

Agenda
Shrimp Management Committee

Gulf of Mexico Fishery Management Council

Hilton Riverside Hotel
Jefferson Ballroom
New Orleans, Louisiana

Monday, August 10th 2015
3:00 pm– 4:00 pm

- I. Adoption of Agenda (**Tab D, No. 1**) – Bosarge
- II. Approval of Minutes (**Tab D, No. 2**) – Bosarge
- III. Action Guide and Next Steps (**Tab D, No. 3**) – Kilgour
- IV. Revised Draft Options Paper for Shrimp Amendment 17 – Addressing the Expiration of the Shrimp Permit Moratorium (**Tab D, No. 4**) - Kilgour
 - a. Committee Recommendations – Bosarge
- V. Other Business – Bosarge
 - a. Update on Changes in TED regulations in Louisiana – Fischer

Members:

Bosarge, Acting Chair

Vacant, Chair

Vacant, Vice Chair

Crabtree/Branstetter

Donaldson

Pausina/Fischer

Riechers/Robinson

Staff: Kilgour

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL
SHRIMP MANAGEMENT COMMITTEE

Marriott Beachside Hotel Key West, Florida

June 10, 2015

VOTING MEMBERS

Corky Perret.....Mississippi
Leann Bosarge.....Mississippi
Roy Crabtree.....NMFS, Florida
Dave Donaldson.....GSMFC
Myron Fischer (designee for Randy Pausina).....Louisiana
Harlon Pearce.....Louisiana
Lance Robinson (designee for Robin Riechers).....Texas

NON-VOTING MEMBERS

Kevin Anson.....Alabama
Martha Bademan (designee for Nick Wiley).....Florida
Doug Boyd.....Texas
Jason Brand.....USCG
Pamela Dana.....Florida
Dale Diaz (designee for Jamie Miller).....Mississippi
John Greene.....Alabama
Campo Matens.....Louisiana
John Sanchez.....Florida
Greg Stunz.....Texas
David Walker.....Alabama
Roy Williams.....Florida

STAFF

Steven Atran.....Senior Fishery Biologist
Assane Diagne.....Economist
John Froeschke.....Fishery Biologist/Statistician
Doug Gregory.....Executive Director
Karen Hoak.....Administrative and Financial Assistant
Morgan Kilgour.....Fishery Biologist
Ava Lasseter.....Anthropologist
Mara Levy.....NOAA General Counsel
Emily Muehlstein.....Fisheries Outreach Specialist
Charlene Ponce.....Public Information Officer
Ryan Rindone.....Fishery Biologist/SEDAR Liaison
Bernadine Roy.....Office Manager
Charlotte Schiaffo.....Research & Human Resource Librarian
Carrie Simmons.....Deputy Director

- 1
- 2 **OTHER PARTICIPANTS**
- 3 Pam Anderson.....Panama City Beach, FL
- 4 Steve Branstetter.....NMFS
- 5 Shane Cantrell.....Galveston Charter Fleet, TX
- 6 Martin Fisher.....FL
- 7 Sue Gerhart.....NMFS
- 8 Richard Gomez.....Key West, FL
- 9 Frank Helies.....Tampa, FL
- 10 Scott Hickman.....Galveston, TX
- 11 Judi Jamison.....FL
- 12 Bart Niquet.....Panama City, FL
- 13 Chris Niquet.....Panama City, FL
- 14 Kelli O'Donnell.....NMFS Contractor, Summerland Key, FL
- 15 Bonnie Ponwith.....SEFSC
- 16 George Sedberry.....NOAA
- 17 Rick Turner.....Marathon, FL
- 18 Daniel Willard.....EDF, Austin, TX

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20

21 The Shrimp Management Committee of the Gulf of Mexico Fishery
 22 Management Council convened at the Marriott Beachside Hotel, Key
 23 West, Florida, Wednesday morning, June 10, 2015, and was called
 24 to order at 9:11 a.m. by Chairman Corky Perret.

25

26 **ADOPTION OF AGENDA**

27 **APPROVAL MINUTES**

28 **ACTION GUIDE AND NEXT STEPS**

29

30 **CHAIRMAN CORKY PERRET:** I would like to call the Shrimp
 31 Management Committee to order. Perret is here and, Mr. Pearce,
 32 are you still with us?

