i>Lopholatilus chamaeleonticeps</i>	Not overfished, no overfishing
Blueline Tilefish	<i>Caulolatilus microps</i>	Unknown
Goldface Tilefish	<i>Caulolatilus chrysops</i>	Unknown
Family Serranidae - Groupers		
Gag	<i>Mycteroperca microlepis</i>	Overfished, no overfishing
Red Grouper	<i>Epinephelus morio</i>	Not overfished, no overfishing
Scamp	<i>Mycteroperca phenax</i>	Unknown
Black Grouper	<i>Mycteroperca bonaci</i>	Not overfished, no overfishing
Yellowedge Grouper	* <i>Hyporthodus flavolimbatus</i>	Not overfished, no overfishing
Snowy Grouper	* <i>Hyporthodus niveatus</i>	Unknown
Speckled Hind	<i>Epinephelus drummondhayi</i>	Unknown
Yellowmouth Grouper	<i>Mycteroperca interstitialis</i>	Unknown
Yellowfin Grouper	<i>Mycteroperca venenosa</i>	Unknown
Warsaw Grouper	* <i>Hyporthodus nigritus</i>	Unknown
**Atlantic Goliath Grouper	<i>Epinephelus itajara</i>	Unknown
Family Lutjanidae - Snappers		
Queen Snapper	<i>Etelis oculatus</i>	Unknown
Mutton Snapper	<i>Lutjanus analis</i>	Not overfished, no overfishing
Blackfin Snapper	<i>Lutjanus buccanella</i>	Unknown
Red Snapper	<i>Lutjanus campechanus</i>	Overfished, no overfishing
Cubera Snapper	<i>Lutjanus cyanopterus</i>	Unknown
Gray Snapper	<i>Lutjanus griseus</i>	Unknown
Lane Snapper	<i>Lutjanus synagris</i>	Unknown
Silk Snapper	<i>Lutjanus vivanus</i>	Unknown
Yellowtail Snapper	<i>Ocyurus chrysurus</i>	Not overfished, no overfishing
Vermilion Snapper	<i>Rhomboplites aurorubens</i>	Not overfished, no overfishing
Wenchman	<i>Pristipomoides aquilonaris</i>	Unknown

Notes: * In 2013 the genus for yellowedge grouper, snowy grouper, and warsaw grouper was changed by the American Fisheries Society from *Epinephelus* to *Hyporthodus* (American Fisheries Society 2013).

**Atlantic goliath grouper is a protected grouper and benchmarks do not reflect appropriate stock dynamics. In 2013 the common name was changed from goliath grouper to Atlantic goliath grouper by the American Fisheries Society to differentiate from the Pacific goliath grouper, a newly named species (American Fisheries Society 2013).

Protected Species

There are 29 different species of marine mammals that may occur in the Gulf. All 29 species are protected under the Marine Mammal Protection Act and seven are also listed as endangered under the Endangered Species Act (ESA) (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales and the West Indian manatee). Other species protected under the ESA occurring in the Gulf include five sea turtle species (Kemp's ridley, loggerhead, green, leatherback, and hawksbill); two fish species (Gulf sturgeon and smalltooth sawfish), and two coral species (elkhorn coral and staghorn coral). Information on the distribution, biology, and abundance of these protected species in the Gulf is included in the final EIS to the Generic EFH Amendment (GMFMC 2004a) and the February 2005, October 2009, and September 2011 ESA biological opinions on the reef fish fishery (NMFS 2005; NMFS 2009; NMFS 2011a). Marine Mammal Stock Assessment Reports and additional information are also available on the NMFS Office of Protected Species website: <http://www.nmfs.noaa.gov/pr/species/>.

The Gulf reef fish fishery is classified in the Marine Mammal Protection Act 2013 List of Fisheries as a Category III fishery (78 FR 53336, August 29, 2013). This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from any fishery is less than or equal to 1% of the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. Dolphins are the only species documented as interacting with these fisheries. Bottlenose dolphins prey upon on the bait, catch, and/or released discards of fish from the reef fish fishery. They are also a common predator around reef fish vessels, feeding on the discards.

All five species of sea turtles are adversely affected by the Gulf reef fish fishery. Incidental captures are relatively infrequent, but occur in all commercial and recreational hook-and-line and longline components of the reef fish fishery. Captured sea turtles can be released alive or can be found dead upon retrieval of the gear as a result of forced submergence. Sea turtles released alive may later succumb to injuries sustained at the time of capture or from exacerbated trauma from fishing hooks or lines that were ingested, entangled, or otherwise still attached when they were released. Sea turtle release gear and handling protocols are required in the commercial and for-hire reef fish fisheries to minimize post-release mortality.

Smalltooth sawfish are also affected by the Gulf reef fish fishery, but to a much lesser extent. Smalltooth sawfish primarily occur in the Gulf off peninsular Florida. Incidental captures in the commercial and recreational hook-and-line components of the reef fish fishery are rare events, with only eight smalltooth sawfish estimated to be incidentally caught annually, and none are expected to result in mortality (NMFS 2005). Fishermen in this fishery are required to follow smalltooth sawfish safe handling guidelines. The long, toothed rostrum of the smalltooth sawfish causes this species to be particularly vulnerable to entanglement in fishing gear.

On September 30, 2011, the Protected Resources Division released a biological opinion, which concluded that the continued operation of the Gulf reef fish fishery is not likely to jeopardize the continued existence of sea turtles (loggerhead, Kemp's ridley, green, hawksbill, and leatherback) or smalltooth sawfish (NMFS 2011a). An incidental take statement was issued specifying the

amount and extent of anticipated take, along with reasonable and prudent measures and associated terms and conditions deemed necessary and appropriate to minimize the impact of these takes. The Council addressed measures to reduce take in the reef fish fishery's longline component in Amendment 31 (GMFMC 2009). Other listed species and designated critical habitat in the Gulf were determined not likely to be adversely affected.

On December 7, 2012, NMFS published a proposed rule to list 66 coral species under the ESA and reclassify *Acropora* from threatened to endangered (77 FR 73220). In a memo dated February 13, 2013, NMFS determined the reef fish fishery was not likely to adversely affect *Acropora* because of where the fishery operates, the types of gear used in the fishery, and that other regulations protect *Acropora* where they are most likely to occur. None of the new information regarding population level concerns would affect those determinations.

Deepwater Horizon MC252 Oil Spill

On April 20, 2010 an explosion occurred on the Deepwater Horizon MC252 oil rig approximately 36 nautical miles (41 statute miles) off the Louisiana coast. Two days later the rig sank. An uncontrolled oil leak from the damaged well continued for 87 days until the well was successfully capped by British Petroleum on July 15, 2010. The Deepwater Horizon MC252 oil spill affected at least one-third of the Gulf area from western Louisiana east to the Florida Panhandle and south to the Campeche Bank in Mexico (Figure 3.3.1).

As reported by the National Oceanic and Atmospheric Administration Office of Response and Restoration (NOAA 2010), the oil from the Deepwater Horizon MC252 spill is relatively high in alkanes, which can readily be used by microorganisms as a food source. As a result, the oil from this spill is likely to biodegrade more readily than crude oil in general. The Deepwater Horizon MC252 oil is also relatively much lower in polyaromatic hydrocarbons. Polyaromatic hydrocarbons are highly toxic chemicals that tend to persist in the environment for long periods of time, especially if the spilled oil penetrates into the substrate on beaches or shorelines. Like all crude oils, MC252 oil contains volatile organic compounds (VOCs) such as benzene, toluene, and xylene. Some VOCs are acutely toxic but because they evaporate readily, they are generally a concern only when oil is fresh.³

In addition to the crude oil, 1.4 million gallons of the dispersant, Corexit 9500A[®], was applied to the ocean surface and an additional 770,000 gallons of dispersant was pumped to the mile-deep well head (National Commission 2010). No large-scale applications of dispersants in deep water had been conducted until the Deepwater Horizon MC252 oil spill. Thus, no data exist on the environmental fate of dispersants in deep water. However, a study found that, while Corexit 9500A[®] and oil are similar in their toxicity, when Corexit 9500A[®] and oil were mixed in lab tests, toxicity to microscopic rotifers increased up to 52-fold (Rico-Martínez et al. 2013). This suggests that the toxicity of the oil and dispersant combined may be greater than anticipated.

Oil could exacerbate development of the hypoxic “dead” zone in the Gulf as could higher than normal input of water from the Mississippi River drainage. For example, oil on the surface of the water could restrict the normal process of atmospheric oxygen mixing into and replenishing

³ Source: http://sero.nmfs.noaa.gov/sf/deepwater_horizon/OilCharacteristics.pdf

oxygen concentrations in the water column. In addition, microbes in the water that break down oil and dispersant also consume oxygen; this could lead to further oxygen depletion.

Changes have occurred in the amount and distribution of fishing effort in the Gulf in response to the oil spill. This has made the analysis of the number of days needed for the recreational sector to fill its quota more complex and uncertain, and will make the requirement to allow the recreational sector to harvest its quota of red snapper while not exceeding the quota particularly challenging. Nevertheless, substantial portions of the red snapper population are found in the northwestern and western Gulf (western Louisiana and Texas) and an increasing population of red snapper is developing off the west Florida continental shelf. Thus, spawning by this segment of the stock may not be impacted, which would mitigate the overall impact of a failed spawn by that portion of the stock located in oil-affected areas.

As a result of the Deepwater Horizon MC252 spill, a consultation pursuant to ESA Section 7(a)(2) was reinitiated. As discussed above, on September 30, 2011, the Protected Resources Division released a biological opinion, which after analyzing best available data, the current status of the species, environmental baseline (including the impacts of the recent Deepwater Horizon MC252 oil release event in the northern Gulf), effects of the proposed action, and cumulative effects, concluded that the continued operation of the Gulf reef fish fishery is not likely to jeopardize the continued existence of green, hawksbill, Kemp's ridley, leatherback, or loggerhead sea turtles, nor the continued existence of smalltooth sawfish (NMFS 2011a).

For additional information on the Deepwater Horizon MC252 oil spill and associated closures, see: http://sero.nmfs.noaa.gov/deepwater_horizon_oil_spill.htm.

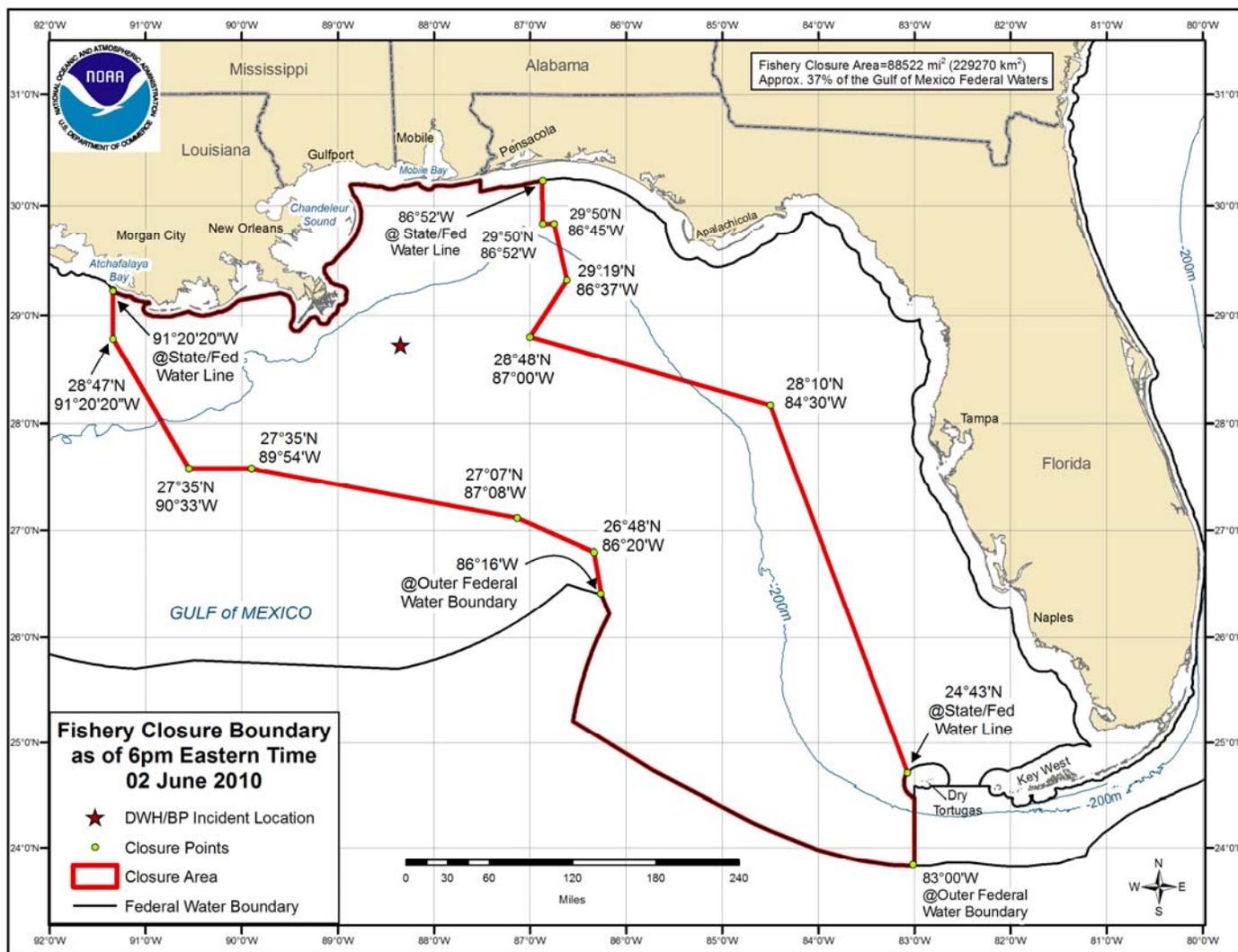


Figure 3.3.1. Fishery closure at the height of the Deepwater Horizon MC252 oil spill.

3.4 Description of the Economic Environment

3.4.1 Commercial Sector

A description of the commercial sector is provided in GMFMC (2013) and is incorporated herein by reference. Because this proposed amendment would only change management of the recreational sector, an update of the information on the commercial sector provided in GMFMC (2013) is not provided.

3.4.2 Recreational Sector

Angler Effort

Recreational effort derived from the MRFSS/MRIP database can be characterized in terms of the number of trips as follows:

1. Target effort - The number of individual angler trips, regardless of duration, where the intercepted angler indicated that the species or a species in the species group was targeted as either the first or second primary target for the trip. The species did not have to be caught.
2. Catch effort - The number of individual angler trips, regardless of duration and target intent, where the individual species or a species in the species group was caught. The fish did not have to be kept.
3. Total recreational trips - The total estimated number of recreational trips in the Gulf, regardless of target intent or catch success.

Other measures of effort are possible, such as the number of harvest trips (the number of individual angler trips that harvest a particular species regardless of target intent), and directed trips (the number of individual angler trips that either targeted or caught a particular species), among other measures, but the three measures of effort listed above are used in this assessment. Because of the Deepwater Horizon MC252 oil spill, 2010 was not a typical year for recreational fishing due to the extensive closures (Figure 3.3.1) and associated decline in fishing in much of the Gulf. For information on the Deepwater Horizon MC252 oil spill and associated closures, see: http://sero.nmfs.noaa.gov/deepwater_horizon_oil_spill.htm. Estimates of the average annual red snapper effort for the shore, charter, and private/rental boat modes in the Gulf for the period 2006-2011 with and without 2010 data are provided in Table 3.4.2.1. The average annual red snapper target effort for 2006-2011 was approximately 9% less than the average for this period excluding 2010. For red snapper catch effort, the difference was approximately 7%. Because of these differences, this assessment excludes recreational effort data for 2010 from further analysis. Table 3.4.2.2 contains estimates for the average annual red snapper recreational effort for 2006-2011 excluding 2010 by state and mode (shore, charter, and private/rental boat only).

Table 3.4.2.1. Effects of 2010 data on average annual red snapper recreational effort.

	Target Trips					
	Alabama	West Florida	Louisiana	Mississippi	Texas	Total
Average 2006-2011	98,373	186,656	49,934	7,225	*	342,187
Average w/o 2010	111,846	198,609	58,108	7,729	*	376,292
	Catch Trips					
	Alabama	West Florida	Louisiana	Mississippi	Texas	Total
Average 2006-2011	150,641	465,282	77,689	9,284	*	702,896
Average w/o 2010	163,316	494,783	90,524	9,722	*	758,346

*Unavailable.

Source: Southeast Regional Office using MRFSS/MRIP data.

Table 3.4.2.2. Average annual red snapper recreational effort by mode, 2006-2011 excluding 2010.

	Alabama	West Florida	Louisiana	Mississippi	Texas	Total
Shore Mode						
Target Trips	610	1,215	0	0	*	1,825
Catch Trips	912	1,114	0	0	*	2,026
Charter Mode						
Target Trips	22,131	46,389	18,510	33	*	87,064
Catch Trips	49,405	212,494	34,418	247	*	296,563
Private/Rental Mode						
Target Trips	89,105	151,005	39,598	7,696	*	287,403
Catch Trips	112,999	281,175	56,106	9,476	*	459,757
All Modes						
Target Trips	111,846	198,609	58,108	7,729	*	376,292
Catch Trips	163,316	494,783	90,524	9,722	*	758,346

*Unavailable.

Source: Southeast Regional Office using MRFSS/MRIP data.

Headboat data do not support the estimation of target or catch effort because target intent is not collected and the harvest data (the data reflect only harvest information and not total catch) are collected on a vessel basis and not by individual angler. Table 3.4.2.3 contains estimates of the number of headboat angler days for all Gulf states for 2006-2011.

Table 3.4.2.3. Headboat angler days.

Year	W Florida/Alabama	Louisiana	Mississippi	Texas	Total
2006	124,049	5,005	0	70,789	199,843
2007	136,880	2,522	0	63,764	203,166
2008	130,176	2,945	0	41,188	174,309
2009	142,438	3,268	0	50,737	196,443
2010	111,018	217	*	47,154	158,389
2011	157,025	1,886	1,771	47,284	207,966
Average All	133,598	2,641	*	53,486	189,724
Average w/o 2010	138,114	3,125	1,771**	54,752	196,345

*Confidential.

**Because the average totals are used to represent expectations of future activity, the 2011 number of trips is provided as best representative of the emergent headboat fishery in Mississippi.

Source: NMFS Southeast Headboat Survey (HBS).

Permits

The for-hire sector is comprised of charter vessels and headboats (party boats). Although charter vessels tend to be smaller, on average, than headboats, the key distinction between the two types of operations is how the fee is determined. On a charter boat trip, the fee charged is for the entire vessel, regardless of how many passengers are carried, whereas the fee charged for a headboat trip is paid per individual angler.

A federal for-hire vessel permit has been required for reef fish since 1996 and the sector currently operates under a limited access system. On June 4, 2013, there were 1,349 valid (non-expired) or renewable Gulf Charter/Headboat Reef Fish Permits. A renewable permit is an expired permit that may not be actively fished, but is renewable for up to one year after expiration. Although the permit does not distinguish between headboats and charter boats, an estimated 70 headboats operate in the Gulf (K. Brennen, NMFS Southeast Fisheries Science Center, pers. comm.).

Information on Gulf charter boat and headboat operating characteristics, including average fees and net operating revenues, is included in Savolainen et al. (2012) and is incorporated herein by reference.

There are no specific permitting requirements for recreational anglers to fish for or harvest reef fish. Instead, anglers are required to possess either a state recreational fishing permit that authorizes saltwater fishing in general, or be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions. As a result, it is not possible to identify with available data how many individual anglers would be expected to be affected by this proposed amendment.

Economic Value

Economic value can be measured in the form of consumer surplus per red snapper trip for anglers (the amount of money that an angler would be willing to pay for a fishing trip in excess of the cost of the trip) and producer surplus per passenger trip for for-hire vessels (the amount of money that a vessel owner earns in excess of the cost of providing the trip). The estimated value of the consumer surplus per red snapper angler trip for a trip on which the angler is allowed to harvest two red snapper is \$56.42 (GMFMC 2010; value updated to 2011 dollars). Estimates of the consumer surplus per fish, instead of per angler trip, for red snapper and other saltwater species are provided in Carter and Liese (2012) and are incorporated herein by reference.

Estimates of the producer surplus per for-hire passenger trip are not available. Instead, net operating revenues, which are the return used to pay all labor wages, returns to capital, and owner profits, are used as the proxy for producer surplus. The estimated net operating revenue is \$154.62 per target charter angler trip and \$51.19 (2011 dollars) per target headboat angler trip regardless of species targeted or catch success (C. Liese, NMFS Southeast Fisheries Science Center, pers. comm.). Estimates of net operating revenue by target species are not available.

Recreational Sector Business Activity

Estimates of the business activity (economic impacts) associated with recreational angling for red snapper were derived using average impact coefficients for recreational angling for all species, as derived from an add-on survey to the MRFSS to collect economic expenditure information, as described and utilized in NMFS (2011b). Estimates of these coefficients for target or catch behavior for individual species are not available. Estimates of the average expenditures by recreational anglers are also provided in NMFS (2011b) and are incorporated herein by reference.

Business activity for the recreational sector is characterized in the form of full time equivalent jobs, output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Job and output (sales) impacts are equivalent metrics across both the commercial and recreational sectors. Income impacts (commercial sector) and value-added impacts (recreational sector) are not equivalent, though similarity in the magnitude of multipliers generated and used for the two metrics may result in roughly equivalent values. Similar to income impacts, value-added impacts should not be added to output (sales) impacts because this would result in double counting.

Estimates of the average red snapper effort (2006-2009 and 2011) and associated business activity (2011 dollars) are provided in Table 3.4.2.4. Red snapper target effort (trips) was selected as the measure of red snapper effort. More individual angler trips catch red snapper than target red snapper, as shown in Tables 3.4.2.1 and 3.4.2.2. Estimates of the economic activity associated with red snapper catch trips can be calculated using the ratio of catch trips to target trips because the available estimates of the average impacts per trip are not differentiated by trip intent or catch success. For example, if the estimated number of catch trips is three times the number of target trips for a particular state and mode, the estimate of the economic activity associated with these catch trips would equal three times the estimated impacts of target trips.

Table 3.4.2.4. Summary of red snapper target trips (2006-2009 and 2011 average) and associated business activity (2011 dollars). Output and value added impacts are not additive.

	Alabama	West Florida	Louisiana	Mississippi	Texas
Shore Mode					
Target Trips	610	1,215	0	0	*
Output Impact	\$46,624	\$86,025	\$0	\$0	*
Value Added Impact	\$25,081	\$49,977	\$0	\$0	*
Jobs	1	1	0	0	*
Private/Rental Mode					
Target Trips	89,105	151,005	39,598	7,696	*
Output Impact	\$5,416,278	\$7,162,669	\$3,373,684	\$229,300	*
Value Added Impact	\$2,965,290	\$4,259,192	\$1,659,295	\$109,897	*
Jobs	54	68	30	2	*
Charter Mode					
Target Trips	22,131	46,389	18,510	33	*
Output Impact	\$12,038,231	\$15,218,384	\$9,206,092	\$10,712	*
Value Added Impact	\$6,626,643	\$9,022,935	\$5,227,203	\$6,036	*
Jobs	154	150	93	0	*
All Modes					
Target Trips	111,846	198,609	58,108	7,729	*
Output Impact	\$17,501,134	\$22,467,077	\$12,579,776	\$240,012	*
Value Added Impact	\$9,617,014	\$13,332,104	\$6,886,498	\$115,933	*
Jobs	209	219	123	2	*

*Because target information is unavailable, associated business activity cannot be calculated.

Source: Effort data from the MRFSS/MRIP, economic impact results calculated by NMFS Southeast Regional Office using the model developed for NMFS (2011b). Estimates of the economic activity (impacts) associated with headboat red snapper effort are not available. Headboat vessels are not covered in MRFSS/MRIP, so estimation of the appropriate economic impact coefficients for headboat vessels has not been conducted. While appropriate economic impact coefficients are available for the charter boats, potential differences in certain factors, such as the for-hire fee, rates of tourist versus local participation rates, and expenditure patterns, may result in significant differences in the economic impacts of the headboat fleet relative to the charter fleet.

The estimates of the business activity associated with red snapper recreational trips are only available at the state level. Addition of the state-level estimates to produce a regional or national total will underestimate the actual amount of total business activity because summing the state estimates will not capture business activity that leaks outside the individual states. A state estimate only reflects activities that occur within that state and not related activity that occurs in

another state. For example, if a good is produced in Alabama but sold in Florida, the measure of business activity in Florida associated with the its sale in Florida does not include the production process in Alabama. Assessment of business activity at the national (or regional) level would capture activity in both states and include all activity except that which leaks into other nations.

3.5 Description of the Social Environment

A description of the social environment for the commercial and recreational sectors' harvest of red snapper is provided in GMFMC (2013a) and is incorporated herein by reference. Because this proposed amendment would only affect management of the recreational sector, a summary of the information provided in GMFMC (2013a) is included for the recreational sector only.

Red snapper is harvested recreationally in all five Gulf states. The proportion of total recreational landings by state for the years 1986 through 2012 is provided in Table 2.3.1. Landings by state are not constant; the proportion of the quota represented by each state varies from year to year. Across time, the proportion of landings made up by the eastern Gulf states (Alabama and western Florida) has increased compared to the western Gulf states (Texas and Louisiana), as the rebuilding plan has proceeded.

Red snapper landings for the recreational sector are not available at the community level, making it difficult to identify communities as dependent on recreational fishing for red snapper. Data reflecting commercial landings of red snapper may or may not reflect areas of importance for recreational fishing of red snapper. It cannot be assumed that the proportion of commercial red snapper landings among other species in a community would be similar to its proportion among recreational landings within the same community because of sector differences in fishing practices and preferences. Thus, in addition to communities with the greatest commercial red snapper landings, the referenced analysis identifies communities with the greatest recreational fishing engagement, based on numbers of: 1) federal for-hire permits, 2) vessels designated recreational by owner address, and 3) vessels designated recreational by homeport, plus availability of recreational fishing infrastructure. The 20 Gulf communities to score highest for recreational fishing engagement based on the described analysis are listed in Table 3.4.1. Because the analysis used discrete geo-political boundaries, Panama City and Panama City Beach had separate values for the associated variables. Calculated independently, each still ranked high enough to appear in the top 20 list suggesting a greater importance for recreational fishing in that region.

Comparing the communities of recreational importance (Table 3.5.1) and those with greater commercial landings and IFQ shareholders (see Figure 3.4.2 and Table 3.4.2 in GMFMC 2013a), five communities overlap: Destin, Panama City, Pensacola, and Apalachicola, Florida and Galveston, Texas. Social effects resulting from actions taken in this plan amendment are likely to be greatest in these communities.

Table 3.5.1. Top ranking Gulf communities based on recreational fishing engagement and reliance, in descending order.

Community	County	State
Destin	Okaloosa	FL
Orange Beach	Baldwin	AL
Panama City	Bay	FL
Port Aransas	Nueces	TX
Pensacola	Escambia	FL
Panama City Beach	Bay	FL
Naples	Collier	FL
St. Petersburg	Pinellas	FL
Freeport	Brazoria	TX
Biloxi	Harrison	MS
Galveston	Galveston	TX
Clearwater	Pinellas	FL
Fort Myers Beach	Lee	FL
Sarasota	Sarasota	FL
Tarpon Springs	Pinellas	FL
Dauphin Island	Mobile	AL
Apalachicola	Franklin	FL
Carrabelle	Franklin	FL
Port St. Joe	Gulf	FL
Marco Island	Collier	FL

Source: NMFS Southeast Regional Office permit office 2008, MRIP site survey 2010.

For additional information pertaining to the social environment for the harvest of red snapper, the reader is directed to the following documents which are included here by reference. The February 2010 Regulatory Amendment (GMFMC 2010) includes a detailed discussion of the commercial communities within each state and county which are the most reliant on red snapper. This description focuses on the demographic character of each county in order to aid in understanding the dependence of a particular county on red snapper fishing. The January 2011 Regulatory Amendment (GMFMC 2011a) includes an update on the impacts of the Deepwater Horizon MC252 oil spill. The Gulf of Mexico 2011 Red Snapper IFQ Annual Report (NMFS 2012a) provides a detailed discussion of the commercial red snapper IFQ program.

3.5.1 Environmental Justice Considerations

Executive Order 12898 requires federal agencies conduct their programs, policies, and activities in a manner to ensure individuals or populations are not excluded from participation in, or denied the benefits of, or subjected to discrimination because of their race, color, or national origin. In addition, and specifically with respect to subsistence consumption of fish and wildlife, federal agencies are required to collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. The main focus of Executive Order 12898 is to consider “the disproportionately high and adverse human health or

environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories...” This executive order is generally referred to as environmental justice (EJ).

Recreational red snapper fishermen and associated businesses and communities along the coast may be affected by this proposed action. However, information on race, ethnicity, and income status for groups at the different participation levels (private anglers, for-hire captain, crew, and customers, and employees of recreational fishing businesses, etc.) is not available. Because this proposed action could be expected to affect fishermen and associated industries in numerous communities along the Gulf coast, census data (available at the county level, only) have been assessed to examine whether any coastal counties have poverty or minority rates that exceed the EJ thresholds.

The threshold for comparison that was used was 1.2 times the state average such that, if the value for the county was greater than or equal to 1.2 times the state average, then the county was considered an area of potential EJ concern (EPA 1999). Census data for the year 2010 was used. For Florida, the estimate of the minority (interpreted as non-white, including Hispanic) population was 39.5%, while 13.2% of the total population was estimated to be below the poverty line. These values translate in EJ thresholds of approximately 47.4% and 15.8%, respectively (Table 3.5.1). Based on the demographic information provided, no potential EJ concern is evident with regard to the percent of minorities for the counties of the west coast of Florida. With regard for poverty, Dixie (3.8%), Franklin (8%), Gulf (1.7%), Jefferson (4.6%), Levy (3.3%), and Taylor (7.1%) counties exceed the threshold by the percentage noted. No potential EJ concern is evident for the remaining counties which fall below the poverty and minority thresholds. The same method was applied to the remaining Gulf states.

Table 3.5.1.1. Each state’s average proportion of minorities and population living in poverty, and the corresponding threshold used to consider an area of potential EJ concern.

State	Minorities		Poverty	
	% Population	EJ Threshold	% Population	EJ Threshold
FL	39.5	47.4	13.2	15.8
AL	31.5	37.8	16.8	20.2
MS	41.2	49.4	21.4	25.7
LA	38.2	45.8	18.4	22.1
TX	52.3	62.7	16.8	20.1

Source: Census Bureau 2010.

In Alabama, Mobile was the only county to exceed the minority threshold (by 1.7%). Neither of Alabama’s coastal counties exceeded the poverty threshold for potential EJ concern. No coastal county in Mississippi exceeded either threshold. In Louisiana, Orleans Parish exceeded the minority threshold by 25% and the poverty threshold by 1.3%. Texas has several counties that exceeded the thresholds. In descending order of magnitude for exceeding the minority threshold were Willacy (26.3%), Cameron (24.7%), Kleberg (12.3%), Kenedy (9%), Nueces (2.8%), and

Harris (0.8%). Exceeding the poverty threshold were Kenedy (32.3%), Willacy (26.8%), Cameron (15.6%), Kleberg (6%), and Matagorda (1.8%). Willacy, Kenedy, Cameron, and Kleberg counties exceed both the minority and poverty thresholds and are the communities identified as most likely to be vulnerable to EJ concerns. Although this analysis identifies areas of potential EJ concern, it is not possible to determine whether the populations of potential EJ concern are involved in or dependent upon marine fishing activities.

Table 3.5.1 provides a summary of 20 communities considered substantially engaged in recreational fishing, generally. When compared with the referenced commercial fishing analysis, the following five communities (and respective county) are considered most likely to be affected: Destin (Okaloosa), Panama City (Bay), Pensacola (Escambia), and Apalachicola (Franklin), Florida and Galveston (Galveston), Texas. In comparing these communities with the preceding analysis identifying counties with potential EJ concerns, Apalachicola is the only community located within a county identified as having potential for EJ concerns. Apalachicola, located in Franklin County, exceeds the poverty threshold by 8% and would be the community most likely to experience unanticipated negative impacts.

The actions in this amendment are designed to implement a program for the regional management of recreational red snapper in which states or regions will be authorized to adapt certain management measures to regional conditions. It is assumed that the flexibility provided to adopt management measures most appropriate to a given region would result in optimal fishing opportunities for local anglers which in turn, would result in benefits to local communities. As will be addressed in the social effects analysis for each action, direct impacts are not expected to accrue to the social environment from most actions of this amendment, which establish the parameters of the program. However, indirect effects (positive or negative) may result due to 1) the specific regulations implemented in each region, 2) how any new regulations differ from existing regulations, and 3) the success or failure of cooperation under the new management regime. Disproportionate impacts to EJ populations are not expected to result from any of the actions in this amendment. Nevertheless, because the regulations to be implemented in each region remain unknown, the lack of impacts on EJ populations cannot be assumed.

3.6 Description of the Administrative Environment

3.6.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the exclusive economic zone, an area extending 200 nautical miles from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the exclusive economic zone.

Responsibility for federal fishery management is shared by the Secretary of Commerce (Secretary) and eight regional fishery management councils that represent the expertise and interests of constituent states. Regional councils are responsible for preparing, monitoring, and

revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for promulgating regulations to implement proposed plans and amendments after ensuring management measures are consistent with the Magnuson-Stevens Act and with other applicable laws summarized in Appendix B. In most cases, the Secretary has delegated this authority to NMFS.

The Council is responsible for fishery resources in federal waters of the Gulf. These waters extend to 200 nautical miles offshore from the nine-mile seaward boundary of the states of Florida and Texas, and the three-mile seaward boundary of the states of Alabama, Mississippi, and Louisiana. The length of the Gulf coastline is approximately 1,631 miles. Florida has the longest coastline of 770 miles along its Gulf coast, followed by Louisiana (397 miles), Texas (361 miles), Alabama (53 miles), and Mississippi (44 miles).

The Council consists of seventeen voting members: 11 public members appointed by the Secretary; one each from the fishery agencies of Texas, Louisiana, Mississippi, Alabama, and Florida; and one from NMFS. The public is also involved in the fishery management process through participation on advisory panels and through Council meetings that, with few exceptions for discussing personnel matters, are open to the public. The regulatory process is also in accordance with the Administrative Procedures Act, in the form of “notice and comment” rulemaking, which provides extensive opportunity for public scrutiny and comment, and requires consideration of and response to those comments.

Regulations contained within FMPs are enforced through actions of the National Oceanic and Atmospheric Administration’s Office of Law Enforcement, the United States Coast Guard, and various state authorities. To better coordinate enforcement activities, federal and state enforcement agencies have developed cooperative agreements to enforce the Magnuson-Stevens Act. These activities are being coordinated by the Council’s Law Enforcement Advisory Panel and the Gulf States Marine Fisheries Commission’s Law Enforcement Committee, which have developed a 5-year “Gulf of Mexico Cooperative Law Enforcement Strategic Plan – 2008-2012.”

The red snapper stock in the Gulf is classified as overfished, but no longer undergoing overfishing. A rebuilding plan for red snapper was first implemented under Amendment 1 (GMFMC 1989), and has undergone several revisions. The current rebuilding plan was established in Reef Fish Amendment 27/Shrimp Amendment 14 (GMFMC 2007), and calls for rebuilding the stock to a level capable of supporting maximum sustainable yield on a continuing basis by 2032. Periodic adjustments to the ACL and other management measures needed to affect rebuilding are implemented through regulatory amendments.

3.6.2 State Fishery Management

The purpose of state representation at the Council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters. The state governments of Texas, Louisiana, Mississippi, Alabama, and Florida have the authority to manage their respective state fisheries. Each of the five Gulf States exercises legislative and regulatory authority over their respective state’s natural resources through discrete administrative units. Although each agency is the primary administrative body

with respect to the states' natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources. A more detailed description of each state's primary regulatory agency for marine resources is provided in Amendment 22 (GMFMC 2004b).

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1 Action 1 – Regional Management

4.1.1 Direct and Indirect Effects on the Physical Environment

4.1.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.1.3 Direct and Indirect Effects on the Economic Environment

4.1.4 Direct and Indirect Effects on the Social Environment

4.1.5 Direct and Indirect Effects on the Administrative Environment

4.2 Action 2 –Regional Management and Sector Separation

4.2.1 Direct and Indirect Effects on the Physical Environment

4.2.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.2.3 Direct and Indirect Effects on the Economic Environment

4.2.4 Direct and Indirect Effects on the Social Environment

4.2.5 Direct and Indirect Effects on the Administrative Environment

4.3 Action 3 – Establish Regions for Management

4.3.1 Direct and Indirect Effects on the Physical Environment

4.3.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.3.3 Direct and Indirect Effects on the Economic Environment

4.3.4 Direct and Indirect Effects on the Social Environment

4.3.5 Direct and Indirect Effects on the Administrative Environment

4.4 Action 4 – Establish Minimum and/or Maximum Size Limits

4.4.1 Direct and Indirect Effects on the Physical Environment

4.4.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.4.3 Direct and Indirect Effects on the Economic Environment

4.4.4 Direct and Indirect Effects on the Social Environment

4.4.5 Direct and Indirect Effects on the Administrative Environment

4.5 Action 5 – Boundaries in the Exclusive Economic Zone

4.5.1 Direct and Indirect Effects on the Physical Environment

4.5.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.5.3 Direct and Indirect Effects on the Economic Environment

4.5.4 Direct and Indirect Effects on the Social Environment

4.5.5 Direct and Indirect Effects on the Administrative Environment

4.6 Action 6 – Apportioning the Recreational Red Snapper Quota among Regions

4.6.1 Direct and Indirect Effects on the Physical Environment

4.6.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.6.3 Direct and Indirect Effects on the Economic Environment

4.6.4 Direct and Indirect Effects on the Social Environment

4.6.5 Direct and Indirect Effects on the Administrative Environment

4.7 Action 7 – Post-season Accountability Measures (AMs)

4.7.1 Direct and Indirect Effects on the Physical Environment

4.7.2 Direct and Indirect Effects on the Biological/Ecological Environment

4.7.3 Direct and Indirect Effects on the Economic Environment

4.7.4 Direct and Indirect Effects on the Social Environment

4.7.5 Direct and Indirect Effects on the Administrative Environment

4.8 Cumulative Effects Analysis (CEA)

CHAPTER 5. REGULATORY IMPACT REVIEW

[This review is completed after selection of all preferred alternatives.]

CHAPTER 6. REGULATORY FLEXIBILITY ACT ANALYSIS

[This analysis is completed after selection of all preferred alternatives.]

CHAPTER 7. BYCATCH PRACTICABILITY ANALYSIS

CHAPTER 8. LIST OF PREPARERS

PREPARERS

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Cynthia Meyer	Fishery biologist	Co-Team Lead – Amendment development, purpose and need, cumulative effects analysis	SERO
Carrie Simmons	Fishery biologist	Biological analyses	GMFMC
Stephen Holiman	Economist	Economic analyses, Regulatory Impact Review, Regulatory Flexibility Act analysis	SERO
Steven Atran	Fishery biologist	Biological analyses	GMFMC
Peter Hood	Fishery biologist	Biological analyses, bycatch practicability analysis	SERO
Andy Strelcheck	Fishery biologist	Scientific analyses	SERO

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Name	Expertise	Responsibility	Agency
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Heather Blough	Policy	Policy review	SERO
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Noah Silverman	Natural resource management specialist	National Environmental Policy Act review	SERO
Mara Levy	Attorney	Legal review	NOAA GC
Jason Brand	Law enforcement	Law enforcement review	USCG

GMFMC = Gulf of Mexico Fishery Management Council; NOAA GC = National Oceanic and Atmospheric Administration General Counsel; SEFSC = Southeast Fisheries Science Center; SERO = Southeast Regional Office of the National Marine Fisheries Service; USCG = United States Coast Guard

CHAPTER 9. LIST OF AGENCIES, ORGANIZATIONS AND PERSONS TO WHOM A COPY OF THE EIS WAS SENT

National Marine Fisheries Service

- Southeast Fisheries Science Center
- Southeast Regional Office
- Office for Law Enforcement
- Endangered Species Division
- Domestic Fisheries Division

NOAA General Counsel

Environmental Protection Agency (Region 4 and 6)

United States Coast Guard

United States Fish and Wildlife Services

Department of Interior, Office of Environmental Policy and Compliance

Department of State, Office of Marine Conservation,
Marine Mammal Commission

Texas Parks and Wildlife Department

Alabama Department of Conservation and Natural Resources/Marine Resources Division

Louisiana Department of Wildlife and Fisheries

Mississippi Department of Marine Resources

Florida Fish and Wildlife Conservation Commission

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APPENDIX A. ALTERNATIVES CONSIDERED BUT REJECTED

REMOVED AT APRIL 2013 COUNCIL MEETING:

Two alternatives from Action 2 – Establish Regions for Management

Alternative 3: Establish an east (Florida, Alabama) and west (Mississippi, Louisiana, Texas) region and allow for different management measures for each region.

* ALTERNATIVE 3 (ABOVE) SUBSEQUENTLY REPLACED IN ACTION 2 AT OCTOBER 2013 COUNCIL MEETING.

Alternative 4: Establish three regions representing the west (Texas), north (Louisiana, Mississippi, Alabama), and east (Florida) region and allow for different management measures for each region.

Remove entire Action 7:

Action 7 – In-Season Accountability Measure Establishing Regional Closures in the EEZ

*Note: Both **Alternative 2** and **Alternative 3** could be selected as Preferred Alternatives.

Alternative 1: No action. When the recreational red snapper quota is reached, or is projected to be reached, the National Marine Fisheries Service (NMFS) files a notification with the Office of the Federal Register that prohibits the recreational harvest of red snapper in the economic exclusive zone (EEZ) for the remainder of the fishing year.

Alternative 2: If a region, as defined in Action 2, establishes an approved regional regulations, NMFS has the authority to alter the recreational red snapper season in the EEZ off those states (including a zero-day season) by the amount necessary to compensate for the additional harvest that would occur in state waters as a result of the region's regulations. (Boundaries for the EEZ off each state are in Figure 1.2.1.)

Alternative 3: If a region, as defined in Action 2, does not have an approved regional regulations and establishes regulations inconsistent with federal red snapper regulations, NMFS has the authority to adjust the recreational red snapper season in the EEZ off those states (including a zero day season) by the amount necessary to compensate for the additional harvest that would occur in state waters as a result of the region's inconsistent regulations. (Boundaries for the EEZ off each state are in Figure 1.2.1.)

Discussion:

Under current management, state and federal waters Gulf wide are open during the red snapper season. If the regions, as defined in Action 2, set their own fishing seasons through an approved management plan or inconsistent regulations, some areas of the Gulf could be open while other areas are closed. This action allows the Council to extend boundary lines of state waters into the EEZ, to correspond with the regions. These boundaries would enable NMFS to close federal

waters off of a region when its regional quota has been reached. Or, the boundaries could be used to close a portion of the EEZ off a state or region that establishes inconsistent regulations. This in-season accountability measure would help prevent the annual catch limit from being exceeded. The in-season and post-season (Action 6) accountability measures are not mutually exclusive and could be used together where appropriate. Further information on accountability measures is described in the Generic ACL/AM Amendment in Section 2.8 (GMFMC 2011).

In March 2013, NMFS implemented a temporary emergency rule that gives NMFS the authority to set separate closure dates for the recreational red snapper season in federal waters off individual Gulf states (Figure 1.2.1). This action was requested by the Council to provide a fairer and more equitable distribution of recreational red snapper fishing opportunities among anglers in all the Gulf states for the 2013 season. Although a temporary emergency rule will be in effect for the 2013 season, it will not be used as the analytical baseline. The temporary emergency rule, even if extended, would not be effective for the 2014 red snapper recreational fishing season.

Alternative 1 would continue the current method of determining the closure date for the recreational red snapper season and apply that date to all federal waters of the Gulf. NMFS determines the length of the season based on the quota, average weight of fish, and estimated catch rates. Because NMFS must ensure the entire stock harvest does not exceed the quota, including harvest in state waters, if states establish less restrictive regulations, the federal season must be adjusted to account for the additional expected harvest. For example, when calculating the projected 27-day 2013 season length, NMFS adjusted the mean catch rate to account for the year-round open season in state waters and 4-fish bag limit in Texas (SERO 2012). In addition, Louisiana has proposed an 88-day season with a 3-fish bag limit and Florida has proposed a 44-day season with a 2-fish bag limit in state waters. Based on the estimated catch rate with those regulations in the three state waters, the 2013 federal recreational red snapper season could be reduced to 22 days (SERO 2013). After the 22-day season, the entire EEZ would be closed for the recreational harvest of red snapper.

Both **Alternative 2** and **Alternative 3** would use regions developed in Action 2 to establish boundaries and allow NMFS to set different closure dates for the red snapper recreational season in the EEZ adjacent to each Gulf state. If the Council chooses to delegate management to the regions in Action 1 and Action 4, then there may be a review process to assess if the region's management plan is consistent with the goals of the FMP and red snapper rebuilding plan. A specific process would need to be established for plan approval. **Alternative 2** would apply to regions with approved management plans. If the region has an approved management plan, but the regional quota is determined to be met before the planned season closure, then NMFS could close the harvest in federal waters to prevent overharvest. **Alternative 3** would apply to regions that do not have an approved management plan and establishes regulations inconsistent with the federal regulations. If a region were to set red snapper regulations that were not less restrictive than federal regulations, NMFS would calculate the red snapper recreational season within those boundaries using an adjusted catch rate, to account for a longer season or larger bag limit in state waters. In some cases, this could allow the EEZ off regions with consistent regulations to have more days than if the season for the entire Gulf was adjusted. For example, if the 2013 federal season was reduced off Texas, Louisiana, and Florida to account for inconsistent regulations in

those waters, the federal seasons could be as follows: Texas = 12 days, Louisiana = 8 days, Mississippi = 28 days, Alabama = 28 days, and Florida = 21 days (SERO-LAPP-2013-2). If increased catch from a region with inconsistent regulations exceeds its sub-quota regardless of the adjacent EEZ being closed, then NMFS may need to adjust the federal season in other regions to account for harvest. Conversely, if a state were to implement regulations in state waters that were more restrictive than federal regulations, the federal season in the EEZ off that state could potentially be increased. The Council could choose both **Alternative 2** and **Alternative 3** to address situations where a region or state may or may not have an approved management plan.

If the current regulations are maintained (**Alternative 1**), they could confound the goals of regional management. If regions set varying seasons, it is possible the activities of one or more regions could exceed the recreational sector quota before another region's season occurs. In turn, NMFS would close the remainder of the season to prevent over-fishing. When the total recreational quota is met, all recreational harvest of red snapper would be prohibited regardless of whether one or more regions have reached their respective apportionments. By establishing varying closed areas, the enforcement issues would likely increase. Recreational fishermen would need to abide by the area closures and be mindful of transiting through closed areas. Provisions for transit through closed areas may need to be considered. If the EEZ was closed off a region due to inconsistent regulations (**Alternative 3**), then a clear definition of the state/federal boundary would help recreational fishermen to insure compliance. Currently, this boundary is the 9-nautical mile buffer off of Texas and Florida, and 3-nautical mile buffer off of Alabama, Mississippi, and Louisiana.

REMOVED AT OCTOBER 2014 COUNCIL MEETING:

Options a and b from Alternatives 2, 3, and 4, in Action 6: Post-Season Accountability Measures (AMs) Adjusting for Regional Overages

Option a: Apply the quota adjustment beginning one year after the implementation of the plan.

Option b: Apply the quota adjustment beginning two years after the implementation of the plan.

These options were removed because they are now less restrictive than the overage adjustment recently adopted in the Framework Action to Set Accountability Measures for Red Snapper (GMFMC 2014).

RESTRUCTURING OF ACTIONS AND ALTERNATIVES FOLLOWING OCTOBER 2014 COUNCIL MEETING:

[To be inserted following review of updated actions and alternatives.]

References cited in rejected sections

GMFMC. 2011. Final generic annual catch limits/accountability measures amendment for the Gulf of Mexico fishery management council's red drum, reef fish, shrimp, coral and coral reefs fishery management plans, including environmental impact statement, regulatory impact review, regulatory flexibility analysis, and fishery impact statement. Gulf of Mexico Fishery Management Council. Tampa, Florida.

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APPENDIX B. OTHER APPLICABLE LAW

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.) provides the authority for fishery management in federal waters of the exclusive economic zone. However, fishery management decision-making is also affected by a number of other federal statutes designed to protect the biological and human components of U.S. fisheries, as well as the ecosystems that support those fisheries. Major laws affecting federal fishery management decision-making are summarized below.

Administrative Procedures Act

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (APA) (5 U.S.C. Subchapter II), which establishes a “notice and comment” procedure to enable public participation in the rulemaking process. Under the APA, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider, and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day waiting period from the time a final rule is published until it takes effect.

Coastal Zone Management Act

Section 307(c)(1) of the federal Coastal Zone Management Act of 1972 (CZMA), as amended, requires federal activities that affect any land or water use or natural resource of a state’s coastal zone be conducted in a manner consistent, to the maximum extent practicable, with approved state coastal management programs. The requirements for such a consistency determination are set forth in NMFS regulations at 15 C.F.R. part 930, subpart C. According to these regulations and CZMA Section 307(c)(1), when taking an action that affects any land or water use or natural resource of a state’s coastal zone, NMFS is required to provide a consistency determination to the relevant state agency at least 90 days before taking final action.

Upon submission to the Secretary, NMFS will determine if this plan amendment is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, Mississippi, and Texas to the maximum extent possible. Their determination will then be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management programs for these states.

Data Quality Act

The Data Quality Act (DQA) (Public Law 106-443) effective October 1, 2002, requires the government to set standards for the quality of scientific information and statistics used and disseminated by federal agencies. Information includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, cartographic, narrative, or audiovisual forms (includes web dissemination, but not hyperlinks to information that others disseminate; does not include clearly stated opinions).

Specifically, the DQA directs the Office of Management and Budget to issue government wide guidelines that “provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies.” Such guidelines have been issued, directing all federal agencies to create and disseminate agency-specific standards to: 1) ensure information quality and develop a pre-dissemination review process; 2) establish administrative mechanisms allowing affected persons to seek and obtain correction of information; and 3) report periodically to Office of Management and Budget on the number and nature of complaints received.

Scientific information and data are key components of fishery management plans (FMPs) and amendments and the use of best available information is the second national standard under the Magnuson-Stevens Act. To be consistent with the Act, FMPs and amendments must be based on the best information available. They should also properly reference all supporting materials and data, and be reviewed by technically competent individuals. With respect to original data generated for FMPs and amendments, it is important to ensure that the data are collected according to documented procedures or in a manner that reflects standard practices accepted by the relevant scientific and technical communities. Data will also undergo quality control prior to being used by the agency and a pre-dissemination review.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. Section 1531 et seq.) requires federal agencies use their authorities to conserve endangered and threatened species. The ESA requires NMFS, when proposing a fishery action that “may affect” critical habitat or endangered or threatened species, to consult with the appropriate administrative agency (itself for most marine species, the U.S. Fish and Wildlife Service for all remaining species) to determine the potential impacts of the proposed action. Consultations are concluded informally when proposed actions may affect but are “not likely to adversely affect” endangered or threatened species or designated critical habitat. Formal consultations, including a biological opinion, are required when proposed actions may affect and are “likely to adversely affect” endangered or threatened species or adversely modify designated critical habitat. If jeopardy or adverse modification is found, the consulting agency is required to suggest reasonable and prudent alternatives.

On September 30, 2011, the Protected Resources Division released a biological opinion which, after analyzing best available data, the current status of the species, environmental baseline (including the impacts of the recent Deepwater Horizon MC 252 oil release event in the northern Gulf of Mexico), effects of the proposed action, and cumulative effects, concluded that the continued operation of the Gulf of Mexico reef fish fishery is also not likely to jeopardize the continued existence of green, hawksbill, Kemp’s ridley, leatherback, or loggerhead sea turtles, nor the continued existence of smalltooth sawfish (NMFS 2011). On December 7, 2012, NMFS published a proposed rule to list 66 coral species under the ESA and reclassify *Acropora* from threatened to endangered (77 FR 73220). In a memorandum dated February 13, 2013, NMFS determined the reef fish fishery was not likely to adversely affect *Acropora* because of where the fishery operates, the types of gear used in the fishery, and that other regulations protect *Acropora* where they are most likely to occur.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas, and on the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce (authority delegated to NMFS) is responsible for the conservation and management of cetaceans and pinnipeds (other than walruses). The Secretary of the Interior is responsible for walruses, sea and marine otters, polar bears, manatees, and dugongs.

Part of the responsibility that NMFS has under the MMPA involves monitoring populations of marine mammals to make sure that they stay at optimum levels. If a population falls below its optimum level, it is designated as “depleted,” and a conservation plan is developed to guide research and management actions to restore the population to healthy levels.

In 1994, Congress amended the MMPA, to govern the taking of marine mammals incidental to commercial fishing operations. This amendment required the preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction, development and implementation of take-reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fisheries, and studies of pinniped-fishery interactions.

Under Section 118 of the MMPA, NMFS must publish, at least annually, a List of Fisheries that places all U.S. commercial fisheries into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishery. The categorization of a fishery in the List of Fisheries determines whether participants in that fishery may be required to comply with certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements. The primary gears used in the Gulf of Mexico reef fish fishery are classified in the updated 2012 MMPA List of Fisheries as Category III fishery (74 FR 73912). The conclusions of the most recent List of Fisheries for gear used by the reef fish fishery can be found in Section 3.3.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 et seq.) regulates the collection of public information by federal agencies to ensure the public is not overburdened with information requests, the federal government’s information collection procedures are efficient, and federal agencies adhere to appropriate rules governing the confidentiality of such information. The PRA requires NMFS to obtain approval from the Office of Management and Budget before requesting most types of fishery information from the public. Action 2 adds reporting and monitoring requirements to the list of post-season accountability measures that can be implemented or changed under the framework procedure and may have PRA consequences.

Executive Orders

E.O. 12630: Takings

The Executive Order on Government Actions and Interference with Constitutionally Protected Property Rights that became effective March 18, 1988, requires each federal agency prepare a Takings Implication Assessment for any of its administrative, regulatory, and legislative policies and actions that affect, or may affect, the use of any real or personal property. Clearance of a regulatory action must include a takings statement and, if appropriate, a Takings Implication Assessment. The National Oceanic and Atmospheric Administration Office of General Counsel will determine whether a Taking Implication Assessment is necessary for this amendment.

E.O. 12866: Regulatory Planning and Review

Executive Order 12866: Regulatory Planning and Review, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, NMFS prepares a Regulatory Impact Review (RIR) for all fishery regulatory actions that either implement a new fishery management plan or significantly amend an existing plan (See Chapter 5). RIRs provide a comprehensive analysis of the costs and benefits to society of proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Analysis. A regulation is significant if it a) has an annual effect on the economy of \$100 million or more or adversely affects in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments and communities; b) creates a serious inconsistency or otherwise interferes with an action taken or planned by another agency; c) materially alters the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or d) raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

E.O. 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

This Executive Order mandates that each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions. The Executive Order is described in more detail relative to fisheries actions in Section 3.5.1.

E.O. 12962: Recreational Fisheries

This Executive Order requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, it establishes a seven-member National Recreational Fisheries Coordination Council (Council) responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The Council also is responsible for developing, in cooperation with federal agencies, States and Tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the Order requires NMFS and the U.S. Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

E.O. 13132: Federalism

The Executive Order on Federalism requires agencies in formulating and implementing policies, to be guided by the fundamental Federalism principles. The Order serves to guarantee the division of governmental responsibilities between the national government and the states that was intended by the framers of the Constitution. Federalism is rooted in the belief that issues not national in scope or significance are most appropriately addressed by the level of government closest to the people. This Order is relevant to FMPs and amendments given the overlapping authorities of NMFS, the states, and local authorities in managing coastal resources, including fisheries, and the need for a clear definition of responsibilities. It is important to recognize those components of the ecosystem over which fishery managers have no direct control and to develop strategies to address them in conjunction with appropriate state, tribes, and local entities (international, too).

E.O. 13158: Marine Protected Areas

This Executive Order requires federal agencies to consider whether their proposed action(s) will affect any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural or cultural resource within the protected area. There are several marine protected areas, habitat areas of particular concern, and gear-restricted areas in the eastern and northwestern Gulf of Mexico.

Essential Fish Habitat

The amended Magnuson-Stevens Act included a new habitat conservation provision known as essential fish habitat (EFH) that requires each existing and any new FMPs to describe and identify EFH for each federally managed species, minimize to the extent practicable impacts from fishing activities on EFH that are more than minimal and not temporary in nature, and identify other actions to encourage the conservation and enhancement of that EFH. To address these requirements the Council has, under separate action, approved an Environmental Impact Statement (GMFMC 2004) to address the new EFH requirements contained within the Magnuson-Stevens Act. Section 305(b)(2) requires federal agencies to obtain a consultation for any action that may adversely affect EFH. An EFH consultation will be conducted for this action.

References

GMFMC. 2004. Final environmental impact statement for the generic essential fish habitat amendment to the following fishery management plans of the Gulf of Mexico: shrimp fishery of the Gulf of Mexico, red drum fishery of the Gulf of Mexico, reef fish fishery of the Gulf of Mexico, stone crab fishery of the Gulf of Mexico, coral and coral reef fishery of the Gulf of Mexico, spiny lobster fishery of the Gulf of Mexico and South Atlantic, coastal migratory pelagic resources of the Gulf of Mexico and South Atlantic. Gulf of Mexico Fishery Management Council. Tampa, Florida.

<http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/Final%20EFH%20EIS.pdf>

NMFS. 2011. Biological opinion on the continued authorization of Reef Fish fishing under the Gulf of Mexico Reef Fish Fishery Management Plan. September 30, 2011. Available at: <http://sero.nmfs.noaa.gov/pr/esa/Fishery%20Biops/03584%20GOM%20Reef%20Fish%20BiOp%202011%20final.pdf>

APPENDIX C. SUMMARIES OF PUBLIC COMMENTS RECEIVED

Scoping workshops were held from January 14 – 22, 2013.
Public hearings were held from August 1 – 15, 2013.

Written comments submitted in response to Reef Fish Amendment 39 can be found here:
<https://docs.google.com/spreadsheets/cc?key=0Atgbk2rxQkqhdFViUTB3VERsX2ZwcXJmckl1QTbXZkE#gid=0>

Scoping workshops were held in the following locations:

January 14, 2013

Baton Rouge, Louisiana
DoubleTree by Hilton
4964 Constitution Ave.
Baton Rouge, LA 70808
(225) 925-1005

January 14, 2013

Texas City, Texas
Holiday Inn Express
2440 Gulf Freeway
Texas City, TX 77591
(409) 986-6700

January 15, 2013

Corpus Christi, Texas
Hilton Garden Inn
6717 S. Padre Island Dr.
Corpus Christi, TX 78412
(361) 991-8200

January 15, 2013

Biloxi, Mississippi
Four Points by Sheraton
940 Beach Blvd.
Biloxi, MS 39530
(228) 546-3100

January 16, 2013

Orange Beach, Alabama
Hilton Garden Inn
23092 Perdido Beach Blvd.
Orange Beach, AL 36561
(251) 974-1600

January 17, 2013

Destin, Florida
Destin Community Center
101 Stahlman Ave.
Destin, FL 32541
(850) 654-5184

January 22, 2013

St. Petersburg, Florida
Hilton St. Petersburg Carillon Park
950 Lake Carillon Dr.
St. Petersburg, FL 33716
(727) 540-0050

Summaries of Scoping Workshops

**Baton Rouge, Louisiana
January 14, 2013**

Council and Staff

Campo Matens

Ryan Rindone

32 members of the public attended.

Joe Macaluso - www.theadvocate.com

The big issue is that the federal government is ignoring the fishermen. How do the federal fisheries managers know which survey, either the Texas Parks and Wildlife or MRIP, is correct? Red snapper can be caught in less than 25 meters of water. Also, how is funding for data collection going to be shared with the states who take on regional management? Allocation should be based on biological criteria. There is a disparity between how recreational and commercial catches figure into the overall red snapper quota. Louisiana's issue with respect to regional management is Florida: Florida has all the people, and Louisiana has all the fish.

George Huye - CCA

Regional management should be done by state, with each state constituting its own region. States should not have to share authority with other states with less resources.

Mike Montalbano - CCA

Regulations are intentionally cumbersome. The Gulf Council should pursue regional management. The Gulf Council should remove as many regulations from the fishery as possible.

Austin Johnson - Private recreational angler

Supports regional management.

Trey Williams - CCA

There are lots of red snapper out there. A 27-day season is not sufficient. Anyone with a boat can catch red snapper. The current system is broken. State-level red snapper is the way to go.

Rawlston Phillips - Private recreational angler

Regional management is the way to go. The money spent by Louisiana on the fishery goes much further than the money spent by the federal government.

Rad Trascher - CCA

Supports regional management. LDWF has a better sense of the red snapper fishery than the federal government and can better manage catch data and conduct stock assessments. Regional management is a step in the right direction.

Larry Hooper - Our Freedom Charters

Will regional management lead to catch shares? Catch share programs haven't worked well anywhere. Supports regional management. Let states handle their own fisheries. Would like to

see the charter for-hire industry recognized as its own business. We pay for everything and get punished for it. Regional management should be conducted at the state level. Red snapper should be assessed using numbers of fish instead of pounds. Scientists need to count all the fish.

Andrew Roberts - CCA

Supports regional management, with Louisiana acting as its own region and governed by LDWF.

Ben Graham - CCA

There are tons of red snapper. Supports regional management of red snapper at the state level. States can do a better job than the federal government. Allocation should be based on biological criteria.

Chris Moran - Marina operator

Supports regional management of red snapper at the state level. Louisiana has the best red snapper fishery and the smallest number of fishermen. There should be shorter seasons as you go from the western Gulf of Mexico to the eastern Gulf of Mexico. Allocation should be based on biological criteria. States could do a better job with sampling funding.

Jim McDowell - Private recreational angler

Supports regional management of red snapper at the state level, with Louisiana managed by LDWF. Allocation should not be based on landings.

David Cresson -CCA Executive Director, LA

The Gulf Council proposed regional management plan is different from the Louisiana proposal. One goal was to show that Louisiana can count fish better than the federal government. In favor of management at the lowest possible level. In favor of regional management as proposed by LDWF.

**Texas City, Texas
January 14, 2013**

Council and Staff

Patrick Riley

Emily Muehlstein

30 members of the public attended.

Bubba Cochrane - Charter, commercial, and recreational angler; Good News Charters and Southern Seafood LLC

What is happening with red snapper management right now isn't working and regional management should be pursued. He likes the idea of managing with 3 regions. Bubba does not want the states to manage red snapper without a regional system.

Shane Cantrell - Charter; Fishin' Addiction Charters and Charter Fishing Association
Shane is a young captain and he believes that regional management has a lot of potential as long as states can agree with one another. He would like to see regional management because it may be a way to increase accountability for the recreational sector.

Tom Hilton - Private recreational angler

The Council is working backwards and should identify fishing effort first. He thinks that an offshore boat permit would solve a lot of issues. The charter for-hire industry already has their own permit and the private recreational anglers should, too. An offshore recreational permit would allow for better determination of what the recreational sector is catching without the time lag associated with MRIP. The permit could also solve the problem of National Standard 4 that disallows discrimination between residents of different states by charging different fees for resident and nonresident fishermen. The real solution is an honest stock assessment that gives full credit to the fish on artificial structure in the Gulf. He could really get behind a regional management system if the regions actually had control, but not if this is just a way to further micromanage the fishery.

John Thomas - Private recreational angler

He echoes Tom Hilton's perspective. He sees that there is more snapper out there than ever, and even though he is allergic to fish he wants the system to be fixed.

Jonathan McKay - Private recreational angler

Jonathan suggests that permitting or buying a license that gives a certain number of fish to each angler would be a good idea. A tag system should be considered; this could be considered using regional management or it could be done Gulf-wide. Ultimately, Jonathan is worried about what the overpopulation of snapper is doing to the other fish.

Roger Dickert - Private recreational angler

Roger would not want to trade more days for a smaller bag limit. He supports a tag system because he would like to be given the opportunity to fish when he wants to so he doesn't have to risk unsafe seas. Regional management would be better because the local folks in control would better be able to make management judgments for their region.

David Conrad - Charter; Circle H Charter

David supports the idea of using a tag system. He likes the idea of regional management and would like to see the idea developed a little more.

Bill Platt - Charter boat captain and tournament angler

Bill likes the idea of a regional management system and he really wants accountability in the recreational sector to be improved. 20 years ago there were way more offshore fishermen and there are a lot less now. A tag system is a reasonable idea for Texas because better accountability should let them fish longer.

Scott Hickman - Charter Captain; Circle H Charters

One size fits all management doesn't work in the Gulf of Mexico. He would rather fish red snapper in the fall, and he supports regional management on a state-by-state level so that they

have the authority to come up with their own system under the federal quota and federal accountability measures. Regional management will allow us to get to the accountable fishery quicker than the federal fishery would allow. The status quo system does not work; 27 days is ridiculous, and Texas may as well not have a federal season with the bad weather. Texas Parks and Wildlife could do better for their fishermen and he applauds the Council for trying to give the recreational fishermen a solution.

Tyler Walker - For-hire deckhand and recreational fisherman.

Tyler has seen how the fish population has grown and he supports the idea of moving forward with a regional management program.

Billy Woolsey - Private recreational angler

Billy thinks regional management is a good idea. He wants accountability to be better and believes that a tag system is a reasonable solution to the problem we're facing. We need to do something different.

Johnny Williams - Owner, Williams Party Boats

Jonny believes there needs to be some safeguards because management has potential to become a derby where the state that opens first gets to catch their fish and the rest of the states are punished when the quota is caught. If a state wants to participate in the program, then it should have to agree that it will close its own state waters, not just the federal waters off the state if the individual region's allocation is reached. He thinks that NMFS should relinquish federal control of snapper completely and allow the states to manage it.

Buddy Guindon - Commercial fisherman; Katie's Seafood

Regional management and accountability would be good but he wants to ensure that the people out there can continue to make a living taking people fishing.

Johnny Walker - Charter owner

Johnny thinks the states can better manage the fishery than the federal government. If the Council can put in place measures that ensure one state's harvest does not cut into another, then regional management is a good idea. He also believes that a tag system is a reasonable solution to the recreational season problems.

Todd Hanslik - Private recreational angler

He supports the idea of regional management and would like the Council to give the states a shot at incremental management of this fishery. It will be very complex to develop the regional management program and Todd would like to be sure that the Council continues to involve fishermen in the development of the program by sharing information and inviting people to comment. He wants to pass on the ability for future generations to fish, and he fears that the fishery is slowly migrating to a liberal system that is similar to that of Canada where you must pay someone to take you bluefin tuna fishing. He would really like the state to have the opportunity to manage snapper on their own.

Gary Graham - Texas Sea Grant

He thinks tags should be considered because it is a potentially viable system that works in the hunting world. He would like to discuss density-dependent allocation because population is limited by habitat.

**Corpus Christi, Texas
January 15, 2013**

Council and Staff

Doug Boyd

Emily Muehlstein

37 members of the public attended.

Mary Ann Heimann – South Bay Marina

It's a good idea that the states take control of the fishery but she thinks that the states should be given full control.

Russell Sanguinet - Charter; Dolphin Dock Inc.

Council can't allocate based on the number of licenses because we can't use historical licenses to determine it; people have not been buying licenses and won't until there is something to catch. He wonders how we are going to differentiate between federally permitted vessels and state-permitted for-hire vessels if the state of Texas gets regional control? Would federal permits be allowed to fish in state waters? The whole purpose of this idea should be to make each state responsible for their own fishery and not be managed by another mismanaged fishery (NMFS).

Jackie Romeyn - Charter; Fisherman's Wharf

She would like to know what the distinction would be between the federal and state waters. She does not currently have a federal permit and wonders what the distinction will be under regional management. Jackie likes the idea of state-based regions or even smaller regions because she believes it will allow for better scientific information, better allocation, and better local regulations if the states are given more responsibility.

Troy Williamson - CCA

The concept of regional management has been developed because of frustration toward federal management. Red snapper are more abundant than ever and management has worked, but it's time to reap the benefits of success. The CCA supports driving management to the lowest level of government possible. The states should manage with as little federal influence as possible. NMFS is "rewarding" anglers with a 27-day season and a 2-fish bag limit after they have sacrificed to rebuild the stock. This short season will result in a wide-spread revolt to fisheries management. The transfer of responsibility will be no easy task; enforcement, monitoring, etc. will be difficult to control. The states should have the ability to manage both commercial and recreational harvest of red snapper.

Mike Nugent - Port Aransas Boatman Association and Charter operator

They have been asking to split the Gulf for 10 years. This is the first time the Council has responded and he hopes that people keep moving forward to get this plan to work. Each state should get their allocation from historical landings and it's really important that each state is independent from the others. The mistakes other regions make should not affect each region. The problems with MRIP could be solved by dividing it into other states who can take more control of their data collection programs. Regional management is desperately needed and would take away the state vs. federal permit issues.

Mike Miglini - Charter; Out to Sea Adventures

He would like allocation to be based on biological abundance of the fish. He supports regional management because local folks can make better regulations for local needs. He sees problems with Reef Fish Amendment 30b and section 407 of MSA which will kill charter boats and headboats. Credit should be given for artificial reef and restocking programs when determining abundance. He would like people to look at tags for recreational boats, and if that's good for private recreational boats he would like to see something for for-hire boats that would allow anglers to fish the days they want; they could use an AB tag system to stay in business.

Mike O'Dell - Charter; A Fishing Fantasy Guide Service

He supports regional management because the states can make better regulations than NMFS can.

Dennis Lug - Retired charter, now private recreational angler.

Would like to see some sort of regional management system worked out.

Steve Hardy - Private recreational angler

We are here because federal fisheries management is not working and it's time for something different. He supports any plan that has Texas as their own region. Boundaries would extend into the EEZ. We are not managing licenses, we are managing fish, so allocation should be based on abundance of fish. There are multiple stocks of red snapper based on habitat and reefs. He is worried that we are having a discussion about how we divide the pie but we are saying nothing about how to make the pie bigger. We need to do something about structure offshore.

Jim Smarr - RFA Texas

RFA believes in state management and has for 17 years. We should use the longest data set possible (historical landings) so that Texas can be treated fairly. It should be a biological abundance decision, period. The SEDAR-style stock assessments should be conducted regionally so that Texas can fish their own stock; monitored and determined by Texas. Management guidelines should not be established by the Council; the state should be given full control of their allocation. There needs to be an amendment to the MSA that cures the system that allows the other states to be affected by another region's overrun of their own allocation.

Brett Casey - For-hire; Port Aransas Boatman Association

Out of all the discussion, it still boils down to NMFS still monitoring the red snapper, and if one state catches the whole allocation, we're still back to square one. We need to figure out what we

need to do to limit this. Texas should be given their own allocation and each region's behavior should not affect what the other regions do. It's time to make a change for the good.

Tim Oestreich – Headboat Captain; Dolphin Dock Inc.

The federal limit seems to mainly limit the for-hire folks with federal permits. Some kind of separation should be made for someone who owns a business, because as it is, private fishermen can catch 4 fish all year-round, while federally permitted for-hire boats have a real short season. It would be very helpful if the season can stretch.

Biloxi, Mississippi

January 15, 2013

Council and Staff

Dale Diaz

Ryan Rindone

23 members of the public attended.

Johnny Marquez - CCA Executive Director, MS

Local managers can do a better job of managing fisheries for constituents. Concerned about how regions will be defined. Want fair and equitable access to the fishery. How would state management entities be funded to conduct regional management?

Tom Becker - Charter for-hire captain

Red snapper are very abundant. Concerned about what Mississippi will get with respect to allocation. Want to know who makes up the catch numbers.

J.R. Titmus - Private recreational angler, artificial reef builder

Louisiana is claiming 9 nautical miles for state waters. Has no idea how recreational catch data are calculated. Would like to see state control out to 9 nautical miles in Mississippi, and the federal government can control beyond that. It is not possible to fish all 27 days of the proposed 27-day red snapper season; it's just too expensive.

Tim Knighten - Private recreational angler

Does not understand how the stock assessments work. It is hard to catch triggerfish because there are so many red snapper. Red snapper are eating everything. Doesn't trust the federal government or federally generated data. Supports state management of red snapper.

Gary Smith - Gulf Council Red Snapper Advisory Panel

There is a major issue with counting the recreational catch. The entire process is a joke, and the federal government is screwing the recreational sector. Flew from Mississippi to Florida to count the number of boats fishing to prove it. Mississippi needs regional management. What happens when Texas removes all of the oil rigs?

Keith Cuevas - Marine Biologist, Gulf Coast Research Lab

Mississippi needs regulations extended into federal waters. Allocation should account for this. Other states have shallow water oil rigs and Mississippi does not. The Gulf Council needs to get involved in the rigs-to-reef process. Juvenile red snapper recruit to the oil rigs. Supports regional management authorities, based on good communication. If states pursue regional management individually, then their independent harvests could have a domino effect on the other states.

**Orange Beach, AL
January 16, 2013**

Council and Staff

Bob Shipp

Ryan Rindone

125 members of the public attended.

Pat Willingham - Private recreational angler

Has seen a four- to fivefold increase in red snapper over the last 40 years. All of the fish are in the 9-25 pound range. Divers tell him that the juvenile fish of other reef species are almost gone due to the red snapper. The Gulf Council needs to consider the impact of large red snapper on reefs.

Tom Steber - Charter for-hire captain

Need to look at regional management. The big issue will center around how the lines are drawn. The overarching issue is the Magnuson-Stevens Act. Fishermen need to rally together to get MSA redone or fixed. Alabama has the best reef zone in the world.

Kevin Sinyard - Private recreational angler

Watched the bag limit drop from five fish to two. It costs a fortune to go fishing for red snapper now.

Dale Ruckle - Private recreational angler

Can't even get a charter to go out fishing for red snapper. Bag limits are too low. Local businesses are losing tourism business as a result.

Troy Frady - Charter for-hire captain

Concerned about how to make a living. Bag limits have plummeted. Cautious about regional management of recreational red snapper. Is regional management going to extend the season or increase the creel limits? Is Alabama going to manage the fishery better than the National Marine Fisheries Service? The regulations are affecting our livelihood.

Gary Malin - Private recreational angler

Fished only a few days last season and limited out on red snapper each time. Red snapper are eating everything. Regional management should be done with a break between Florida and Alabama; this would be more fair for Alabama. Current fisheries regulations don't make sense.

John Kemper - Private recreational angler from Minnesota
Alabama anglers should fight for their rights.

Tim Wilson - Private recreational angler
Fishing is an inalienable right. There are plenty of fish in the ocean. The charter for-hire fleet is afraid of the federal government. Fishermen need to protect their rights. Government has taken all of those rights away. Shorter seasons make it less likely that people will fish. Local control of fisheries is better.

Tom Ard - Charter for-hire captain
The best idea so far for red snapper is regional management. Alabama does a great job counting fish. Each region should be held accountable for their allocation. Would fish tags be used? How might regional management apply to grouper in the future? Use historical biological data for setting the allocation and adjust it periodically. Fears noncompliance by states like Texas and Louisiana.

Ben Fairey - Charter for-hire captain
The fisheries management process takes too long. Regions will all fight for allocation. Alabama should not be grouped with Florida. Alabama only has 3 nautical miles worth of state waters, while other Gulf states have more. Wants assurance from the Alabama Gulf Council representatives that Alabama will be cared for in this process.

Bill Coursen - Private recreational angler, Pensacola, FL
Whenever the government takes anything over, they mess it up. Fishing rights are being denied. Caught 76 red snapper last year, and discarded close to 400. Hopes that some regions won't be unjustly shorted on their allocation.

Matt McLeod - Charter for-hire captain
There is a disparity between the number of fish caught and the reported landings. Both are total unknowns. Supports states all going noncompliant. NMFS's red snapper management plan will crumble with noncompliance, and NMFS will have to do what the fishermen want.

Chris Sherrill - Restaurateur
There will be economic problems if the season length drops to zero. He depends on recreational fishermen eating at his restaurant during the summer; no red snapper, no customers.

Gary Bryant - Charter for-hire captain
Red snapper season should last 180 days at a 4-fish per person bag limit. Supports regional management by individual states with accountability measures provided by the Gulf Council. Likes the idea of fish tags. The charter for-hire industry could receive their annual allotment of tags at the beginning of each year, and the private recreational anglers could get tags to catch red snapper at will. Harder to find more desirable fish.

Rashley - Private recreational angler
The federal government is over-managing. Flawed management affects everything.

Alan Taylor - Private recreational angler

Supports regional management of recreational red snapper by state.

Dwain Sanders - Private recreational angler

There are thousands of red snapper off Alabama. The charter for-hire industry is ruined. Commercial fishermen are paying lobbyists to raise the price of red snapper.

Robert Turpin - Escambia County Marine Resources, Private recreational angler

Supports regional management of recreational red snapper with allocation based on biomass. NMFS is currently trying to rebuild red snapper to a threshold that is too high. Will never be able to meet the rebuilding threshold.

**Destin, Florida
January 17th, 2013**

Council and Staff

Pam Dana

Ryan Rindone

104 members of the public attended.

Candy Hansard - Private recreational angler

The portion of Amendment 30B requiring CFH fishermen to adhere to the strictest regulations needs to be eliminated. States shouldn't be penalized for other states exceeding their allocation. Regional management is needed. Need to solve fisheries problems, not manage them. Need more artificial reefs. The Gulf Council needs to look into private artificial reef construction.

George Eller - Charter for-hire captain

Regional management of recreational red snapper may have merit under some conditions. There are too many unanswered questions right now. Need to table the amendment until the next assessment is completed. Until the CFH portion of Amendment 30B is gone, competition will be unfair. Texas is in violation of current regulations. Louisiana extending their state waters will take an act of Congress.

Matt McLeod - Charter for-hire captain

Been coming to these meetings for ten years. Lots of false hope. System has failed the fishermen. The regions would be fighting over a constantly shrinking pie. Supports states all going noncompliant. Fishermen need leverage against NMFS. States could grossly exceed the TAC set by NMFS, and the NMFS's red snapper management plan would crumble. Fishermen could then demand that NMFS work with them. The problem won't be solved by anything less.

BJ Burkhead - Charter for-hire captain

Opposed to regional management; table the amendment.

Stewart Miller - Charter for-hire captain

Opposed to regional management; table the amendment. Too many unanswered questions.

Chuck Guilford - Charter for-hire captain

Opposed to regional management. Opposes all management without consideration of ecosystem variations. Opposes any separation between the CFH and private recreational fishing groups.

Tom Adams - Charter for-hire captain, www.mexicobeachcharters.com

The Gulf Council should appoint new people to the Advisory Panels.

Dr. Rain - Private recreational angler, Destin resident

Has quit fishing deepwater outside of the red snapper season because red snapper are all you can catch when you go out there. Huge red snapper off of Destin. Fisheries management needs to focus on the data collection.

Brant Kelly - Charter for-hire captain, www.relentlesscharterfishing.com

Opposed to regional management. Table the amendment.

**St. Petersburg, Florida
January 22, 2013**

Council and Staff

Martha Bademan

John Sanchez

Ava Lasseter

24 members of the public attended.

Capt. Bob Bryant - Charter

In considering regional management, once again we are trying to manage something that we don't know what we're managing; we don't know the numbers. The stock assessment fails to get a huge percentage of the fish from oil rigs and artificial reefs. The majority of the stock assessment is based on natural structure that NMFS knows. The majority of fishermen are going to artificial structures and we are not capturing fish from those places. Stock assessments are useless without this, making catch data useless, too. There are more problems than benefits in regional management and it seems to be a backdoor to sector separation. What we need to do is to unite fishermen and provide good data to NMFS and have them provide good data to the fishermen in return.

Bo Gorham - Private recreational angler

For-hire operators do a great service, but private anglers put money into economy and so have an important voice. He works weekdays so only had 12 days possible to fish red snapper during last year's season, and was only able to go fishing four times. Investing in gas and boat wear and tear for a derby fishery is not sustainable. Upon hearing this year's estimated 27-day season, he started running his own numbers. He compared MRIP's effort data and number of fish caught a day and the numbers don't work out. If effort data stays constant, it shows they didn't overfish last year but came out right at quota. If that's true, he should have 42-day season again this year. But it's a crap shoot because we don't know the stock. He does agree that taking management to the regional level now is crazy; the data are not there now to manage as a whole. Dividing into

five ways creates new bureaucracy that taxpayers will have to pay for. The states don't cooperate now. It's a way to avoid the hard part which is to validate what is going on in the fishery. Data is the key.

Capt. Mark Hubbard - Hubbard's marina, John's Pass.

He is strongly against splitting up amongst the states and echoes Bo Gorham's comments. He doesn't want another layer of bureaucracy on this fishery, especially since the Council can't manage fishery now. Plus, taxpayers can't afford it; it's more and bigger government. The plan takes away from state powers and discriminates between for-hire, federal, and state permit holders. It discriminates between the states, and appears to move toward sector separation. It uses fatally flawed data to micromanage a fishery that is already screwed up. It seems to divide and conquer the Gulf of Mexico. He is against regional management now, but would have supported it with a 6-month season. A full benchmark assessment needs to be done on red snapper. The fishery needs more days for open access fishing. It's the opportunity to fish that drives our economy, and a 27-day season is just silly with all the fish out there. Resources are being spent on assessing smaller reef fish instead of the important species.

Before considering regional management of gag, a full benchmark stock assessment is needed. The Council is restricting the gag fishery based on a flawed stock assessment. The gag fishery is huge and more reliable data are needed. There aren't as many boats fishing now because they must spend so much money to go out. Ten years ago, there would be 15 boats at the Middle Grounds, but that doesn't happen anymore. The pressure isn't on the fishery the way NMFS and the Council say it is.

Concerning state boundaries and allocation of red snapper, if states get allocated pounds, could those allocations start to migrate over from the commercial fishery? If that was the case, he wants the commercial allocation that moves into the recreational sector to stay in the recreational sector. He doesn't want the commercial sector to buy out of the recreational sector. That would give them some protection, in case catch shares take hold in the recreational fishery.

Stephen Furman - Tampa CCA

He hasn't fished offshore much lately; fuel prices keep him in his kayak. He knows others don't do it as much anymore either, so offshore effort has gone down. He thinks people understand regional management would allow states to manage the fishery and they can do a better job. But it sounds to him like the feds would spread the 27-day season among the 5 states and each gets a 5-day season and that's not appealing. He thinks a 4-day weekend season would help spread out the days so people could fish longer. Concerning how to get better data, he supports the idea of an offshore permit for collecting data from fishermen, and says it's easy to do and is already done for migratory game bird hunting.

Dennis O'Hern - FRA

This plan appears to increase uncertainty and it is uncertainty applied to allowable catch that is hurting them. The idea for regional management, regional cooperation, is a great concept, but it's called the Gulf Council and you already have that. The problem seems like the Council is told what they have to do. He is not sure where regional management is coming from; it looks like sector separation. He doesn't want to give NMFS more power to close a fishery arbitrarily.

For greater amberjack, they closed the season in 5 days, in-season, based on MRFSS data which is not supposed to be used for in-season quota monitoring. The MRIP data is still just random telephone surveys; Florida is starting new data collection but it's not making it to the top.

It's been 10 years since having a full stock assessment on red snapper. The current one is a modified benchmark assessment, and it should be a full assessment; the Council needs to make some more noise about that. These plans take away state powers; if state waters are managed by the states, anyone can fish in state waters, permit or no permit. The feds cannot come in and chain you to that federal rule. That is for all the charter guys.

They had clamped down on red grouper even though they were thick as flies, and they won a lawsuit against the regulations. The same thing has been going on with red snapper and gag; the clamp is staying on it. Roy Crabtree is clamped by certain rules, as is the Council, but we threw off slavery and other rules and putting up with this is just plain wrong. The spring shallow-water grouper closure is not needed, and he can't believe it isn't done (the rule making), so Mark Hubbard and his employees cannot access what is known to be a healthy fishery. There is no reason the closure can't be rescinded. If Dr. Crabtree can close amberjack in five days, he can open shallow-water grouper. The analyses have already been done. There will be an online petition up by tomorrow to address the 2-month closure, because it would be a half million dollar bump to the fishing economy.

Libby Fetherston - Ocean Conservancy

She lauds the goal on increasing flexibility for recreational fishermen, but is concerned that regional management isn't the way to go. There are issues with monitoring and enforcement and it is unclear where from the federal budget enforcement funds would come from. Without additional funds for monitoring, they would need a bigger uncertainty buffer and she doesn't see that happening because it would further reduce the season. She is uncertain how much flexibility states would have; it may be limited to when they have their seasons and the bag limit. She doesn't see this as a mechanism for optimizing recreational fishing opportunities.

As with all their comments on scoping documents, she feels that the Council and NMFS should analyze a wide range of options that address this issue. She is concerned about how federally permitted charter operators would be affected by regional management, and that warrants further analysis. NMFS must ensure that this is consistent with federal law and the rebuilding goals for red snapper. She predicts the assessment will show great progress has been made in rebuilding red snapper, but that they aren't there yet.

Vance Tice - FRA, Minnows and Monsters

He is still very upset that no Council member attended the last public hearing and he is concerned that Council members did not receive their testimony. He had a tackle shop that is closed because of draconian measures; 60% of his business was offshore fishing and there is no more offshore fishing. He's against catch shares but they keep trying to slide it in there; the majority in Florida is against catch shares. Congress has addressed it but they move on with it. The way effort is calculated is a big problem. He has called a lot of businesses and they report that business is down, but the data show effort is up so there is a problem there. At the boat ramps, you don't see the big trailers anymore, you see smaller bay boats. He knows guys who

have sold their offshore boats because it isn't worth it anymore. When FWC goes out and does mortality studies that show that the data are way off, their studies are ignored. Bob Shipp's paper says there is way more red snapper than the Gulf Council wants to admit. It's hard to feel a part of management when what they see is 180 degrees from what is being shoved down their throats. For red snapper, they used to have a 192-day season, 4-fish bag limit, and they never overfished the limit. Now with a 40 day season and 2 fish limit, they've somehow miraculously overfished the limit. Factors like weather, price of gas, and the economy are not taken into account. People are struggling. You're not just affecting people who fish, you're affecting every Florida citizen because when you take that money out of the state, the state still needs money to run.

Scott Moore

We don't even know how many people are fishing in federal waters. He doesn't like fishing licenses, but he knows why you have to have them. Magnuson was enacted to get information from the states on who was fishing in federal waters and he can't understand how to do this without knowing how many people are fishing in federal waters. He suggests that Florida implement the same thing as fish and wildlife did with federal regulations on migratory birds. The permits should be free because you're collecting the data and the feds should pay the states to do this. That's the first thing that should have been enacted. Just because a guy catches grouper onshore doesn't mean he fishes in federal waters. The only way to get this right is to permit the data. Another thing is poundage; Florida never went by pounds; they went by individual catch. Poundage is way too confusing, you want to simplify as much as possible. There are a lot of fish out there in trouble. There's no fishery in the world that has ever collapsed fishing on a slot [limit]; he feels slot limits should be used more.