33

34 **MR. HARLON PEARCE:** I am here, dude. I am here.

35

36 **CHAIRMAN PERRET:** Thank you, sir. Ms. Bosarge is here and Dr.
 37 Branstetter and, Mr. Donaldson, are you here? Yes. Mr. Fischer
 38 is around somewhere and Mr. Robinson is here and so the first
 39 item of business is Adoption of Agenda and that's Tab D-1. Any
 40 additions or modifications to the agenda? Any opposition to
 41 adopting the agenda as presented? Hearing none, the agenda is
 42 adopted. Morgan, there you are.

43

44 The second item is Approval of Minutes, Tab D, Number 2. Any
 45 modifications to the minutes? If not, I will entertain a motion
 46 for approval.

47

48 **MS. LEANN BOSARGE:** Make the motion to approve.

1
2 **CHAIRMAN PERRET:** It's moved by Ms. Bosarge and seconded by Mr.
3 Donaldson. Any opposition to approving the minutes? Hearing
4 none, so ordered. The next item, Dr. Kilgour, is the Action
5 Guide and Next Steps. We have a couple of issues to discuss and
6 so, Dr. Kilgour, do you want to take that?

7
8 **FINAL ACTION SHRIMP AMENDMENT 15 - STATUS DETERMINATION CRITERIA**
9 **FOR PENAEID SHRIMP AND ADJUSTMENTS TO THE SHRIMP FRAMEWORK**
10 **PROCEDURE**

11
12 **DR. MORGAN KILGOUR:** Sure. If we could just go through the
13 action guide as we come upon them in the agenda, that would be
14 helpful. The first thing on the agenda for me to discuss would
15 be Amendment 15. We have added a new alternative under Action
16 1.3 to have an MSY-based overfished threshold and I would like
17 the committee to review that and decide if --

18
19 **EXECUTIVE DIRECTOR DOUG GREGORY:** Excuse me, Morgan. We need
20 more quiet in the audience. If you want to talk, go outside,
21 please. The sound just echoes through the room. Thank you.

22
23 **DR. KILGOUR:** If I could just delve into Amendment 15, then we
24 can review that alternative, if that would be all right with
25 you, Mr. Chair.

26
27 **CHAIRMAN PERRET:** Morgan, that was the technical work and you
28 and the Center and whomever else, the Regional Office shrimp
29 people, worked out, right?

30
31 **DR. KILGOUR:** Correct. At the last meeting, you guys looked at
32 some MSY-based alternatives and we didn't have one for the
33 overfished threshold yet and we do have one now and so I wanted
34 to present that to you. You've already selected preferred
35 alternatives for all the other actions, but you might consider
36 looking at this new alternative and if you wanted to change it
37 to an MSY-based alternative, we could do that.

38
39 **CHAIRMAN PERRET:** Okay, but on the previous two actions, we've
40 already selected preferred alternatives and so unless someone
41 wants to make a suggested change, we don't need to go to Action
42 1, which is modify stock status. Action 1 is modify MSY and
43 we've got a preferred and so is everybody satisfied with the
44 preferred? Okay.

45
46 The second one, 1.2, modify overfishing threshold, we have a
47 preferred and does anybody want -- Okay. So then we get to
48 Action 1.3 and so go ahead, Morgan. This is the new one, right?

1
2 **DR. KILGOUR:** Right and I can give the *Reader's Digest* version
3 of the first three alternatives, since you've already seen them
4 multiple times. The first one is leaving it status quo, which
5 isn't consistent with the current model.

6
7 The second one is using the model, but we're using an MSST value
8 with a buffer or a 95 percent confidence limit and not a buffer.
9 The third one doesn't incorporate the confidence limit and,
10 again, that's just based on the MSST value out of the model and
11 the fourth alternative is the new alternative and I will go
12 through that one.

13
14 It's basically an MSST based on the spawning stock biomass at
15 MSY and they're using the same years as we've used in all the
16 other alternatives and so it's 1984 to 2012 and the values will
17 be updated every five years through the framework procedure
18 unless changed earlier by the council.