Frank Bachelier - Captain, Hubbard's Marina

Since he came back to the area he's noticed an overwhelming change in the laws that have been imposed. For groupers, there's a big change in what you can't keep in federal waters. He gets gags year round and is not seeing the population decline like everyone is talking about. Out in 130 feet of water, red snapper are everywhere, and doesn't understand how people are getting these numbers. The FWC guys are there and they're awesome, but they are counting the number of runts coming on their boat, rather than figuring out other stuff out with their time. We're so limited with the season and we need to figure out what we're doing here. He's listening to everyone out here saying the way they collect the data is wrong, and everyone here at this meeting is against everything that's going on. No one here supports the 27-day season, they need better data.

Public Hearings were held in the following locations:

Thursday, August 1, 2013

Call-in session

Monday, August 5, 2013

Courtyard Marriott
11471 Cinema Drive
D'Iberville, MS

Wednesday, August 7, 2013

Holiday Inn Select
2001 N. Cove Boulevard
Panama City, FL

Thursday, August 8, 2013

Renaissance Mobile Riverview Plaza Hotel
64 South Water Street
Mobile, AL

Monday, August 12, 2013

Hilton St. Petersburg Carillon Parkway
950 Lake Carillon Drive
St. Petersburg, FL

Monday, August 12, 2013

Hilton Garden Inn
6717 South Padre Island Drive
Corpus Christi, TX

Tuesday, August 13, 2013

Hampton Inn & Suites
2320 Gulf Freeway South
League City, TX

Wednesday, August 14 2013

DoubleTree
4964 Constitution Avenue
Baton Rouge, LA

Summaries of Public Hearings

Call-in Session

August 1, 2013

Council/Staff

Kevin Anson
Ava Lasseter
Emily Muehlstein
Charlene Ponce

17 members of the public attended.

Tom Hilton - Recreational

Mr. Hilton believes that regional management puts the cart before the horse. The council is pushing for a concept that uses knowingly-flawed data that overestimates recreational landings by at least 70%. It would be better for the Council to help the Gulf states implement a state-based data collection system modeled after the existing Louisiana offshore landings permit. Second, the concept of sector separation has been slipped into the regionalization concept. It is irresponsible for the Council to give that type of decision-making power over to the states rather than tackle the issue Gulf-wide.

Dennis O’Hern- Fishing Rights Alliance

Mr. O’Hern wonders if there is no accountability measure for the recreational sector what is the 28-day season. The recreational sector is managed after the fact, due to the horrible mismanagement of data by NMFS. He also mentioned that people often submit false information to the Council and he asked for follow-up regarding the law and any past prosecutions under said law. He also expressed concerned that regional management was based on data that the Council knows to be wrong. The Gulf Council should be the management tool that we want, but NMFS influence and control over the Council must be removed. He stated that the Council should be run by the states with constituent input, and the members of the Council should be appointed by the Governors; not hand-picked by NMFS.

B.J. Burkette - Charter; Florida

Mr. Burkette does not think that regional management is going to help because the NMFS data is still a problem. There is no need to be so restrictive with the amount of fish and regional management won’t solve that problem.

George McKinney - Commercial, For-Hire, Private; Pensacola, Florida

Mr. McKinney wondered how enforcement would work in a place like Pensacola, Florida with Perdido Pass so close. He would like to see some sort of regional management. He wants small boats and private recreational anglers who are limited in days to be able to safely and effectively fish in the Gulf.

Bob Gill - Former Council member; Crystal River, Florida

Mr. Gill recommended that the Council require the states to come to full agreement on all points relative to regional management prior to the Council taking further consideration or action. He added that the Council ought to table the amendment until the states agree on all the issues. New issues seem to be cropping up and it’s going to be very difficult for the Council to find an endpoint if the states do not agree with every action and alternative.

Action 4 - Council should give serious consideration to a slot limit for red snapper. Spawning success is greater for large fish and preserving the older fish in the truncated population may have some merit. Mr. Gill acknowledges the discard problem and still believes a slot will be useful.

Bill Teehan - Former Council member; Tallahassee, Florida

Mr. Teehan thinks the entire concept is very interesting. He supports Action 4’s Alternative 7 which would allow individual regions to establish sub-allocations for for-hire and private anglers.

Corpus Christi, Texas
August 12, 2013

Council/Staff

Robin Riechers
Lance Robinson
Emily Muehlstein
Charlotte Schiaffo

20 members of the public attended (mostly Texas Parks and Wildlife and Harte Research Institute staff; about eight were members of the fishing public).

Cliff Strain - Port Aransas Boatmen Association

Mr. Strain commented that he understood the current data collection but believed that people were unsatisfied with the federal government because the regulations were not in line with what the people are seeing. He added that if a move toward regionally adjusting the data was not made, then regional management would not have the punch or be as effective as anglers wanted it to be. He noted that Texas had the structure and ability to manage red snapper, and while he did not think there needed to be a year round season which could deplete the resource, he did want to see a longer fishing season. He stated that he had not had to spend more than 30 minutes fishing to limit out. He expressed concern that eventually, the destruction of habitat would have an effect on fish populations and encouraged the Council to do what it could to control the removal of rigs. He stated that his association wants to support regional management.

Ron Moser - Port Aransas Boatmen Association

Mr. Moser favored individual states having control over their waters (Action 2, Alternative 3). He added that the data collected should be adjusted to account for the biomass of fish in the state of Texas, as Texas seemed to be penalized more than other states because of this not being taken into account. He supported Action 3, Alternative 1; do not apportion the quota based on historical landings. On Action 4, he recommended the Preferred Alternative 4, to allow individual regions to set recreational red snapper season start and end dates and season structure. On Action 5, he believes that for-hire vessels and federal permit restrictions should be left to Texas to manage the resource. On Action 6, he agreed a 2-year grace period (Option b) would be best so that the new program had opportunity for error without penalizing fishermen while the program adjusts.

Pat Harris - Private recreational angler

Mr. Harris would like to see as much effort from the Gulf Council to increase habitat quality as they did in forcing regulations on anglers. He added that trying to improve everything instead of concentrating on improving the fishery was the wrong path for the Council to take.

League City, Texas
August 13th, 2013

Council/Staff

Robin Riechers
Lance Robinson
Emily Muehlstein
Charlotte Schiaffo

21 members of the public attended.

Kristen McConnell - Senior Conservation Manager Environmental Defense Fund

Ms. McConnell expressed concern about the regional management proposal. She is cautiously supportive because Environmental Defense Fund agrees with the idea of increasing access and flexibility for anglers but finds it difficult to support an idea with so many outstanding issues. Regional management will present challenges to law enforcement; it may have unforeseen impacts on other species due to effort shifting. It is hard to move forward without a better understanding of what the states will do. States should provide details on what direction they will take and their proposals should include accountability measures in case of a quota overage. She fails to see the relative benefit of regional management for private and for-hire anglers in the long term because the concept simply promotes the use of the same management tools with the same pitfalls. A real solution that potentially uses regional management is needed, but the current amendment does not seem to provide that solution.

Bill Bahr - Charter Captain

Mr. Bahr is largely concerned with the health of the snapper fishery and properly assessing that population. He is a Texas native and he has confidence that Texas Parks and Wildlife will be able to manage red snapper. He is concerned about the discrepancy between Louisiana and NMFS landings data, and he would support Action 6, Option b which would create a 2-year grace period for the regions to establish their own programs without having the NMFS numbers shoved down their throats.

Scott Hickman - Charter Captain and owner of Commercial Red Snapper IFQ

Status quo is not working. The commercial IFQ program can be credited for success of some of the red snapper recovery and he would like a similar tool to be considered for the for-hire sector. Mr. Hickman can't participate in his own state waters, so he supports Action 5, Alternative 2 to remove the requirement for for-hire vessels to adhere to the strictest regulations. Mr. Hickman also supports Action 4, Alternative 7 which would allow for a separate sub-allocation for the private for-hire industry. Amendment 39 has a lot of holes in it and he is afraid that Texas will have a weekend season or something that will shut out the charter industry. He is tentative about supporting the amendment and wants the charter boat fleet to have assurance before he can move forward.

Paul Bitner - Charter Captain

There are a lot of holes in how the landings are calculated and he would like to see greater accountability in how those numbers are collected. Mr. Bitner does not think we can get a grip

on the numbers without implementing a tag program to keep better track of the fish. Mr. Bitner has limited days to catch fish and make business work and the current management does not allow for success. He supports Action 4, Alternative 7 because he would like the private and for-hire fishermen to be managed separately.

Johnny Williams - Headboat owner/operator

Mr. Williams thinks there are going to be winners and losers under a regional management program, and we are in a situation where we don't know who those winners or losers will be. Texas landings have decreased but it's not because the fishing is getting worse; he predicts that under status quo, the Texas proportion of the harvest will continue to decrease. He supports states' rights and wants the federal entities to stay out of his business. Mr. Williams has a hard time supporting the amendment without a better understanding of what the program would look like if delegation were given to Texas. He would be opposed to a situation where the red snapper fishing would be open only on Saturdays during the summer and he does not know where the State stands.

Tom Hilton

The data is showing that headboats are landing 68% of all the red snapper, so headboat operators have nothing to worry about. Mr. Hilton wants to Council to get a hard handle on exactly what we are doing before jumping off into the unknown using flawed data to determine allocation percentages in Action 3. There are no regional assessments of biomass and the feds have taken control of the commercial fishery without regional control. Off Texas the working allocation is not 51% commercial and 49% recreational. There are far more commercial harvesters off Texas, and here it may be closer to 70% commercial and 30% recreational. He says that there is nothing regional about this concept because the federal agencies will still hold critical control points. The Louisiana offshore landings permit should be a sounding bill for every Gulf state to implement their own data collection system. Louisiana didn't believe the feds and they proved them wrong. In Mr. Hilton's opinion, it is a dereliction of duty for all involved to move forward with this amendment with this flawed data.

He proposes a better solution:

1. Implement a data collection system across the Gulf for each state modeled after the Louisiana offshore permit.
2. Implement an 11 million pound annual catch limit over the next 3 years.
3. Give any increase in quota to the recreational fishermen because their season and bag limit has been slashed while commercial folks have had full access to their quota.
4. Reinstate the 149-day season.

Steve Cunningham - Charter Captain

Mr. Cunningham shares the other speakers' opinions. Caution is important and using only fishery dependent data needs to change. 30B needs to be removed so he can be successful as a charter operator. Mr. Cunningham supports Action 2, Alternative 4 which would create 5 regions, one for each state. He supports Action 3, Alternative 3 which would remove landings from 2006 and 2010 from the allocation decisions. He made it clear that biomass data needs to be included somehow even if it's not given the weight that the historical landings are given. We know there are more fish in the western Gulf and that needs to be accounted for. He supports Action 5, Alternative 2 which would create a 2-year grace period. A 3-year period may be even

better. He is slightly leaning towards having more faith in Texas than he does in NMFS. There are a lot of issues in the document so before any radical changes are made, we need to look at this idea very carefully. The fishermen on charter boats are recreational anglers and they, along with seafood consumers, are important contributors to the fishery.

Shane Cantrell - Charter owner/operator

Mr. Cantrell is disappointed that regional management does not allow for planning or provide for additional methods of data collection. He would prefer a multispecies IFQ program for the charter industry. The commercial program works well for commercial fishermen and he understands that changes would be made to accommodate his industry. He wants the real time accountability. He thinks harvest tags would work out very well for the private recreational anglers. As it is proposed, regional management is just a reshuffling of the deck with the same management tools and he would rather new novel approaches to management be considered.

David Conrad- Charter Captain

He fully supports Action 5, Alternative 2 to allow for-hire boats to participate in the state season. 30B needs to go away because recreational fishermen on their boat should be allowed to fish just like recreational boat owners. He sees issues with allocation for the states. He needs to see what's in the details before fully supporting this document.

Baton Rouge, Louisiana
August 14, 2013

Council/Staff

Camp Matens
Emily Muehlstein
Charlotte Schiaffo

24 members of the public attended.

Chris Macaluso - Theodore Roosevelt Conservation Partnership

As an organization, they are trying to work within the system to better manage the recreational fisheries. Trying to manage red snapper to a total allowable catch is destined for failure because the Marine Recreational Information Program does not reflect an accurate count of the fish that are being caught or how many people are fishing. For Action 3 he is concerned with basing the quotas on historical landings. Historical landings from Alabama and Florida will reflect more landings but that is a measure of fishing pressure not abundance of fish. He does not want to restrict pressure but if the target in MSA is to end overfishing and the Council allows states with less biological availability to out fish the areas with greater availability, we are going to fail. Managing the red snapper as one stock may be a problem. The fish don't migrate from west to east; there are fish in each region. Allowing an area with less fish to harvest more of the fish will not end overfishing. The only way we will successfully end this problem is to allow more fishing where there is more biological availability and less where there are less fish.

Ed Fike - Environmental Consultant and private recreational angler

He is supportive of what he has heard this evening. He is happy that Louisiana is taking the charge and that NMFS is working with fish. Biological availability of the fish is very important and he thinks that needs to be considered during allocation (Action 3). During the fall supplemental season, he fished every weekend and never saw anyone at one of the key landings sites. Based on his observations, he does not think that fishing is that important here in the fall.

Kenny Acostu - Private recreational angler

Mr. Acostu likes the opportunity to go fishing and he enjoys it, but opening June 1st with 2-3 foot waves is hard on him. Let the states manage using the weekend season and if it's recreational that's great because it will benefit him. There is no reason to go fishing for anything outside of red snapper season because you can't catch anything but red snapper; it makes his other fishing less enjoyable. He wants to fish without feeling like he is being wasteful and killing something by accident.

George Huye – CCA; Private Recreational Angler

He is in favor of regional management. For Action 3 he is concerned about the use of historical landings data because it does not fix the problem of inaccurate fisheries dependent data and it doesn't make much sense to perpetuate the current system forward. He sees enough alternatives for the Council to be able to make good decisions here. Regional management will give the people of Louisiana a better opportunity to have a chance to catch what they may have had in the past. We know the stocks are strong and this will give the Louisiana fishermen an opportunity to put their trust and faith in their own resource management department.

Rebecca Triche - Louisiana Wildlife Federation

Ms. Triche noted that red snapper is a hot topic for her members. The Federation submitted comment in January already. She would like to see a regional approach because the Louisiana Department of Wildlife and Fisheries has the capability to assess the stocks. She wants limits to be set based on biological availability because the western region can sustain more harvest than the east. There was lots of activity in legislation regarding the passion Louisiana anglers have. She urges the Council to continue moving forward with this idea to acknowledge the frustrations of recreational anglers.

Rad Trashe - CCA Louisiana

Mr. Trashe expressed his full support for regional management. We all know that we've had faulty science and poor management. This is an opportunity to do what everyone wants; what's best for the resource and what's better for the fishermen. The Department of Louisiana Wildlife has proven that they do better science than NMFS. This year there was someone at the ramp every single day. We should put the power in Louisiana's hands and let them run with it.

D'Iberville, MS
August 5, 2013

Council/Staff

Dale Diaz
Corky Perret
Ava Lasseter

7 members of the public attended.

Tom Becker - Mississippi Charter Captains Association

The Association discussed this the other night and decided that they need to go along with this and see what happens. There are problems with the data because they were never checked to see what they're catching on his headboat. He wants to see someone checking landings more often instead of telling him when they can get there. The Department of Natural Resources is hurting for people. There are so many places to unload your fish and that's what's happening.

Gary Smith - Recreational

Mr. Smith's first concern is the legality of regional management. There needs to be a non-biased person looking into it, in case in a couple of years it's determined they did something they shouldn't have done. He doesn't have a problem with regional management, but it needs more thought about how to divide the quota. Texas, the largest state, only got 12%, but Florida landed so much [2012 landings]; what's going to happen as the population changes? There are a lot of areas that need to be addressed: will there be annual adjustments, what process will be required, what happens when Texas demands more? The biggest issue is how you're going to count/estimate the data. Everyone agrees the data is flawed, but we're not addressing that. To fix it, got to count the number of boats. Don't worry about the number of fishermen, just the number of boats. Then each state could require a boat permit and you couldn't have red snapper aboard until you have the boat permit. Looking at Mississippi's data, it comes up to 22,000 fish they could catch. He has counted the number of boats and has never counted more than 50 boats. The most he's ever counted was 88; the boats just aren't there. You'll be back to 21 days even with regional management. Counting the boats is how you have got to correct the problem.

John Marquez Jr. - CCA Mississippi

He supports regional management and wants management taken to the state level, which allows them to control the fishery, best for their anglers. CCA wants to see the states have the ability to manage the commercial red snapper quota and be allowed to allocate among sectors. They would like red snapper removed from the reef fish FMP, as has been done for misty grouper and other species. He echoes Mr. Smith's comment that any plan needs to contain flexibility to allow for change within the states over time. Mississippi has concerns about how this would be funded, as they have a different sort of funding mechanism for data collection.

**Panama City, FL
August 7, 2013**

Council/Staff

Martha Bademan

Ava Lasseter

Ryan Rindone

7 members of the public attended.

Chris Niquet - Commercial

He noted the differences between the percentage of red snapper landed by state since the oil spill and the allocation under Alternative 4, which would be based on the ABCs [separate east Gulf and west Gulf stock assessments]. So recreational allocations would be 48.5% for the eastern Gulf and 51.5% for the western Gulf, which lands the least recreationally. He thinks this seems backward. It seems like Florida and Alabama would get the bulk of the ABC.

Bart Niquet - Commercial

He feels the charter and headboats are stepchildren in all of this; they get no consideration from the commercial side or the recreational, side and they are being put out of business. They need their own sector and own bag limits. For red snapper, the recreational sector should go to 60 days with a 2-fish limit and set that in stone. He thinks they should be given something they can depend on so they can make a living.

Bob Zales, II - Charter Captain

He is speaking for himself, as the PCBA has not taken a position yet. He is conditionally supportive of regional management if it is only being discussed for the recreational sector, and will have no impact on the commercial sector. He supports the preferred alternatives in Actions 1 and 2. For Action 3, he supports Alternative 2 Option d, which doesn't benefit Florida the most out of all the options, but seems like a fair allocation. For Action 4 he supports only the Preferred Alternatives 2, 3, and 4. He is a little confused by Action 5; he wants the provision removed so supports that. But even if regional management does not go forward, he wants this action to go forward and be finalized before the 2014 season. For Action 6, he prefers Preferred Alternative 3, Option b, to allow the longest grace period to adapt to the change in management. He's confused by Action 7 because he doesn't see how it's going to work. Under the Magnuson-Stevens Act, the fishery must be closed when the quota is met. What happens if Mississippi fishes a lot? They could effectively cause the closure of the rest of the Gulf. He recommends rescinding 406b of Magnuson-Stevens Act that includes that requirement. It may have been necessary in 1996; it's clearly no longer necessary. Finally, as a for-hire operator, he emphasized that his passengers are private recreational anglers, just like those fishing on their own boats.

Jim Clements - Commercial

Although CCA and RFA have criticized the IFQ program, Mr. Clements supports regional management if it will help the recreational fishers catch more fish and have more days to fish. But, this must not affect the commercial red snapper fishery.

Mike Eller – Charter and Commercial

Mr. Eller is speaking for himself and his own for-hire vessel. For Action 1 he prefers Alternative 3 [Council-implemented regional management]; for Action 2: he supports the preferred alternative for 5 regions. Action 3, he supports Alternative 2 Option d, combining the long and short time series.

Regional management is a slippery slope that could result in benefits or could turn into a total fiasco. He is asking himself, can his state can do a better job than what is going on now? If the states get together and make a big advance on data collection, it could be better. But if they don't do that first, then this is putting the cart in front of the horse. This is hard for him to support when he doesn't know the long-term ramifications. His state will make decisions dependent on the current political persuasion at the time. What if his state chooses to adopt a weekends only season? That would really hurt the for-hire fleet. At least with the Council, you have diverse opinions represented. He would like the individual states to have leeway in setting opening season dates, but maybe not to set different size limits. He supports increased flexibility but it is a slippery slope. He wants to see the regional plan for each state before he supports it and they don't have that yet because it is still new. He wants to hear from a state how it would actually manage red snapper better than the NMFS. He does not want the commercial sector to be impacted by this.

He supports the preferred alternative in Action 5 and thinks the 30B provision is unfair and unconstitutional. In Action 4, he supports Preferred Alternatives 2, 3, 4, 5, and 7. Anglers that fish on for-hire vessels should be protected and shouldn't be lumped in with private anglers who fish differently. He feels there should be the possibility for sub-allocations. In Action 6, he supports Alternative 4, Option b; establish a 2-year grace period before implementation of overage adjustments.

Don Whitecotton - Charter

We have all looked at how we are going to protect the life of the fish, but we are putting our industry at risk by setting the season in the middle of hurricane season. Even if the weather is bad, charter boats have to go out to make a living. We need a way for the for-hire boats to go out, and this is a big socio-economic issue. They have been lucky nothing has happened on the headboats yet [accidents]. He suggests a year round season with a number of days you can go out to fish. We can surely regulate ourselves [when we go out] if we can regulate these fish.

Warner Foster - Recreational

He is very interested in the quota issue and wants to know how they get the quota. He hears they just pull it out of somewhere. He has never had his fish counted and weighed checked on his boat. Commercial guys have to weigh in all their fish, but no one is ever at the ramp asking him what he caught. With the size of his boat, he's not going to go out in the rough weather and get beat up. The June 1 season start was during rough weather and they couldn't get out most of the season.

***The following comments were received in Panama City on August 6, 2013 at a hearing on Coastal Migratory Pelagics.**

BJ Burkett - Charter and commercial

Capt. Burkett thinks the whole program is going to be a logistical nightmare. Red snapper isn't being managed appropriately now, but they're going to throw 5 more leaders into it? It's going to be very complicated because the regulations change so often. On all the actions, except Action 5, he wants no action. He does not want regional management. The issue we should be fixing is the flawed data. Regional management will make regulations based on incorrect data instead of tackling the issue of getting more days. He has heard we're never going to get back to where we were just a few years ago [longer season], but that's what people want. Regional management might leave them with 25-30 day seasons, which doesn't take us anywhere close to what people want. Therefore, he doesn't see the benefit of doing it. Maybe one state can fish a few days longer, or keep one fish more than another region's bag limit, but he does not see benefits to the whole Gulf and for all anglers.

Randall Akins - Recreational, retired charter captain

Capt. Akins has a historical captain permit that he can't transfer to his children and that's not the way of doing things in America. His children should be able to receive his permit. When he was in the Coast Guard, he was told you couldn't sell permits, but now you can so he is confused. At least 50% of the time he has broken the law because he has to throw back red snapper that are not at least 16". He has to throw them back and the dolphins get them. Feeding dolphins is against the law and he knows someone who was fined for feeding dolphins. This can be solved by keeping the season open year round and you can keep your first five fish. He was told that would be culling the fish, but that's what he's doing now. He doesn't support setting seasons or size limits.

**Mobile, AL
August 8, 2013**

Council/Staff

Kevin Anson
Chris Blankenship
Ava Lasseter
Ryan Rindone

11 members of the public attended

Palmer Whiting - Recreational, Alabama CCA Chairman

Mr. Whiting thinks the state has done a good job of managing its inshore fisheries and can do a good job with offshore fisheries. They built this habitat and they can manage it. Alabama has a lot of habitat and a lot of snapper. CCA members are in favor of that and having it on a more local level, with local scientists, who are more than capable. Bring management down to the state level is preferred.

Captain Mike Thierry - Charter

Capt. Thierry thinks states can manage it better. The inconsistency of allocations needs to be addressed so everyone is on the same playing field, and the number of days each state is allowed to fish is not impacted because of another state's regulations. Basing allocations on landings when some states who were open while Alabama was closed is like rewarding them for not playing by the rules. Sub-allocations are needed because one size does not fit all. The weekends-only season that private vessel anglers prefer would not work for the charter fleet. There should be no more restrictions than the for-hire fleet already has compared to the private recreational anglers. He supports the states taking over management and feels they are up to the job. He would like to have states do their own stock assessment. They are here locally every day and could do a better job. Each region needs to be accountable to its own quota. For example, Destin's rodeo is in October and they'd like to have the season open then. We'd like our own rodeo season in July; so one size doesn't fit all. Texas wants to be open in the winter as it's a good time for them. Alabama has got some of the best people in the world working on this stuff right here.

Skipper Thierry - Charter

He supports state management of red snapper and the ability of a state to establish sub-allocations. He would like for the state to conduct its own stock assessment, eventually. He wants the accountability measure, but they need to be flexible because landings often fluctuate annually for all kinds of reasons beyond our control.

**St. Petersburg, FL
August 12, 2013**

Council/Staff

Martha Bademan

Ava Lasseter

Ryan Rindone

Doug Gregory

8 members of the public attended.

Buddy Bradham - Recreational Fishing Alliance, retired charter and commercial fisherman

The RFA has a lot of problems with this so for right now, they prefer No Action be taken on all actions. They're behind on getting data sets in place. Florida is working on it but it is unknown when this will be available. There is the potential for going over the quota. The season dates would have to come from each state. There was a meeting on Friday morning where it was said it may cost 2.5 million dollars per year, and that's funding Florida doesn't have. These are problems that need to be solved before we go into regional management. If the improved data collection is in place, they would support regional management with the following preferred alternatives:

Action 1: prefer no action until data is fixed. Action 2: support the preferred alternative of 5 regions. For the quota (Action 3), they have a big problem with the data sets that may be used.

Louisiana has just proved how bad the NMFS estimates are: 70% off from their catches. They would like any new data program to run for 3 years then base the quota allocations on that. Action 4: they support the Preferred Alternatives 2, 3, and 4. But, they strongly speak out against Preferred Alternative 7, as this is a form of sector separation. They are still against it and feel the Council is trying to push it into this amendment. For Action 5, they support the preferred alternative. They don't support 30B at all and it should be completely removed, not just for red snapper but also for all reef fish. For Action 6, they prefer Alternative 3, Option b, allowing a 2-year grace period. For Action 7, they support Preferred Alternative 3 for a state that opts out.

Libby Fetherston - Ocean Conservancy

The Ocean Conservancy supports the Council's attempt to consider alternative management for the recreational sector. They do not take positions on allocation decisions. They think data collection and validation is critical to the success of any regional management plan and will need minimum data standards. They encourage the Council to think about ways that the restoration funds could support these goals in terms of quality and quantity of sampling. They also encourage the use of ACTs because they provide a reasonable buffer based on past performance and warrant consideration.

Sharon McBreen - Pew Charitable Trusts

Pew recommends revising the amendment's purpose and need to reflect that rebuilding red snapper is the top priority. They recommend that the amendment include the following three key components needed for the program's success:

1. AMs are safeguards and should include payback provisions, to maintain rebuilding. So they support the preferred alternative in Action 6. They also encourage the states to set up a system to constrain catches to within their quota. They do not oppose the Option a for a 1-year grace period, to allow state programs time to adjust their management process. This will be a learning process between NOAA and the states.
2. The states will need to retool their data collection systems to avoid triggering AMs. States should consider the use of ACTs to build in a margin of error to avoid triggering AMs, especially while adjusting to the new management system. This includes the option to use an ACT.
- 3: They support Action 4's Preferred Alternative 7: establish sub-allocations. If a state chooses that this is right for them, they should be allowed to pursue it.

Stephen Furman - CCA Florida, Tampa chapter

CCA supports regional management. He found the example of regional management for king mackerel an interesting example, because it is a migratory fish, and red snapper is not migratory. We had no red snapper off this coast for a long time but they came back because of Hurricane Katrina. This is a good start but the states would do a good job figuring it out if the feds would step away from the table. The states should have that authority, and the data and law enforcement is available. NOAA is paying FWC for nice boats to patrol offshore and there is no reason to stop that.

APPENDIX D. DELEGATION PROVISION

Magnuson-Stevens Fishery Conservation and Management Act 16 U.S.C. §1856(a)(3), (b)

(3) A State may regulate a fishing vessel outside the boundaries of the State in the following circumstances:

(A) The fishing vessel is registered under the law of that State, and (i) there is no fishery management plan or other applicable Federal fishing regulations for the fishery in which the vessel is operating; or (ii) the State's laws and regulations are consistent with the fishery management plan and applicable Federal fishing regulations for the fishery in which the vessel is operating.

(B) The fishery management plan for the fishery in which the fishing vessel is operating delegates management of the fishery to a State and the State's laws and regulations are consistent with such fishery management plan. If at any time the Secretary determines that a State law or regulation applicable to a fishing vessel under this circumstance is not consistent with the fishery management plan, the Secretary shall promptly notify the State and the appropriate Council of such determination and provide an opportunity for the State to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the State does not correct the inconsistencies identified by the Secretary, the authority granted to the State under this subparagraph shall not apply until the Secretary and the appropriate Council find that the State has corrected the inconsistencies. For a fishery for which there was a fishery management plan in place on August 1, 1996 that did not delegate management of the fishery to a State as of that date, the authority provided by this subparagraph applies only if the Council approves the delegation of management of the fishery to the State by a three-quarters majority vote of the voting members of the Council.

(C) [Pertains to Alaska, only.]

(b) EXCEPTION.—

(1) If the Secretary finds, after notice and an opportunity for a hearing in accordance with section 554 of title 5, United States Code, that—

(A) the fishing in a fishery, which is covered by a fishery management plan implemented under this Act, is engaged in predominately within the exclusive economic zone and beyond such zone; and

(B) any State has taken any action, or omitted to take any action, the results of which will substantially and adversely affect the carrying out of such fishery management plan; the Secretary shall promptly notify such State and the appropriate Council of such finding and of his intention to regulate the applicable fishery within the boundaries of such State (other than its internal waters), pursuant to such fishery management plan and the regulations promulgated to implement such plan.

(2) If the Secretary, pursuant to this subsection, assumes responsibility for the regulation of any fishery, the State involved may at any time thereafter apply to the Secretary for reinstatement of its authority over such fishery. If the Secretary finds that the reasons for which he assumed such regulation no longer prevail, he shall promptly terminate such regulation.

(3) If the State involved requests that a hearing be held pursuant to paragraph (1), the Secretary shall conduct such hearing prior to taking any action under paragraph (1).

APPENDIX E. FISHERY ALLOCATION POLICY

Gulf of Mexico Fishery Management Council Fishery Allocation Policy

This allocation policy was developed by the Gulf of Mexico Fishery Management Council to provide principles, guidelines, and suggested methods for allocation that would facilitate future allocation and reallocation of fisheries resources between or within fishery sectors.

Issues considered in this allocation policy include principles based on existing regulatory provisions, procedures to request and initiate (re)allocation, (re)allocation review frequency, tools and methods suggested for evaluating alternative (re)allocations.

1. Principles for Allocation

- a. Conservation and management measures shall not discriminate between residents of different states.
- b. Allocation shall:
 - (1) be fair and equitable to fishermen and fishing sectors;
 - (i) fairness should be considered for indirect changes in allocation
 - (ii) any harvest restrictions or recovery benefits be allocated fairly and equitably among sectors
 - (2) promote conservation
 - (i) connected to the achievement of OY
 - (ii) furtherance of a legitimate FMP objective,
 - (iii) promotes a rational, more easily managed use
 - (3) ensure that no particular individual, corporation, or other entity may acquire an excessive share.
- c. Shall consider efficient utilization of fishery resources but:
 - (1) should not just redistribute gains and burdens without an increase in efficiency
 - (2) prohibit measures that have economic allocation as its sole purpose.
- d. Shall take into account: the importance of fishery resources to fishing communities by utilizing economic and social data in order to:
 - (1) provide for the sustained participation of fishing communities
 - (2) minimize adverse economic impacts on fishing communities.

- e. Any fishery management plan, plan amendment, or regulation submitted by the Gulf Council for the red snapper fishery shall contain conservation and management measures that:
 - (1) establish separate quotas for recreational fishing (including charter fishing) and commercial fishing.
 - (2) prohibit a sector (i.e., recreational or commercial) from retaining red snapper for the remainder of the season, when it reaches its quota.
 - (3) ensure that the recreational and commercial quotas reflect allocation among sectors and do not reflect harvests in excess of allocations.

2. Guidelines for Allocation

- a. All allocations and reallocations must be consistent with the Gulf of Mexico Fishery Management Council's principles for allocation.
- b. An approved Council motion constitutes the only appropriate means for requesting the initiation of allocation or reallocation of a fishery resource. The motion should clearly specify the basis for, purpose and objectives of the request for (re)allocation.
- c. The Council should conduct a comprehensive review of allocations within the individual FMPs at intervals of no less than five years.
- d. Following an approved Council motion to initiate an allocation or reallocation, the Council will suggest methods to be used for determining the new allocation. Methods suggested must be consistent with the purpose and objectives included in the motion requesting the initiation of allocation or reallocation.
- e. Changes in allocation of a fishery resource may, to the extent practicable, account for projected future socio-economic and demographic trends that are expected to impact the fishery.
- f. Indirect changes in allocation, i.e., shifts in allocation resulting from management measures, should be avoided or minimized to the extent possible.

3. Suggested Methods for Determining (Re)Allocation

- a. Market-based Allocation
 - (1) Auction of quota
 - (2) Quota purchases between commercial and recreational sectors
 - (i) determine prerequisites and conditions:
 - (a) quota or tags or some other mechanism required in one or both sectors
 - (b) mechanism to broker or bank the purchases and exchanges

- (c) annual, multi-year, or permanent
- (d) accountability for purchased or exchanged quota in the receiving sector

b. Catch-Based (and mortality) Allocation

- (1) historical landings data
 - (i) averages based on longest period of credible records
 - (ii) averages based on a period of recent years
 - (iii) averages based on total fisheries mortality (landings plus discard mortality) by sector
 - (iv) allocations set in a previous FMP
 - (v) accountability (a sector's ability to keep within allocation)

c. Socioeconomic-based Allocation

- (1) socio-economic analyses
 - (i) net benefits to the nation
 - (ii) economic analysis limited to direct participants
 - (iii) economic impact analysis (direct expenditures and multiplier impacts)
 - (iv) social impact analysis
 - (v) fishing communities
 - (vi) participation trends
 - (vii) "efficiency" analysis
 - (a) lowest possible cost for a particular level of catch;
 - (b) harvest OY with the minimum use of economic inputs

d. Negotiation-Based Allocation

- (1) Mechanism for sectors to agree to negotiation and select representatives
- (2) Mechanism to choose a facilitator
- (3) Negotiated agreement brought to Council for normal FMP process of adoption and implementation.

APPENDIX F. RECREATIONAL RED SNAPPER LANDINGS BY STATE

Table F-1. Annual recreational red snapper landings by state (1986-2013), based on whole weight of fish.

Year	Alabama	Florida	Louisiana	Mississippi	Texas	Total
1986	394,610	1,936,214	631,294	3,483	525,242	3,490,843
1987	387,280	912,624	281,412	54,030	454,200	2,089,547
1988	516,944	939,638	1,038,395	21,783	622,381	3,139,142
1989	542,325	364,040	708,400	345,009	980,566	2,940,340
1990	641,710	292,327	274,814	55,440	360,242	1,624,534
1991	876,783	440,116	968,807	179,601	451,819	2,917,126
1992	1,512,196	371,268	1,129,185	764,794	840,845	4,618,289
1993	2,088,874	1,257,376	1,626,283	907,243	1,281,487	7,161,264
1994	1,950,637	846,390	1,284,748	491,146	1,502,841	6,075,762
1995	1,753,476	554,639	1,543,766	156,083	1,455,779	5,463,742
1996	1,754,990	995,650	885,325	212,843	1,490,081	5,338,889
1997	2,675,157	992,718	1,145,690	664,884	1,325,782	6,804,230
1998	1,435,965	1,402,409	721,783	189,014	1,104,927	4,854,099
1999	1,961,616	1,436,635	784,325	201,748	588,084	4,972,407
2000	1,400,506	1,706,823	881,480	53,551	707,746	4,750,107
2001	2,224,619	2,092,335	316,993	108,454	509,885	5,252,285
2002	2,633,929	2,515,232	404,563	238,012	743,411	6,535,147
2003	2,315,399	2,213,349	544,731	365,829	666,135	6,105,444
2004	1,936,445	3,485,296	376,280	25,571	636,651	6,460,243
2005	1,361,195	2,243,070	484,250	5,222	582,182	4,675,918
2006	838,612	2,094,879	504,844	32,809	659,988	4,131,132
2007	1,143,109	3,286,876	908,429	3,399	466,981	5,808,795
2008	698,227	2,329,830	638,159	39,193	350,466	4,055,876
2009	1,213,550	2,624,803	1,054,594	43,574	660,335	5,596,856
2010	567,453	1,479,310	133,602	10,834	459,653	2,650,851
2011	3,611,844	1,970,382	600,359	69,478	482,047	6,734,109
2012	2,714,675	2,432,569	1,446,106	314,154	616,736	7,524,239
2013	4,228,706	3,935,550	574,431	429,812	470,295	9,638,795

Source: Southeast Fisheries Science Center annual catch limit dataset, including the Calibrated Marine Recreational Information Program (MRIP) landings, Texas Parks and Wildlife Department, and Southeast Headboat Survey landings. Headboat landings from Alabama and the Florida Panhandle are initially reported to the same headboat fishing area. Landings have been assigned to each state based on the survey's vessel landing records (December 2014).

APPENDIX G. CURRENT FEDERAL REGULATIONS FOR GULF OF MEXICO RECREATIONAL RED SNAPPER MANAGEMENT

1. § 622.9 Prohibited gear and methods--general.

(e) Use of Gulf reef fish as bait prohibited. Gulf reef fish may not be used as bait in any fishery, except that, when purchased from a fish processor, the filleted carcasses and offal of Gulf reef fish may be used as bait in trap fisheries for blue crab, stone crab, deep-water crab, and spiny lobster.

2. § 622.20 Permits and endorsements.

(b) Charter vessel/headboat permits. For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess Gulf reef fish, in or from the EEZ, a valid charter vessel/headboat permit for Gulf reef fish must have been issued to the vessel and must be on board.

(1) Limited access system for charter vessel/headboat permits for Gulf reef fish. No applications for additional charter vessel/headboat permits for Gulf reef fish will be accepted. Existing permits may be renewed, are subject to the restrictions on transfer in paragraph (b)(1)(i) of this section, and are subject to the renewal requirements in paragraph (b)(1)(ii) of this section.

(i) Transfer of permits--(A) Permits without a historical captain endorsement. A charter vessel/headboat permit for Gulf coastal migratory pelagic fish or Gulf reef fish that does not have a historical captain endorsement is fully transferable, with or without sale of the permitted vessel, except that no transfer is allowed to a vessel with a greater authorized passenger capacity than that of the vessel to which the moratorium permit was originally issued, as specified on the face of the permit being transferred. An application to transfer a permit to an inspected vessel must include a copy of that vessel's current USCG Certificate of Inspection (COI). A vessel without a valid COI will be considered an uninspected vessel with an authorized passenger capacity restricted to six or fewer passengers.

(B) Permits with a historical captain endorsement. A charter vessel/headboat permit for Gulf coastal migratory pelagic fish or Gulf reef fish that has a historical captain endorsement may only be transferred to a vessel operated by the historical captain, cannot be transferred to a vessel with a greater authorized passenger capacity than that of the vessel to which the moratorium permit was originally issued, as specified on the face of the permit being transferred, and is not otherwise transferable.

(C) Procedure for permit transfer. To request that the RA transfer a charter vessel/headboat permit for Gulf reef fish, the owner of the vessel who is transferring the permit and the owner of the vessel that is to receive the transferred permit must complete the transfer information on the reverse side of the permit and return the permit and a completed application for transfer to the RA. See § 622.4(f) for additional transfer-related requirements applicable to all permits issued under this part.

(ii) Renewal. (A) Renewal of a charter vessel/headboat permit for Gulf reef fish is contingent upon the permitted vessel and/or captain, as appropriate, being included in an active

survey frame for, and, if selected to report, providing the information required in one of the approved fishing data surveys. Surveys include, but are not limited to—

(1) NMFS' Marine Recreational Fishing Vessel Directory Telephone Survey (conducted by the Gulf States Marine Fisheries Commission);

(2) NMFS' Southeast Headboat Survey (as required by § 622.26(b)(1));

(3) Texas Parks and Wildlife Marine Recreational Fishing Survey; or

(4) A data collection system that replaces one or more of the surveys in paragraph (b)(1)(ii)(A),(1),(2), or (3) of this section.

(B) A charter vessel/headboat permit for Gulf reef fish that is not renewed or that is revoked will not be reissued. A permit is considered to be not renewed when an application for renewal, as required, is not received by the RA within 1 year of the expiration date of the permit.

(iii) Requirement to display a vessel decal. Upon renewal or transfer of a charter vessel/headboat permit for Gulf reef fish, the RA will issue the owner of the permitted vessel a vessel decal for Gulf reef fish. The vessel decal must be displayed on the port side of the deckhouse or hull and must be maintained so that it is clearly visible.

(2) A charter vessel or headboat may have both a charter vessel/headboat permit and a commercial vessel permit. However, when a vessel is operating as a charter vessel or headboat, a person aboard must adhere to the bag limits. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

(3) If Federal regulations for Gulf reef fish in subparts A or B of this part are more restrictive than state regulations, a person aboard a charter vessel or headboat for which a charter vessel/headboat permit for Gulf reef fish has been issued must comply with such Federal regulations regardless of where the fish are harvested.

3. § 622.26 Recordkeeping and reporting.

(b) Charter vessel/headboat owners and operators—(1) Reporting requirement. The owner or operator of a vessel for which a charter vessel/headboat permit for Gulf reef fish has been issued, as required under § 622.20(b), or whose vessel fishes for or lands such reef fish in or from state waters adjoining the Gulf EEZ, who is selected to report by the SRD must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD and must submit such record as specified in paragraph (b)(2) of this section.

(2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1) of this section for charter vessels must be submitted to the SRD weekly, postmarked not later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

(ii) Headboats. Completed fishing records required by paragraph (b)(1) of this section for headboats must be submitted to the SRD monthly and must either be made available to an authorized statistical reporting agent or be postmarked not later than 7 days after the end of each month. Information to be reported is indicated on the form and its accompanying instructions.

4. § 622.27 At-sea observer coverage.

(a) Required coverage. A vessel for which a Federal commercial vessel permit for Gulf reef fish or a charter vessel/headboat permit for Gulf reef fish has been issued must carry a NMFS-approved observer, if the vessel's trip is selected by the SRD for observer coverage. Vessel permit renewal is contingent upon compliance with this paragraph (a).

(b) Notification to the SRD. When observer coverage is required, an owner or operator must advise the SRD in writing not less than 5 days in advance of each trip of the following:

(1) Departure information (port, dock, date, and time).

(2) Expected landing information (port, dock, and date).

(c) Observer accommodations and access. An owner or operator of a vessel on which a NMFS-approved observer is embarked must:

(1) Provide accommodations and food that are equivalent to those provided to the crew.

(2) Allow the observer access to and use of the vessel's communications equipment and personnel upon request for the transmission and receipt of messages related to the observer's duties.

(3) Allow the observer access to and use of the vessel's navigation equipment and personnel upon request to determine the vessel's position.

(4) Allow the observer free and unobstructed access to the vessel's bridge, working decks, holding bins, weight scales, holds, and any other space used to hold, process, weigh, or store fish.

(5) Allow the observer to inspect and copy the vessel's log, communications logs, and any records associated with the catch and distribution of fish for that trip.

5. § 622.29 Conservation measures for protected resources.

(a) Gulf reef fish commercial vessels and charter vessels/headboats--(1) Sea turtle conservation measures. (i) The owner or operator of a vessel for which a commercial vessel permit for Gulf reef fish or a charter vessel/headboat permit for Gulf reef fish has been issued, as required under

§§ 622.20(a)(1) and 622.20(b), respectively, must post inside the wheelhouse, or within a waterproof case if no wheelhouse, a copy of the document provided by NMFS titled, "Careful Release Protocols for Sea Turtle Release With Minimal Injury," and must post inside the wheelhouse, or in an easily viewable area if no wheelhouse, the sea turtle handling and release guidelines provided by NMFS.