19
20 Currently, the Stock Synthesis Model produces the following
21 values for spawning stock biomass at MSY and that's brown shrimp
22 at just over six-million pounds of tails and white shrimp at
23 just over 365-million pounds of tails and pink shrimp at just
24 over twenty-three million pounds of tails.

25
26 **MS. BOSARGE:** Morgan, we had a lot of discussion on this one at
27 the last committee meeting and Alternative 4 seems to encompass
28 everything that we discussed. Now, I know we did have a
29 preferred alternative as Alternative 2, but it looks like we
30 need to shift that now, based on the technical reading of
31 Alternative 4, to be our preferred alternative now and is there
32 any committee feedback on that?

33
34 **CHAIRMAN PERRET:** That's what I think too. Morgan, do you want
35 to comment on Ms. Bosarge's --

36
37 **DR. KILGOUR:** I think I probably would need a motion, right?

38
39 **MS. BOSARGE:** I would like to make a motion that Alternative 4
40 on Action 1.3 be our preferred alternative.

41
42 **MR. PEARCE:** I will second.

43
44 **CHAIRMAN PERRET:** You have heard the motion and Mr. Pearce
45 seconds and you've heard some discussion. Is there any
46 additional discussion on making Alternative 4 under Action 1.2
47 the preferred?

48

1 **MS. MARA LEVY:** I just wanted to clarify or ask a question. In
2 the other actions when we had the MSY Alternative 4 added, there
3 was some discussion below the alternatives about how Alternative
4 4 wasn't really comparable to the other ones because of the
5 difference in the way it's calculated and I'm assuming that the
6 same thing applies here, but that same explanation isn't there
7 and so I just wanted to make sure that was correct.

8
9 **DR. KILGOUR:** Yes, the same thing applies here, where you can't
10 really compare the previous two alternatives that were presented
11 with this one, because this one is based on an average over the
12 -- This is based on a summation over the year for pink and white
13 shrimp and for brown shrimp, it's a seasonal export from the
14 SSB, but if that's not in the discussion then it should be and
15 so I will make sure that that language is added.

16
17 **MS. BOSARGE:** I think on page 16 of the document, the first
18 paragraph on the page, I think it does address that in
19 Alternative 4 and it says that these values are not comparable
20 to Alternatives 2 and 3, as those are based on minimum monthly
21 outputs of the Stock Synthesis Model.

22
23 **MS. LEVY:** Right. It just was in the other ones and it was like
24 right under the alternative and so it was very clear why they
25 were so different and so that's fine. My suggestion would just
26 be to keep it the same and add the same explanation right under
27 the alternatives.

28
29 **DR. KILGOUR:** That's fine. I will do that.

30
31 **CHAIRMAN PERRET:** Any other discussion on the motion? Do I have
32 to read that whole thing?

33
34 **EXECUTIVE DIRECTOR GREGORY:** Technically no. It's on the board
35 and everybody can see it.

36
37 **CHAIRMAN PERRET:** Okay. The motion is in Action 1.3 that
38 Alternative 4 be the preferred alternative. **All in favor**
39 **signify by saying aye; opposed like sign. The motion passes.**

40
41 Next on the agenda, and I know we'll take it up after and see if
42 there's any discussion on the codified text and that's next.
43 There probably will be very little or none, but the next item is
44 4(b), the codified text. Does anybody have any comments on the
45 codified text? Mara.

46
47 **MS. LEVY:** I will just note that it's in your briefing book and
48 actually really the only thing that's being changed in the

1 codified text relates to the framework language, because we
2 don't codify the MSYs and the overfished and the overfishing
3 level and so that's not going to be in there, but there was an
4 action that addressed the framework language and so that's what
5 is in the codified text.

6
7 **CHAIRMAN PERRET:** Thank you, Mara. Any other discussion on the
8 codified language or proposed codified language? Okay. Now we
9 will entertain a motion to recommend Amendment 15 as necessary
10 and appropriate with editorial license and authority given to
11 staff and final approval authority given to the Council Chair
12 and so does someone want to make that motion?

13

14 **DR. STEVE BRANSTETTER:** So moved.