(ii) Such owner or operator must also comply with the sea turtle bycatch mitigation measures, including gear requirements and sea turtle handling requirements, specified in §§ 635.21(c)(5)(i) and (ii) of this chapter, respectively.

(iii) Those permitted vessels with a freeboard height of 4 ft (1.2 m) or less must have on board a dipnet, tire, short-handled dehooker, long-nose or needle-nose pliers, bolt cutters, monofilament line cutters, and at least two types of mouth openers/mouth gags. This equipment must meet the specifications described in §§ 635.21(c)(5)(i)(E) through (L) of this chapter with the following modifications: the dipnet handle can be of variable length, only one NMFS-approved short-handled dehooker is required (i.e., § 635.21(c)(5)(i)(G) or (H) of this chapter); and life rings, seat cushions, life jackets, and life vests or any other comparable, cushioned, elevated surface that allows boated sea turtles to be immobilized, may be used as alternatives to

tires for cushioned surfaces as specified in § 635.21(c)(5)(i)(F) of this chapter. Those permitted vessels with a freeboard height of greater than 4 ft (1.2 m) must have on board a dipnet, tire, long-handled line clipper, a short-handled and a long-handled dehooker, a long-handled device to pull an inverted "V", long-nose or needle-nose pliers, bolt cutters, monofilament line cutters, and at least two types of mouth openers/mouth gags. This equipment must meet the specifications described in § 635.21(c)(5)(i)(A) through (L) of this chapter with the following modifications: only one NMFS-approved long-handled dehooker (§ 635.21(c)(5)(i)(B) or (C)) of this chapter and one NMFS-approved short-handled dehooker (§ 635.21(c)(5)(i)(G) or (H) of this chapter) are required; and life rings, seat cushions, life jackets, and life vests, or any other comparable, cushioned, elevated surface that allows boated sea turtles to be immobilized, may be used as alternatives for cushioned surfaces as specified in § 635.21(c)(5)(i)(F) of this chapter.

(2) Smalltooth sawfish conservation measures. The owner or operator of a vessel for which a commercial vessel permit for Gulf reef fish or a charter vessel/headboat permit for Gulf reef fish has been issued, as required under §§ 622.20(a)(1) and 622.20(b), respectively, that incidentally catches a smalltooth sawfish must--

- (i) Keep the sawfish in the water at all times;
 - (ii) If it can be done safely, untangle the line if it is wrapped around the saw;
 - (iii) Cut the line as close to the hook as possible; and
 - (iv) Not handle the animal or attempt to remove any hooks on the saw, except for with a long-handled dehooker.
- (b) [Reserved]

6. § 622.30 Required fishing gear.

For a person on board a vessel to fish for Gulf reef fish in the Gulf EEZ, the vessel must possess on board and such person must use the gear as specified in paragraphs (a) through (c) of this section.

(a) Non-stainless steel circle hooks. Non-stainless steel circle hooks are required when fishing with natural baits.

(b) Dehooking device. At least one dehooking device is required and must be used to remove hooks embedded in Gulf reef fish with minimum damage. The hook removal device must be constructed to allow the hook to be secured and the barb shielded without re-engaging during the removal process. The dehooking end must be blunt, and all edges rounded. The device must be of a size appropriate to secure the range of hook sizes and styles used in the Gulf reef fish fishery.

(c) Venting tool. At least one venting tool is required and must be used to deflate the abdominal cavities of Gulf reef fish to release the fish with minimum damage. This tool must be a sharpened, hollow instrument, such as a hypodermic syringe with the plunger removed, or a 16-gauge needle fixed to a hollow wooden dowel. A tool such as a knife or an ice-pick may not be used. The venting tool must be inserted into the fish at a 45-degree angle approximately 1 to 2 inches (2.54 to 5.08 cm) from the base of the pectoral fin. The tool must be inserted just deep enough to release the gases, so that the fish may be released with minimum damage.

7. § 622.32 Prohibited gear and methods.

Also see § 622.9 for additional prohibited gear and methods that apply more broadly to multiple fisheries or in some cases all fisheries.

(a) Poisons. A poison may not be used to take Gulf reef fish in the Gulf EEZ.

(b) [Reserved]

8. § 622.33 Prohibited species.

(d) Gulf reef fish exhibiting trap rash. Possession of Gulf reef fish in or from the Gulf EEZ that exhibit trap rash is prima facie evidence of illegal trap use and is prohibited. For the purpose of this paragraph, trap rash is defined as physical damage to fish that characteristically results from contact with wire fish traps. Such damage includes, but is not limited to, broken fin spines, fin rays, or teeth; visually obvious loss of scales; and cuts or abrasions on the body of the fish, particularly on the head, snout, or mouth.

9. § 622.34 Seasonal and area closures designed to protect Gulf reef fish.

(a) Closure provisions applicable to the Madison and Swanson sites and Steamboat Lumps, and the Edges-- (1) Descriptions of Areas. (i) The Madison and Swanson sites are bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	29°17'	85°50'
B	29°17'	85°38'
C	29°06'	85°38'
D	29°06'	85°50'
A	29°17'	85°50'

(ii) Steamboat Lumps is bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	28°14'	84°48'
B	28°14'	84°37'
C	28°03'	84°37'
D	28°03'	84°48'
A	28°14'	84°48'

(iii) The Edges is bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	28°51'	85°16'
B	28°51'	85°04'
C	28°14'	84°42'
D	28°14'	84°54'
A	28°51'	85°16'

(2) Within the Madison and Swanson sites and Steamboat Lumps, possession of Gulf reef fish is prohibited, except for such possession aboard a vessel in transit with fishing gear stowed as specified in paragraph (a)(4) of this section.

(3) Within the Madison and Swanson sites and Steamboat Lumps during November through April, and within the Edges during January through April, all fishing is prohibited, and possession of any fish species is prohibited, except for such possession aboard a vessel in transit with fishing gear stowed as specified in paragraph (a)(4) of this section. The provisions of this paragraph, (a)(3), do not apply to highly migratory species.

(4) For the purpose of paragraph (a) of this section, transit means non-stop progression through the area; fishing gear appropriately stowed means--

(i) A longline may be left on the drum if all gangions and hooks are disconnected and stowed below deck. Hooks cannot be baited. All buoys must be disconnected from the gear; however, buoys may remain on deck.

(ii) A trawl net may remain on deck, but trawl doors must be disconnected from the trawl gear and must be secured.

(iii) A gillnet must be left on the drum. Any additional gillnets not attached to the drum must be stowed below deck.

(iv) A rod and reel must be removed from the rod holder and stowed securely on or below deck. Terminal gear (i.e., hook, leader, sinker, flasher, or bait) must be disconnected and stowed separately from the rod and reel. Sinkers must be disconnected from the down rigger and stowed separately.

(5) Within the Madison and Swanson sites and Steamboat Lumps, during May through October, surface trolling is the only allowable fishing activity. For the purpose of this paragraph (a)(5), surface trolling is defined as fishing with lines trailing behind a vessel which is in constant motion at speeds in excess of four knots with a visible wake. Such trolling may not involve the use of down riggers, wire lines, planers, or similar devices.

(6) For the purpose of this paragraph (a), fish means finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals and birds. Highly migratory species means tuna species, marlin (*Tetrapturus spp.* and *Makaira spp.*), oceanic sharks, sailfishes (*Istiophorus spp.*), and swordfish (*Xiphias gladius*).

10. § 622.35 Gear restricted areas.

(a) Reef fish stressed area. The stressed area is that part of the Gulf EEZ shoreward of rhumb lines connecting, in order, the points listed in Table 2 in Appendix B of this part.

(1) A powerhead may not be used in the stressed area to take Gulf reef fish. Possession of a powerhead and a mutilated Gulf reef fish in the stressed area or after having fished in the stressed area constitutes prima facie evidence that such reef fish was taken with a powerhead in the stressed area. The provisions of this paragraph do not apply to hogfish.

(2) A roller trawl may not be used in the stressed area. Roller trawl means a trawl net equipped with a series of large, solid rollers separated by several smaller spacer rollers on a separate cable or line (sweep) connected to the footrope, which makes it possible to fish the gear over rough bottom, that is, in areas unsuitable for fishing conventional shrimp trawls. Rigid framed trawls adapted for shrimping over uneven bottom, in wide use along the west coast of Florida, and shrimp trawls with hollow plastic rollers for fishing on soft bottoms, are not considered roller trawls.

(b) Seasonal prohibitions applicable to bottom longline fishing for Gulf reef fish. (1) From June through August each year, bottom longlining for Gulf reef fish is prohibited in the portion of the Gulf EEZ east of 85°30' W. long. that is shoreward of rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	28°58.70'	85°30.00'
B	28°59.25'	85°26.70'
C	28°57.00'	85°13.80'
D	28°47.40'	85°3.90'
E	28°19.50'	84°43.00'
F	28°0.80'	84°20.00'
G	26°48.80'	83°40.00'
H	25°17.00'	83°19.00'
I	24°54.00'	83°21.00'
J	24°29.50'	83°12.30'
K	24°26.50'	83°00.00'

(2) Within the prohibited area and time period specified in paragraph (b)(1) of this section, a vessel with bottom longline gear on board may not possess Gulf reef fish unless the bottom longline gear is appropriately stowed, and a vessel that is using bottom longline gear to fish for species other than Gulf reef fish may not possess Gulf reef fish. For the purposes of paragraph (b) of this section, appropriately stowed means that a longline may be left on the drum

if all gangions and hooks are disconnected and stowed below deck; hooks cannot be baited; and all buoys must be disconnected from the gear but may remain on deck.

(3) Within the Gulf EEZ east of 85°30' W. long., a vessel for which a valid eastern Gulf reef fish bottom longline endorsement has been issued that is fishing bottom longline gear or has bottom longline gear on board cannot possess more than a total of 1000 hooks including hooks on board the vessel and hooks being fished and cannot possess more than 750 hooks rigged for fishing at any given time. For the purpose of this paragraph, "hooks rigged for fishing" means hooks attached to a line or other device capable of attaching to the mainline of the longline.

(c) Reef fish longline and buoy gear restricted area. A person aboard a vessel that uses, on any trip, longline or buoy gear in the longline and buoy gear restricted area is limited on that trip to the bag limits for Gulf reef fish specified in § 622.38(b) and, for Gulf reef fish for which no bag limit is specified in § 622.38(b), the vessel is limited to 5 percent, by weight, of all fish on board or landed. The longline and buoy gear restricted area is that part of the Gulf EEZ shoreward of rhumb lines connecting, in order, the points listed in Table 1 in Appendix B of this part.

(d) Alabama SMZ. The Alabama SMZ consists of artificial reefs and surrounding areas. In the Alabama SMZ, fishing by a vessel that is operating as a charter vessel or headboat, a vessel that does not have a commercial permit for Gulf reef fish, as required under § 622.20(a)(1), or a vessel with such a permit fishing for Gulf reef fish is limited to hook-and-line gear with three or fewer hooks per line and spearfishing gear. A person aboard a vessel that uses on any trip gear other than hook-and-line gear with three or fewer hooks per line and spearfishing gear in the Alabama SMZ is limited on that trip to the bag limits for Gulf reef fish specified in § 622.38(b) and, for Gulf reef fish for which no bag limit is specified in § 622.38(b), the vessel is limited to 5 percent, by weight, of all fish on board or landed. The Alabama SMZ is bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	30°02.5'	88°07.7'
B	30°02.6'	87°59.3'
C	29°55.0'	87°55.5'
D	29°54.5'	88°07.5'
A	30°02.5'	88°07.7'

11. § 622.37 Size limits.

All size limits in this section are minimum size limits unless specified otherwise. A fish not in compliance with its size limit, as specified in this section, in or from the Gulf EEZ, may not be possessed, sold, or purchased. A fish not in compliance with its size limit must be released immediately with a minimum of harm. The operator of a vessel that fishes in the EEZ is responsible for ensuring that fish on board are in compliance with the size limits specified in this section. See § 622.10 regarding requirements for landing fish intact.

(a) Snapper—(1) Red snapper—16 inches (40.6 cm), TL, for a fish taken by a person subject to the bag limit specified in § 622.38 (b)(3) and 13 inches (33.0 cm), TL, for a fish taken by a person not subject to the bag limit.

12. § 622.38 Bag and possession limits.

(a) Additional applicability provisions for Gulf reef fish. (1) Section 622.11(a) provides the general applicability for bag and possession limits. However, § 622.11(a) notwithstanding, bag and possession limits also apply for Gulf reef fish in or from the EEZ to a person aboard a vessel that has on board a commercial permit for Gulf reef fish--

(i) When trawl gear or entangling net gear is on board. A vessel is considered to have trawl gear on board when trawl doors and a net are on board. Removal from the vessel of all trawl doors or all nets constitutes removal of trawl gear.

(ii) When a longline or buoy gear is on board and the vessel is fishing or has fished on a trip in the reef fish longline and buoy gear restricted area specified in § 622.35(c). A vessel is considered to have a longline on board when a power-operated longline hauler, a cable of diameter and length suitable for use in the longline fishery, and gangions are on board. Removal of any one of these three elements, in its entirety, constitutes removal of a longline.

(iii) For a species/species group when its quota has been reached and closure has been effected, provided that no commercial quantities of Gulf reef fish, i.e., Gulf reef fish in excess of applicable bag/possession limits, are on board as specified in paragraph (a)(2) of this section.

(iv) When the vessel has on board or is tending any trap other than a stone crab trap or a spiny lobster trap.

(2) A person aboard a vessel that has a Federal commercial vessel permit for Gulf reef fish and commercial quantities of Gulf reef fish, i.e., Gulf reef fish in excess of applicable bag/possession limits, may not possess Gulf reef fish caught under a bag limit.

(b) Bag limits--

(3) Red snapper--2. However, no red snapper may be retained by the captain or crew of a vessel operating as a charter vessel or headboat. The bag limit for such captain and crew is zero.

13. § 622.39 Quotas.

See § 622.8 for general provisions regarding quota applicability and closure and reopening procedures. This section, provides quotas and specific quota closure restrictions for Gulf reef fish.

(a) Gulf reef fish--

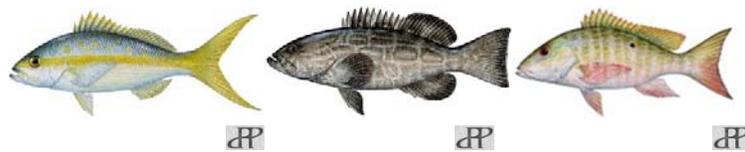
(2) Recreational quotas. The following quotas apply to persons who fish for Gulf reef fish other than under commercial vessel permits for Gulf reef fish and the applicable commercial quotas specified in paragraph (a)(1) of this section.

(i) Recreational quota for red snapper--4.145 million lb (1.880 million kg), round weight.

(c) Restrictions applicable after a recreational quota closure--

(1) After closure of the recreational quota for red snapper. The bag and possession limit for red snapper in or from the Gulf EEZ is zero.

Modifications to Gulf Reef Fish and South Atlantic Snapper Grouper Fishery Management Plans



Draft Joint Generic Amendment For the Joint Council Committee on South Florida Management Issues

March 2015



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COVER SHEET

Name of Action

Draft Joint Generic Amendment to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico and to the Fishery Management Plan for the Snapper-Grouper Fishery of the South Atlantic Region

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CHAPTER 1. INTRODUCTION

1.1 Background

The Joint Council Committee on South Florida Management Issues (Joint Council Committee) was formed in response to a South Atlantic Fishery Management Council (South Atlantic Council) motion in June 2011. The group was first convened in January of 2014 to begin discussing management needs of south Florida species, which casually refers to those areas adjacent to the Floridian peninsula and south of 28° North latitude. There were several recommendations from the Joint Council Committee that were considered by the Joint Council Committee in July 2014, where revised recommendations were proffered and are reflected in this document. Prior to the Joint Council Committee meetings, the Florida Fish and Wildlife Commission (FL FWC) held a series of South Florida workshops in August of 2013. The results of these workshops were discussed at the January 2014 Joint Council Committee meeting and the full summaries are in Appendix A.

The Councils are responding to various suggestions for addressing the inconsistencies in management across the three jurisdictions (Gulf Council, South Atlantic Council, and State of Florida) in south Florida.

Separate South Florida Council

Establishing a separate Council for South Florida would be time consuming, expensive, and duplicate already existing management authority. Requirements would include congressional establishment of a new Council, appointment of staff, office space, equipment needs, etc. Also, this would introduce yet a fourth management body with which affected fishermen and the general public would need to work. The Councils concluded this is was an efficient or effective approach.

Separate Management Area for South Florida

The Joint Committee discussed several potential boundaries (e.g., 28° latitude South, Cape Canaveral and Tampa Bay) but recognized that a number of the affected species occur north of these lines in Florida. This approach would require creation of a set of Annual Catch Limits (ACLs) for the new area and would increase the administrative burden on NMFS to track quotas and close areas. The Councils concluded this was not an effective approach.

Secession by Florida from the Gulf and South Atlantic Councils

Similar to creating a separate “South Florida Council”, a change such as this approach would require legislation to enact, and would require a significant amount of time and resources. If the State of Florida was successful in this effort, then a commensurate set of regulations would still have to be developed and fishermen would still be operating under three management jurisdictions. The Councils concluded this was not an efficient or effective approach.

Streamlining management measures in South Florida

During the spring of 2014, the South Atlantic Council held port meetings in south Florida as part of their visioning project to develop a long-term vision and strategic plan for the snapper-grouper

fishery. Stakeholder input received at these meetings echoed the sentiment heard during the Joint South Florida Issues workshops held by FL FWC in August 2013. Stakeholder concerns during the port meetings included, but were not limited to: inconsistent regulations between Florida and the two federal jurisdictions (size limits, bag limits, and seasons); spawning season closures; circle hook requirements; and species specific concerns about black grouper, yellowtail snapper, and mutton snapper. Based upon growing stakeholder concern and feedback, the Joint Committee moved forward with development of an amendment that would address the aforementioned concerns.

The Councils concluded the most efficient and effective approach was to create a joint amendment that establishes a commensurate set of management regulations developed by a joint committee comprised of representatives of the Gulf Council, the South Atlantic Council, and the State of Florida. The Councils and Florida are evaluating a large suite of management alternatives to address stakeholder concerns, and to more efficiently respond to necessary regulatory changes as they arise.

During the second meeting, the Joint Committee reviewed a draft document organized by type of action with sub-alternatives for each species involved (management-oriented actions), but found this approach to be unnecessarily complicated. The Joint Committee then changed their approach to the discussions and organized the actions by separate species and addressed each type of action that applied to that species (species-oriented actions). They directed staff to further develop the actions/alternatives using this organizational structure (species-oriented actions). This structure facilitates the development of specific, and yet homogenous, management alternatives for each species throughout the south Florida region.

The organizational structure was again discussed during the third meeting. NOAA General Counsel thought the document would be improved if the actions/alternatives were organized by type of action with sub-alternatives for each species (management-oriented actions). However, the Joint Committee was more comfortable with the current structure organized by species and also thought the public would better understand the proposed alternatives with this structure. The Joint Committee directed staff to maintain the current structure (species-oriented actions).

The Councils have pursued the approaches outlined in this document in an effort to harmonize fisheries regulations, where possible, throughout the south Florida region. Several species occurring in this region do not occur in comparable abundance elsewhere in Gulf or South Atlantic waters. This regional concentration of socially and economically important species creates an opportunity for the Councils to homogenize regulations. Current regulations for yellowtail snapper, mutton snapper, and black grouper, three species being considered in this amendment, are shown in Tables 1 (recreational) and 2 (commercial). This amendment explores management alternatives developed by the Councils to potentially simplify existing fishing regulations.

Table 1. Recreational fishing regulations for yellowtail snapper, mutton snapper, and black grouper in the Gulf of Mexico, South Atlantic, and State of Florida.

Species	State Waters Gulf of Mexico	Federal Waters Gulf of Mexico	State Waters Atlantic Ocean	Federal Waters Atlantic Ocean
Yellowtail Snapper	12" TL; within snapper aggregate	12" TL; within snapper aggregate	12" TL; within snapper aggregate	12" TL; within snapper aggregate
Mutton Snapper	16" TL; within snapper aggregate	16" TL; within snapper aggregate	16" TL; within snapper aggregate	16" TL; within snapper aggregate
Black Grouper	22" TL; within 4 grouper aggregate. Monroe County follows Atlantic rules	22" TL; within 4 grouper aggregate. Closed Feb 1 - Mar 31 seaward of 20 fathoms; "The Edges" closed Jan 1 - Apr 30	24" TL; 1 gag or black combined/person. Closed Jan 1 - Apr 30. Monroe County follows Atlantic rules	24" TL; 1 gag or black combined/person. Closed Jan 1 - Apr 30

Table 2. Commercial fishing regulations for yellowtail snapper, mutton snapper, and black grouper in the Gulf of Mexico, South Atlantic, and State of Florida.

Species	State Waters Florida	Federal Waters Gulf of Mexico	Federal Waters Atlantic Ocean
Yellowtail Snapper	12" TL	12" TL	12" TL
Mutton Snapper	16" TL; May and June: 10/person/day or per trip (whichever is more restrictive)	16" TL	16" TL; May and June: 10/person/day or per trip (whichever is more restrictive)
Black Grouper	Gulf 24" TL; Atlantic and Monroe County closed Jan 1 - Apr 30	24" TL, within Grouper Tilefish IFQ; "The Edges" closed Jan 1 - Apr 30	24" TL; Closed Jan 1 - Apr 30

1.2 Purpose and Goals

The purpose of this document is to minimize differences in regulations for species whose primary distribution is in southern Florida and are managed by different agencies in the Gulf of Mexico, South Atlantic, and State of Florida waters. Currently, some fishing regulations differ between the Gulf and South Atlantic Council waters and in some cases, state and adjacent federal waters. This makes it difficult for fishermen to abide by different regulations in the south Florida area, particularly the Florida Keys, where anglers can fish in multiple jurisdictions on a single trip.

The goal of this document and the Joint Council Committee is to provide guidance in determining the best solutions for fisheries management issues that are unique to south Florida, ultimately leading to similar regulations across the south Florida region. The Joint Council Committee could recommend solutions by species, region, and/or sector based on the current respective Gulf and South Atlantic Council regulations and management programs, or recommend entirely new management alternatives.

CHAPTER 2. DRAFT MANAGEMENT ALTERNATIVES

The following actions pertain exclusively to yellowtail snapper.

Action 1: Partial Delegation of Commercial and/or Recreational Management of Yellowtail Snapper to the State of Florida for Federal Waters Adjacent to the State of Florida

Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures.

Alternative 1: No action. Do not delegate management of yellowtail snapper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for yellowtail snapper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Alternative 3: Determine specific commercial management items for delegation to the State of Florida for yellowtail snapper:

Option 3a: Size limits

Option 3b: Seasons

Option 3c: Commercial trip limits

Option 3d: Minor modifications to existing allowable gear

IPT Note: *The IPT recommends determining upper and/or lower bounds for management items being considered for delegation to Florida (Options 2/3 a-c). Also, further detail will be necessary to define “Minor modifications to existing allowable gear”, as analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.*

IPT Note: *The Councils should determine specifically which types of modifications to existing allowable gear will be permitted under this action.*

Discussion

This action considers partial delegation of the management of yellowtail snapper to the State of Florida for the recreational (**Alternative 2**) and/or commercial (**Alternative 3**) fisheries. The harvest of yellowtail snapper is almost entirely from Florida (**Tables 3 and 4**). The Councils

would remain responsible for setting acceptable biological catch (ABC) and annual catch limit (ACL) values, and for establishing accountability measures (AMs). Any existing permit requirements would remain in effect for fishing in the respective jurisdictions. Additionally, prior to implementing any changes in management items delegated herein, the State of Florida will be required to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils.

Under **Alternative 1**, all management of yellowtail snapper would be retained by the Councils. The regulations outlined in **Tables 1** and **2** would remain in effect, along with season opening and closing dates and current permissible gears. Currently, the yellowtail snapper season opens for both Councils on January 1.

Alternative 2 would determine specific recreational management items for delegation to the State of Florida for yellowtail snapper, including: **Option 2a**- size limits; **Option 2b**- seasons; **Option 2c**- bag limits; and **Option 2d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of recreational fisheries management to the State of Florida. The Councils would remain responsible for setting ACLs and implementing AMs, as defined in the Magnuson-Stevens Act.

Alternative 3 would determine specific commercial management items for delegation to the State of Florida for yellowtail snapper, including: **Option 3a**- size limits; **Option 3b**- seasons; **Option 3c**- bag limits; and **Option 3d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of commercial fisheries management to the State of Florida. The Councils would remain responsible for setting ACLs and implementing AMs, as defined in the Magnuson-Stevens Act.

Table 3. Mean percent of recreational landings (lb ww) by species and state, 2008-2012.

Species	FL	AL	GA	LA	MS	NC	SC	TX
yellowtail snapper	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
mutton snapper	99.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
black grouper	96.8%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%

Table 4. Mean percent of commercial landings (lb ww) by species and state, 2008-2012.

Species	FL	AL	GA	LA	MS	NC	SC	TX
yellowtail snapper	99.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
mutton snapper	97.5%	0.0%	0.1%	0.0%	0.0%	0.6%	1.7%	0.0%
black grouper	93.6%	0.7%	0.0%	0.5%	0.0%	0.2%	2.0%	3.0%

Action 2: Establish and Consolidate ABCs and ACLs for Yellowtail Snapper

Alternative 1. No action. Maintain the current commercial and recreational ACLs for yellowtail snapper based on the South Atlantic Council's Snapper Grouper Fishery Management Plan and maintain the current total ACL for yellowtail snapper in the Gulf based on the Reef Fish FMP.

Alternative 2: Manage yellowtail snapper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

Alternative 3. Use both Councils' agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 3a: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3b: Base sector allocations on average landings from 2009-2013

Option 3c: Base sector allocations on average landings from 2004-2013

Discussion

This action considers establishing and combining Gulf and South Atlantic ABCs and ACLs for yellowtail snapper into one Southeastern US ABC and ACL. The National Marine Fisheries Service (NMFS) would continue to monitor the landings and notify the Councils when the ACL is met or projected to be met. The respective Scientific and Statistical Committees for each Council would meet jointly to review stock assessment information, and would collectively determine appropriate values for OFL and ABC for yellowtail snapper. Although yellowtail snapper has been managed as two separate stocks for regulatory purposes, the stock assessment considered yellowtail snapper from the Gulf and South Atlantic to be a single biological stock (SEDAR 27 2013). For the purposes of management of yellowtail snapper, the ACL would be equal to the ABC since the stock is not thought to be overfished or undergoing overfishing (SEDAR 27 2013). Currently, only landings data are being used to determine allocations for this amendment. The Councils are considering other criteria in addition to landings data, such as social and economic considerations, for determining allocations in the future.

Currently, each Council determines its own ABC and ACL based on yield projections from the most recent stock assessment (SEDAR 27 2013) using the jurisdictional split (75% South Atlantic, 25% Gulf) established in the Generic (Gulf of Mexico) and Comprehensive (South Atlantic) ACL and AM Amendments (GMFMC 2011; SAFMC 2011) (**Alternative 1**).

Alternative 2 would manage yellowtail snapper as a single unit with an overall combined multijurisdictional ABC and ACL. This method of management would still have within it recreational and commercial fishing allocations; however, neither sector would close in a fishing year so long as the overall ACL had not been met.

Alternative 3 would use both Councils’ agreed upon acceptable biological catch (ABC) for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic using one of the time period options offered. When determining the resultant sector allocations for **Options 3a – 3c**, sector landings will be capped at their respective sector ACLs (where appropriate), to ensure that overfishing in some years does not result in biased allocation ratios. **Option 3a** would divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013. **Option 3b** would base sector allocations for waters off the State of Florida on average landings from 2009-2013. **Option 3c** would base sector allocations for waters off the State of Florida on average landings from 2004-2013. **Table 5** outlines the resultant allocations for **Options 3a – 3c** of **Alternative 3**, based on the recreational and commercial landings in **Table 6**. Sector allocation options were determined with landings constrained to be no higher than the ACL for each respective sector in each Council’s jurisdiction. For yellowtail snapper, the respective ACLs were not exceeded.

Table 5. Sector allocation options for yellowtail snapper for Alternative 3 of Action 2. Percentages were derived from landings in whole weight.

Yellowtail Snapper Sector ACL Options		
Option	Commercial	Recreational
Option 3a	75.89%	24.11%
Option 3b	80.13%	19.87%
Option 3c	73.26%	26.74%

Table 6. Commercial and recreational landings of yellowtail snapper in the Gulf of Mexico and South Atlantic for 1993-2013. Landings are reported in pounds whole weight. Gulf commercial landings data for 1993 are confidential.

**Yellowtail Snapper Commercial and Recreational Landings,
1993-2013**

Year	Commercial		Recreational	
	<i>Gulf</i>	<i>South Atlantic</i>	<i>Gulf</i>	<i>South Atlantic</i>
1993	Confidential	1311367	51015	1189637
1994	1344942	860543	11762	880763
1995	591074	1265856	3434	660358
1996	485120	973815	2854	554130
1997	218384	1455496	2008	702997
1998	341479	1183074	4965	487063
1999	601027	1245345	39260	288951
2000	388984	1203154	4781	395845
2001	246849	1174008	7045	328458
2002	341823	1069057	7782	407848
2003	463743	948886	11472	510314
2004	478221	1002309	17937	698058

2005	510437	814899	31176	576247
2006	542237	694958	21477	560320
2007	350079	628608	19726	786399
2008	460569	910323	6056	746313
2009	891925	1085281	19250	348536
2010	569275	1126231	8783	434259
2011	769730	1125220	25560	390998
2012	630984	1439586	5087	493409
2013	728387	1305002	6991	666026

Source: SERO ALS Database (commercial landings) and MRIP (recreational landings)

Landings indicate that the yellowtail snapper fishery has historically been dominated by the commercial fishery. It is important to note that during the time periods considered in Alternative 3, neither the commercial nor the recreational sector exceeded their respective ACLs.

The following actions pertain exclusively to mutton snapper.

Action 3: Partial Delegation of Commercial and/or Recreational Management of Mutton Snapper to the State of Florida in Federal Waters Adjacent to the State of Florida

Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures.

Alternative 1: No action. Retain management of Mutton Snapper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for Mutton Snapper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Alternative 3: Determine specific commercial management items for delegation to the State of Florida for Mutton Snapper:

Option 3a: Size limits

Option 3b: Seasons

Option 3c: Commercial trip limits

Option 3d: Minor modifications to existing allowable gear

***IPT Note:** The IPT recommends determining upper and/or lower bounds for management items being considered for delegation to Florida (**Options 2/3 a-c**). Also, further detail will be necessary to define “Minor modifications to existing allowable gear”, as analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.*

***IPT Note:** Delegating the setting of bag limits under Alternatives 2 and 3, Options 2c and 3c of Action 3 seems to duplicate efforts in Actions 5 and 6. If it is the Councils’ desire to delegate the setting and changing of bag limits for mutton snapper to the State of Florida as outlined in Action 3, then the Councils may wish to reconsider the establishment of bag limits for mutton snapper in the manner shown in Actions 5 and 6. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.*

***IPT Note:** The Councils should determine specifically which types of modifications to existing allowable gear will be permitted under this action.*

Discussion

This action considers partially delegating the management of mutton snapper to the State of Florida for the recreational (**Alternative 2**) and/or commercial (**Alternative 3**) fisheries. The harvest of mutton snapper is almost entirely from Florida (**Tables 3 and 4**). The Councils would remain responsible for setting acceptable biological catch (ABC) and annual catch limit (ACL) values, and for establishing accountability measures (AMs). Any existing permit requirements would remain in effect for fishing in the respective jurisdictions. Additionally, prior to implementing any changes in management items delegated herein, the State of Florida will be required to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils.

Under **Alternative 1**, all management of mutton snapper would be retained by the Councils. The regulations outlined in **Tables 1 and 2** would remain in effect, along with season opening and closing dates and current permissible gears. Currently, the mutton snapper season opens for both Councils on January 1.

Alternative 2 would determine specific recreational management items for delegation to the State of Florida for mutton snapper, including: **Option 2a**- size limits; **Option 2b**- seasons; **Option 2c**- bag limits; and **Option 2d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of recreational fisheries management to the State of Florida. The Councils would remain responsible for setting ACLs and implementing AMs, as defined in the Magnuson-Stevens Act.

Alternative 3 would determine specific commercial management items for delegation to the State of Florida for mutton snapper, including: **Option 3a**- size limits; **Option 3b**- seasons; **Option 3c**- bag limits; and **Option 3d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of commercial fisheries management to the State of Florida. The Councils would remain responsible for setting ACLs and implementing AMs, as defined in the Magnuson-Stevens Act.

Action 4: Establish and Consolidate ABCs and ACLs for Mutton Snapper

Alternative 1. No action. Maintain the current commercial and recreational ACLs for mutton snapper based on the South Atlantic Councils Snapper Grouper Fishery Management Plan and maintain the current total ACL for mutton snapper in the Gulf based on the Reef Fish Resources FMP.

Alternative 2: Manage mutton snapper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

Alternative 3. Use both Councils' agreed upon ABC for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 3a: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3b: Base sector allocations for waters off Florida on average landings from 2009-2013

Option 3c: Base sector allocations for waters off Florida on average landings from 2004-2013

Discussion

This action considers establishing and combining Gulf and South Atlantic ABCs and ACLs for mutton snapper into one Southeastern US ABC and ACL. The National Marine Fisheries Service (NMFS) would continue to monitor the landings and notify the Councils when the ACL is met or projected to be met. The respective Scientific and Statistical Committees for each Council would meet jointly to review stock assessment information, and would collectively determine appropriate values for OFL and ABC for mutton snapper. Although mutton snapper has been managed as two different stocks for regulatory purposes, the stock assessment (SEDAR 15A 2008) considered mutton snapper from the Gulf and South Atlantic to be a single biological stock. For the purposes of management of mutton snapper, the ACL would be equal to the ABC, since mutton snapper are not thought to be overfished or experiencing overfishing (SEDAR 15A 2008). Currently, only landings data are being used to determine allocations for this amendment. The Councils are considering other criteria in addition to landings data, such as social and economic considerations, for determining allocations in the future.

Currently, each Council determines its own ABC and ACL based on yield projections from the most recent stock assessment (SEDAR 15A 2008) using the jurisdictional split (79% South Atlantic; 21% Gulf) established in the Generic (Gulf of Mexico) and Comprehensive (South Atlantic) ACL and AM Amendments (GMFMC 2011; SAFMC 2011) (**Alternative 1**).

Alternative 2 would manage mutton snapper as a single unit with an overall combined multijurisdictional ABC and ACL. This method of management would still have within it

recreational and commercial fishing allocations; however, neither sector would be closed in a fishing year so long as the overall ACL had not been met.

Alternative 3 would use both Councils’ agreed upon acceptable biological catch (ABC) for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic using one of the time period options offered. When determining the resultant sector allocations for **Options 3a – 3c**, sector landings will be capped at their respective sector ACLs (where appropriate), to ensure that overfishing in some years does not result in biased allocation ratios. **Option 3a** would divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013. **Option 3b** would base sector allocations for waters off the State of Florida on average landings from 2009-2013. **Option 3c** would base sector allocations for waters off the State of Florida on average landings from 2004-2013. **Table 7** outlines the resultant allocations for **Options 3a – 3c** of **Alternative 3**, based on the recreational and commercial landings in **Table 8**. Sector allocation options were determined with landings constrained to be no higher than the ACL for each respective sector in each Council’s jurisdiction. For mutton snapper, the respective ACLs were not exceeded.

Table 7. Sector allocation options for mutton snapper for Alternative 3 of Action 4. Percentages were derived from landings in whole weight.

Mutton Snapper Sector ACL Options		
Option	Commercial	Recreational
Option 3a	32.13%	67.87%
Option 3b	25.07%	74.93%
Option 3c	27.13%	72.87%

Table 8. Commercial and recreational landings of mutton snapper in the Gulf of Mexico and South Atlantic for 1993-2013. Landings are reported in pounds whole weight. Gulf commercial landings data for 1993-1996 are confidential.

Year	Commercial		Recreational	
	<i>Gulf</i>	<i>South Atlantic</i>	<i>Gulf</i>	<i>South Atlantic</i>
1993	Confidential	169112	4664	540658
1994	Confidential	176022	4946	399568
1995	Confidential	196265	2767	458726
1996	Confidential	207243	20493	314405
1997	69841	221674	2303	339350
1998	73343	282490	10665	312690
1999	84854	168141	3583	266928
2000	80146	124475	1717	340501
2001	99960	133047	4077	302430
2002	101446	132219	2705	422465
2003	124508	144109	9891	555855
2004	201938	145861	13296	396210
2005	140947	96298	2243	466909
2006	214115	74839	1976	631323
2007	133086	88550	34047	748118
2008	81391	76705	20281	822520
2009	43689	78132	5766	436032
2010	54242	74737	1541	569471
2011	94238	66158	1391	281247
2012	88695	77122	7156	477022
2013	107814	73392	4960	481731

Source: SERO ALS Database (commercial landings) and MRIP (recreational landings)

Landings indicate that the mutton snapper fishery has historically been dominated by the recreational fishery. It is important to note that during the time periods considered in **Alternative 3**, neither the commercial nor the recreational sector exceeded their respective ACLs.

Action 5. Modify Mutton Snapper Recreational Bag Limit in Gulf of Mexico and South Atlantic

Alternative 1: No action. Mutton snapper is part of the aggregate 10 snapper bag limit in the Gulf of Mexico, the South Atlantic, and the State of Florida.

Alternative 2: Remove mutton snapper from the recreational aggregate bag limit and change the recreational bag limit for mutton snapper during the regular season (July-April) and during the spawning season (May-June).

Option 2a: 10 fish/person/day in the regular season, 2 fish/person/day during the spawning season

Option 2b: 5 fish/person/day in the regular season, 2 fish/person/day during the spawning season

Option 2c: 4 fish/person/day in the regular season, 2 fish/person/day during the spawning season

Alternative 3: Retain mutton snapper within the aggregate 10 snapper bag limit in the Gulf of Mexico and the South Atlantic, but specify bag limits for mutton snapper within the snapper recreational aggregate bag limit during the regular season (July-April) and during the spawning season (May-June).

Option 3a: Within the aggregate snapper bag limit, no more than 10 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

Option 3b: Within the aggregate snapper bag limit, no more than 5 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

Option 3c: Within the aggregate snapper bag limit, no more than 4 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

Note: In the Gulf of Mexico, the 10 snapper-per-person aggregate includes all snapper species in the reef fish management unit except red snapper, vermilion snapper, and lane snapper (Table 5). In the South Atlantic, the 10 snapper-per-person aggregate includes all snapper species in the snapper grouper management unit except red snapper and vermilion snapper (Table 5). Cubera snapper less than 30" total length (TL) are included in the 10 fish bag limit. The aggregate 10 snapper bag limit includes a maximum of 2 cubera snapper per person (not to exceed 2 per/vessel) for fish 30" TL or larger off Florida.

Note: State of Florida has the same regulations for the recreational sector as both Councils; however, the commercial sector in state waters is managed using regulations identical to the South Atlantic Council's commercial regulations.

IPT Note: Establishing bag limits in Actions 5 and 6 seems to duplicate efforts in Alternatives 2 and 3, Options 2c and 3c of Action 3. If it is the Councils' desire to establish bag limits for

mutton snapper in the manner shown in Actions 5 and 6, then the Councils may wish to reconsider delegating the setting and changing of bag limits for mutton snapper to the State of Florida as outlined in Action 3. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.

***IPT Note:** The Councils may wish to revisit the inclusion of both Options 2b/c and 3b/c, since they differ by only one fish per person per day. If the Councils wish to include both options, then additional rationale will help frame subsequent analyses.*

Discussion

In 2010, the Snapper Grouper Advisory Panel (SGAP) recommended that the South Atlantic Council consider a spawning area closure or a seasonal closure in May and June of each year. Furthermore, the SGAP recommended that the mutton snapper bag limit be reduced to 3 fish per person per day. There is concern by the public regarding fishing effort on mutton snapper spawning aggregations during the May-June peak spawning season in the Florida Keys despite a healthy status of the mutton snapper stock. According to the most recent stock assessment of mutton snapper in the southeastern United States (SEDAR 15A, 2008), mutton snapper are neither overfished ($SSB_{2006}/SSB_{30\%SPR} = 1.14$) nor experiencing overfishing ($F_{2006}/F_{30\%SPR} = 0.51$). An update stock assessment of mutton snapper is expected to be made available to the Councils by April 2015.

Currently, mutton snapper is part of the 10 snapper aggregate in the Gulf and South Atlantic (**Table 9**). The commercial sector in the Gulf has no bag limit or trip limit restrictions during the mutton snapper peak spawning season. There is no bag or trip limit for the commercial sector in the Gulf or South Atlantic during the July-April regular season. Current regulations for mutton snapper in the Gulf and South Atlantic are shown in **Table 10**.

Table 9. Composition of the 10 snapper aggregate in the Gulf and South Atlantic.

Gulf of Mexico	South Atlantic
Gray snapper	Gray snapper
Mutton snapper	Mutton snapper
Yellowtail snapper	Yellowtail snapper
Cubera snapper	Cubera snapper
Queen snapper	Queen snapper
Blackfin snapper	Blackfin snapper
Silk snapper	Silk snapper
Wenchman	Dog snapper
	Lane snapper
	Mahogany snapper

Table 10. Current fishing regulations in the Gulf of Mexico and the South Atlantic for mutton snapper (June 2014).

Mutton Snapper Management by Region				
Council	Sector	Size Limit	Bag Limit	Notes
Gulf	Recreational	16" TL	10 fish/person/day	Included in 10 snapper aggregate bag limit
	Commercial	16" TL	None	No trip limit
South Atlantic	Recreational	16" TL	10 fish/person/day	Included in 10 snapper aggregate bag limit
	Commercial	16" TL	None during July-April each year; 10 fish/person/day or per trip during May-June	During May-June, restricted to 10 fish/person/day or per trip, whichever is more restrictive

The peak of mutton snapper recreational landings occur during the May-June spawning season (Wave 3) in the South Atlantic during 2012 and 2013 (**Table 11**). Impacts of various bag limits for 2011-2013 are shown in **Table 12** for the headboat sector and **Table 13** for the private/charter sector. The main difference between **Alternatives 2** and **3** is that **Alternative 2** removes mutton snapper from the snapper recreational aggregate bag limit, while **Alternative 3** retains mutton snapper within the snapper recreational aggregate bag limit. Both **Alternatives 2** and **3** establish specific bag limits for mutton snapper during the regular and spawning seasons, respectively. For both alternatives, **Option 2/3a** considers maintaining the recreational bag limit of 10 fish/person/day during the July-April regular season, and reducing the recreational bag limit to 2 fish/person/day during the spawning season. **Option 2/3a** would be expected to reduce recreational harvest during the May-June (Wave 3) spawning season by 22% for the headboat sector and 16% for the private/charter sector; however, there would be no reduction in recreational harvest during July-April (**Tables 12** and **13**). **Option 2/3b** would specify a 5 fish/person/day for the recreational sector during July-April, and 2 fish/person/day during the May-June spawning season. **Option 2/3b** would be expected to reduce recreational harvest during the regular season by 6% for the headboat sector, and 1% for the private/charter sectors. **Option 2/3c** would specify a 4 fish/person/day for the recreational sector during July-April, and 2 fish/person/day during the May-June spawning season. **Option 2/3c** would be expected to reduce recreational harvest during the regular season by 10% for the headboat sector, and 6% for the private/charter sectors. A 2 fish/person/day spawning season recreational bag limit would be expected to reduce harvest by 22% and 16% for the headboat and private/charter sectors, respectively during the May-June spawning season (**Tables 14** and **15**). If **Alternative 2** is selected by itself, it could potentially increase the opportunity for the recreational harvest of the snapper species still included as part of the snapper recreational aggregate bag limit.

Additional analyses for Action 5 can be found in Appendix C.

Table 11. South Atlantic recreational (private, charter, headboat) mutton snapper landings by wave. Source: http://sero.nmfs.noaa.gov/sustainable_fisheries/acl_monitoring/index.html.

Year	1	2	3	4	5	6	Total
2012	46,282	102,210	182,880	77,015	27,275	34,366	470,028
2013	50,961	36,208	175,774	91,913	90,689	36,186	481,731

Table 12. Percent of status quo harvest remaining under various bag limits for Gulf and South Atlantic **headboat-harvested** mutton snapper.

Year	Status Quo (10)	1	2	3	4	5	6	7	8	9
2011	100%	64%	77%	86%	91%	95%	97%	99%	99%	100%
2012	100%	57%	69%	78%	85%	91%	94%	96%	98%	98%
2013	100%	67%	79%	87%	92%	95%	97%	98%	98%	99%
Mean 2011-2013	100%	63%	75%	84%	90%	93%	96%	98%	98%	99%

Table 13. Percent of status quo harvest remaining under various bag limits for Gulf and South Atlantic **private/charter-harvested** mutton snapper.

Year	Status Quo (10)	1	2	3	4	5	6	7	8	9
2011	100%	76%	90%	93%	94%	95%	95%	96%	97%	97%
2012	100%	78%	88%	91%	94%	95%	96%	97%	98%	99%
2013	100%	78%	88%	91%	94%	95%	96%	97%	98%	99%
Mean 2011-2013	100%	77%	89%	92%	94%	95%	96%	96%	97%	98%

Table 14. Percent of status quo harvest remaining under various bag limits for Gulf and South Atlantic **headboat-harvested** mutton snapper for Wave 3 (May-June) during 2011-2013, Waves 1,2,4,5, and 6 combined during 2011-2013, and Waves 1-6 during 2011-2013.

Waves	Status Quo (10)	1	2	3	4	5	6	7	8	9
Wave 3	100%	67%	78%	85%	90%	93%	96%	97%	99%	99%
Waves 1,2,4,5,6	100%	61%	74%	84%	90%	94%	96%	98%	98%	99%
Waves 1-6	100%	63%	75%	84%	90%	93%	96%	98%	98%	99%

Table 15. Percent of status quo harvest remaining under various bag limits for Gulf and South Atlantic **private/charter-harvested** mutton snapper for Wave 3 (May-June) during 2011-2013, Waves 1,2,4,5, and 6 combined, and Waves 1-6 during 2011-2013.

Waves	Status Quo (10)	1	2	3	4	5	6	7	8	9
Wave 3	100%	75%	84%	87%	88%	90%	92%	94%	96%	98%
Waves 1,2,4,5,6	100%	82%	95%	98%	98%	99%	99%	99%	99%	99%
Waves 1-6	100%	77%	89%	92%	94%	95%	96%	96%	97%	98%

The distribution of mutton snapper catch-per-angler (cpa) is shown in **Figure 1** for the headboat sector and **Figure 2** for the private/charter sector. As can be seen, most anglers catch 3 or fewer mutton snapper. Furthermore, most of the mutton snapper landings are from the Southeast (**Figure 3**) data collection area.

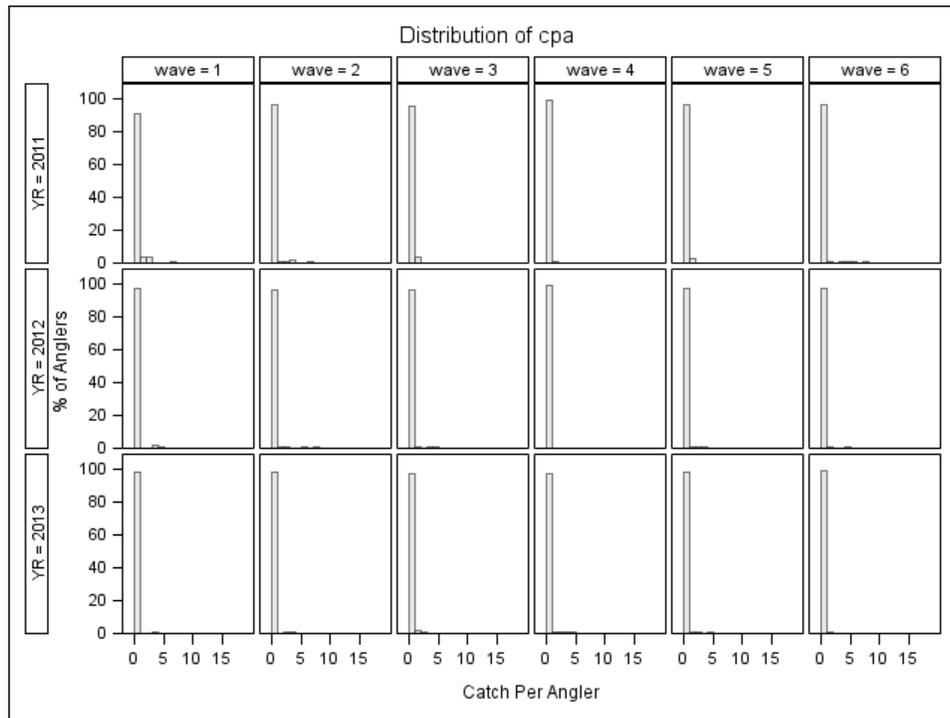


Figure 1. Histogram of the distribution of South Atlantic and Gulf of Mexico mutton snapper **headboat** catch per angler (cpa), by MRIP wave for 2011-2013. Source: SERO.

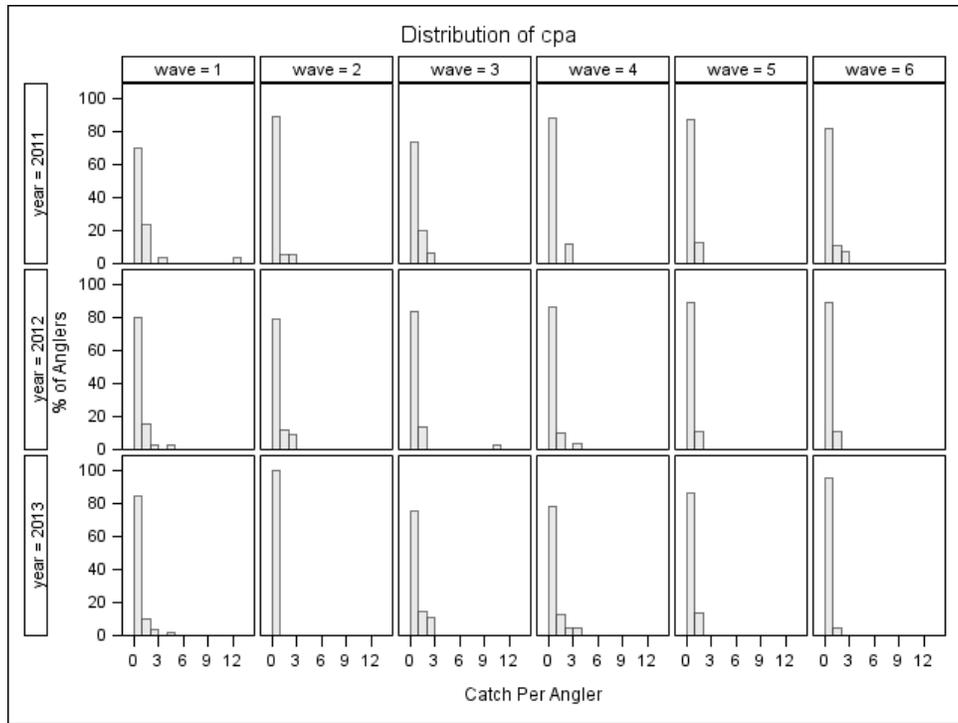


Figure 2. Histogram of the distribution of South Atlantic and Gulf of Mexico mutton snapper catch per angler (cpa), by **MRIP** wave from 2011-2013. Source: SERO.

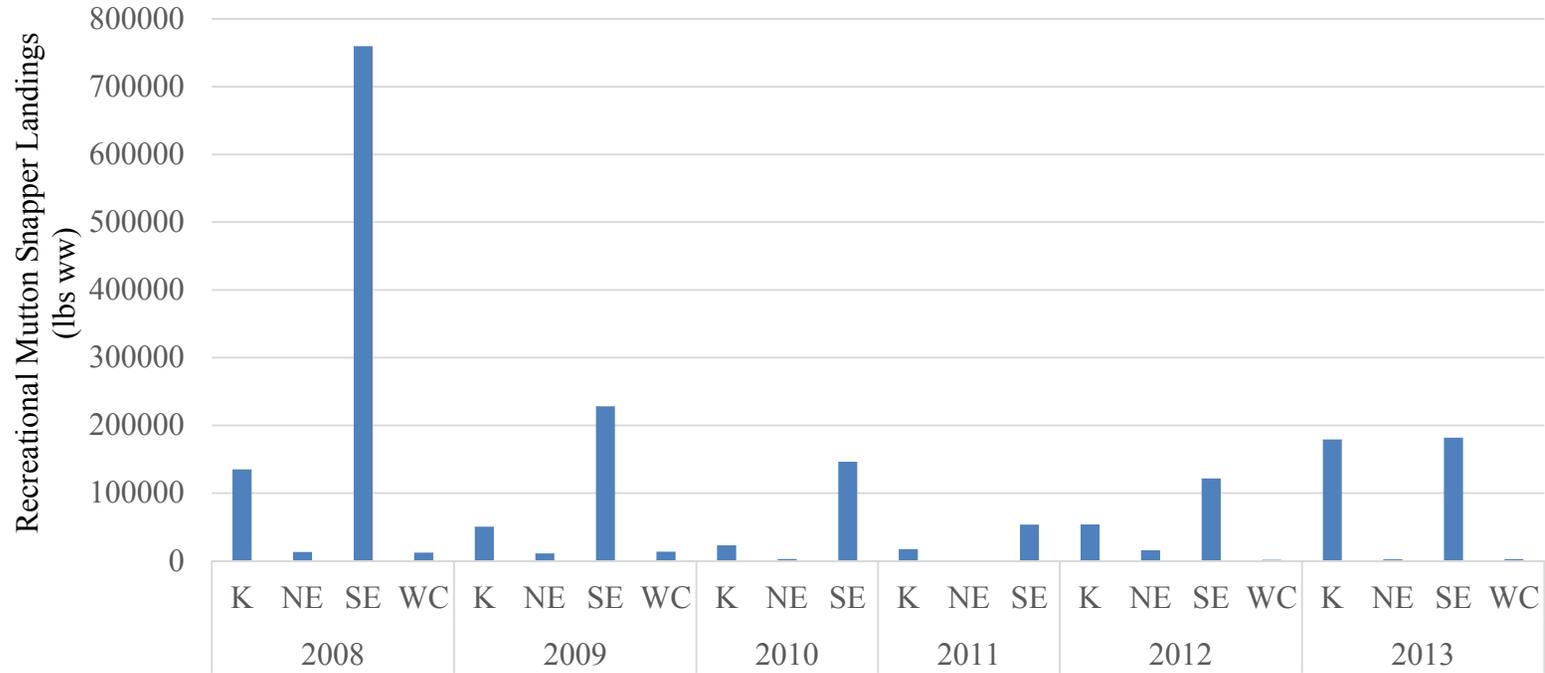


Figure 3. Total recreational landings (lbs ww) of mutton snapper from Florida waters from 2008-2013 by reporting region: K = Keys (Monroe County), NE = Northeast (Nassau County to Brevard County), SE = Southeast (Indian River County to Dade County), WC = West Central (Collier County to Citrus County). The Panhandle of Florida (otherwise denoted as “P”; Levy County to Escambia County) is not represented here due to the absence of mutton snapper landings in the Panhandle region.

Action 6. Modify Mutton Snapper Commercial Trip Limit in the Gulf of Mexico and South Atlantic

Alternative 1: No action. During May-June, the commercial sector in the South Atlantic is restricted to 10 mutton snapper per day or 10 mutton snapper per trip, whichever is more restrictive. There is no bag or trip limit for the commercial sector in the Gulf or South Atlantic from July through April.

Alternative 2: Establish a commercial trip limit for mutton snapper during the regular season (July through April) in the Gulf of Mexico and the South Atlantic.

Option 2a: 10 fish/person/day

Option 2b: Some higher bag or trip limit.

Alternative 3: Specify a commercial trip limit for mutton snapper during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Option 3a: 2 fish/person/day

Option 3b: 5 fish/person/day

Option 3c: 10 fish/person/day

Option 3d: No bag or trip limit

Alternative 4: Specify a commercial trip limit for mutton snapper that is identical to the recreational bag limit during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Alternative 5: Specify a commercial trip limit for mutton snapper for the handline sector during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Option 5a: 2 fish/person/day

Option 5b: 5 fish/person/day

Option 5c: 10 fish/person/day

Option 5d: Some other trip limit

Alternative 6: Specify a commercial trip limit for mutton snapper for the longline sector during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Option 6a: 500 pounds whole weight trip limit

Option 6b: Some other trip limit

Added by the South Atlantic Council

IPT Note: Establishing bag limits in Actions 5 and 6 seems to duplicate efforts in Alternatives 2 and 3, Options 2c and 3c of Action 3. If it is the Councils' desire to establish bag limits for mutton snapper in the manner shown in Actions 5 and 6, then the Councils may wish to reconsider delegating the setting and changing of bag limits for mutton snapper to the State of Florida as outlined in Action 3. It would seem to be contradictory to consider delegating the

setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.

IPT Note: *The Councils may wish to consider vessel limits for commercial mutton snapper fishing. The biological effects of bag limits could vary depending on the number of crew aboard a commercial fishing vessel, making biological effects more difficult to determine. For example, the biological effects of four crew members retaining the per-person trip limit in Alternative 5 would be greater than the same for only two crew members. Analysis of Alternative 5 may prove difficult, since there is no way to know how many crew could be on board a commercial fishing vessel on any given day.*

Discussion

This action considers alternatives for mutton snapper commercial trip limits in the Gulf of Mexico and the South Atlantic. During May and June, the commercial sector in the South Atlantic is restricted to 10 mutton snapper per day or 10 mutton snapper per trip, whichever is more restrictive. There is no commercial trip limit in the Gulf. Current commercial fishing regulations for mutton snapper are detailed in **Table 2 (Alternative 1)**.

Alternative 2, Option 2a would establish a commercial trip limit for mutton snapper during the regular season (July-April) of 10 fish/person/day. Currently, there are no commercial bag or trip limits in effect for commercial harvest of mutton snapper during the regular season. Assuming the average weight of a landed mutton snapper is 5 pounds whole weight (lbs ww), a 10 fish/person/day bag limit would correspond to a 50 lbs ww trip limit. About 17% of the commercial trips landed more than 50 lbs ww per trip but these trips represented about 60% of the landings (**Table 17**). **Option 2b** would establish a commercial bag or trip limit in excess of 10 fish per person per day and several potential trips limits are included in Table 13.

Alternative 3, Options 3a through 3c would specify a commercial trip limit for mutton snapper during the spawning season (May-June) of 2, 5, or 10 fish/person/day. **Option 3d** would not specify a commercial bag limit or trip limit for mutton snapper during the spawning season. A two fish/person/day commercial bag limit would be expected to reduce harvest by over 78% during the May-June spawning season; a 5 fish/person/day commercial bag limit would be expected to reduce harvest by 75% during the May-June spawning season; and a 10 fish/person/day would be expected to reduce commercial harvest of mutton snapper during the spawning season by 63% during the May-June spawning season (**Table 18**).

Alternative 4 would specify a commercial trip limit for mutton snapper that is identical to the recreational bag limit during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic. This alternative would constrain commercial mutton snapper landings during the time period when those landings are the highest in terms of the average weight of fish landed. Also, if the recreational bag limit specified for the mutton snapper spawning season changes, so too would the commercial trip limit.

Alternatives 5 and 6 would specify a commercial trip limit for mutton snapper for the handline and longline fleets, respectively, during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic. **Option 5a** would set a handline trip limit of 2 fish/person/day; **Option 5b**, 5 fish/person/day; **Option 5c**, 10 fish/person/day; and **Option 5d**, some other trip limit. **Option 6a** would set a longline trip limit of 500 pounds whole weight, and **Option 6b** would set some other trip limit.

The commercial landings of mutton snapper for all Florida counties are highest during the May-June period of peak spawning (**Figure 4**). Overall Florida landings of mutton snapper were highest in 2008 and decreased through 2011. Landings increased in 2012 and 2013 (**Figure 5**). An examination of the monthly distribution of mutton snapper landings from commercial logbook and dealer reports shows similar trends (**Tables 16a and 16b**). In addition, commercial landings of mutton snapper in the South Atlantic are highest during the May-June spawning season despite the 10 fish/person/day bag limit that is currently in place.

Table 16a. Monthly distribution of mutton snapper landings for commercial logbook in the Gulf and South Atlantic during 2009-2013

Month	Total	SA	Gulf
1	5.81%	5.51%	6.09%
2	9.01%	6.50%	11.30%
3	6.38%	5.59%	7.11%
4	7.24%	6.15%	8.24%
5	16.89%	22.67%	11.60%
6	10.42%	14.05%	7.10%
7	11.82%	9.78%	13.68%
8	7.45%	8.29%	6.67%
9	6.14%	5.46%	6.76%
10	6.89%	5.40%	8.26%
11	5.61%	5.55%	5.68%
12	6.34%	5.06%	7.51%

Table 16b. Monthly distribution of mutton snapper landings from dealer reported landings (Accumulative Landings System) in the Gulf and South Atlantic during 2009-2013.

Month	Total	SA	Gulf
1	5.53%	5.68%	5.38%
2	8.63%	6.84%	10.32%
3	6.52%	5.46%	7.52%
4	7.05%	6.49%	7.57%
5	16.28%	20.86%	11.92%
6	10.94%	14.66%	7.40%

7	11.49%	9.00%	13.85%
8	7.35%	8.27%	6.47%
9	6.00%	5.27%	6.69%
10	7.42%	5.50%	9.24%
11	5.90%	6.07%	5.74%
12	6.91%	5.91%	7.87%

Table 17. Reduction in harvest provided by a trip or bag limit during July-April based on commercial mutton snapper landings from 2008-2012 for the Gulf and South Atlantic.

Trip Limit (lbs ww)	Trip Limit (#fish)	2008-2012		
		# Trips	% Trips	Harvest Reduction
0	0	7,030	100.00%	100.00%
20	4	3,000	42.67%	77.12%
25	5	2,568	36.53%	73.88%
40	8	1,739	24.74%	66.45%
50	10	1,419	20.18%	62.79%
60	12	1,202	17.10%	59.74%
80	16	929	13.21%	54.79%
100	20	747	10.63%	50.88%
115	23	648	9.22%	48.46%
150	30	466	6.63%	44.00%
175	35	404	5.75%	41.50%
200	40	337	4.79%	39.38%
250	50	260	3.70%	35.97%
300	60	220	3.13%	33.18%
400	80	171	2.43%	28.76%
500	100	130	1.85%	25.22%
600	120	108	1.54%	22.48%
700	140	90	1.28%	20.14%
800	160	80	1.14%	18.19%
900	180	69	0.98%	16.47%
1,000	200	59	0.84%	15.02%
1,100	220	51	0.73%	13.76%
1,200	240	48	0.68%	12.61%
1,300	260	38	0.54%	11.59%
1,400	280	35	0.50%	10.73%
1,500	300	32	0.46%	9.96%
1,600	320	27	0.38%	9.27%
1,700	340	25	0.36%	8.67%

1,800	360	24	0.34%	8.12%
1,900	380	23	0.33%	7.58%
2,000	400	22	0.31%	7.06%
2,250	450	19	0.27%	5.82%
2,500	500	15	0.21%	4.89%
2,750	550	12	0.17%	4.14%
3,000	600	10	0.14%	3.50%

Table 18. Reduction in harvest provided by a trip limit during May-June based on commercial mutton snapper landings from 2008-2012 for the Gulf and South Atlantic.

Trip Limit (lbs ww)	Trip Limit (#fish)	2008-2012		
		# Trips	% Trips	Harvest Reduction
0	0	2,728	100.00%	100.00%
20	4	1,330	48.75%	78.44%
25	5	1,166	42.74%	75.05%
40	8	857	31.41%	66.95%
50	10	742	27.20%	62.65%
60	12	645	23.64%	58.93%
80	16	501	18.37%	52.80%
100	20	398	14.59%	48.00%
115	23	357	13.09%	44.96%
150	30	259	9.49%	39.13%
175	35	225	8.25%	35.90%
200	40	188	6.89%	33.11%
250	50	140	5.13%	28.77%
300	60	107	3.92%	25.49%
400	80	67	2.46%	20.98%
500	100	55	2.02%	17.79%
600	120	41	1.50%	15.28%
700	140	31	1.14%	13.42%
800	160	26	0.95%	11.91%
900	180	23	0.84%	10.63%
1,000	200	19	0.70%	9.49%
1,100	220	15	0.55%	8.58%
1,200	240	13	0.48%	7.83%
1,300	260	11	0.40%	7.19%
1,400	280	11	0.40%	6.60%
1,500	300	10	0.37%	6.05%
1,600	320	8	0.29%	5.58%
1,700	340	8	0.29%	5.15%
1,800	360	8	0.29%	4.72%
1,900	380	8	0.29%	4.29%
2,000	400	8	0.29%	3.86%
2,250	450	7	0.26%	2.80%
2,500	500	4	0.15%	2.21%
2,750	550	2	0.07%	1.72%
3,000	600	1	0.04%	1.48%

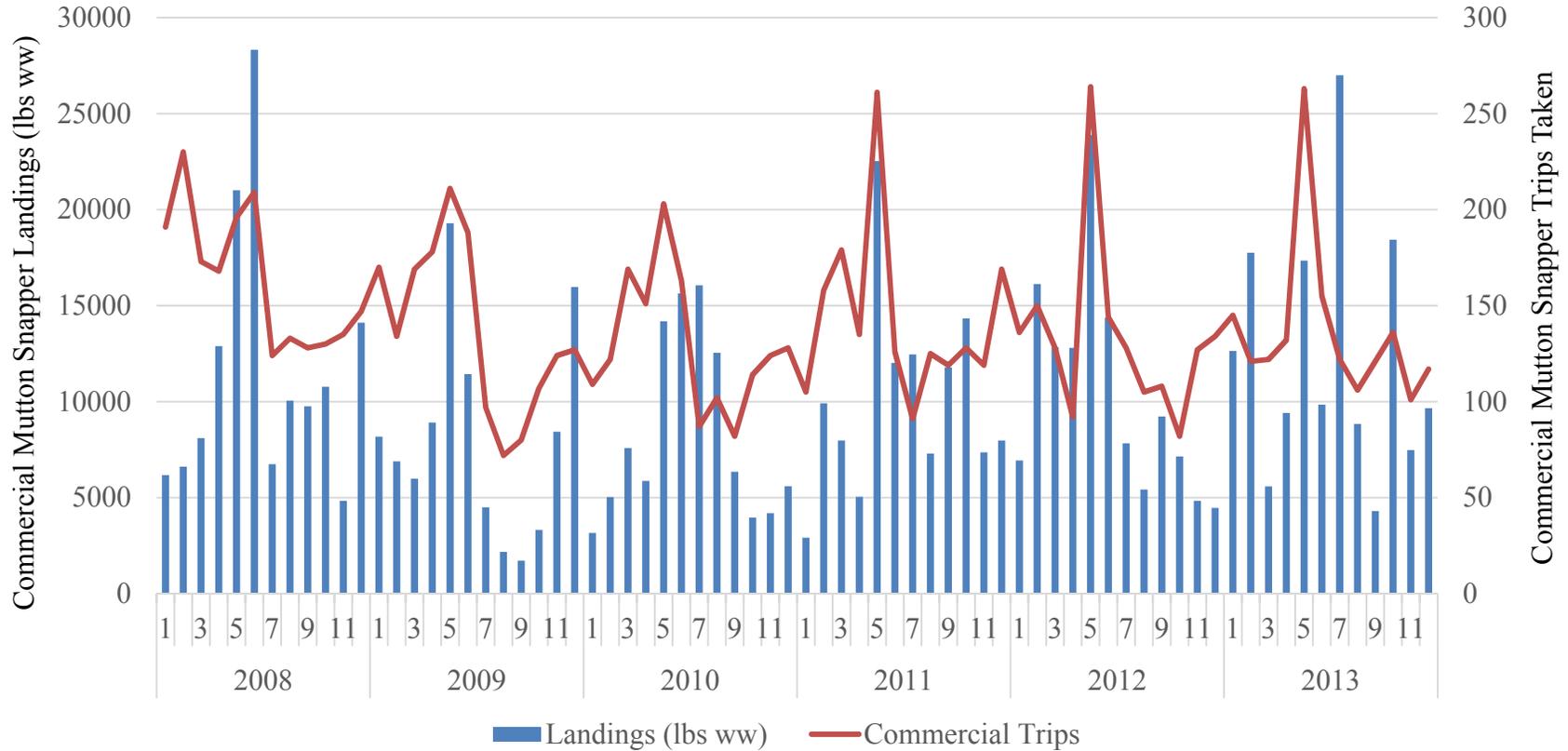


Figure 4. Commercial mutton snapper landings and trips by month from 2008 to 2013. Left y-axis (blue bars) is total commercial mutton snapper landings (lbs ww) for all Florida counties. Right y-axis (red line) is total commercial mutton snapper trips taken.

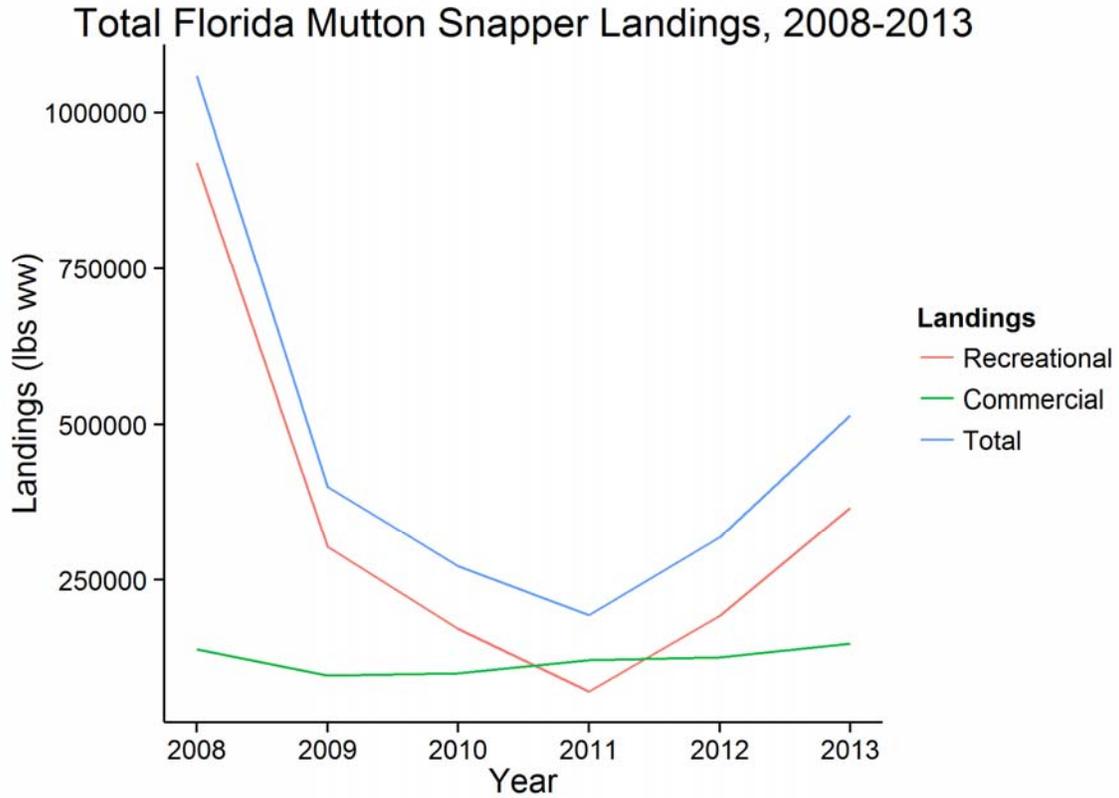


Figure 5. Total landings of mutton snapper in Florida (lbs ww). Data are from the Florida Fish and Wildlife Conservation Commission recreational landings and commercial trip ticket programs.

The following actions pertain exclusively to black grouper.

Action 7: Partial Delegation of Recreational Management of Black Grouper to the State of Florida in Federal Waters Adjacent to the State of Florida

Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures.

Alternative 1: No action. Retain recreational management of black grouper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for black grouper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

***IPT Note:** The IPT recommends determining upper and/or lower bounds for management items being considered for delegation to Florida (Options 2a-c). Also, further detail will be necessary to define “Minor modifications to existing allowable gear”, as analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.*

***IPT Note:** Delegating the setting of bag limits under Alternative 2, Option 2c of Action 7 seems to duplicate efforts in Alternative 8 of Action 11. If it is the Councils’ desire to delegate the setting and changing of bag limits for black grouper to the State of Florida as outlined in Action 7, then the Councils may wish to reconsider the establishment of bag limits for black grouper in the manner shown in Action 11. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.*

***IPT Note:** The Councils should determine specifically which types of modifications to existing allowable gear will be permitted under this action.*

Discussion

This action considers alternatives that would partially delegate the management of black grouper to the State of Florida for the recreational (**Alternative 2**) sector. **Tables 3** and **4** reveal that harvest of black grouper is almost entirely from Florida. Delegation of the management of the commercial black grouper sector is not being considered here, as it is currently part of the Shallow-water Grouper Individual Fishing Quota program in the Gulf of Mexico. The Councils

would remain responsible for setting acceptable biological catch (ABC) and annual catch limit (ACL) values, and for establishing accountability measures (AMs). Any existing permit requirements would remain in effect for fishing in the respective jurisdictions. Additionally, prior to implementing any changes in management items delegated herein, the State of Florida will be required to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils.

Under **Alternative 1**, all management of black grouper would be retained by the Councils. The regulations outlined in **Tables 1** and **2** would remain in effect, along with season opening and closing dates and current permissible gears. Currently, the black grouper season is open from May 1 through December 31 in the South Atlantic, and is open year-round in the Gulf (but closed seaward of 20 fathoms from February 1 through March 31).

Alternative 2 would determine specific recreational management items for delegation to the State of Florida for black grouper, including: **Option 2a**- size limits; **Option 2b**- seasons; **Option 2c**- bag limits; and **Option 2d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of recreational fisheries management to the State of Florida. The Councils would remain responsible for setting ACLs and implementing AMs, as defined in the Magnuson-Stevens Act.

Action 8: Establish and Consolidate ABCs and ACLs for Black Grouper

Alternative 1. No action. Maintain the current recreational ACLs based on the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Manage black grouper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

Alternative 3. Use both Councils' agreed upon ABC for black grouper and allocate the recreational ACLs for the Gulf and South Atlantic:

Option 3a: Combine the current recreational allocations (i.e., 63.12% of the ACL for the South Atlantic and 27% of the ACL for the Gulf) for black grouper into a single recreational allocation.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations on average landings from 2009-2013

Option 3d: Base sector allocations on average landings from 2004-2013

Discussion

This action considers establishing and combining the Gulf and South Atlantic ABCs and ACLs for black grouper in the Southeastern US. The National Marine Fisheries Service (NMFS) would continue to monitor the landings and notify the Councils when the ACL is met or projected to be met. The respective Scientific and Statistical Committees for each Council would meet jointly to review stock assessment information, and would collectively determine appropriate values for OFL and ABC for black grouper. Although black grouper has been managed as two different stocks for regulatory purposes, the stock assessment (SEDAR 19 2010) considered black grouper from the Gulf and South Atlantic to be a single biological stock. For the purposes of management of black grouper, the ACL would be equal to the ABC, since black grouper are not thought to be overfished or undergoing overfishing (SEDAR 19 2010). Currently, only landings data are being used to determine allocations for this amendment. The Councils are considering other criteria in addition to landings data, such as social and economic considerations, for determining allocations in the future.

Currently, each Council determines its own ABC and ACL based on yield projections from the most recent stock assessment (SEDAR 19 2010) using the jurisdictional split (47% South Atlantic; 53% Gulf) established in the Generic (Gulf of Mexico) and Comprehensive (South Atlantic) ACL and AM Amendments (GMFMC 2011; SAFMC 2011) (**Alternative 1**).

Alternative 2 would manage black grouper as a single unit with an overall combined multijurisdictional ABC and ACL. This method of management would still have within it

recreational and commercial fishing allocations; however, neither sector would be closed in a fishing year so long as the overall ACL had not been met.

Alternative 3 would use both Councils’ agreed upon acceptable biological catch (ABC) for black grouper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic using one of the time period options offered. When determining the resultant sector allocations for **Options 3b – 3d**, sector landings will be capped at their respective sector ACLs (where appropriate), to ensure that overfishing in some years does not result in biased allocation ratios. **Option 3a** would combine the current recreational allocations (i.e., 63% of the ACL for the South Atlantic and 27% of the ACL for the Gulf) for black grouper into a single recreational allocation. The respective commercial allocations for each Council would continue to be managed directly by the responsible Council. This option may be inherently problematic, as the recreational portion of the black grouper ACL in the shallow water grouper complex in the Gulf is undefined. Commercial shallow-water grouper are in the individual fishing quota system (IFQ). The ACL for the shallow-water groupers is determined using black grouper as the indicator species for the complex. The recreational ACL and ACT are undefined because there is no defined allocation of recreational harvest. This means that the Gulf recreational allocation for black grouper is undefined and would need to be revisited. **Option 3b** would divide the sector allocations based on the ratio of landings, with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013. **Option 3c** would base sector allocations for waters off the State of Florida on average landings from 2009-2013. **Option 3d** would base sector allocations for waters off the State of Florida on average landings from 2004-2013. **Table 19** outlines the resultant allocations for **Options 3a – 3c** of **Alternative 3**, based on the recreational and commercial landings in **Table 20**. Sector allocation options were determined with landings constrained to be no higher than the ACL for each respective sector in each Council’s jurisdiction. For black grouper, the respective ACLs were not exceeded.

Table 19. Sector allocation options for black grouper for Alternative 3 of Action 8. Percentages were derived from landings in whole weight.

Black Grouper Sector ACL Options		
Option	Commercial	Recreational
Option 3a	<i>Would vary annually based on yield projections</i>	
Option 3b	61.63%	38.37%
Option 3c	48.02%	51.98%
Option 3d	57.79%	42.21%

Table 20. Commercial and recreational landings of black grouper in the Gulf of Mexico and South Atlantic for 1993-2013. Landings are reported in pounds whole weight.

**Black Grouper Commercial and Recreational Landings,
1993-2013**

Year	Commercial		Recreational	
	<i>Gulf</i>	<i>South Atlantic</i>	<i>Gulf</i>	<i>South Atlantic</i>
1993	515679	146214	13903	169438
1994	431911	131164	26451	217951
1995	309725	201737	63266	177669
1996	306206	190494	29489	372712
1997	185267	169530	54740	465053
1998	254355	174739	138058	272127
1999	362967	128968	43216	66471
2000	416218	122650	14505	107069
2001	389736	136082	30654	154036
2002	334195	149681	16054	130980
2003	389081	151382	18404	234406
2004	372206	147167	8352	189348
2005	217295	115345	45363	164478
2006	225776	81753	1555	124960
2007	137965	95501	20413	193300
2008	67007	52722	4583	179112
2009	38649	46726	23154	137771
2010	27537	44057	391	36186
2011	50526	62407	667	51898
2012	54165	50813	30718	149353
2013	63400	54075	3815	99096

Source: SERO ALS Database (commercial landings) and MRIP (recreational landings)

Landings indicate that the black grouper fishery has historically been dominated by the commercial fishery. However, recreational landings have increased in the more recent time series (2009-2013), resulting in the ratio of landings between the sectors to slightly favor the recreational sector. It is important to note that during the time periods considered in **Alternative 3**, neither the commercial nor the recreational sector exceeded their respective ACLs.

The following action pertains exclusively to accountability measures. Accountability measures are used by the Councils to compensate for overages in a given fishing year, to decrease the probability that deleterious impacts to fisheries will persist for long time periods.

Action 9: Specify Accountability Measures for South Florida Species

Note: Under some circumstances more than one alternative could be selected as preferred.

Alternative 1: No action. Maintain the current recreational and commercial accountability measures (AMs) for yellowtail snapper, mutton snapper, and black grouper based on the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

South Atlantic: Commercial AM – In-season closure when the ACL is expected to be met and ACL reduced in following fishing season if species is overfished and ACL is exceeded.
Recreational AM – if ACL is exceeded, monitor landings in following season for persistence in landings and reduce the length of the following fishing season, if necessary.

Gulf: For Yellowtail Snapper and Mutton Snapper, if the combined commercial and recreational landings exceed the stock ACL, in-season AMs are in effect for the following year. If the combined landings reach or are projected to reach the stock ACL, both sectors will be closed for the remainder of that fishing year. For black grouper, this AM applies to the ACL for the other shallow-water grouper aggregate (black grouper, scamp, yellowmouth grouper, and yellowfin grouper).

Alternative 2: If the sum of the commercial and recreational landings exceeds the stock ACL, then during the following fishing year, if the sum of commercial and recreational landings reaches or is projected to reach the stock ACL, then the commercial and recreational sectors will be closed for the remainder of that fishing year. On and after the effective date of a closure, all sales, purchases harvest or possession of this species in or from the EEZ will be prohibited.

Option 2a: For yellowtail snapper

Option 2b: For mutton snapper

Option 2c: For black grouper

Alternative 3: If commercial landings reach or are projected to reach the commercial ACL, **NMFS** would close the commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession of this species in or from the EEZ would be limited to the recreational bag and possession limit. Additionally, if the commercial ACL is exceeded, **NMFS** would reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded.

Option 3a: For yellowtail snapper

Option 3b: For mutton snapper

Option 3c: For black grouper

Alternative 4: If recreational landings exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for a persistence in increased landings. If necessary, NMFS would reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if NMFS determines, using the best scientific information available, that a reduction is unnecessary.

Option 4a: For yellowtail snapper

Option 4b: For mutton snapper

Option 4c: For black grouper

Alternative 5: If recreational landings reach or are projected to reach the recreational ACL, NMFS would close the recreational sector for the remainder of the fishing year, unless, using the best scientific information available, NMFS determines that a closure is unnecessary.

Option 5a: If the species is overfished

Sub-option 5a(1): For yellowtail snapper

Sub-option 5a(2): For mutton snapper

Sub-option 5a(3): For black grouper

Option 5b: Regardless of stock status

Sub-option 5b(1): For yellowtail snapper

Sub-option 5b(2): For mutton snapper

Sub-option 5b(3): For black grouper

Alternative 6: The Councils would jointly set the ACL for the recreational and commercial sector. If the combined recreational ACL and commercial ACL is met or expected to be met, NMFS would close both sectors for the remainder of the fishing year.

Option 6a: yellowtail snapper

Option 6b: mutton snapper

Option 6c: black grouper

Modified by the South Atlantic Council to insert sub-options for each species under the two main options for the alternative

Note: The South Atlantic Council is considering changes to their accountability measures in Snapper-Grouper Amendment 34, which could change the no-action and action alternatives in Action 9. These changes have been transmitted to the Secretary of Commerce by the South Atlantic Council, and are currently in the NMFS review and rule-making process.

The South Atlantic Council would like for the language in Alternatives 3 and 4 to mirror similar language found in the South Atlantic Council's Generic Accountability Measures Amendment. The language proposed herein has been provided by the Southeast Regional Office to be more similar to language NMFS is using or recommending in multiple other documents.

Discussion

Alternative 2 follows the AMs that are in place for Gulf species; whereas, **Alternatives 3-5** follow AMs that are being considered for snapper-grouper species in the Comprehensive AM and Dolphin Allocation Amendment. **Alternative 6** would close the areas covered by a joint ABC and ACL to fishing for the species selected in the associated options only when the overall ACL is met. **Alternative 6** would require each Council to establish recreational and commercial ACLs for the preferred options.

Compared to **Alternative 1 (No Action)**, **Alternatives 2-6** would benefit the biological environment to varying degrees based on the sub-alternatives chosen under each alternative. For the recreational sector, the most biologically beneficial option is likely **Alternatives 5**. For the commercial sector, the most biologically beneficial option compared to **Alternative 1 (No Action)** is likely to be **Alternative 3**. None of the alternatives considered under this action would significantly alter the way in which the fisheries are prosecuted in the South Atlantic EEZ. No adverse impacts on endangered or threatened species are anticipated because of this action; nor are any adverse impacts on essential fish habitats or habitat areas of particular concern including corals, sea grasses, or other habitat types.

For the commercial sector, the alternatives may be ranked from lowest to highest probability of paybacks and short-term adverse economic effects as follows: **Alternative 1 (No Action)**, **Alternatives 2**, **Alternatives 6**, and **Alternative 3**. The likelihood that a species would be affected by this action is based primarily on the probability that its total ACL would be reached, and whether or not the species is overfished.

For the recreational sector, **Alternative 4** would be less likely to cause short-term direct economic effects compared to **Alternatives 5** and **6** because any closure would not occur until the second year of overages. However, **Alternatives 5** and **6** would be more likely to prevent long term, direct economic effects compared to **Alternative 4**.

For the commercial sector, maintaining the current AMs under **Alternative 1 (No Action)** would not be expected to result in additional negative effects on the commercial fleets of these fisheries, but could also negate benefits to the commercial sectors by not allowing flexibility in the payback provisions, such as those in **Alternatives 3** and **6**. **Alternative 3** would provide the most flexibility for triggering the payback AM, in that the most critical conditions must be met before the payback is triggered, and would be expected to be most beneficial to commercial fishermen in that it would be less likely that a payback is required for an overage. Additionally, **Alternative 3** would be more consistent with AMs for other species such as king mackerel and Spanish mackerel in the South Atlantic.

For the recreational sector, maintaining the current AMs under **Alternative 1 (No Action)** would not be expected to result in additional negative effects on recreational fishermen and for-hire businesses, other than inconsistency in AMs among all species. For many of these species, establishment of a payback provision without a post-season AM under **Alternative 4** would create an increased likelihood that an overage of the recreational ACL could reduce fishing opportunities in the following year. However, **Alternatives 4** provides some flexibility in how a post-season payback would be triggered. The in-season closure AM for the recreational sector in

Alternatives 5 and 6 could have negative effects on recreational fishing opportunities and for-hire businesses for the stocks that do not have a recreational in-season AM in place. However, **Alternative 6** would reduce the likelihood of a recreational in-season closure.

Alternatives 2-6 may be associated with slight changes to the administrative environment based on the frequency with which each of the AM options for the commercial sector would be triggered. The payback provision under **Alternatives 3 and 4** would be triggered less frequently given that the species must be overfished and the total ACL exceeded, resulting in the lowest direct effects on the administrative environment. The administrative impacts associated with **Alternative 2** are largely the same as those under **Alternative 4**, with the addition of continued monitoring for persistence of increased landings when a species' recreational ACL has been exceeded. **Alternatives 3 and 4** are the least likely to be triggered. Overall, the administrative impacts of all the alternatives considered under this action, compared to **Alternative 1 (No Action)**, are expected to be minimal.