15
16 **CHAIRMAN PERRET:** Dr. Branstetter moved that we provide
17 Amendment 15 as necessary and appropriate with editorial license
18 and authority to staff and final approval authority given to the
19 Council Chair. Do I have a second?

20

21 **MR. LANCE ROBINSON:** Second.

22

23 **CHAIRMAN PERRET:** Second by Mr. Robinson. We've got a motion on
24 the floor for final approval. Any discussion? Okay. Ready to
25 vote? **All those in favor signify by saying aye; opposed like**
26 **sign. The motion passes.** Thank you.

27

28 We are now next going to Draft Options Paper for Amendment 17,
29 Addressing the Expiration of the Shrimp Permit Moratorium. We
30 do not have to select preferreds at this time and it's up to the
31 committee of whatever you want to do. We will have a public
32 hearing draft coming out later and so if you want to wait until
33 then to make the preferreds, that's up to the committee. With
34 that, Morgan, do you want to take us through Amendment 17,
35 please?

36 **OPTIONS PAPER FOR SHRIMP AMENDMENT 17 - ADDRESSING THE**
37 **EXPIRATION OF THE SHRIMP PERMIT MORATORIUM**

38

39 **DR. KILGOUR:** Sure. I have a presentation that's kind of a
40 little bit of a cheat sheet for me and so the first step is to
41 review the purpose and need. The purpose of this document, and
42 I just bulleted it, but it's basically verbatim from the
43 document and it's to prevent overcapacity of the shrimp fishery,
44 promote economic efficiency and stability, protect the
45 federally-managed Gulf shrimp stocks, and determine if the royal
46 red shrimp endorsement is still necessary.

47

48 The need was to maintain increases in catch efficiency while

1 preventing overfishing and to obtain the best available
2 information to manage the fishery. I will just kind of stop
3 there if there are any additions or if there's anything about
4 the purpose and need that the committee doesn't like.

5
6 **CHAIRMAN PERRET:** Anybody have any suggestions relative to
7 purpose and need at this time? I have one suggestion. It seems
8 to me we want to ensure or maintain catch per effort efficiency
9 or something relative to catch per effort, which we've been
10 experiencing in the last few years. The boats are doing better
11 on a per effort basis and it seems like that might be applicable
12 and so keep that in mind, Morgan.

13
14 **DR. KILGOUR:** Okay.

15
16 **CHAIRMAN PERRET:** Anything else on purpose and need? Okay.
17 Morgan, thank you and go ahead.

18
19 **DR. KILGOUR:** Okay. Action 1 addresses the expiration of the
20 federal permit moratorium. The first alternative is no action,
21 which means that the permit moratorium will expire on October
22 26, 2016 and the Gulf shrimp permits will be open access again.

23
24 Action 2 extends the moratorium and we have two different
25 options under this, either for five years or for ten years. The
26 ten years would be equivalent to the current moratorium and the
27 five years would be a shorter time period, to see if maybe the
28 number of permits level off.

29
30 Alternative 3 would make the moratorium permanent and I have
31 "permanent" in quotation marks, because nothing is permanent,
32 but it's basically extending the moratorium indefinitely and so
33 we had to rephrase it as calling it a limited access system,
34 because that's what it essentially would be. If you don't
35 currently have a Gulf shrimp permit, you won't get one unless
36 you buy it from somebody who already has it. Those are the
37 three alternatives and were there options that the committee
38 would like to add or to remove from this? Now would be the time
39 to let us know.

40
41 **CHAIRMAN PERRET:** Are you satisfied with these three or is there
42 any comments relative to additions of any other alternatives?
43 Morgan, do you have a preference for a preferred now or should
44 we wait until we get the public hearing draft and come up with
45 preferreds for the public hearing draft?

46
47 **DR. KILGOUR:** That's really up to the committee, but if you know
48 now that you're not interested in extending the moratorium for

1 five years or ten years, then we could eliminate those options
2 now or if you know now that you're not interested in even
3 exploring this, then we could eliminate Alternatives 2 and 3 and
4 so it's really up to you on what you would like to do.