The following actions pertain to seasonal closures in the shallow-water grouper fisheries of the Gulf of Mexico and the South Atlantic. Seasonal closures are time-based closures to fishing effort to conserve or protect fish stocks from harvest during periods of increased vulnerability, such as during spawning seasons.

Action 10. Modify Shallow-water Grouper Species Compositions and Seasonal Closures in the Gulf and South Atlantic

Alternative 1: No action. Retain the existing respective shallow-water grouper species compositions and seasonal closures in the Gulf and South Atlantic Councils.

Alternative 2: Remove the shallow-water grouper closure for all affected grouper species in the Gulf of Mexico and the South Atlantic:

Option 2a: from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida.

Option 2b: Throughout each Council's jurisdiction.

Alternative 3: Establish identical regulations for shallow-water grouper species compositions for the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida:

Option 3a: Adopt the Gulf shallow-water grouper species composition for the Gulf and South Atlantic.

Option 3b: Adopt the South Atlantic shallow-water grouper species composition for the Gulf and South Atlantic.

Option 3c: Specify a new and identical shallow-water species complex for the Gulf and South Atlantic.

Alternative 4: Establish identical regulations for the shallow-water grouper seasonal closures in the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida:

Option 4a: Adopt the Gulf shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 4b: Adopt the South Atlantic shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 4c: Establish new and identical regulations for shallow-water grouper seasonal closures in the Gulf of Mexico and the South Atlantic.

Alternative 5: Establish identical regulations for the shallow-water grouper seasonal closures throughout the Gulf and South Atlantic:

Option 5a: Adopt the Gulf shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 5b: Adopt the South Atlantic shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 5c: Establish new and identical regulations for shallow-water grouper seasonal closures in the Gulf of Mexico and the South Atlantic.

Alternative 6: Modify the shallow-water grouper seasonal closure off Monroe County, Florida to allow harvest of other shallow-water grouper species and only close harvest of gag.

Discussion:

The immediate effects of fishing pressure on the reproductive characteristics of shallow-water grouper (SWG) are most often seen in the average size of fish landed, and in changes in sex ratios over time (Coleman et al. 1996; Koenig et al. 2000). Long-term effects include decreases in fecundity, population abundance, and concomitantly, catch limits. Commercially and recreationally important SWG species which would be subject to additional exploitation, such as red grouper (*Epinephelus morio*), black grouper (*Mycteroperca bonaci*), gag (*M. microlepis*), yellowfin grouper (*M. venenosa*), yellowmouth grouper (*M. interstitialis*), and scamp (*M. phenax*), all of which are protogynous species (Shapiro 1987, Böhlke and Chaplin 1993) attracted to high-relief sites. Gag, scamp, and black grouper form predictable, localized, and seasonal spawning aggregations, increasing their vulnerability to exploitation (Gilmore and Jones 1992; Coleman et al. 1996; Coleman et al. 2000; Brule et al. 2003). Yellowfin and yellowmouth groupers may be similarly vulnerable; however, substantially less empirical life history information is available for these two species (**Table 21**).

Table 21. Gulf of Mexico shallow-water grouper spawning information and recreational season closures. The shallow-water grouper complex applies to both the recreational and commercial sector in the Gulf of Mexico; however, the commercial sector is managed with an individual fishing quota system so the season closures listed below only apply to the recreational sector.

Gulf of Mexico Shallow-Water Grouper Complex					
Species	Current Recreational Closure	Spawning Season	Spawning Depth	Northernmost Distribution	Data Source(s)
Gag	1/1-6/30 and 12/4-12/31	January-May	50-120 m	Northern Florida Panhandle	SEDAR 33
Black Grouper	2/1- 3/31 > 20-fath	February-April	≥ 30 m	Middle Grounds/Big Bend	SEDAR 19
Red Grouper	2/1- 3/31 > 20-fath	March-May	25-120 m	Northern Florida Panhandle	SEDAR 12, 2009 SEDAR 12 Update
Scamp	2/1- 3/31 > 20-fath	January-May	30-100 m	Gulf-wide	Heemstra and Randall 1993, Coleman et al. 2011
Yellowfin Grouper	2/1- 3/31 > 20-fath	February-April	30-40 m	Gulf-wide	Nemeth et al. 2006
Yellowmouth Grouper	2/1- 3/31 > 20-fath	March-May	≤ 150 m	Gulf-wide	Heemstra and Randall 1993; Bullock and Murphy 1994

In the Gulf of Mexico, a separate recreational gag season was developed as part of the gag rebuilding plan. Because other SWG stocks are considered healthy, the utility of the SWG closure was questioned. In addition, much of the dominant gag spawning grounds are now protected by time-area closures. In response to this, the Gulf Council submitted a framework action that among other things, eliminated the February 1 through March 31 SWG closure shoreward of 20 fathoms in the Gulf of Mexico (GMFMC 2012). These new regulations were adopted and implemented in 2013. The SWG closure is still enforced in the exclusive economic zone in the Gulf for waters seaward of 20 fathoms (~36.5 m, or 120 feet). It should be noted that the SEDAR 33 stock assessment, in combination with additional analyses as requested by the Gulf Council's Scientific and Statistical Committee, determined that the Gulf of Mexico gag population was rebuilt at their June 2014 meeting.

The January-April commercial and recreational spawning season closure for South Atlantic SWG was put into place through the final rule for Amendment 16 to the Snapper Grouper FMP (SAFMC 2008). Off the southeastern United States, gag spawn from December through May, with a peak in March and April (McGovern et al. 1998). There is some evidence that spawning may occur earlier off Florida compared to other more northern areas. Gag may make annual late-winter migrations to specific locations to form spawning aggregations, and fishermen know many of these locations. McGovern et al. (2005) found gag were capable of extensive movement and suggested some large scale movement may be related to spawning. Gilmore and Jones (1992) indicated male gag may be selectively removed from spawning aggregations because they are the largest and most aggressive individuals and subsequently, the first to be taken by fishing gear. In 1998, the South Atlantic Council took action to reduce fishing mortality and protect spawning aggregations of gag and black grouper. Actions included a March-April spawning season closure for the commercial sector. While a March-April commercial closure may offer some protection to spawning aggregations including the selective removal of males, the January-April spawning season closure provided greater protection. Although gag spawn from December through May, aggregations are in place before and after spawning activity (Gilmore and Jones 1992). Therefore, males can be removed from spawning aggregations early in the spawning season, and this could affect the reproductive output of the aggregation if there were not enough males present in an aggregation for successful fertilization of eggs. Amendment 16 (SAFMC 2008) also established a provision to close other SWG including black grouper, red grouper, scamp, red hind, rock hind, yellowmouth grouper, yellowfin grouper, graysby, and coney, which are also known to spawn during January-April. Further protection for gag and SWG were provided through the establishment of ACLs and AMs in Amendment 17B to the Snapper Grouper FMP (SAFMC 2010b) and the Comprehensive ACL Amendment (SAFMC 2011), respectively. Thus, the seasonal closure provides protection to SWG during their spawning season when SWG species may be exceptionally vulnerable to fishing pressure, and ACLs and AMs are in place to help ensure overfishing does not occur. Information on SWG in the South Atlantic is provided in **Table 22**.

Table 22. South Atlantic shallow-water grouper complex spawning information. The shallow-water complex applies to both the commercial and recreational sectors in the South Atlantic.

Species	Current Rec & Comm Closure	Peak Spawning Season	General Spawning Depth	Data Source(s)
Gag	January-April	January-May	24-117 m	McGovern et al. 1998; SEDAR 10
Black Grouper	January-April	January-March	≥ 30 m	Crabtree and Bullock 1998; SEDAR 19
Red Grouper	January-April	February-April	30-90 m	Williams and Carmichael 2009; SEDAR 19
Scamp	January-April	March-May	33-93 m	Williams and Carmichael 2009; Harris et al. 2002
Yellowfin Grouper	January-April	March in FL Keys		Taylor and McMichael 1983
Yellowmouth Grouper	January-April	March-May in Gulf		Bullock and Murphy 1994
Red Hind	January-April	December-February in Caribbean		Thompson and Munro 1978
Rock Hind	January-April	January through March off Cuba		García-Cagide et al. 1994; Rielinger 1999
Graysby	January-April	March, May-July in Caribbean		Erdman 1976
Coney	January-April	November to March off Puerto Rico		Figuerola et al. 1997

Alternative 1 would retain the existing respective shallow-water grouper species compositions and seasonal closures in the Gulf and South Atlantic Councils. **Alternative 2** would remove the shallow-water grouper closure for all affected grouper species in the Gulf of Mexico and the South Atlantic either from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida (**Option 2a**) or throughout each Council’s jurisdiction (**Option 2b**). Law enforcement personnel have commented that the geographic boundaries proposed in **Alternative 2, Option 2a** may be easier to abide by and enforce. The Dade/Monroe County line in the east is a well-known and acknowledged boundary, and the waters west of Shark Point on the west coast of Monroe County do not constitute heavily used fishing grounds. **Alternative 3** would establish identical regulations for shallow-water grouper species compositions for the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida by adopting either the Gulf shallow-water grouper species composition (**Option 3a**) or the South Atlantic shallow-water grouper species composition (**Option 3b**) for the Gulf and South Atlantic, or by specifying a new and identical shallow-water species complex for the Gulf and South Atlantic (**Option 3c**). Developing identical regulations for shallow-water grouper species compositions

in both Councils' jurisdictions would simplify management for fishermen, especially those who may fish in both Councils' jurisdictions on a single trip. **Alternative 4** would establish identical regulations for the shallow-water grouper seasonal closures in the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida by adopting the Gulf shallow-water grouper seasonal closures (**Option 4a**) or the South Atlantic shallow-water grouper seasonal closures (**Option 4b**) for the Gulf and South Atlantic, or by establishing new and identical regulations for shallow-water grouper seasonal closures in both Councils' jurisdictions (**Option 4c**). **Alternative 5** would establish identical regulations for the shallow-water grouper seasonal closures in the same manner and with the same options as **Alternative 4**, except that the resultant regulations would be applicable throughout the Gulf and South Atlantic. **Alternative 6** would modify the shallow-water grouper seasonal closure off Monroe County, Florida to allow harvest of other species and only close harvest of gag. **Alternative 6** would allow fishermen to pursue shallow-water grouper species determined in **Alternative 3** (if **Alternative 3** is selected as preferred), while protecting the recovery of gag in the South Atlantic.

Action 11. Modify Black Grouper Fishery Closures and Bag Limits in the Gulf of Mexico and the South Atlantic.

Alternative 1: No Action – Do not modify black grouper recreational closures in the Gulf of Mexico or recreational and commercial closures in the South Atlantic. Maintain currently established seasonal bag limits in both the Gulf of Mexico and the South Atlantic, with black grouper included as a component of the shallow-water grouper and reef fish aggregate bag limits.

Alternative 2: Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf and of the recreational and commercial seasons in the South Atlantic.

Alternative 3: Establish a recreational seasonal closure for black grouper. (*Multiple options may be chosen*)

Option 3a: January

Option 3b: February

Option 3c: March

Alternative 4: Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Florida.

Alternative 5: Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Monroe County, Florida.

Alternative 6: Remove black grouper from recreational aggregate bag limits in the Gulf of Mexico.

Alternative 7: Remove black grouper from recreational aggregate bag limits in the South Atlantic.

Alternative 8: Establish a recreational bag limit for black grouper.

Option 8a: One fish/person/day

Option 8b: Two fish/person/day

Option 8c: Three fish/person/day

Option 8d: Four fish/person/day

Option 8e: Apply this bag limit only to the following area(s):

Sub-option 8a: Off Monroe County

Sub-option 8b: In federal waters off Florida

Sub-option 8c: In federal waters of the Gulf and the South Atlantic

Alternative 9: Modify the commercial seasonal closure for black grouper in the Gulf of Mexico and the South Atlantic.

Option 3a: January

Option 3b: February

Option 3c: March

Added by the South Atlantic Council

***IPT Note:** Establishing bag limits under Alternative 8 of Action 11 seems to duplicate efforts in Alternative 2, Option 2c of Action 7. If it is the Councils' desire to establish bag limits for black grouper in the manner shown in Action 11, then the Councils may wish to reconsider delegating the setting and changing of bag limits for black grouper to the State of Florida as outlined in Action 7.*

The South Atlantic Council wants to include discussion and a new alternative considering changes to commercial black grouper management, including seasonal closures and trip limits. These changes would affect the Gulf shallow-water grouper IFQ program.

Discussion

Modifying the current black grouper closures in the Gulf of Mexico and the South Atlantic could provide or remove protections to spawning aggregations, especially during peak spawning activity in January through March. The protection of spawning aggregations has shown to be beneficial to other heavily-targeted protogynous groupers (see Gulf of Mexico gag, SEDAR 33). Also, modifying the inclusion of black grouper in recreational bag limits in the Gulf of Mexico and the South Atlantic could provide additional harvest capacity for the recreational sector in the south Florida region, and may increase removals of other shallow-water groupers which may be under rebuilding plans. Removal of black grouper from the shallow-water grouper aggregate bag limit could permit the additional harvest of other shallow-water grouper species still included in bag limit. The same can be said about the potential additional harvest of other reef fish species included in the reef fish aggregate bag limit.

Alternative 1 would retain the current black grouper recreational closure in the Gulf of Mexico, and the recreational and commercial closures in the South Atlantic. Currently established seasonal bag limits in both the Gulf of Mexico and the South Atlantic would also remain the same, with black grouper included as a component of the shallow-water grouper and reef fish aggregate bag limits.

Alternative 2 would remove black grouper from the shallow-water grouper closure of the recreational season in the Gulf and of the recreational and commercial seasons in the South Atlantic, thus allowing harvest throughout the South Florida region year-round. Alternatively,

Alternative 3 would establish a recreational seasonal closure for black grouper during January only (**Option 3a**), during February only (**Option 3b**), or during March only (**Option 3c**). Multiple months can be selected for **Alternative 3** if a closure is determined necessary for multiple months.

Alternative 4 would remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the

South Atlantic in federal waters off Florida. This would open black grouper up to recreational fishing effort beyond 20 fathoms in Gulf waters off Florida during February and March, and to recreational and commercial fishing effort in Atlantic waters off Florida from January through April.

Alternative 5 would have the same effects as **Alternative 4**, except that **Alternative 5** would only apply to those waters off Monroe County, Florida.

Alternative 6 would remove black grouper from recreational aggregate bag limits in the Gulf of Mexico, and **Alternative 7** would do the same in the South Atlantic. **Alternatives 6** and **7** have the potential to result in increased harvest capacity for those species remaining in the shallow-water grouper aggregate bag limits, as black grouper would no longer account for some portion of those bag limits. Such a removal would permit the harvest of additional fish still included within those respective aggregate bag limits.

Alternative 8 would establish a recreational bag limit for black grouper, with one of the following options: **Option 8a**: One fish/person/day; **Option 8b**: Two fish/person/day; **Option 8c**: Three fish/person/day; and **Option 8d**: Four fish/person/day. **Option 8e** of **Alternative 8** would apply the bag limit option selected from **Options 8a-8d** only to the following area(s): **Sub-option 8a**: Off Monroe County; **Sub-option 8b**: In federal waters off Florida; or **Sub-option 8c**: In federal waters of the Gulf and the South Atlantic. Due to a paucity of data, it is not possible to conduct a thorough analysis of this alternative for Gulf waters. An analysis of **Alternative 8** for South Atlantic waters is provided in Appendix B.

The following actions pertain to modifications of landing and effort controls. Such regulations include size limits, bag limits, and permissible gear types. By modifying how these regulations influence fishing practices, the Councils can control the size and quantity of fish landed, and help to influence other factors including discard mortality.

Action 12: Harmonize bag and size limits for species in shallow-water grouper complex seasonal closures in Federal Waters Adjacent to Monroe County, Florida.

Alternative 1: No action – Retain the current bag and size limits for species in shallow-water grouper complex seasonal closures in federal waters adjacent to Monroe County, Florida.

Alternative 2: Harmonize the bag limits for species included in the shallow-water grouper seasonal closures in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

Alternative 3: Harmonize the size limits for species included in the shallow-water grouper seasonal closures in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

Added by the South Atlantic Council

IPT Note: *The IPT recommends the removal of Action 12, as it is outside of the scope of this amendment. Action 12 would require the addition (in the Gulf) or removal (in the South Atlantic) of species in the respective shallow-water grouper complexes (Action 10). Also, Action 12 would have implications for the Gulf and South Atlantic regions to a much greater extent than that outlined in the purpose of this amendment. Further, Alternative 3 of Action 10 already achieves the goal of Action 12, with respect to the South Florida region. If Action 12 remains necessary, it may be worthwhile to consider a separate amendment for this action, as it will encompass several additional species with multiple actions for each species.*

Action 13. Changes to Circle Hook Requirement in Gulf and South Atlantic Jurisdictional Waters

Alternative 1: No action – Retain the current hook requirements in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

Alternative 2: Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in the exclusive economic zone of the Gulf of Mexico.

Option 2a: For the recreational fishing sector

Option 2b: For the commercial fishing sector

Alternative 3: Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper south of 28° North latitude in the exclusive economic zone of the Gulf of Mexico.

Option 3a: For the recreational fishing sector

Option 3b: For the commercial fishing sector

Alternative 4: Require the use of circle hooks when fishing with natural bait for all snapper-grouper species south of 28° North latitude in the exclusive economic zone of the South Atlantic.

Option 4a: For the recreational fishing sector

Option 4b: For the commercial fishing sector

Alternative 5. Remove the requirement to use circle hooks when fishing with natural bait for all species in the snapper grouper complex north of 28° North latitude in the exclusive economic zone of the South Atlantic.

Option 5a: For the recreational fishing sector

Option 5b: For the commercial fishing sector

Alternative 6. Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in federal waters from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida

Option 6a: For the recreational fishing sector

Option 6b: For the commercial fishing sector

IPT Note: The IPT recommends the removal of Alternative 5, as it is outside of the scope of this amendment. The area being referenced in Alternative 5 includes areas north of the State of Florida.

The South Atlantic Council would like to retain Alternative 5, as it would allow them to address other aspects of Snapper-Grouper management in one document.

IPT Note: The Committee may wish to consider establishing safeguards to ensure that a vessel fishing for yellowtail snapper with hooks other than circle hooks is not also actively fishing for other reef fish species for which circle hooks are still required.

Discussion:

In 2008, the Gulf Council adopted a preferred management alternative in Amendment 27 to the Reef Fish Fishery Management Plan, which required recreational anglers fishing in federal waters to use non–stainless steel circle hooks when catching reef fishes with natural bait (50 CFR 622.41). Circle hooks are defined by regulation as “a fishing hook designed and manufactured so that the point is turned perpendicularly back to the shank to form a generally circular, or oval, shape.” Florida matched federal regulations, with the added specification that a circle hook must have zero degrees of offset (Florida Administrative Code §68B-14.005).

In 2010, the South Atlantic Council approved Amendment 17A to the snapper grouper Fishery Management Plan (SAFMC 2010a), which required recreational and commercial anglers fishing in federal waters to use non-stainless steel circle hooks (offset or non-offset) when fishing for all species in the snapper grouper complex when using hook-and-line-gear with natural baits in waters North of 28 degrees North latitude. This requirement was effective March 3, 2011.

Multiple reef fish species managed by the Gulf Council occur in waters south of 28°N latitude. A recent stock assessment on red snapper recognized and incorporated reduced discard mortality as a result of the requirement to use circle hooks when fishing with natural bait (SEDAR 31 2013). Sauls and Ayala (2012) observed red snapper caught with circle hooks and J hooks within the recreational sector and reported a 63.5% reduction in potentially lethal hooking injuries for red snapper caught with circle hooks (6.3% potentially lethal injuries, versus 17.1% with J hooks) (SEDAR 31 2013). SEDAR 33 (2014a, b) examined the effects of hook type on gag and greater amberjack and determined that the generally low level of recreational discard mortality for both species (both prior to and after the 2008 circle hook requirement) negated the realization of benefits from using circle hooks (Sauls and Ayala 2012; Sauls and Cermak 2013; Murie and Parkyn 2013).

Alternative 1 would retain the current circle hook requirements in Gulf of Mexico jurisdictional waters, requiring recreational anglers fishing in federal waters to use non–stainless steel circle hooks when catching reef fish with natural bait. Biological impacts from this alternative are not expected to change from present conditions. Any biological benefit(s) to the current circle hook requirement would be expected to persist.

Alternative 2 would remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in the Gulf of Mexico. **Option 2a** would remove the requirement for the recreational fishing sector, and **Option 2b** would remove the requirement for the commercial fishing sector. Anglers have informed resource managers of an increased propensity for gut-hooking yellowtail snapper when fishing with circle hooks due to the small size of hook needed to successfully hook yellowtail snapper. Anglers indicate that the smaller circle hooks are swallowed completely into the stomach, increasing the likelihood of the hook snagging somewhere in the fish’s digestive tract. If J-hooks are permitted for use, anglers argue, they will be able to hook yellowtail snapper in the mouth more frequently due to the morphology of the fish’s mouth.

In the absence of scientific literature to characterize differences in lethal hooking injuries from different hook types for yellowtail snapper, the biological effects of removing the circle hook requirement are largely unknown. However, requiring the use of one hook type for multiple cohabitating species and not for another may result in a management measure which is difficult to enforce. Anglers fishing for yellowtail snapper with hooks other than circle hooks would not be likely to keep from landing any of the other reef fish species for which circle hooks are required. Incidental catch of fish other than yellowtail snapper under **Alternative 2 Option 2a** may have deleterious biological effects on bycatch, including those species which are currently under rebuilding plans (red snapper and gray triggerfish). These effects could be influential elsewhere in the Gulf, as yellowtail snapper are increasingly found off Texas. A potential exception to these possible impacts applies to the commercial fishing sector (**Option 2b**), where the fishing practices used almost exclusively target yellowtail snapper. Commercial fishermen indicate that they use chum bags on the surface to encourage yellowtail snapper to school near the transom of the fishing vessel, and then use natural bait on small hooks to catch and land the fish. The commercial fishermen also indicate that their release tools allow them to release yellowtail snapper which have been caught with J-hooks more easily than those caught with circle hooks, resulting in decreased handling times for fish which are to be discarded.

Alternative 3 would remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper south of 28°N latitude in the EEZ in the Gulf. **Option 3a** would remove the requirement for the recreational fishing sector, and **Option 3b** would remove the requirement for the commercial fishing sector. **Alternative 3** would be expected to have similar negative biological consequences as **Alternatives 2**, albeit to a lesser degree than both. Under **Alternative 3**, all yellowtail snapper which occur in the Gulf south of 28°N latitude would be vulnerable to fishing pressure from hook types other than circle hooks. Permitting the use of any hook type may have negative effects on the rebuilding plans of other reef-associated species (such as red snapper), and may result in increased discard mortality in multiple fisheries.

Alternative 4 would require the use of circle hooks when fishing with natural bait for all snapper-grouper species south of 28° North latitude in the exclusive economic zone of the South Atlantic for the recreational fishing sector (**Option 4a**) and/or the commercial sector (**Option 4b**). Such a requirement would make the snapper-grouper regulations in the South Atlantic commensurate with the reef fish regulations for the Gulf of Mexico. Additionally, benefits to the biological environment may be realized for those species with documented decreases in post-release mortality when caught with circle hooks as opposed to other hook types.

Alternative 5 would remove the requirement to use circle hooks when fishing with natural bait for all species in the snapper grouper complex north of 28° North latitude in the exclusive economic zone of the South Atlantic for the recreational fishing sector (**Option 5a**) and/or the commercial sector (**Option 5b**). This alternative would create consistent fishing regulations for the selected sector(s) throughout the South Atlantic Council's jurisdiction. Any socio-economic benefits currently realized south of 28° North latitude would be realized north of that line, as would any biological impacts.

Alternative 6 would remove the requirement to use circle hooks when fishing for yellowtail snapper in federal waters from the Dade/Monroe County line on the east coast of Florida to

Shark Point on the west coast of Monroe County, Florida for the recreational fishing sector (**Option 6a**) and/or the commercial sector (**Option 6b**). Circle hooks are currently not required when fishing for yellowtail snapper south of 28° N latitude in the exclusive economic zone of the South Atlantic. The primary harvest areas for both the recreational and commercial sectors exist south of ~26° N latitude (Monroe and Dade counties, >70% recreational and >97% commercial). When commercial fishing for yellowtail snapper, fishermen use chum to bring the fish to the surface. Small hooks are baited with natural bait and fish are typically hooked at the surface within five meters of the fishing vessel. This practice has been shown to limit bycatch of non-yellowtail snapper species, since fishermen can actively monitor which fish are pursuing a bait. Additionally, commercial fishermen believe that the combination of hook size and historical fishing practices can serve as safeguards against bycatch of undersized yellowtail snapper and non-yellowtail snapper species.

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APPENDIX A. CONSIDERED BUT REJECTED ACTIONS AND ALTERNATIVES

Action 1: Modifications to the Fishery Management Plans of the Gulf and South Atlantic Fishery Management Councils

Alternative 1: No action. Do not modify the Reef Fish and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Delegate management of any of the species listed below to the State of Florida.

Option 2a: yellowtail snapper

Option 2b: mutton snapper

Option 2c: black grouper recreational fishery only

Note: Alternative 2 would delegate all management including ABC, ACLs, management measures, etc.

Alternative 3: Manage each stock as a single unit with an overall combined multijurisdictional annual catch limits (ACLs).

Suggested wording from FWC Staff from minutes pages 125-127: The Gulf and South Atlantic Councils will agree to manage any of the species listed below with an overall ABC and an overall ACL. Each Council would agree to a recreational and commercial split. Both Councils will close their jurisdictions when the overall ACL is met.

Option 3a: yellowtail snapper

Option 3b: mutton snapper

Option 3c: black grouper

Alternative 4: Remove any of the species listed below from the Reef Fish and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Option 4a: yellowtail snapper

Option 4b: mutton snapper

Option 4c: black grouper

Alternative 5: Remove any of the species listed below from the Reef Fish Fishery Management Plan of the Gulf Council and request the Secretary of Commerce designate the South Atlantic Council as the responsible Council.

Option 5a: yellowtail snapper

Option 5b: mutton snapper

Alternative 6: Remove any of the species listed below from the Snapper Grouper Fishery Management Plan of the South Atlantic Council and request the Secretary of Commerce designate the Gulf Council as the responsible Council.

Option 6a: yellowtail snapper

Option 6b: mutton snapper

Rationale: Action 1 was removed by the Committee, and the alternatives therein were merged within other remaining Actions in the document.

Action 3: Allocate Yellowtail Snapper Sector Annual Catch Limits to the State of Florida and Create a Landings Allowance for other Gulf and South Atlantic States

Alternative 2. Use both Councils' agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 2a: Use the South Atlantic Council's current sector allocation formula (bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Alternative 3. Use both Councils' agreed upon ABC for yellowtail snapper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 75% of the ABC for South Atlantic Council jurisdictional waters, and 25% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

Option 3a: Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations for waters off Florida on average landings from 2008-2012

Option 3d: Base sector allocations for waters off Florida on average landings from 200x-20xx

Option 3e: Employ some other allocation formula

Alternative 4. Create a landings allowance for yellowtail snapper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

Option 4a: Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

Option 4b: Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

Rationale: Alternative 2a was removed after a mathematical bias was identified with the proposed "bowtie" approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

Action 4: Delegate Commercial and Recreational Management of Mutton Snapper to the State of Florida

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for Mutton Snapper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Option 2e: Fishing year

Alternative 3: Determine specific commercial management items for delegation to the State of Florida for Mutton Snapper:

Option 3a: Size limits

Option 3b: Seasons

Option 3c: Commercial trip limits

Option 3d: Minor modifications to existing allowable gear

Option 3e: Fishing year

Rationale: Alternatives 2e and 3e were removed after the Committee determined that setting the fishing year should remain a Council responsibility, in conjunction with determining ABCs, ACLs, and AMs.

Action 5: Allocate Mutton Snapper Sector Annual Catch Limits to the State of Florida and Create a Bycatch Allowance for other Gulf and South Atlantic States

Alternative 2. Use both Councils' agreed upon ABC for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 2a: Use the South Atlantic Council's current sector allocation formula (bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Alternative 3. Use both Councils' agreed upon ABC for mutton snapper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 82% of the ABC for South Atlantic Council jurisdictional waters, and 18% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

Option 3a: Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations for waters off Florida on average landings from 2008-2012

Option 3d: Base sector allocations for waters off Florida on average landings from 200x-20xx

Option 3e: Employ some other allocation formula

Alternative 4. Create a landings allowance for mutton snapper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

Option 4a: Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

Option 4b: Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

Rationale: Alternative 2a was removed after a mathematical bias was identified with the proposed “bowtie” approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

Action 8: Delegate Recreational Management of Black Grouper to the State of Florida

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for black grouper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Option 2e: Fishing year

Rationale: Alternative 2e was removed after the Committee determined that setting the fishing year should remain a Council responsibility, in conjunction with determining ABCs, ACLs, and AMs.

Action 9: Allocate Black Grouper Recreational Annual Catch Limits to the State of Florida and Create a Recreational Bycatch Allowance for other Gulf and South Atlantic States

Alternative 2. Use both Councils' agreed upon ABC for black grouper and allocate the recreational ACLs for the Gulf and South Atlantic:

Option 2b: Use the South Atlantic Council's current sector allocation formula (Bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the

weighting given to the mean of the landings from 1991-2008, and 50% on the mean of the landings from 2006-2008.

Alternative 3. Use both Councils' agreed upon ABC for black grouper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 47% of the ABC for South Atlantic Council jurisdictional waters, and 53% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

Option 3a: Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1991-2008, and 50% on the mean of the landings from 2006-2008.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations for waters off Florida on average landings from 2008-2012

Option 3d: Base sector allocations for waters off Florida on average landings from 200x-20xx

Option 3e: Employ some other allocation formula

Alternative 4. Create a recreational landings allowance for black grouper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

Option 4a: Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

Option 4b: Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

Option 4c: Adjust ABC by 3% to address landings in the other Gulf and South Atlantic States.

Option 4d: Adjust ABC by 4% to address landings in the other Gulf and South Atlantic States.

Rationale: Alternative 2b was removed after a mathematical bias was identified with the proposed "bowtie" approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

Action 10: Specify Accountability Measures for South Florida Species

Alternative 3: If commercial landings as estimated by the Science and Research Director reach or are projected to reach the commercial ACL, the Regional Administrator shall publish a notice to close the commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession of this species in or from the EEZ is limited to the bag and possession limit. Additionally,

Option 3a: If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished.

Option 3b: If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the total ACL (commercial ACL and recreational ACL) is exceeded.

Option 3c: If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded.

Alternative 4: If recreational landings, as estimated by the Science and Research Director, exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for a persistence in increased landings.

Option 4a: If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

Option 4b: If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

Option 4c: If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

Rationale: Alternatives 3a, 3b, 4a, and 4b were removed after a recommendation from the South Atlantic Council, which recently passed updated accountability measures in Snapper Grouper Amendment 34. Amendment 34 is currently undergoing regulatory review.

Action 13. Changes to Circle Hook Requirement in Gulf and South Atlantic Jurisdictional Waters

Alternative 3: Remove the requirement to use circle hooks when fishing with natural bait for all reef fish south of 28° North latitude in the exclusive economic zone of the Gulf of Mexico.

Option 3a: For the recreational fishing sector

Option 3b: For the commercial fishing sector

Rationale: Alternative 3 was because of the documented positive biological effects identified for red snapper, which have shown decreased hooking mortality when caught with circle hooks. Because red snapper are undergoing rebuilding in the Gulf, the Committee elected to remove this alternative, so as to not jeopardize the rebuilding timeline for red snapper by potentially introducing additional discard mortality.

APPENDIX B. BLACK GROUPEY ANALYSIS

Black Grouper Recreational Closure and Bag Limit Analysis for Action 11 of the Draft Joint Generic Amendment on South Florida Management Issues

This analysis focused on the South Atlantic region. This is because the Gulf of Mexico region had a low number of trips that sampled black grouper in the recreational surveys. From 2011 to 2013 there were only 56 trips (3 MRIP and 53 Headboat trips) in the Gulf of Mexico region. Therefore, there are not enough samples to do a meaningful analysis.

Additionally, the recreational black grouper landings in the Gulf of Mexico have been relatively low. Black grouper are included in the shallow water grouper complex in the Gulf of Mexico which has had landings below the ACL in the past three years (2012, 2013, and 2014). This complex consists of black, scamp, yellowmouth, and yellowfin grouper. From 2011 to 2013 black grouper contributed to only about 7% of the total shallow water grouper landings.

In June of 2009, South Atlantic Snapper-Grouper Amendment 16 established a *recreational closed season for South Atlantic black grouper from January 1st to April 30th*. Action 11 of the Draft Joint Generic Amendment on South Florida Management Issues proposes to eliminate or modify this closure and modify the bag limit. Predictions of closure dates are required to determine if landings will exceed the black grouper ACL if the closed season and bag limit are modified.

Estimating Future Landings

Data from the most recent years of complete landings (2012 and 2013) and preliminary 2014 landings were used as a proxy for future recreational landings for waves 3 through 6 (May to December). Landings from all three years of 2012 to 2014 were used, instead of just using the most recent year of landings, because landings were quite different in each of these years (Figure 1). Using all three years of data provides a range of different predictions for future landings. At the present time 2014 Headboat landings and MRIP landings for wave 6 (November to December) of 2014 are not available. Headboat landings from 2013 were used as a proxy for 2014 Headboat landings, and 2013 wave 6 MRIP landings were used as a proxy for 2014 wave 6 MRIP landings.

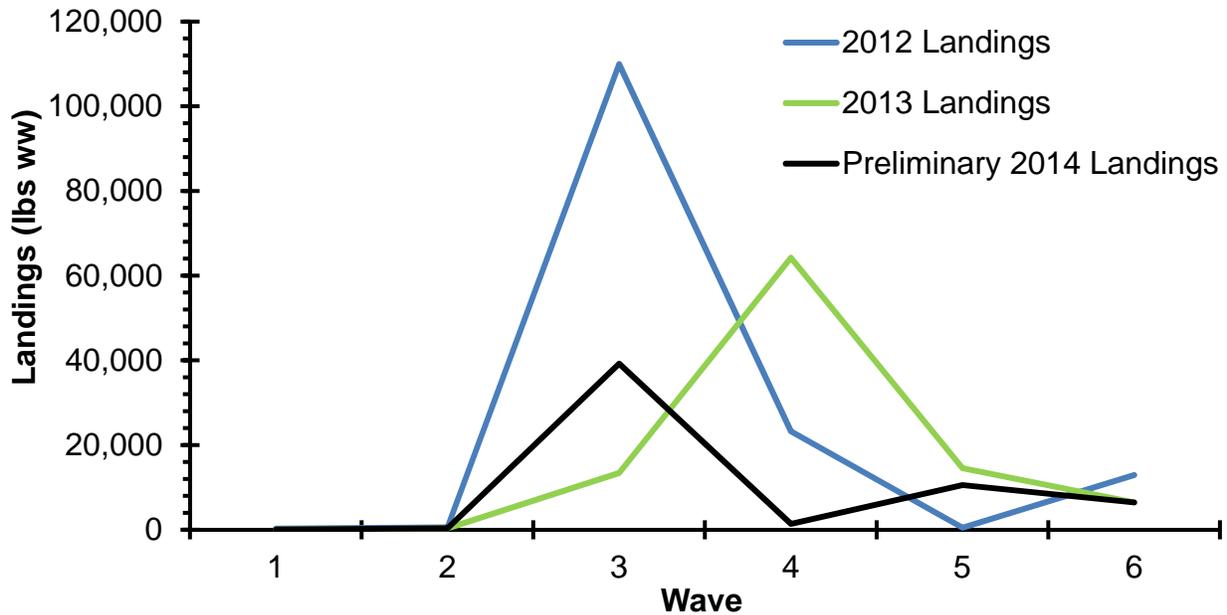


Figure 1. South Atlantic black grouper recreational landings by wave for 2012 and 2013, and preliminary landings for 2014.

Alternative 2: Remove the January to April Closure in the South Atlantic

Action 11 proposes to eliminate (Alternative 2) or modify (Alternatives 3 and 4) the current closure from January to April. Estimates of future recreational landings during the January to April closure were necessary to make predictions of closure dates. Two different scenarios were conducted to predict future landings for January through April (waves 1 and 2). Both scenarios determined wave 1 and 2 landings from the historical proportional relationship with wave 3 landings. Scenario 1 determined the proportional relationships using only Headboat landings because Headboat landings were estimated by a logbook program which is less vulnerable to sampling variability during low-effort fishing months. The second scenario determined the proportional relationship using both Headboat and MRIP landings. The closure was implemented in 2009; therefore, landings from 2007 and 2008 were used to determine the historical proportional relationship. Figure 2 displays the 2007 and 2008 recreational landings for waves 1 to 3. A 2-year average of the proportion was used to smooth the variability of black grouper landings from the two years. The average of the 2007 and 2008 Headboat landings proportion between waves determined the relationship between waves 1 and 3 was 1.2 (Standard Deviation = 0.98), and the relationship for waves 2 and 3 was 0.88 (Standard Deviation = 0.96). The average of the 2007 and 2008 Headboat and MRIP landings proportion determined the relationship between waves 1 and 3 was 2.96 (Standard Deviation = 1.82), and the relationship for waves 2 and 3 was 0.89 (Standard Deviation = 0.30). Since applying the proportion to wave 3 landings has the potential to overinflate wave 1 and 2 landings there was a landings cap placed on waves 1 and 2. The cap for wave 1 was 123,695 pounds whole weight (lbs ww) and 46,053 lbs ww for wave 2. These landings caps were the maximum landings for these two waves over the past ten years. Figure 3 provides a visual representation of the landings for the two scenarios.

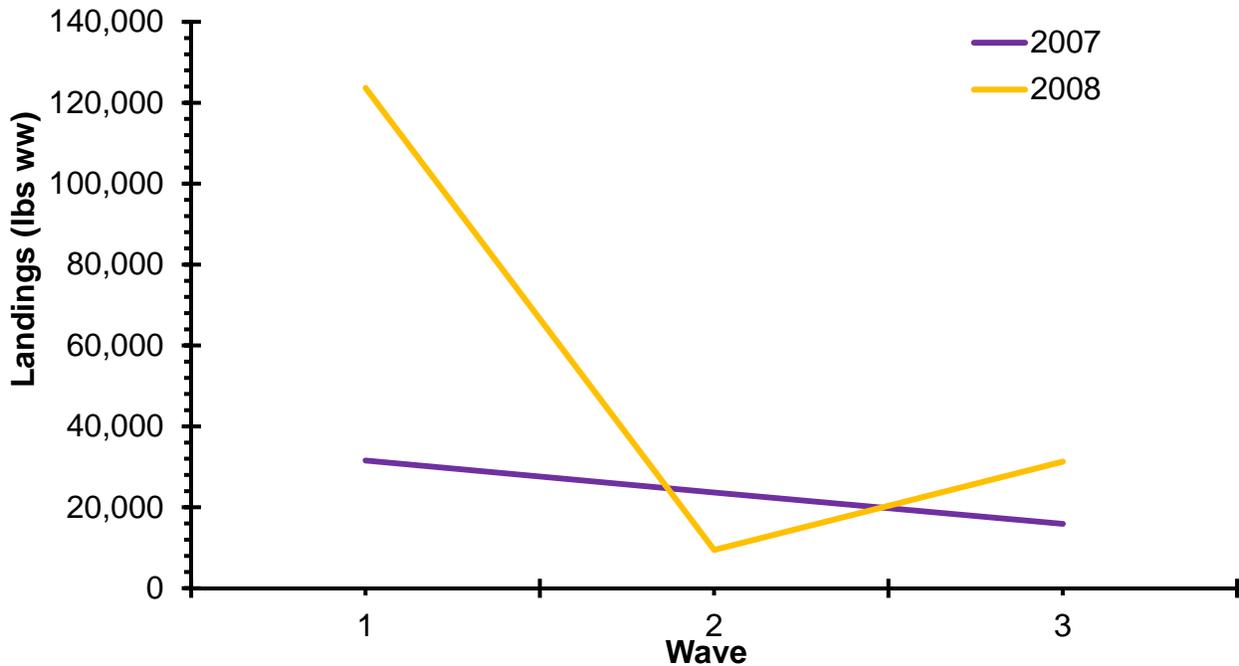


Figure 2. South Atlantic black grouper recreational landings by wave for 2007 and 2008.

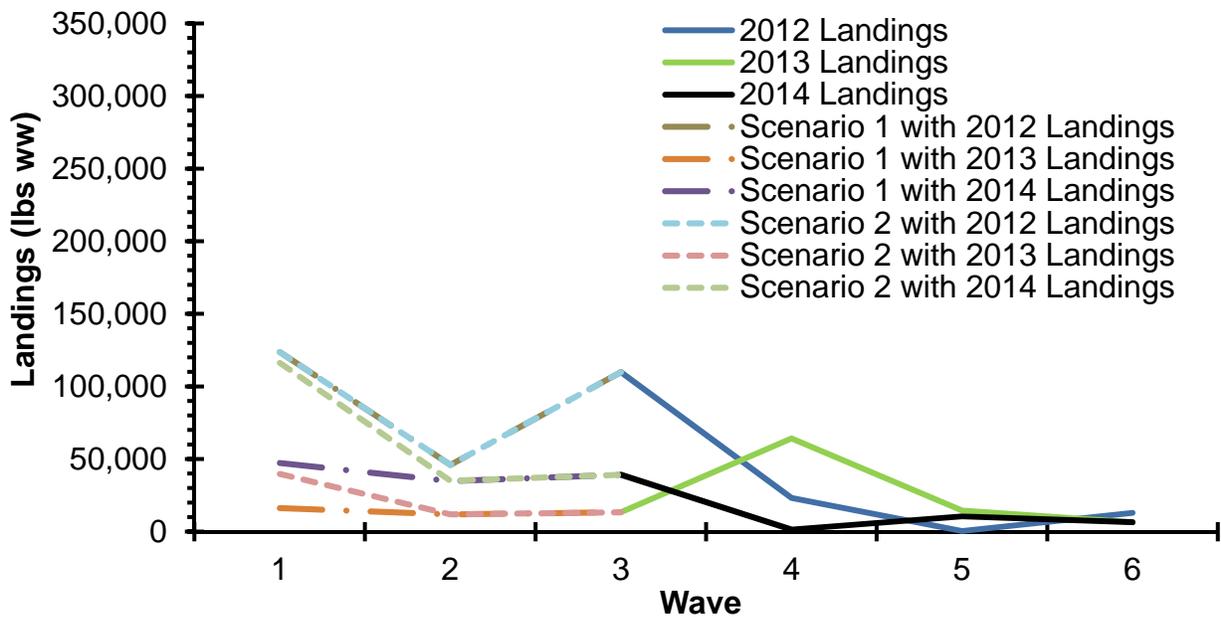


Figure 3. South Atlantic black grouper recreational landings by wave. Two scenarios were used to predict landings in waves 1 and 2. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

Once the landings for each wave were established for each scenario then it was assumed that each month (Headboat) or wave (MRIP) had uniform distributions of landings by day. The landings by day were cumulatively summed and compared to the ACL to predict closure dates. The current South Atlantic recreational ACL is 165,750 lbs ww.

Whether the stock exceeds the ACL or not is dependent on how representative 2012, 2013, or 2014 landings are to future landings (Table 1). If the future landings are similar to the 2012 landings then the recreational sector will be closed in season. However, if future landings are similar to 2013 landings then the recreational sector will be open for the entire year. The landings in 2014 were low which results in no closure for scenario 1, but there was a closure in scenario 2 due to the relatively higher 2014 wave 3 landings.

Table 1. Alternative 2 predicted annual recreational landings and closure dates for black grouper under two landings scenarios. Alternative 2 proposes to remove the January to April closure in the entire South Atlantic region, and the ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, and 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
2012 Landings	316,382	25-Apr	316,382	25-Apr
2013 Landings	126,841	None	150,495	None
2014 Landings	139,868	None	208,985	23-May

Alternative 3 and 4: Modify the Recreational Seasonal Closure

Alternatives 3 and 4 of Action 11 propose to modify the seasonal closure. An analysis of Alternatives 3 and 4 was conducted using the same estimates of future landings and scenarios that were used to analyze Alternative 2. The different options for Alternatives 3 and 4 were analyzed by assuming there were no landings during the month or months of a closure. This assumption is supported by the fact that landings during the closure months are typically 200 pounds or less.

Table 2 summarizes the analysis of landings and closure dates for the different options of Alternatives 3 and 4. Again, predictions of whether the stock exceeds the ACL or not are dependent on how 2012, 2013, or 2014 landings are representative of future landings. If the future landings are similar to the 2012 landings then the recreational sector will be closed in season. However, if future landings are similar to 2013 or 2014 landings then the recreational sector will be open for the entire year.

Table 2. Alternatives 3 and 4 predicted annual recreational landings and closure dates for black grouper under two landings scenarios. The South Atlantic recreational ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
January to March Closure				
2012 Landings	194,739	21-Jul	194,961	20-Jul
2013 Landings	104,580	None	104,607	None
2014 Landings	76,501	None	76,580	None
January Closure				
2012 Landings	307,405	31-May	399,610	7-Mar
2013 Landings	118,332	None	129,587	None
2014 Landings	116,685	None	149,570	None
February Closure				
2012 Landings	314,151	29-Apr	416,186	30-Jan
2013 Landings	119,156	None	131,611	None
2014 Landings	119,090	None	155,482	None
March Closure				
2012 Landings	327,400	21-Apr	520,959	30-Jan
2013 Landings	120,773	None	144,399	None
2014 Landings	123,816	None	191,174	20-Jun

Results for Alternatives 2, 3 and 4

Action 11 proposes to eliminate (Alternative 2) or modify (Alternatives 3 and 4) the current closure from January to April. Table 3 summarizes the results of the analysis of landings and closure dates for both Alternative 2 and Alternative 3.

Table 3. Predicted annual recreational landings and closure dates for black grouper under two landings scenarios for Alternatives 2, 3, and 4. The South Atlantic recreational ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
Alternative 2: No Seasonal Closure				
2012 Landings	377,109	21-Mar	570,897	30-Jan
2013 Landings	126,841	None	150,495	None
2014 Landings	139,868	None	208,985	23-May
Alternatives 3 and 4 Option a: January to March Closure				
2012 Landings	194,739	21-Jul	194,961	20-Jul
2013 Landings	104,580	None	104,607	None
2014 Landings	76,501	None	76,580	None
Alternatives 3 and 4 Option b: January Closure				
2012 Landings	307,405	31-May	399,610	7-Mar
2013 Landings	118,332	None	129,587	None
2014 Landings	116,685	None	149,570	None
Alternatives 3 and 4 Option c: February Closure				
2012 Landings	314,151	29-Apr	416,186	30-Jan
2013 Landings	119,156	None	131,611	None
2014 Landings	119,090	None	155,482	None
Alternatives 3 and 4 Option d: March Closure				
2012 Landings	327,400	21-Apr	520,959	30-Jan
2013 Landings	120,773	None	144,399	None
2014 Landings	123,816	None	191,174	20-Jun

There has been a decline in total annual recreational black grouper landing from 2012 to 2014 (Figure 1). The lowest total landings for all three years took place in 2014. If black grouper landings continue to decrease then the probability of exceeded the ACL will be decreased.

Alternative 5: Remove black grouper from the shallow-water grouper closure of the recreational season in the South Atlantic in Federal waters off Monroe County, Florida.

Alternative 5 was analyzed by applying the same method used for the analysis for Alternatives 2, 3, and 4 but only the Federal waters of Monroe County, Florida did not have the January to April

closure. Therefore, the analysis only allowed January to April landings to occur in Federal waters of Monroe County. The landings were assumed to be zero from January to April for the rest of the South Atlantic region. Table 4 provides predicted landings and closure dates for Alternative 5.

Table 4. Alternative 5 predicted annual recreational landings and closure dates for black grouper under two landings scenarios. Alternative 5 proposes to remove the January to April closure only in Monroe County, Florida. The South Atlantic recreational ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
2012 Landings	238,902	11-Jun	238,902	11-Jun
2013 Landings	105,299	None	110,842	None
2014 Landings	132,089	None	194,665	14-Jun

Alternative 6: Remove black grouper from the recreational aggregate bag limit in the Gulf of Mexico

Black grouper are included in the Gulf of Mexico aggregate bag limit which is set at 4 grouper per angler. The aggregate bag limit contains black, gag, red, yellowfin, scamp, and yellowmouth grouper. Alternative 6 of Action 11 proposes to remove black grouper from the Gulf of Mexico aggregate bag limit. An examination of the 2011-2013 catch records for all grouper in the aggregate is shown in Figure 4. Less than 1% (n=255 trips) of the trips reached or exceeded the bag limit of 4 grouper per angler. Also, trips that harvested black grouper from 2011-2013 (n=56 trips) accounted for less than 1% of the total Gulf of Mexico trips sampled that harvested any of the aggregate grouper species (n=28,700 trips). Therefore, the other grouper species should not be impacted by removing black grouper from the aggregate group as the 4 grouper per angler aggregate is not currently constraining angler harvest.

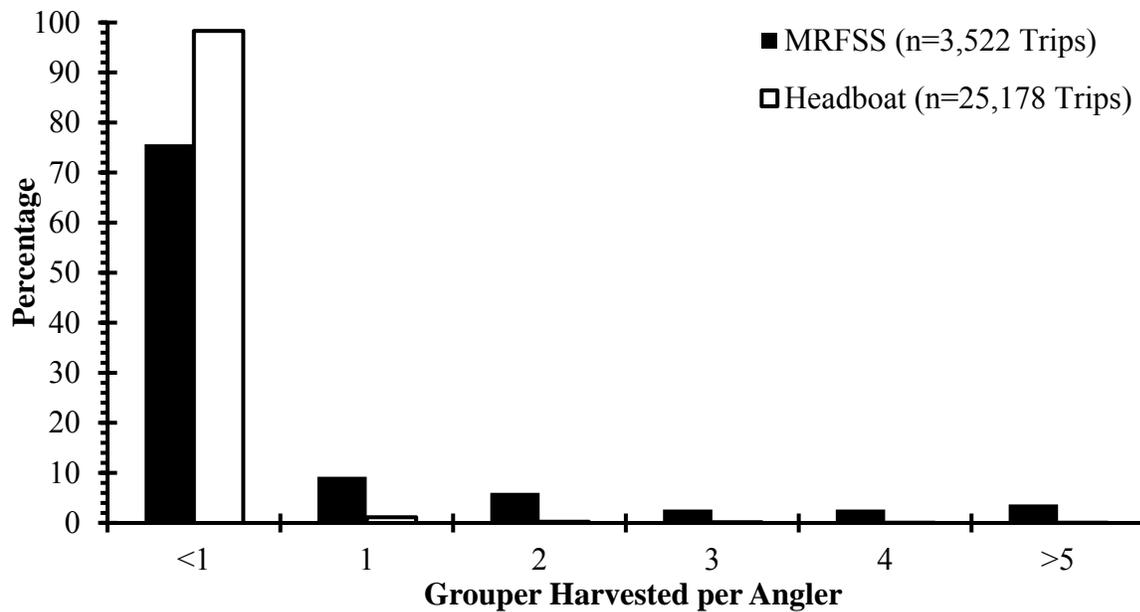


Figure 4. Distribution of Gulf of Mexico grouper harvested per angler included in the grouper aggregate bag limit from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. This aggregate includes the species of black, gag, red, yellowfin, scamp, and yellowmouth grouper.

Alternative 7: Remove black grouper from the recreational aggregate bag limit in the South Atlantic

Black grouper are included in the South Atlantic grouper aggregate bag limit which is set at 3 grouper per angler, however only one grouper can be a black or gag grouper. The aggregate bag limit contains black, gag, red, red hind, rock hind, coney, graysby, yellowfin, scamp, and yellowmouth grouper. Alternative 7 of Action 11 proposes to remove black grouper from the South Atlantic aggregate bag limit. An examination of the 2011-2013 catch records for all grouper in the aggregate is shown in Figure 5. Less than 1% (n=15 trips) of the trips sampled reached or exceeded the bag limit of 3 grouper per angler. Therefore, the other grouper species should not be impacted by removing black grouper from the aggregate group as the 3 grouper aggregate is not currently constraining angler harvest.

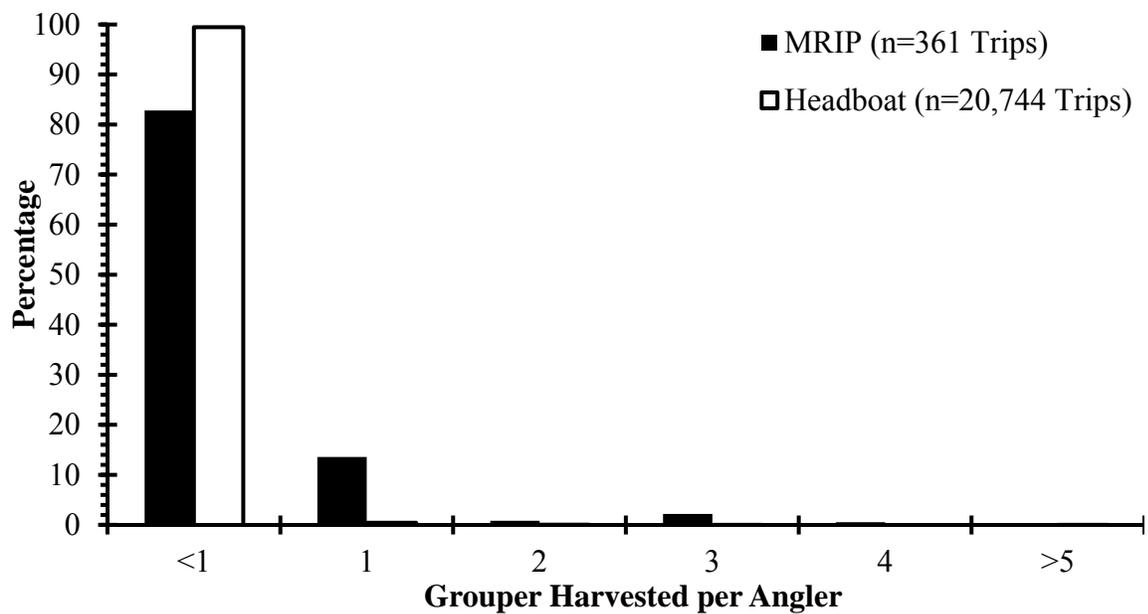


Figure 5. Distribution of South Atlantic grouper harvested per angler included in the grouper aggregate bag limit from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. This aggregate includes the species of black, gag, red, red hind, rock kind, coney, graysby, tiger, scamp, yellowfin, and yellowmouth grouper.

Alternative 8: Modify the recreational bag limit for black grouper in the South Atlantic

Alternative 8 proposes to increase the bag limit to two, three, or four black grouper per angler. The South Atlantic catch and effort files for the last 3 years of complete data (2011-2013) were explored. The South Atlantic region had 2,451 trips (41 MRIP and 2,410 Headboat trips) that reported black grouper in the South Atlantic. This region currently has a one fish bag limit for black grouper. This is reflected in the catch and effort files with 99% of the South Atlantic trips harvesting one black grouper or less per angler (Figure 6).

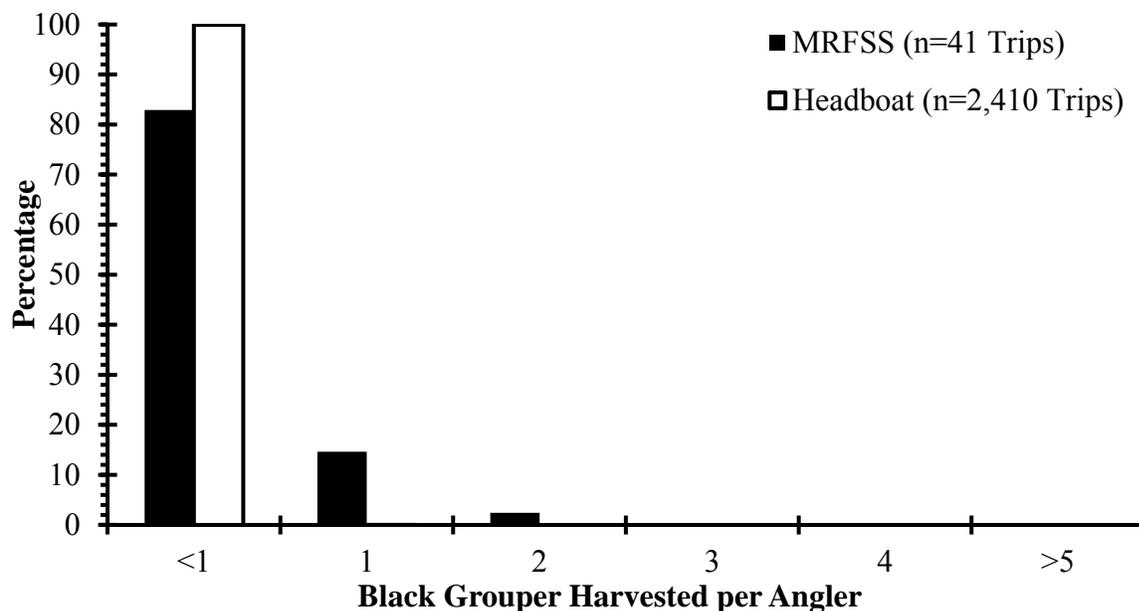


Figure 6. Distribution of South Atlantic black grouper harvested per angler from the two recreational datasets (MRIP and Headboat) from 2011 to 2013.

In February of 1999 South Atlantic Snapper-Grouper Amendment 9 changed the black grouper bag limit from five to two fish. Then in June of 2009 South Atlantic Snapper-Grouper Amendment 16 changed the black grouper bag limit from two to one fish. Landings data from 1996 to 1998 were reviewed to determine catch rates of black grouper per person during a time when anglers had the option of keeping up to five black grouper. Figure 7 provides the black grouper harvested per person from 1996 to 1998. Also, the stock was not overfished from 1996 to 1998 according to the latest black grouper assessment (SEDAR 19). The options to increase the bag limit were analyzed by first calculating the proportion of trips that caught two, three, and four black grouper relative to the number of trips that caught one black grouper. The proportions were calculated to be 6% for two fish, 3% for three fish, and 1% for four fish relative to the trips that harvested one black grouper. Percent increases in landings from increasing the bag limit were calculated by applying the proportions to the trips that harvested one black grouper from 2011 to 2013. Table 5 provides the percent increase in landings by dataset (MRIP and Headboat). Percent increases in landings by mode or by month were not possible because of small sample sizes ($n < 30$).

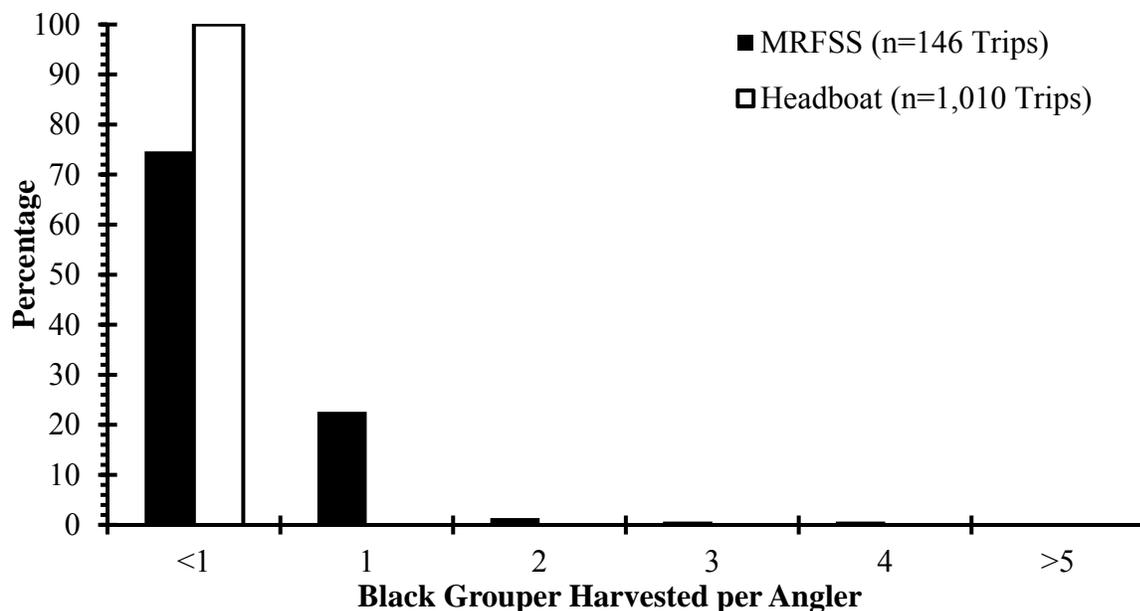


Figure 7. Distribution of South Atlantic black grouper harvested per angler from the two recreational datasets (MRIP and Headboat) from 1996 to 1998.

Table 5. Percent increases in landings for various bag limits applied to South Atlantic recreational landings for the years 2011 and 2013. The increases were calculated in terms of numbers of fish with respect to dataset (MRIP and Headboat).

Bag Limit	MRIP	Headboat
1	0	0
2	2.9%	< 1%
3	3.2%	< 1%
4	3.4%	< 1%

The bag limit percent increases in landings were applied to landings Scenarios 1 and 2 of the 2014 landings. Figure 3 from above displays the landings scenarios for the 2014 landings. Alternative 8 also proposed to modify the bag limit for all of the South Atlantic region, only in waters off Monroe County, only in Federal waters off Florida, and only in Federal waters of the South Atlantic. The 2014 landings were separated by County, State, and Federal waters to analyze all of the bag limit options in Alternative 8, and Table 6 reveals the breakdown of those landings. The same landings were provided for the two categories of only in Federal waters off of Florida and only in Federal waters of the South Atlantic. This is because there were no additional black grouper 2014 landings outside of Florida that were declared in Federal waters of the South Atlantic. The percent increases in landings were applied to the appropriate body of water to analyze the options in Alternative 8. Table 7 provides the predicted annual landings and closure dates for the analytical results. It should be noted that because of low sample sizes, it was not possible to calculate bag limit increases for specific water bodies (county, State, Federal) and the same overall region-wide increase in harvest relating to the bag limit was used for all options considered.

Table 6. Two landings scenarios of 2014 recreational landings separated by water body. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Following the options in Alternative 8 the landings were separated into the four water body categories of: 1) all of the South Atlantic region, 2) only in waters off Monroe County, 3) only in Federal waters off Florida, and 4) only in Federal waters of the South Atlantic.

	Scenario 1				Scenario 2		
	Only Monroe County	Remaining Landings	Total		Only Monroe County	Remaining Landings	Total
Landings	117,211	22,658	139,869	Landings	175,583	33,403	208,986
Percent	84	16	100	Percent	84	16	100
	Only Federal Waters off Florida	Remaining South Atlantic Landings	Total		Only Federal Waters off Florida	Remaining South Atlantic Landings	Total
Landings	110,503	29,367	139,870	Landings	169,538	39,448	208,986
Percent	79	21	100	Percent	81	19	100
	Only Federal Waters of the South Atlantic	Remaining South Atlantic Landings	Total		Only Federal Waters of the South Atlantic	Remaining South Atlantic Landings	Total
Landings	110,503	29,367	139,870	Landings	169,538	39,448	208,986
Percent	79	21	100	Percent	81	19	100

Table 7. Predicted closure dates for Alternative 8 options using the two landings scenarios for 2014 recreational landings. Following the options in Alternative 8 the bag limit increases were applied to the four water body categories of: 1) all of the South Atlantic region, 2) only in waters off Monroe County, 3) only in Federal waters off Florida, and 4) only in Federal waters of the South Atlantic. The ACL is 165,750 lbs ww.

Bag Limit	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
All of South Atlantic Region (Federal and State waters)				
1 Fish	139,868	None	208,985	23-May
2 Fish	143,737	None	214,858	16-May
3 Fish	144,137	None	215,465	15-May
4 Fish	144,404	None	215,870	15-May

Option 8e: Sub-option 8e(i): Off Monroe County, Florida				
1 Fish	139,868	None	208,986	23-May
2 Fish	143,269	None	214,078	17-May
3 Fish	143,620	None	214,605	16-May
4 Fish	143,855	None	214,956	16-May
Option 8e: Sub-option 8e(ii): In Federal Waters off Florida				
1 Fish	139,869	None	208,986	23-May
2 Fish	143,074	None	213,903	17-May
3 Fish	143,405	None	214,411	16-May
4 Fish	143,626	None	214,750	16-May
Option 8e: Sub-option 8e(iii): In Federal Waters in South Atlantic				
1 Fish	139,869	None	208,986	23-May
2 Fish	143,074	None	213,903	17-May
3 Fish	143,405	None	214,411	16-May
4 Fish	143,626	None	214,750	16-May

Predictions of whether the stock exceeds the ACL or not are dependent which landings scenario is representative of future landings. If the future landings are similar to scenario 1 then the recreational sector will be open for the entire year. However, if future landings are similar to scenario 2 then the recreational sector will close in May.

The highest predicted landings and shortest season came from applying the increased bag limit options to the 2014 scenario 2 landings for the entire South Atlantic region. This is because this option applies the increased bag limit to the largest geographic area. The second highest predicted landings came from applying the increased bag limit options to the 2014 scenario 2 landings for the waters off Monroe County. This occurred because most of the black grouper landings (84%) in the 2014 landings occurred in Monroe County.

This analysis attempted to bracket the possible range of future landings considering with and without recreational season closures. Uncertainty exists in these projections, as economic conditions, weather events, changes in catch-per-unit effort, fisher response to management regulations, and a variety of other factors may cause departures from the predictions. Also, the majority of the landings estimates generated for each wave had proportional standard error values greater than 50%. This indicates high variability around the landings estimates and therefore low precision. This must be considered when evaluating the effects of bag limits and season closures.

References

SEDAR 19. 2009. Stock assessment of black grouper. Available from the SEDAR website: www.sefsc.noaa.gov/sedar/

APPENDIX C. MUTTON SNAPPER BAG LIMIT ANALYSIS

Mutton Snapper Bag Limit analysis for Action 5 of the Draft Joint Generic Amendment on South Florida Management Issues.

Action 5 of the Draft Joint Generic Amendment on South Florida Management Issues proposes to both remove mutton snapper from the aggregate bag limit and reduce the mutton snapper bag limit. This report analyzes the Action 5 alternatives. The analysis focused primarily on the South Atlantic region because the Gulf of Mexico region had a low number of trips that sampled mutton snapper in the recreational surveys. An examination of the recent years of complete data (2011 to 2013) there were only 72 trips (0 in Texas, 6 MRIP, and 66 Headboat trips) in the Gulf of Mexico region. Therefore, there are not enough samples for the Gulf of Mexico region to do a meaningful analysis. The South Atlantic has significantly more mutton snapper trips surveyed with 8,525 trips (466 MRIP and 8,059 Headboat trips) from 2011 to 2013.

Alternative 2: Remove mutton snapper from the recreational aggregate bag limit

Mutton snapper are included in an aggregate bag limit and alternative 2 of Action 5 considers removing mutton snapper from it. This aggregate bag limit has a maximum of 10 fish, and encompasses the snapper species of mutton, gray, yellowtail, cubera, queen, blackfin, and silk for the Gulf of Mexico and South Atlantic regions. Wenchman are included in the Gulf of Mexico aggregate, and dog, lane, and mahogany snapper are included in the South Atlantic aggregate.

The Gulf of Mexico trips that harvested the aggregate snapper species were explored to reveal if the trip limit was being reached. An examination of the 2011-2013 catch records for all of the snapper in the aggregate are shown in Figure 1. Less than 2% (n = 153 trips) of the trips reached or exceeded the bag limit of 10 snapper per person. Therefore, the other snapper species should not be impacted by removing mutton snapper from the aggregate group as the 10 fish per angler aggregate is not currently constraining harvest.

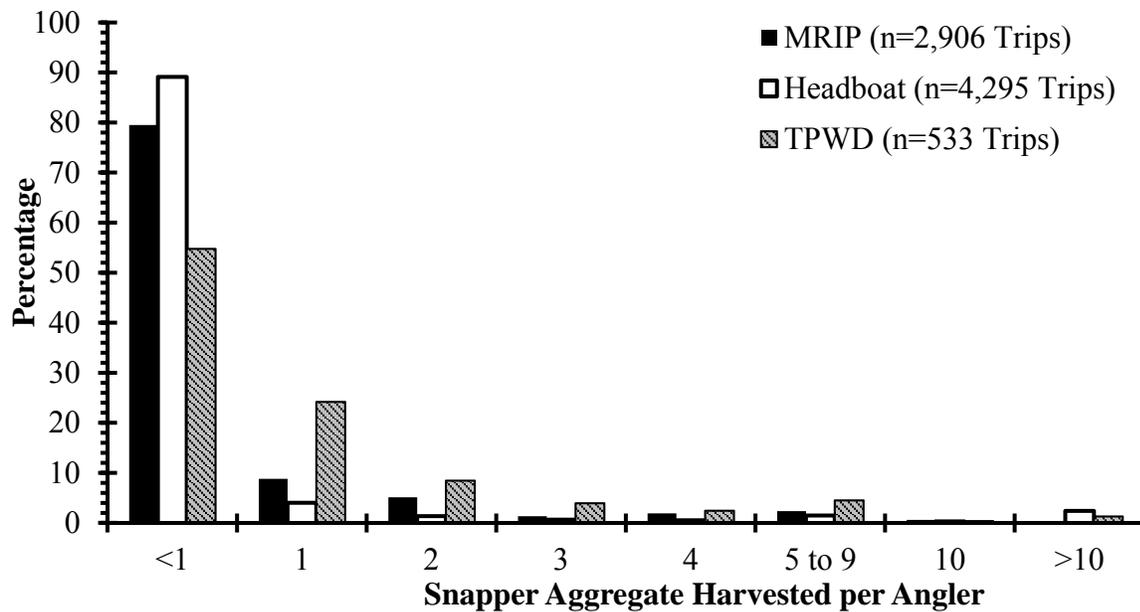


Figure 1. Distribution of Gulf of Mexico snapper harvested per angler for the species of snapper included in the snapper aggregate bag limit from the three recreational datasets (MRIP, Headboat, and TPWD) from 2011 to 2013. This aggregate includes the snapper species of mutton, gray, yellowtail, cubera, queen, blackfin, silk, and wenchman.

South Atlantic trips that harvested the snapper aggregate species were explored to reveal if the trip limit was being reached. An examination of the 2011-2013 catch records for all of the snapper in the aggregate are shown in Figure 2. Less than 1% (n = 329 trips) of the trips reached or exceeded the bag limit of 10 snapper per person. Therefore, the other snapper species should not be impacted by removing mutton snapper from the aggregate group as the 10 fish per angler aggregate is not currently constraining harvest.

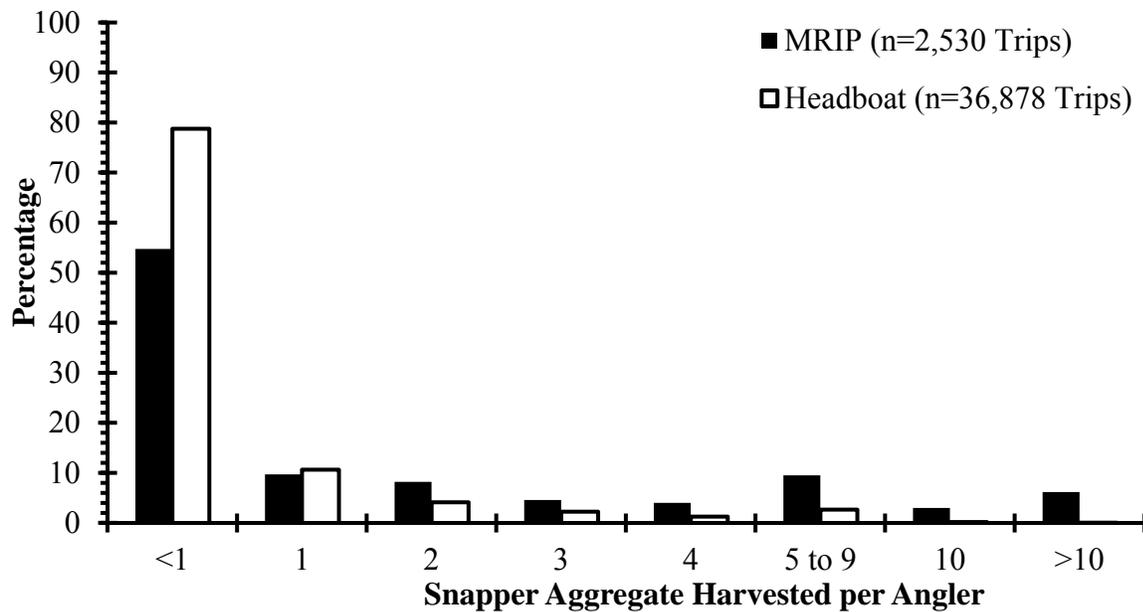


Figure 2. Distribution of South Atlantic snapper harvested per angler for the species of snapper included in the snapper aggregate bag limit from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. This aggregate includes the snapper species of mutton, gray, yellowtail, cubera, queen, blackfin, silk, dog, lane, and mahogany.

Alternative 3: Retain mutton snapper within the aggregate bag limit but specify bag limits for mutton snapper within the regular season and during the spawning season.

Analysis for alternative 3 only focused on the South Atlantic region. There was no analysis for the Gulf of Mexico region because of the low number of trips that sampled mutton snapper in this region.

There is concern from the public regarding fishing effort on mutton snapper spawning aggregations during the May-June peak spawning season. The trips that harvested mutton snapper were explored both within and outside the spawning season. Both the number of mutton snapper harvested per angler (Figure 3), and also the total mutton snapper harvested on a trip (Figure 4) were explored. In both cases the regular season and spawning season did not have distributional differences that were statistically significant (mutton snapper per angler, G-test, $P = 0.950$; total mutton snapper harvested on a trip, G-test, $P = 0.726$).

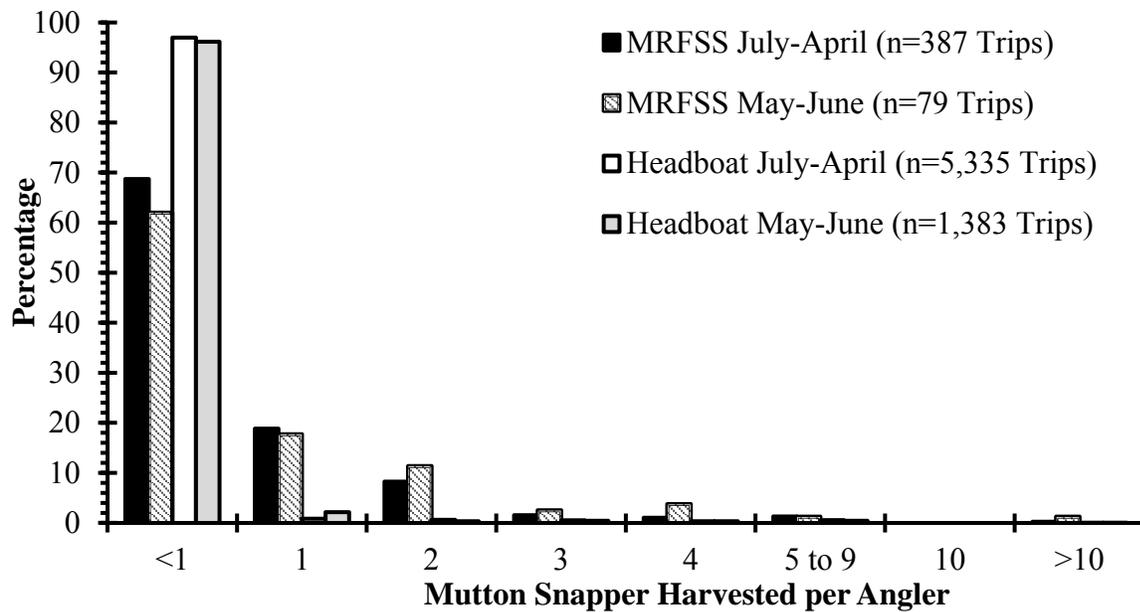


Figure 3. Distribution of South Atlantic mutton snapper harvested per angler by season from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. The regular season is from July to August and the spawning season is from May to June.

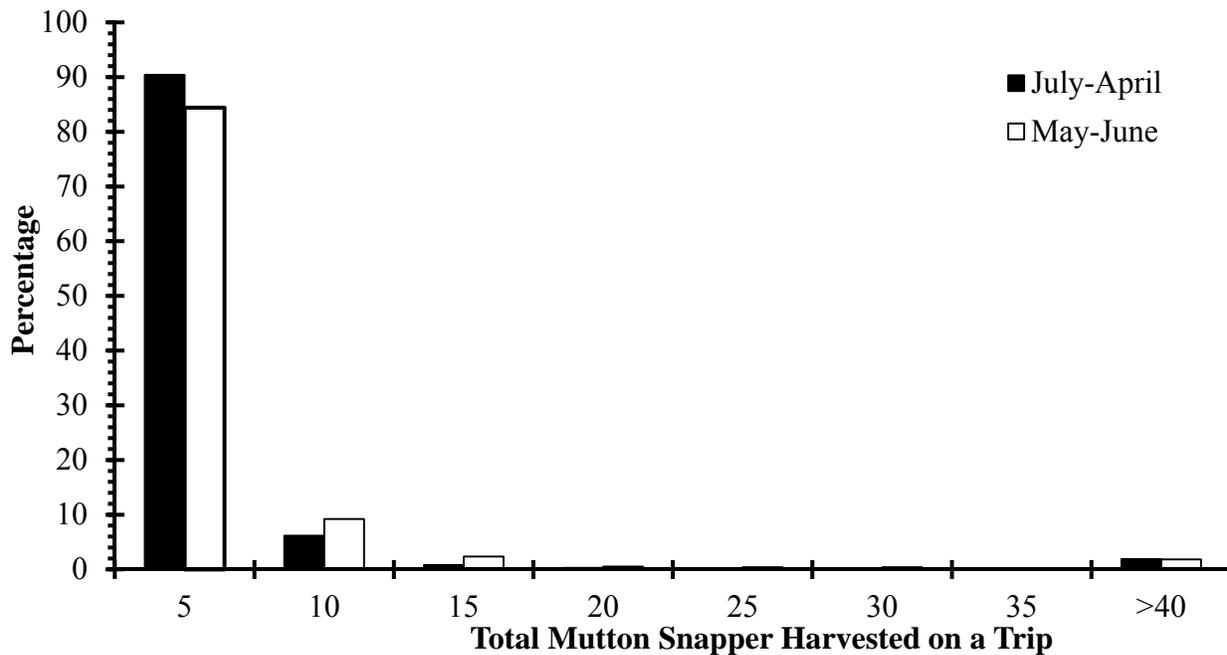


Figure 4. Distribution of the total number of mutton snapper harvested on a trip in the South Atlantic region from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. The regular season is from July to August and the spawning season is from May to June.

Percent reductions in landings from reducing the bag limit were calculated using data from 2011 to 2013. The reductions were calculated for each dataset and season (Table 1).

Table 1. Percent reductions in landings for various bag limits generated from South Atlantic recreational landings for the years 2011 and 2013. The reductions were calculated in terms of mutton snapper numbers with respect to dataset and non-spawning (July to April) and spawning (May-June) season. The datasets were MRIP and Headboat.

Bag Limit	MRIP			Headboat		
	Jul-Apr	May-Jun	All Year	Jul-Apr	May-Jun	All Year
10	0.0	0.0	0.0	0.0	0.0	0.0
9	0.2	1.3	0.4	0.3	0.4	0.3
8	0.4	2.5	0.9	0.7	0.8	0.7
7	1.3	3.8	1.8	1.3	2.0	1.5
6	2.3	5.1	2.9	2.9	3.8	3.1
5	3.5	6.3	4.1	5.5	6.2	5.7
4	5.1	8.4	5.8	9.4	9.7	9.5
3	8.5	12.7	9.3	15.3	14.7	15.2
2	14.1	20.3	15.3	25.0	21.7	24.2
1	29.3	34.2	30.3	37.5	32.4	36.3

Action 5 proposes different bag limits during July to April then during May-June because of the May-June spawning season. Table 2 provides the percent reductions for the bag limit options proposed.

Table 2. Percent reductions in landings for Alternative 2 of Action 5 for the Decision Document for Joint Council Committee on South Florida Management Issues. The bag limits were applied to Gulf of Mexico and South Atlantic recreational landings for the years 2011 and 2013. The reductions were calculated in terms of mutton snapper numbers with respect to dataset and non-spawning (July to April) and spawning (May-June) season. The datasets were MRIP and Headboat.

	MRIP		Headboat	
	Jul-Apr	May-Jun	Jul-Apr	May-Jun
Alt 2 Option 2a				
Bag Limit	10 fish	2 fish	10 fish	2 fish
Percent Reduction	None	20.3	None	21.2
Alt 2 Option 2b				
Bag Limit	5 fish	2 fish	5 fish	2 fish
Percent Reduction	3.5	20.3	5.9	21.2

In recent years the majority (about 80%) of the South Atlantic recreational landings came from MRIP (**Table 3**). Therefore, the percent reductions generated from the MRIP data will have a greater impact than the Headboat percent reductions.

Table 3. South Atlantic mutton snapper recreational landings by dataset.

Year	MRIP		Headboat		Total
	lbs	%	lbs	%	
2011	228,075	81	53,171	19	281,247
2012	402,382	84	74,640	16	477,022
2013	429,759	89	51,972	11	481,731

Modifications to Gulf Reef Fish and South Atlantic Snapper Grouper Fishery Management Plans



Draft Joint Generic Amendment DECISION DOCUMENT For the Joint Council Committee on South Florida Management Issues

March 2015



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DRAFT MANAGEMENT ALTERNATIVES

The following actions pertain exclusively to yellowtail snapper.

Action 1: Partial Delegation of Commercial and/or Recreational Management of Yellowtail Snapper to the State of Florida for Federal Waters Adjacent to the State of Florida

Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures.

Alternative 1: No action. Do not delegate management of yellowtail snapper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for yellowtail snapper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Alternative 3: Determine specific commercial management items for delegation to the State of Florida for yellowtail snapper:

Option 3a: Size limits

Option 3b: Seasons

Option 3c: Commercial trip limits

Option 3d: Minor modifications to existing allowable gear

IPT Note: *The IPT recommends determining upper and/or lower bounds for management items being considered for delegation to Florida (Options 2/3 a-c). Also, further detail will be necessary to define “Minor modifications to existing allowable gear”, as analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.*

IPT Note: *The Councils should determine specifically which types of modifications to existing allowable gear will be permitted under this action.*

Action 2: Establish and Consolidate ABCs and ACLs for Yellowtail Snapper

Alternative 1. No action. Maintain the current commercial and recreational ACLs for yellowtail snapper based on the South Atlantic Council's Snapper Grouper Fishery Management Plan and maintain the current total ACL for yellowtail snapper in the Gulf based on the Reef Fish FMP.

Alternative 2: Manage yellowtail snapper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

Alternative 3. Use both Councils' agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 3a: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3b: Base sector allocations on average landings from 2009-2013

Option 3c: Base sector allocations on average landings from 2004-2013

The following actions pertain exclusively to mutton snapper.

Action 3: Partial Delegation of Commercial and/or Recreational Management of Mutton Snapper to the State of Florida in Federal Waters Adjacent to the State of Florida

Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures.

Alternative 1: No action. Retain management of Mutton Snapper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for Mutton Snapper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Alternative 3: Determine specific commercial management items for delegation to the State of Florida for Mutton Snapper:

Option 3a: Size limits

Option 3b: Seasons

Option 3c: Commercial trip limits

Option 3d: Minor modifications to existing allowable gear

***IPT Note:** The IPT recommends determining upper and/or lower bounds for management items being considered for delegation to Florida (**Options 2/3 a-c**). Also, further detail will be necessary to define “Minor modifications to existing allowable gear”, as analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.*

***IPT Note:** Delegating the setting of bag limits under Alternatives 2 and 3, Options 2c and 3c of Action 3 seems to duplicate efforts in Actions 5 and 6. If it is the Councils’ desire to delegate the setting and changing of bag limits for mutton snapper to the State of Florida as outlined in Action 3, then the Councils may wish to reconsider the establishment of bag limits for mutton snapper in the manner shown in Actions 5 and 6. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.*

***IPT Note:** The Councils should determine specifically which types of modifications to existing allowable gear will be permitted under this action.*

Action 4: Establish and Consolidate ABCs and ACLs for Mutton Snapper

Alternative 1. No action. Maintain the current commercial and recreational ACLs for mutton snapper based on the South Atlantic Councils Snapper Grouper Fishery Management Plan and maintain the current total ACL for mutton snapper in the Gulf based on the Reef Fish Resources FMP.

Alternative 2: Manage mutton snapper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

Alternative 3. Use both Councils' agreed upon ABC for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 3a: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3b: Base sector allocations for waters off Florida on average landings from 2009-2013

Option 3c: Base sector allocations for waters off Florida on average landings from 2004-2013

Action 5. Modify Mutton Snapper Recreational Bag Limit in Gulf of Mexico and South Atlantic

Alternative 1: No action. Mutton snapper is part of the aggregate 10 snapper bag limit in the Gulf of Mexico, the South Atlantic, and the State of Florida.

Alternative 2: Remove mutton snapper from the recreational aggregate bag limit and change the recreational bag limit for mutton snapper during the regular season (July-April) and during the spawning season (May-June).

Option 2a: 10 fish/person/day in the regular season, 2 fish/person/day during the spawning season

Option 2b: 5 fish/person/day in the regular season, 2 fish/person/day during the spawning season

Option 2c: 4 fish/person/day in the regular season, 2 fish/person/day during the spawning season

Alternative 3: Retain mutton snapper within the aggregate 10 snapper bag limit in the Gulf of Mexico and the South Atlantic, but specify bag limits for mutton snapper within the snapper recreational aggregate bag limit during the regular season (July-April) and during the spawning season (May-June).

Option 3a: Within the aggregate snapper bag limit, no more than 10 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

Option 3b: Within the aggregate snapper bag limit, no more than 5 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

Option 3c: Within the aggregate snapper bag limit, no more than 4 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

Note: In the Gulf of Mexico, the 10 snapper-per-person aggregate includes all snapper species in the reef fish management unit except red snapper, vermilion snapper, and lane snapper (Table 5). In the South Atlantic, the 10 snapper-per-person aggregate includes all snapper species in the snapper grouper management unit except red snapper and vermilion snapper (Table 5). Cubera snapper less than 30" total length (TL) are included in the 10 fish bag limit. The aggregate 10 snapper bag limit includes a maximum of 2 cubera snapper per person (not to exceed 2 per/vessel) for fish 30" TL or larger off Florida.

Note: State of Florida has the same regulations for the recreational sector as both Councils; however, the commercial sector in state waters is managed using regulations identical to the South Atlantic Council's commercial regulations.

IPT Note: Establishing bag limits in Actions 5 and 6 seems to duplicate efforts in Alternatives 2 and 3, Options 2c and 3c of Action 3. If it is the Councils' desire to establish bag limits for

mutton snapper in the manner shown in Actions 5 and 6, then the Councils may wish to reconsider delegating the setting and changing of bag limits for mutton snapper to the State of Florida as outlined in Action 3. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.