5
6 **CHAIRMAN PERRET:** With the purpose and need of wanting to
7 maintain high efficiency in the fishery and keep bycatch down
8 and that sort of thing, I suspect, and this is me talking, the
9 alternative will probably be to extend the moratorium for X
10 period of time. I would assume, unless somebody has a different
11 opinion, but, anyway, we can proceed and we don't need a
12 preferred if the committee doesn't want to do that now.

13
14 **MR. PEARCE:** Mr. Chairman, I agree with you. I think that
15 Alternative 2 right now looks like the best alternative in this
16 action and we've got to be cautious how we approach this
17 amendment, because we've got a lot of problems with -- We don't
18 want to have any overcapacity like we had in the past, but
19 Alternative 2 looks the best to me.

20
21 **CHAIRMAN PERRET:** Thank you. Ms. Bosarge.

22
23 **MS. BOSARGE:** I agree with Harlon. I think that in talking to
24 industry that is one thing that we seem to have a consensus on,
25 is that we do definitely want to extend the moratorium. Maybe
26 on some of these other action items that we'll get to we have a
27 little more discussion still and we don't have a consensus as of
28 yet, but the ten-year extension is essentially what I've heard
29 so far from industry and that's what I would support as well.

30
31 **CHAIRMAN PERRET:** Thank you, Ms. Bosarge. Anybody else? Any
32 motions? None at this time?

33
34 **MS. BOSARGE:** Myron is not here and I don't like to make a
35 motion -- He's here. Okay. He's here and good, because I know
36 Myron and I sometimes are on opposite sides on things. **Myron,**
37 **we had some discussion on extending the moratorium and I would**
38 **like to make a motion that at this point we could possibly pick**
39 **a preferred on this action to extend the moratorium for ten**
40 **years.**

41
42 **CHAIRMAN PERRET:** So your motion is for Alternative 2 to be the
43 preferred, which extends the moratorium on the issuance of Gulf
44 commercial shrimp vessel permits and Option b, the moratorium
45 would be extended for ten years.

46
47 **MS. BOSARGE:** Correct.

48

1 **CHAIRMAN PERRET:** That's the motion. Do we have a second? We
2 need a second.

3

4 **MR. ROBINSON:** Second.

5

6 **CHAIRMAN PERRET:** Second by Mr. Robinson. Is there discussion?
7 Ms. Bosarge, do you want to offer any discussion at this time?

8

9 **MS. BOSARGE:** I'm not sure Myron heard what we were talking
10 about earlier, but Harlon has obviously talked to the industry
11 and he feels comfortable with that and I've spoken to a good
12 many shrimpers and most definitely they want to see this
13 moratorium extended. There's a little hesitancy on making it
14 permanent, but they don't want to see it go away and they
15 definitely like the ten years versus the five and so that's why
16 I chose this alternative and we can definitely have some more
17 discussion on it.

18

19 **CHAIRMAN PERRET:** Thank you. Any others? Mr. Fischer.

20

21 **MR. FISCHER:** Thank you, Mr. Chair. That's correct what Leann
22 said and we don't want to make it permanent at this time. We're
23 not prepared to have a permanent catch share or even just a
24 permanent moratorium. Ten years allows the fishery to
25 stabilize, but what else happens in ten years is the council can
26 come to the table anytime in that second to tenth year and
27 restructure it and so it gives stability until something comes
28 up and there's a need to restructure this entire plan.

29

30 **CHAIRMAN PERRET:** Thank you, Mr. Fischer. Dr. Branstetter and
31 then Mr. Boyd.

32

33 **DR. BRANSTETTER:** To Myron's point, the council can come in at
34 any point and change the moratorium and so whether you pick five
35 years or ten years or in perpetuity, you can always change it
36 and so I'm not sure that there's a real difference in any of
37 these.

38

39 **MR. DOUG BOYD:** That was partly my question. I have two
40 questions. One is where is this document, in the public hearing
41 process or the scoping process? That's the first question.

42

43 **CHAIRMAN PERRET:** We're in the scoping to develop the draft for
44 a public hearing document and is that right, Morgan?

45

46 **DR. KILGOUR:** We're in the options and so the next step would be
47 the public hearing draft.

48

1 **MR. BOYD:** Okay. Is it appropriate to choose preferreds at this
2 point?
3

4 **DR. KILGOUR:** The committee can. We don't have a lot of the
5 effects analysis done, but that will be in the public hearing
6 draft and the committee can always change their preferred
7 alternatives at any time.
8

9 **MR. BOYD:** My second question is along the lines of Dr.
10 Branstetter for our attorney. If a moratorium is established by
11 this group, can it be modified at a later date by another
12 council, by this council at a later date?
13

14 **MS. LEVY:** Yes, the council can always change what's in the
15 plan. What the moratorium does is forces you to look at it in
16 five or ten years or let it expire, whereas the permanent one
17 would be there permanently unless you take action and so it's
18 kind of like when we talked about the sunset option. It forces
19 some reconsideration in some period of time or it goes away.
20

21 **MR. BOYD:** All right and so if a moratorium is approved by this
22 body and they came back a year or two from now and said we want
23 to change that and we don't want a moratorium, they could make
24 that motion and approve it?
25

26 **MS. LEVY:** Yes and I mean you would have to do more than a
27 motion. You would have to prepare a document to actually change
28 that. It wouldn't just be a motion and you would have to go
29 through the whole process.
30

31 **MR. BOYD:** Yes, I understand. Thank you.
32

33 **CHAIRMAN PERRET:** Thank you, Mr. Boyd. Mr. Donaldson.
34

35 **MR. DONALDSON:** Thank you, Mr. Chairman. I am kind of hesitant
36 to choose a preferred now without having gone out to public
37 comment, but according to Leann and Harlon, it seems like this
38 is what industry wants, but -- And Myron and I guess we can
39 always change it too and I mean it's not like it's --
40

41 **CHAIRMAN PERRET:** Again, this is one step in the process and we
42 have a motion to make a preferred at this time and so we can
43 vote it up or down, but you see what the preferred is. Myron,
44 do you want to comment?
45

46 **MR. FISCHER:** Sure and at the stage of where this document is,
47 we're -- Am I correct that this is just going out for scoping
48 and so it's the very inception of the document and typically we

1 don't have preferreds when we go out to scoping.
2
3 We can let industry see the direction we're going into and so
4 whether we choose a preferred now or choose it later after we
5 hear the comments, but we still have time to revisit it after
6 the options paper, which is probably the more appropriate time
7 to have preferreds, but I do think it's wise to let the public
8 know some of the direction the council is going into up at the
9 scoping, but I don't think the intent of scoping is to be -- I
10 think it's to ask the public what they want at that stage and by
11 us having a preferred, we're not asking them what they want and
12 we're more or less dictating to them. I do feel negative
13 sometimes of having preferreds in a scoping document.
14

15 **CHAIRMAN PERRET:** This is the options paper now, Myron. This is
16 the options paper. Any other comments on the motion that in
17 Action 1 to select Alternative 2, Option b as the preferred?
18 Any other discussion? Are you ready to vote? **All in favor**
19 **signify by saying aye; opposed like sign. The motion carries.**
20

21 **MR. FISCHER:** While I'm in the process of embarrassing myself,
22 you can say whoa.
23

24 **CHAIRMAN PERRET:** I don't want to ever cut you off, Myron. I
25 want you to make a bigger -- Dr. Kilgour, proceed, please.
26

27 **DR. KILGOUR:** Okay. Just about the number of permits, so when
28 the moratorium started, it was -- The first permit moratorium
29 permit was in March of 2007 and so there were 1,933 permits and
30 it has declined ever since then and now we have a total number
31 of permits of 1,470 and that was as of December 31, 2014.
32

33 We also have the number of surrendered permits and the number of
34 terminated permits and then the cumulative number and so that's
35 additive for every year and so that's a little bit of the permit
36 history.
37

38 **MR. FISCHER:** I do have one question. This is since the
39 moratorium was in effect, but prior to the moratorium, do you
40 have an indication of when it was open permits how many permits
41 were out and maybe even what the universe of the fishery looked
42 like decades ago?
43

44 **DR. KILGOUR:** Right and so I might punt that one to Sue, because
45 the permit status before the moratorium was a bit messy and I
46 think there was a switch in databases and so there was an
47 estimated number of permits that I think was about 2,600 before
48 the moratorium was instituted and then the document was created

1 and a lot of analyses were done and at the time of the
2 moratorium, the number of permit holders that were eligible for
3 a moratorium permit were 1,933, but as far as the exact number
4 of shrimp permits, I don't know if we have the answer to that
5 question, because of database issues, but Sue or Steve might be
6 able to clarify for me.