IPT Note: *The Councils may wish to revisit the inclusion of both Options 2b/c and 3b/c, since they differ by only one fish per person per day. If the Councils wish to include both options, then additional rationale will help frame subsequent analyses.*

Action 6. Modify Mutton Snapper Commercial Trip Limit in the Gulf of Mexico and South Atlantic

Alternative 1: No action. During May-June, the commercial sector in the South Atlantic is restricted to 10 mutton snapper per day or 10 mutton snapper per trip, whichever is more restrictive. There is no bag or trip limit for the commercial sector in the Gulf or South Atlantic from July through April.

Alternative 2: Establish a commercial trip limit for mutton snapper during the regular season (July through April) in the Gulf of Mexico and the South Atlantic.

Option 2a: 10 fish/person/day

Option 2b: Some higher bag or trip limit.

Alternative 3: Specify a commercial trip limit for mutton snapper during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Option 3a: 2 fish/person/day

Option 3b: 5 fish/person/day

Option 3c: 10 fish/person/day

Option 3d: No bag or trip limit

Alternative 4: Specify a commercial trip limit for mutton snapper that is identical to the recreational bag limit during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Alternative 5: Specify a commercial trip limit for mutton snapper for the handline sector during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Option 5a: 2 fish/person/day

Option 5b: 5 fish/person/day

Option 5c: 10 fish/person/day

Option 5d: Some other trip limit

Alternative 6: Specify a commercial trip limit for mutton snapper for the longline sector during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

Option 6a: 500 pounds whole weight trip limit

Option 6b: Some other trip limit

Added by the South Atlantic Council

***IPT Note:** Establishing bag limits in Actions 5 and 6 seems to duplicate efforts in Alternatives 2 and 3, Options 2c and 3c of Action 3. If it is the Councils' desire to establish bag limits for mutton snapper in the manner shown in Actions 5 and 6, then the Councils may wish to reconsider delegating the setting and changing of bag limits for mutton snapper to the State of Florida as outlined in Action 3. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.*

IPT Note: *The Councils may wish to consider vessel limits for commercial mutton snapper fishing. The biological effects of bag limits could vary depending on the number of crew aboard a commercial fishing vessel, making biological effects more difficult to determine. For example, the biological effects of four crew members retaining the per-person trip limit in Alternative 5 would be greater than the same for only two crew members. Analysis of Alternative 5 may prove difficult, since there is no way to know how many crew could be on board a commercial fishing vessel on any given day.*

The following actions pertain exclusively to black grouper.

Action 7: Partial Delegation of Recreational Management of Black Grouper to the State of Florida in Federal Waters Adjacent to the State of Florida

Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures.

Alternative 1: No action. Retain recreational management of black grouper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for black grouper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

***IPT Note:** The IPT recommends determining upper and/or lower bounds for management items being considered for delegation to Florida (Options 2a-c). Also, further detail will be necessary to define “Minor modifications to existing allowable gear”, as analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.*

***IPT Note:** Delegating the setting of bag limits under Alternative 2, Option 2c of Action 7 seems to duplicate efforts in Alternative 8 of Action 11. If it is the Councils’ desire to delegate the setting and changing of bag limits for black grouper to the State of Florida as outlined in Action 7, then the Councils may wish to reconsider the establishment of bag limits for black grouper in the manner shown in Action 11. It would seem to be contradictory to consider delegating the setting of bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.*

***IPT Note:** The Councils should determine specifically which types of modifications to existing allowable gear will be permitted under this action.*

Action 8: Establish and Consolidate ABCs and ACLs for Black Grouper

Alternative 1. No action. Maintain the current recreational ACLs based on the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Manage black grouper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

Alternative 3. Use both Councils' agreed upon ABC for black grouper and allocate the recreational ACLs for the Gulf and South Atlantic:

Option 3a: Combine the current recreational allocations (i.e., 63.12% of the ACL for the South Atlantic and 27% of the ACL for the Gulf) for black grouper into a single recreational allocation.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations on average landings from 2009-2013

Option 3d: Base sector allocations on average landings from 2004-2013

The following action pertains exclusively to accountability measures. Accountability measures are used by the Councils to compensate for overages in a given fishing year, to decrease the probability that deleterious impacts to fisheries will persist for long time periods.

Action 9: Specify Accountability Measures for South Florida Species

Note: Under some circumstances more than one alternative could be selected as preferred.

Alternative 1: No action. Maintain the current recreational and commercial accountability measures (AMs) for yellowtail snapper, mutton snapper, and black grouper based on the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

South Atlantic: Commercial AM – In-season closure when the ACL is expected to be met and ACL reduced in following fishing season if species is overfished and ACL is exceeded.
Recreational AM – if ACL is exceeded, monitor landings in following season for persistence in landings and reduce the length of the following fishing season, if necessary.

Gulf: For Yellowtail Snapper and Mutton Snapper, if the combined commercial and recreational landings exceed the stock ACL, in-season AMs are in effect for the following year. If the combined landings reach or are projected to reach the stock ACL, both sectors will be closed for the remainder of that fishing year. For black grouper, this AM applies to the ACL for the other shallow-water grouper aggregate (black grouper, scamp, yellowmouth grouper, and yellowfin grouper).

Alternative 2: If the sum of the commercial and recreational landings exceeds the stock ACL, then during the following fishing year, if the sum of commercial and recreational landings reaches or is projected to reach the stock ACL, then the commercial and recreational sectors will be closed for the remainder of that fishing year. On and after the effective date of a closure, all sales, purchases harvest or possession of this species in or from the EEZ will be prohibited.

Option 2a: For yellowtail snapper

Option 2b: For mutton snapper

Option 2c: For black grouper

Alternative 3: If commercial landings reach or are projected to reach the commercial ACL, **NMFS** would close the commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession of this species in or from the EEZ would be limited to the recreational bag and possession limit. Additionally, if the commercial ACL is exceeded, **NMFS** would reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded.

Option 3a: For yellowtail snapper

Option 3b: For mutton snapper

Option 3c: For black grouper

Alternative 4: If recreational landings exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for a persistence in increased landings. If necessary, NMFS would reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if NMFS determines, using the best scientific information available, that a reduction is unnecessary.

Option 4a: For yellowtail snapper

Option 4b: For mutton snapper

Option 4c: For black grouper

Alternative 5: If recreational landings reach or are projected to reach the recreational ACL, NMFS would close the recreational sector for the remainder of the fishing year, unless, using the best scientific information available, NMFS determines that a closure is unnecessary.

Option 5a: If the species is overfished

Sub-option 5a(1): For yellowtail snapper

Sub-option 5a(2): For mutton snapper

Sub-option 5a(3): For black grouper

Option 5b: Regardless of stock status

Sub-option 5b(1): For yellowtail snapper

Sub-option 5b(2): For mutton snapper

Sub-option 5b(3): For black grouper

Alternative 6: The Councils would jointly set the ACL for the recreational and commercial sector. If the combined recreational ACL and commercial ACL is met or expected to be met, NMFS would close both sectors for the remainder of the fishing year.

Option 6a: yellowtail snapper

Option 6b: mutton snapper

Option 6c: black grouper

Modified by the South Atlantic Council to insert sub-options for each species under the two main options for the alternative

Note: The South Atlantic Council is considering changes to their accountability measures in Snapper-Grouper Amendment 34, which could change the no-action and action alternatives in Action 9. These changes have been transmitted to the Secretary of Commerce by the South Atlantic Council, and are currently in the NMFS review and rule-making process.

The South Atlantic Council would like for the language in Alternatives 3 and 4 to mirror similar language found in the South Atlantic Council's Generic Accountability Measures Amendment. The language proposed herein has been provided by the Southeast Regional Office to be more similar to language NMFS is using or recommending in multiple other documents.

The following actions pertain to seasonal closures in the shallow-water grouper fisheries of the Gulf of Mexico and the South Atlantic. Seasonal closures are time-based closures to fishing effort to conserve or protect fish stocks from harvest during periods of increased vulnerability, such as during spawning seasons.

Action 10. Modify Shallow-water Grouper Species Compositions and Seasonal Closures in the Gulf and South Atlantic

Alternative 1: No action. Retain the existing respective shallow-water grouper species compositions and seasonal closures in the Gulf and South Atlantic Councils.

Alternative 2: Remove the shallow-water grouper closure for all affected grouper species in the Gulf of Mexico and the South Atlantic:

Option 2a: from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida.

Option 2b: Throughout each Council's jurisdiction.

Alternative 3: Establish identical regulations for shallow-water grouper species compositions for the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida:

Option 3a: Adopt the Gulf shallow-water grouper species composition for the Gulf and South Atlantic.

Option 3b: Adopt the South Atlantic shallow-water grouper species composition for the Gulf and South Atlantic.

Option 3c: Specify a new and identical shallow-water species complex for the Gulf and South Atlantic.

Alternative 4: Establish identical regulations for the shallow-water grouper seasonal closures in the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida:

Option 4a: Adopt the Gulf shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 4b: Adopt the South Atlantic shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 4c: Establish new and identical regulations for shallow-water grouper seasonal closures in the Gulf of Mexico and the South Atlantic.

Alternative 5: Establish identical regulations for the shallow-water grouper seasonal closures throughout the Gulf and South Atlantic:

Option 5a: Adopt the Gulf shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 5b: Adopt the South Atlantic shallow-water grouper seasonal closures for the Gulf and South Atlantic.

Option 5c: Establish new and identical regulations for shallow-water grouper seasonal closures in the Gulf of Mexico and the South Atlantic.

Alternative 6: Modify the shallow-water grouper seasonal closure off Monroe County, Florida to allow harvest of other shallow-water grouper species and only close harvest of gag.

Action 11. Modify Black Grouper Fishery Closures and Bag Limits in the Gulf of Mexico and the South Atlantic.

Alternative 1: No Action – Do not modify black grouper recreational closures in the Gulf of Mexico or recreational and commercial closures in the South Atlantic. Maintain currently established seasonal bag limits in both the Gulf of Mexico and the South Atlantic, with black grouper included as a component of the shallow-water grouper and reef fish aggregate bag limits.

Alternative 2: Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf and of the recreational and commercial seasons in the South Atlantic.

Alternative 3: Establish a recreational seasonal closure for black grouper. (*Multiple options may be chosen*)

Option 3a: January

Option 3b: February

Option 3c: March

Alternative 4: Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Florida.

Alternative 5: Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Monroe County, Florida.

Alternative 6: Remove black grouper from recreational aggregate bag limits in the Gulf of Mexico.

Alternative 7: Remove black grouper from recreational aggregate bag limits in the South Atlantic.

Alternative 8: Establish a recreational bag limit for black grouper.

Option 8a: One fish/person/day

Option 8b: Two fish/person/day

Option 8c: Three fish/person/day

Option 8d: Four fish/person/day

Option 8e: Apply this bag limit only to the following area(s):

Sub-option 8a: Off Monroe County

Sub-option 8b: In federal waters off Florida

Sub-option 8c: In federal waters of the Gulf and the South Atlantic

Alternative 9: Modify the commercial seasonal closure for black grouper in the Gulf of Mexico and the South Atlantic.

Option 3a: January

Option 3b: February

Option 3c: March

Added by the South Atlantic Council

***IPT Note:** Establishing bag limits under Alternative 8 of Action 11 seems to duplicate efforts in Alternative 2, Option 2c of Action 7. If it is the Councils' desire to establish bag limits for black grouper in the manner shown in Action 11, then the Councils may wish to reconsider delegating the setting and changing of bag limits for black grouper to the State of Florida as outlined in Action 7.*

The South Atlantic Council wants to include discussion and a new alternative considering changes to commercial black grouper management, including seasonal closures and trip limits. These changes would affect the Gulf shallow-water grouper IFQ program.

The following actions pertain to modifications of landing and effort controls. Such regulations include size limits, bag limits, and permissible gear types. By modifying how these regulations influence fishing practices, the Councils can control the size and quantity of fish landed, and help to influence other factors including discard mortality.

Action 12: Harmonize bag and size limits for species in shallow-water grouper complex seasonal closures in Federal Waters Adjacent to Monroe County, Florida.

Alternative 1: No action – Retain the current bag and size limits for species in shallow-water grouper complex seasonal closures in federal waters adjacent to Monroe County, Florida.

Alternative 2: Harmonize the bag limits for species included in the shallow-water grouper seasonal closures in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

Alternative 3: Harmonize the size limits for species included in the shallow-water grouper seasonal closures in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

Added by the South Atlantic Council

IPT Note: *The IPT recommends the removal of Action 12, as it is outside of the scope of this amendment. Action 12 would require the addition (in the Gulf) or removal (in the South Atlantic) of species in the respective shallow-water grouper complexes (Action 10). Also, Action 12 would have implications for the Gulf and South Atlantic regions to a much greater extent than that outlined in the purpose of this amendment. Further, Alternative 3 of Action 10 already achieves the goal of Action 12, with respect to the South Florida region. If Action 12 remains necessary, it may be worthwhile to consider a separate amendment for this action, as it will encompass several additional species with multiple actions for each species.*

Action 13. Changes to Circle Hook Requirement in Gulf and South Atlantic Jurisdictional Waters

Alternative 1: No action – Retain the current hook requirements in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

Alternative 2: Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in the exclusive economic zone of the Gulf of Mexico.

Option 2a: For the recreational fishing sector

Option 2b: For the commercial fishing sector

Alternative 3: Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper south of 28° North latitude in the exclusive economic zone of the Gulf of Mexico.

Option 3a: For the recreational fishing sector

Option 3b: For the commercial fishing sector

Alternative 4: Require the use of circle hooks when fishing with natural bait for all snapper-grouper species south of 28° North latitude in the exclusive economic zone of the South Atlantic.

Option 4a: For the recreational fishing sector

Option 4b: For the commercial fishing sector

Alternative 5. Remove the requirement to use circle hooks when fishing with natural bait for all species in the snapper grouper complex north of 28° North latitude in the exclusive economic zone of the South Atlantic.

Option 5a: For the recreational fishing sector

Option 5b: For the commercial fishing sector

Alternative 6. Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in federal waters from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida

Option 6a: For the recreational fishing sector

Option 6b: For the commercial fishing sector

IPT Note: The IPT recommends the removal of Alternative 5, as it is outside of the scope of this amendment. The area being referenced in Alternative 5 includes areas north of the State of Florida.

The South Atlantic Council would like to retain Alternative 5, as it would allow them to address other aspects of Snapper-Grouper management in one document.

IPT Note: The Committee may wish to consider establishing safeguards to ensure that a vessel fishing for yellowtail snapper with hooks other than circle hooks is not also actively fishing for other reef fish species for which circle hooks are still required.

APPENDIX A. CONSIDERED BUT REJECTED ACTIONS AND ALTERNATIVES

Action 1: Modifications to the Fishery Management Plans of the Gulf and South Atlantic Fishery Management Councils

Alternative 1: No action. Do not modify the Reef Fish and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Alternative 2: Delegate management of any of the species listed below to the State of Florida.

Option 2a: yellowtail snapper

Option 2b: mutton snapper

Option 2c: black grouper recreational fishery only

Note: Alternative 2 would delegate all management including ABC, ACLs, management measures, etc.

Alternative 3: Manage each stock as a single unit with an overall combined multijurisdictional annual catch limits (ACLs).

Suggested wording from FWC Staff from minutes pages 125-127: The Gulf and South Atlantic Councils will agree to manage any of the species listed below with an overall ABC and an overall ACL. Each Council would agree to a recreational and commercial split. Both Councils will close their jurisdictions when the overall ACL is met.

Option 3a: yellowtail snapper

Option 3b: mutton snapper

Option 3c: black grouper

Alternative 4: Remove any of the species listed below from the Reef Fish and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

Option 4a: yellowtail snapper

Option 4b: mutton snapper

Option 4c: black grouper

Alternative 5: Remove any of the species listed below from the Reef Fish Fishery Management Plan of the Gulf Council and request the Secretary of Commerce designate the South Atlantic Council as the responsible Council.

Option 5a: yellowtail snapper

Option 5b: mutton snapper

Alternative 6: Remove any of the species listed below from the Snapper Grouper Fishery Management Plan of the South Atlantic Council and request the Secretary of Commerce designate the Gulf Council as the responsible Council.

Option 6a: yellowtail snapper

Option 6b: mutton snapper

Rationale: Action 1 was removed by the Committee, and the alternatives therein were merged within other remaining Actions in the document.

Action 3: Allocate Yellowtail Snapper Sector Annual Catch Limits to the State of Florida and Create a Landings Allowance for other Gulf and South Atlantic States

Alternative 2. Use both Councils' agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 2a: Use the South Atlantic Council's current sector allocation formula (bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Alternative 3. Use both Councils' agreed upon ABC for yellowtail snapper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 75% of the ABC for South Atlantic Council jurisdictional waters, and 25% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

Option 3a: Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations for waters off Florida on average landings from 2008-2012

Option 3d: Base sector allocations for waters off Florida on average landings from 200x-20xx

Option 3e: Employ some other allocation formula

Alternative 4. Create a landings allowance for yellowtail snapper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

Option 4a: Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

Option 4b: Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

Rationale: Alternative 2a was removed after a mathematical bias was identified with the proposed "bowtie" approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

Action 4: Delegate Commercial and Recreational Management of Mutton Snapper to the State of Florida

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for Mutton Snapper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Option 2e: Fishing year

Alternative 3: Determine specific commercial management items for delegation to the State of Florida for Mutton Snapper:

Option 3a: Size limits

Option 3b: Seasons

Option 3c: Commercial trip limits

Option 3d: Minor modifications to existing allowable gear

Option 3e: Fishing year

Rationale: Alternatives 2e and 3e were removed after the Committee determined that setting the fishing year should remain a Council responsibility, in conjunction with determining ABCs, ACLs, and AMs.

Action 5: Allocate Mutton Snapper Sector Annual Catch Limits to the State of Florida and Create a Bycatch Allowance for other Gulf and South Atlantic States

Alternative 2. Use both Councils' agreed upon ABC for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

Option 2a: Use the South Atlantic Council's current sector allocation formula (bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Alternative 3. Use both Councils' agreed upon ABC for mutton snapper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 82% of the ABC for South Atlantic Council jurisdictional waters, and 18% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

Option 3a: Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations for waters off Florida on average landings from 2008-2012

Option 3d: Base sector allocations for waters off Florida on average landings from 200x-20xx

Option 3e: Employ some other allocation formula

Alternative 4. Create a landings allowance for mutton snapper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

Option 4a: Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

Option 4b: Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

Rationale: Alternative 2a was removed after a mathematical bias was identified with the proposed “bowtie” approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

Action 8: Delegate Recreational Management of Black Grouper to the State of Florida

Alternative 2: Determine specific recreational management items for delegation to the State of Florida for black grouper:

Option 2a: Size limits

Option 2b: Seasons

Option 2c: Bag limits

Option 2d: Minor modifications to existing allowable gear

Option 2e: Fishing year

Rationale: Alternative 2e was removed after the Committee determined that setting the fishing year should remain a Council responsibility, in conjunction with determining ABCs, ACLs, and AMs.

Action 9: Allocate Black Grouper Recreational Annual Catch Limits to the State of Florida and Create a Recreational Bycatch Allowance for other Gulf and South Atlantic States

Alternative 2. Use both Councils' agreed upon ABC for black grouper and allocate the recreational ACLs for the Gulf and South Atlantic:

Option 2b: Use the South Atlantic Council's current sector allocation formula (Bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the

weighting given to the mean of the landings from 1991-2008, and 50% on the mean of the landings from 2006-2008.

Alternative 3. Use both Councils' agreed upon ABC for black grouper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 47% of the ABC for South Atlantic Council jurisdictional waters, and 53% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

Option 3a: Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1991-2008, and 50% on the mean of the landings from 2006-2008.

Option 3b: Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

Option 3c: Base sector allocations for waters off Florida on average landings from 2008-2012

Option 3d: Base sector allocations for waters off Florida on average landings from 200x-20xx

Option 3e: Employ some other allocation formula

Alternative 4. Create a recreational landings allowance for black grouper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

Option 4a: Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

Option 4b: Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

Option 4c: Adjust ABC by 3% to address landings in the other Gulf and South Atlantic States.

Option 4d: Adjust ABC by 4% to address landings in the other Gulf and South Atlantic States.

Rationale: Alternative 2b was removed after a mathematical bias was identified with the proposed "bowtie" approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

Action 10: Specify Accountability Measures for South Florida Species

Alternative 3: If commercial landings as estimated by the Science and Research Director reach or are projected to reach the commercial ACL, the Regional Administrator shall publish a notice to close the commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession of this species in or from the EEZ is limited to the bag and possession limit. Additionally,

Option 3a: If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished.

Option 3b: If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the total ACL (commercial ACL and recreational ACL) is exceeded.

Option 3c: If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded.

Alternative 4: If recreational landings, as estimated by the Science and Research Director, exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for a persistence in increased landings.

Option 4a: If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

Option 4b: If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

Option 4c: If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

Rationale: Alternatives 3a, 3b, 4a, and 4b were removed after a recommendation from the South Atlantic Council, which recently passed updated accountability measures in Snapper Grouper Amendment 34. Amendment 34 is currently undergoing regulatory review.

Action 13. Changes to Circle Hook Requirement in Gulf and South Atlantic Jurisdictional Waters

Alternative 3: Remove the requirement to use circle hooks when fishing with natural bait for all reef fish south of 28° North latitude in the exclusive economic zone of the Gulf of Mexico.

Option 3a: For the recreational fishing sector

Option 3b: For the commercial fishing sector

Rationale: Alternative 3 was because of the documented positive biological effects identified for red snapper, which have shown decreased hooking mortality when caught with circle hooks. Because red snapper are undergoing rebuilding in the Gulf, the Committee elected to remove this alternative, so as to not jeopardize the rebuilding timeline for red snapper by potentially introducing additional discard mortality.

Charge to the Reef Fish Headboat Advisory Panel

The charge to the Reef Fish Headboat AP is to make recommendations to the Council relative to the design and implementation of flexible measures for the management of reef fish for the headboat component of the for-hire sector.

**Standing and Special Reef Fish SSC
Meeting Summary
Tampa, Florida
March 11-12, 2015**

The meeting of the Standing and Special Reef Fish SSC was held March 11-12, 2015. The Standing, Special Shrimp, and Special Spiny Lobster SSC also met on March 10, 2015. That portion of the meeting is in a separate summary. The Standing and Special Reef Fish SSC did not have a quorum present. Therefore, the SSC did not vote to make OFL and ABC recommendations for mutton snapper and hogfish. OFL and ABC for those stocks will be reviewed at a future meeting.

The agenda was accepted with changes to the order of presentations and the removal of OFL and ABC recommendations for mutton snapper and hogfish. The following minutes were accepted by acclamation as written.

- January 2014 Standing and Special Reef Fish SSC summary minutes
- Reef Fish portion of January 2011 Standing, Special Spiny Lobster, and Special Reef Fish SSC summary minutes

Dr. Will Patterson announced that he would be the SSC representative at the March 30-April 2, 2015 Council meeting in Biloxi, Mississippi.

Reorganization of SSCs as Approved by Council

Mr. Doug Gregory reported that the Council had approved combining the Standing, Ecosystem, and Socio-economic SSCs into a single SSC, with the creation of a new Special Socio-economic SSC. A new online application form will be available on the Council website soon, at which time applications will be accepted to the SSCs until 45 days before the June 2015 Council meeting. Appointments to the reorganized SSCs will be made at the June Council meeting.

FWC SEDAR 15A Mutton Snapper Update Assessment

The SSC did not have a quorum present, and therefore did not vote to recommend mutton snapper OFL and ABC. However, the SSC did review the update assessment and voted on whether to accept it. Mr. Joe O'Hop from Florida FWRI presented the assessment. The South Atlantic and Gulf of Mexico regions were treated as one for the SEDAR 15A assessment and for this update. A statistical catch-at-age model (ASAP) was used as the assessment model. Several suggestions for improvements made by the SEDAR 15A Review Panel were incorporated into this assessment. Changes in the update assessment included:

- Update incorporates
 - New discard data (rates, lengths, dispositions)
 - Revised maturity schedule, new sex ratio data (~1:1)
 - Re-calculated growth curves, M (but similar to SEDAR 15A)
 - New genetics data (still one stock)

- Stochastic Age-Length-Key (but still external to model)
- Fishery ALK and Direct aging as sensitivities
- Newer methods for constructing indices of abundance
- ALK- age comps for discards, indices of abundance
- Selectivity modeled with logistic and double logistic curves
 - And linkage of fishery dependent indices to fleets
- Adjusted 1981-1991 Head Boat Survey landings and discards
 - [SEDAR41-DW40, August 2014]
- Adjusted MRFSS/MRIP time series, by coast, year, and mode
- Base run, eighty-one sensitivity runs, 10-year retrospective, likelihood profiling, and MCMC (multiple chains)

Indices generally followed the same trends as in the previous assessment. One difference in the results of the update assessment compared to the SEDAR 15A benchmark assessment was a change in the maturity curves. The average length at 50% maturity was reduced from 402 mm (15.8 inches) TL to 388 mm (15.3 inches) total length. The age at 50% maturity was also reduced from 3.71 years to 2.72 years.

A plot of Markov Chain Monte Carlo results for SSB-ratio and F-ratio was made using $F_{30\% SPR}$ as the proxy for F_{MSY} . None of the F-ratios were above 1 (overfishing not occurring). Only 6.2% of the SSB-ratios were less than MSST ($1-M*B_{MSY}$) and only 24.3% were less than 1, indicating that the stock is not overfished (Figure 1).

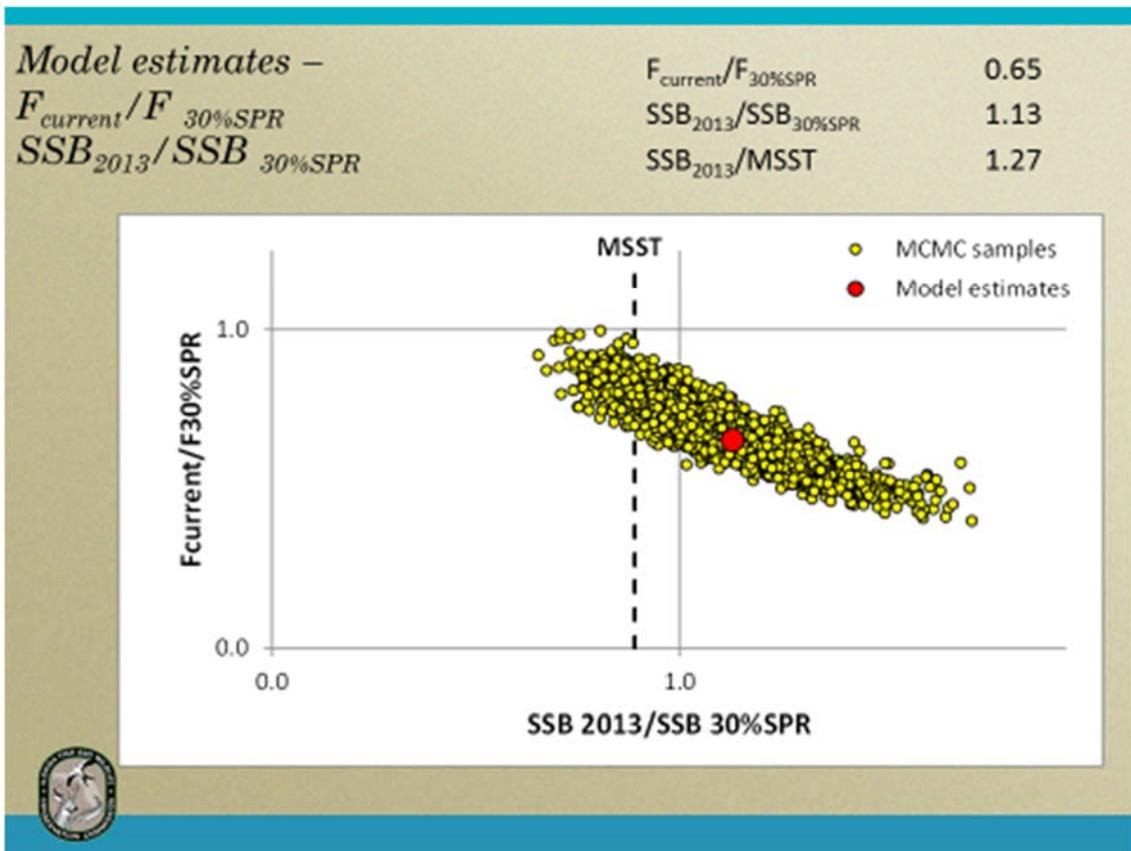


Figure 1. Plot of Markov Chain Monte Carlo results for SSB-ratio and F-ratio

Results of most of the sensitivity runs also indicated the stock was below the overfishing threshold and above MSST (Figure 2). Exceptions were runs using low natural mortality, direct ageing, no age-composition indices (age-structured surplus production model), or with only a single fishery independent index (RVC or Riley's Hump) for model tuning.

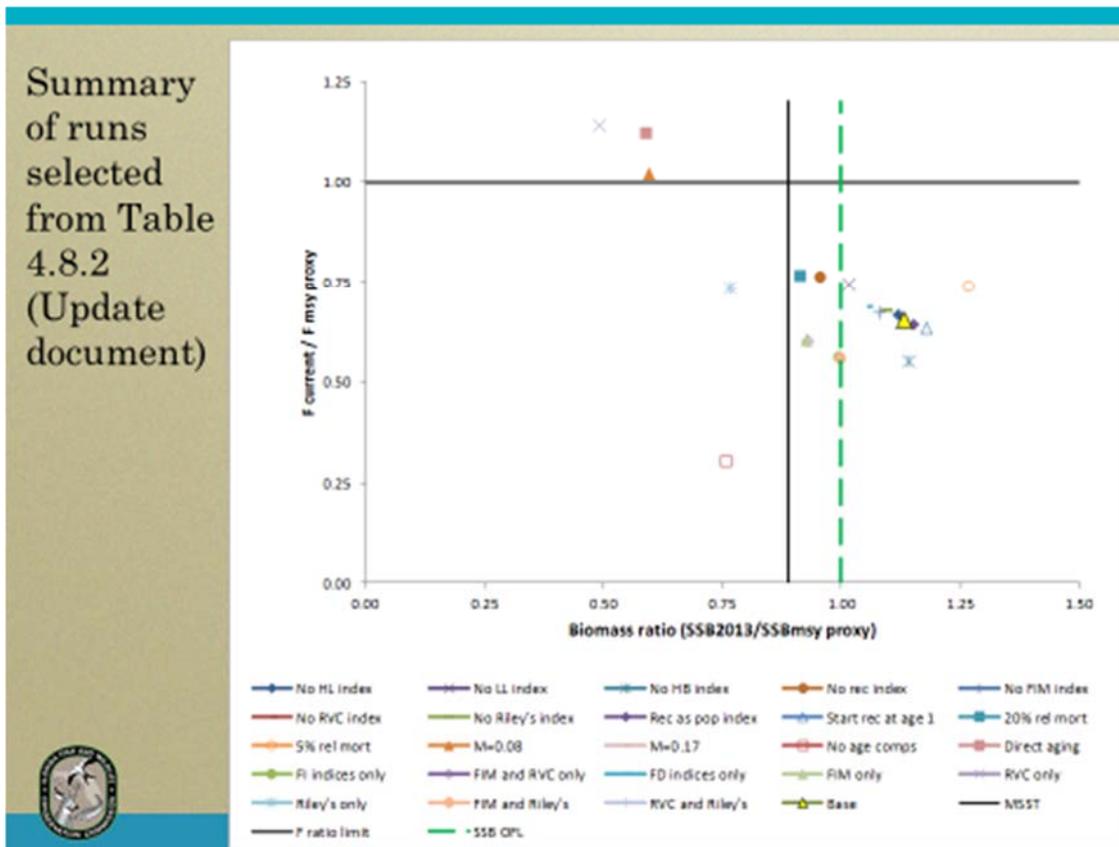


Figure 2. Summary of sensitivity runs.

Upon reviewing the update assessment, the SSC passed the following motion.

The Committee accepts that the 2015 SEDAR 15a update assessment of mutton snapper represents the best available science and is suitable for the development of management advice.

Motion passed 9-0

Since a quorum is needed to vote on ABC projections, the SSC did not review projections or recommend OFL and ABC. Furthermore, some SSC members expressed concern about fitting the model with age composition estimates derived from age-length keys when direct aging of the catch was available. The SSC requested additional information to examine that fit versus model runs in which age composition was estimated via direct aging of the catch.

Approximately 85% of the mutton snapper stock occurs in the South Atlantic Council's jurisdiction. The South Atlantic SSC is scheduled to review the mutton snapper update assessment and vote on OFL and ABC when it meets in April. When the Gulf SSC meets again in May, it will review the South Atlantic SSC's recommendations and the results of the additional information requested. At that time, the SSC will decide whether it concurs with the South Atlantic SSC's recommendations.

Minimum Stock Size Threshold Options Paper

Dr. Shannon Cass-Calay reviewed an analysis prepared by the SEFSC of the probability that spawning stock will fall below the MSST in the absence of overfishing when $MSST = (1-M) * B_{MFMT}$ versus other MSST reference points. This analysis was requested by the interdisciplinary planning team that is developing a proposed amendment to adjust MSST for certain stocks managed by the Gulf Council. The analysis modeled three stocks using different proxies for MFMT (F_{MSY} for bluefin tuna, F_{MAX} for vermilion snapper and $F_{30\% SPR}$ for gray triggerfish). For these stocks, estimated natural mortality (M) ranged from 0.14 to 0.27. In the model, abundance was varied randomly while the stock was fished at MFMT. Results showed that fewer than 5% of the model runs resulted in spawning stock levels below MSST at either $(1-M) * B_{MFMT}$ or $0.75 * B_{MSY}$. None of the model runs resulted in spawning stock levels below MSST at $0.50 * B_{MSY}$. These results indicate that for the stocks examined, $(1-M) * B_{MFMT}$ appears to be a sufficient buffer against stocks dropping below MSST due to natural fluctuations. However, lower values of M did result in higher probabilities of the stock dropping below MSST despite not experiencing overfishing. As a result, the relationship may breakdown for very small levels of $M < 0.1$, in which case one might wish to adopt a definition for MSST that does not exceed $0.9 * B_{MFMT}$.

SSC members suggested that the analysis be conducted for stocks that have a very low M . One SSC member noted that the simulations did not account for all sources of uncertainty, and in his experience $0.75 * B_{MFMT}$ seemed to produce better results than $(1-M) * B_{MFMT}$. It was pointed out that in setting MSST, the Council needs to consider the costs associated with different levels of MSST. If MSST is only slightly below B_{MFMT} , there is a risk of unnecessarily having to implement a rebuilding plan if the stock fluctuates below MSST but may recover on its own. On the other hand, if MSST is far below B_{MFMT} , the likelihood of unnecessarily implementing a rebuilding plan is reduced, but the cost of rebuilding from a lower MSST will be greater.

Mr. Steven Atran reviewed the actions and alternatives in the MSST options paper. In Action 1, sub-options would define low M as either 0.15, 0.20, or 0.25. Based on the SEFSC analysis, $M=0.1$ might be worth considering as a low M options, and $0.90 * B_{MFMT}$ might be worth considering as an alternative MSST. At the other end of the low M range, SSC members questioned whether 0.25 should be considered low M . Only two stocks in the Gulf for which M has been estimated are above that level; greater amberjack ($M = 0.28$) and gray triggerfish ($M = 0.27$).

SEDAR 45 Vermilion Snapper Terms of Reference and Project Schedule

Dr. Julie Neer reviewed the terms of reference for the SEDAR 45 vermilion snapper standard assessment. Under TOR #2, it was noted that there are no new indices of abundance at this time, just additional data for existing indices.

Dr. Cass-Calay noted some changes from the previous update assessment that the Science Center intended to incorporate into the standard assessment. One change is that the model will be fitted to the shrimp effort data series rather than assume a mean shrimp bycatch throughout the series. The Science Center is also reevaluating how it produces discard estimates relative to the previous SEDAR 9 benchmark assessment. Dr. Cass-Calay stated that the Science center was not aware of any new information for vermilion snapper at this time, but it would like to incorporate any new fisheries-independent indices that become available. She asked that anyone who has new information about vermilion snapper that they would like to have considered in the assessment let her know.

An SSC member asked if inputs from the Deepwater Horizon spill could be incorporated into the assessment if feasible. Dr. Neer suggested that this could possibly be included as an episodic event under TOR #2. However, it was noted that the indices would have to show a decline in abundance in order to estimate an episodic M.

A suggestion was made to include the word “standard” in the title of the terms of reference. Dr. Neer responded that they had moved away from identifying assessments in the title as benchmark, standard, or update because of the public perception that standard and update assessments were a lower quality. However, she agreed to include somewhere in the TOR a notation that this is a standard assessment.

A request was made from staff to include in the TOR #5 a constant catch ABC projection that is equivalent to the annual ABC projection during the years for which the SSC makes a projection. A suggestion was made that the mean of the ABCs might serve as a constant catch alternative, but it would need to be analyzed further.

An SSC member suggested that, rather than include all tables and figures in the assessment document, that they be kept in an online digital archive with links from the assessment document. This would allow the document to be smaller in size while allowing more tables and figures to be made accessible than in the current format. Several SSC members expressed support for this approach. Dr. Neer noted that this would be a major change in how assessment documentation is provided.

Following the above discussion and suggestions, the SSC passed the following motion.

The Committee accepts the SEDAR 45 Vermilion Snapper TOR as modified.

Motion passed unanimously.

Review of Draft National Standard 1 Guideline Revisions

Mr. Steven Atran reviewed a NMFS presentation on proposed revisions to the Magnuson-Stevens Act National Standard 1, 3, and 7 Guidelines. This was presented at the recent National SSC workshop and Council Coordinating Committee meeting, and will be presented at Council

meetings over the next couple of months. Mr. Atran also review the marked up document containing the proposed changes.

Under Rebuilding: Adequate Progress, the marked-up text contains a sentence on page 21 that states, “The Secretary shall review rebuilding plans at routine intervals that may not exceed two years...” It was pointed out that the Generic ACL/AM Amendment requires that Council staff examine inclusion/exclusion of species and species groupings in fishery management plans for suitability every five years. However, the Generic ACL/AM amendment provision may be more applicable to the National Standards guidelines section on stocks that require conservation and management than to the section on adequate progress for rebuilding plans.

The presentation included a slide that stated that the annualized expression of $OY = ACL$. The marked-up text included on page 16, under “Relationship between OY and the ACL framework”, the statement, “An annual OY cannot exceed the ACL.” SSC members felt that this was reversed and should read, “An ACL cannot exceed annual OY.” This led to a discussion concerning the relationship between OY, ACL and ACT. Several SSC members felt that management should move from being driven by buffers to stay away from limits (MSY) to being target (OY) based. One SSC member suggested that this could be accomplished by setting $ACT = OY$, and then setting ACL at some level between ACT and OFL depending on how large a buffer is needed. This would make ACT the main reference point for management. It was pointed out that not all Councils use ACT, and the Gulf Council considers ACT unnecessary for IFQ managed sectors.

Under Phased-in ABC Control Rule, SSC members felt that clarification was needed as to what was meant by a “comprehensive analysis”. It was suggested that a phase-in could result in overfishing continuing during the phase-in, which would violate the Magnuson-Stevens Act requirement to end overfishing immediately unless the catch was kept below OFL. However, if the phase-in catch is kept below OFL, the buffer between OFL and ABC for many Gulf stocks is so small that there would be little benefit to a phase-in. In addition, a phase-in would need to be incorporated into ABC projections.

Under the Carryover ABC Control Rule, this provision does not include any mention of uncertainty in the estimation of catches.

Review of NMFS Climate Strategy

Dr. Roger Griffis, NOAA Office of Habitat Conservation, made a presentation via webinar of the NMFS Draft Climate Science Strategy. An SSC member noted that the Southeast Fisheries Science Center has an integrated ecosystem assessment group that is developing processes for ecosystem assessments, but is running into funding and staffing problems. Dr. Griffis responded that ongoing examples such as this would be useful in his attempts to gain funding for climate science. He noted that NOAA has ranked climate science as one of its top 3 priorities for FY 2016, and one of its top two priorities for FY2017. It was noted that increasing capacity to conduct climate-informed management strategy evaluations would likely require that each Science Center hire an MSE specialist. The Centers might consider diverting existing staff from

stock assessments, but NMFS already has a shortage of assessment scientists and this would reduce NMFS's ability to do stock assessments.

It was noted that the Draft Climate Science Strategy does not contain any mention of mitigation efforts or technology to reduce human impacts such as increased use of hybrid engines. Dr. Griffis responded that NMFS might be able to partner with other agencies to address this issue.

An SSC member asked if the Draft Climate Science Strategy incorporated actions related to state responsibilities and needs. Climate change actions taken by the states could have impacts on species that inhabit state waters during early periods of their life cycle. Dr. Griffis responded that some of the state information needs are the same as the federal needs, but that he would reach out to the state agencies for input.

An SSC member asked how closely NMFS will work with Landscape Conservation Cooperatives (LCCs) that are working on similar issues. Dr. Griffis responded that he recognizes the importance of LCCs and efforts are being made to work with them.

A question was asked as to how often ecosystem status reports would be updated. Every two to three years was suggested, but this was felt to be too infrequent. Some Science Centers produce quarterly status reports which allow them to more quickly identify any changes.

National SSC Workshop V Summary

SSC members and staff who attended the National SSC V Workshop in Honolulu gave their impressions of the meeting. In general, the meeting was felt to be well organized and productive, but it attempted to address too many issues in too short a time. Of note was the introduction of the term, "model resistant stocks", a term which has been applied in some regions to stocks for which fits of assessment models always seem to be poor. SSC attendees felt that this term was a misnomer. Stocks are not model resistant. Rather, in these cases the selected and parameterized models are mis-specified, or other sources of error exist, such that stock dynamics are not fully accounted for by the models.

One SSC attendee expressed concern about the need to incorporate stakeholder needs into the process. A staff member noted an almost complete lack of discussion of recreational fishery concerns. It was noted that, in Hawaii, anyone can buy a commercial license for \$20 and become a commercial fisherman.

Western Pacific Council staff is in the process of consolidating comments made by the workshop participants, and will circulate a draft in the near future. Their immediate objective is to formulate recommendation from the workshop to bring to the June CCC meeting. The next National SSC workshop will be hosted by the Pacific Fishery Management Council.

Ecosystem Working Group Summary

Dr. Morgan Kilgour reported the results of a meeting of the Ecosystem Working Group held September 19, 2014. The working group developed an initial set of suggested goals and

objectives incorporating ecosystem based fisheries management into current assessments, and developed approaches for identifying and prioritizing ecosystem and socioeconomic information needs for fisheries managed by the Council. Their recommendations were reviewed by the Ecosystem SSC on February 25, 2015, which recommended that the working group continue working on developing a set of suggested goals and objectives.

Other Business

Starting times for SSC meetings

Council staff asked if SSC members would prefer that meetings start at 8:30 am on the first day or at 1:00 pm which is currently done for most meetings. Several SSC members responded that they would prefer the earlier start if it meant the meeting could last two days instead of three days.

SSC Members Present

Standing SSC

William Patterson, Chair
*Luiz Barbieri, V. Chair
Shannon Cass-Calay
Bob Gill
*Walter Keithly
*Kai Lorenzen
Jim Tolan

Special Reef Fish SSC

Robert Ellis
John Mareska

Council Staff

Steven Atran
Charlotte Schiaffo
Morgan Kilgour
Doug Gregory
John Froeschke
Ryan Rindone

Council Member

Camp Matens

Others Present

Michael Drexler-OC
Bill Kelly- FKCFCA
Chad Hanson-PEW
Julie Neer-SEDAR
Joe O'Hop-FWC
Jim Nance-NMFS

* Not present on last day