7
8 **MS. SUE GERHART:** The 2,600 was over the course of however many
9 years that we had open access and so it's not that there were
10 2,600 at any one point and it was that over the course of that
11 time that's how many permits.

12
13 Because they were open access, they aren't tracked the same way
14 as when you have a number and a moratorium or a limited access
15 or something like that and so someone could have a permit and
16 let it expire and then six months later buy a new one and it
17 would appear as if two different permits versus the one and so
18 it's really hard to track that in those years, but 2,600 was a
19 number that was in Amendment 13 or somewhere around there as to
20 how many maximum there were over the course of those five years
21 or whatever while it was open access.

22
23 **CHAIRMAN PERRET:** Thank you. Myron, one of the problems prior
24 to was all the states had their own licensing system and when
25 the shrimp, the original shrimp, plan was put in and the Texas
26 closure thing, it was -- If I remember in the plan, NMFS said
27 there were something like over 3,000 offshore vessels, shrimp
28 vessels, and some of us questioned, but it wasn't a hard number,
29 because we just didn't know, because the licensing system was by
30 the states and you know you license everything from the twelve-
31 foot boat that wants to fish inside to the big slabs.

32
33 **MR. FISCHER:** Sure and decades ago, during this timeframe, we
34 heard anecdotal information when the Carolina and the Georgia
35 boats came around that there were outrageous numbers in the Gulf
36 and some even cited 5,000 to 7,000 and so at one stage, this was
37 a very large fishery.

38
39 **MR. PEARCE:** You know you look at the year 2007 and you look at
40 permits valid that particular year and you look at permits that
41 were 2,600 or 3,000 or whatever before that and I think there's
42 one important thing you have to remember, that in 2005 -- The
43 word "Katrina" in Hebrew means purge and so I think we had a
44 pretty good purge when Katrina hit of some boats that really
45 didn't belong in that fishery in the first place.

46
47 A lot of the number drops were a situation where we had some
48 natural events that changed the course of the shrimpers numbers

1 moving into the future and so a lot of those old numbers really
2 aren't as valid as we have now new numbers and remember that we
3 were at overcapacity in a lot of those numbers too, but after
4 2005, things definitely changed.

5
6 **CHAIRMAN PERRET:** Thank you, sir. Any other comments at this
7 time? Morgan, go ahead. Go ahead, Ms. Bosarge.

8
9 **MS. BOSARGE:** Morgan, on one of these alternatives, I was
10 wondering -- Because essentially what we're looking at in this
11 alternative is trying to pick a level where we think these
12 permits should be and what's efficient and what's sustainable
13 for the future and me as somebody on the boat side, the guys
14 that go out and catch these shrimp, what I look at is how many
15 boats are out there right now harvesting shrimp offshore in
16 federal waters, the EEZ. That's what this permit allows you to
17 do.

18
19 Because I know that whatever that number is, essentially we're
20 breaking even or barely getting by right now at whatever that
21 number is and can we get some more information on what that
22 number is, because, to me, that's a threshold of some
23 significance that I know what we can survive, hopefully, at the
24 number that are actually out there shrimping right now and not
25 the number that -- Not the 1,470 that we have on the books, but
26 how many of those are shrimping in the EEZ?

27
28 Because we do have a lot of smaller boats that shrimp in state
29 waters, but they hold a Gulf permit. They've got one and
30 they're holding it and there's not a problem with that, but I
31 need to know how many boats are actually landing shrimp from
32 federal waters and is that something that we can work on
33 getting, because I would like to see that as our threshold maybe
34 in some of these alternatives.

35
36 **DR. KILGOUR:** That's a pretty complex question and we've been
37 discussing this in the IPT and it's really virtually impossible
38 to distinguish offshore EEZ landings versus offshore -- Federal
39 waters versus state waters.

40
41 In the document, we talk about offshore landings, but that is
42 anything that's basically from the mouth of bays out to the 200-
43 mile marker, because being able to distinguish where those
44 shrimp were actually caught is impossible. The 1,470 is just
45 the number of permits that have a federal permit, but --

46
47 **CHAIRMAN PERRET:** They don't necessarily have landings.

48

1 **DR. KILGOUR:** They don't necessarily have landings and if that's
2 something the committee would like us to investigate, we can
3 look at latent permits, but, again, at the last meeting we
4 discussed that some of those latent permits are there because
5 industry might need to trawl after removing a platform or a rig
6 and so they need to have that shrimp permit, but we could
7 actually figure out that number if that was something that the
8 committee would like and Sue probably has more to add to that.

9
10 **CHAIRMAN PERRET:** I think it would be interesting to see how
11 many of those 1,470 are actually harvesting shrimp.

12
13 **MS. GERHART:** Just to follow up that that is a number we're
14 working to get to. Dr. Travis in our office is working on that
15 now and that's why we have three highlighted areas that say "to
16 be determined". It is a tricky number to get at. It is
17 offshore rather than just in federal waters, but we hope to have
18 that for you by August and bring that back in front of you, but
19 we just couldn't get it together in time for now, but we hope to
20 have numbers to fill into those three alternatives which rely on
21 that active number of vessels rather than the number of permits.

22
23 **MS. BOSARGE:** Thank you. I appreciate that. I think it is an
24 important number and the closer we -- It doesn't have to be
25 exact and down to the penny, but if we can get closer to that,
26 that would give us a good idea, because essentially the 1,470
27 that are on the books right now, if every one of those boats
28 went shrimping in federal waters right now, then we would have a
29 fleet that was back in the position that it was before, where
30 there is too many pieces of the pie. The pie is being split up
31 too many ways with all of the hurdles that we have in the
32 industry in these days.

33
34 It's much more expensive and it gets more expensive every year
35 to go and catch that shrimp and we won't even get into the price
36 that you get for it, but just these expenses to go out and get
37 it and so we need to see that number and I think that's very
38 important.

39
40 The other thing I wanted to bring up, and I bring this up
41 because I know that we seem to have different opinions around
42 the table as to should these number of permits go down or should
43 they go up, and I was trying to find a way to possibly do
44 something that could encompass both of those in this action.

45
46 I know that's a crazy thing to think about, but what I've come
47 up with, with a little help, is all of these actions -- Myron,
48 this is for you and so give me your feedback.

1
2 All of these actions set a hard floor in place and they say,
3 okay, after we reach this number of permits we create a pool and
4 from then on we will have those permits in the pool and so if
5 somebody wants to come into the industry, they can do that.
6 Then we have this big debate on, well, but should we go back and
7 create more or would that harm the industry? Should we let it
8 go down farther and how much farther and would that harm the
9 industry or where is the good point?

10
11 This is my train of thought here. If maybe we could find out
12 how many vessels are actively fishing right now in offshore
13 waters and make that number or we can have some debate on what
14 the number is, but make it a soft floor and not a hard floor, so
15 that what it does is trigger us, when we get to that level of
16 permits on the books at NOAA/NMFS, we will go back and look at
17 these permits and say, all right, we hit that threshold that we
18 were looking at, that target, and where is the industry at?

19
20 Have we gone too far now? Do we need to add some back? Is it
21 at a good level? Does it need to go down further? I don't
22 know, because I don't know when we'll hit that target, but it
23 would trigger us to go and look at it again at that point in
24 time and have the option again to go back up, rather than right
25 now trying to hit this perfect number of permits when the
26 industry really is still at a break-even, on a precipice, in my
27 opinion. What are your thoughts on that?

28
29 **MR. FISCHER:** We would still like to have permits in a pool and
30 not at some point in the future, but sooner rather than later.
31 When you look at Table 2.2.1 in coordination with this table
32 that's up right now, after 2006/2007, we started getting a much
33 higher CPUE. Our landings are stable. The landings are busy
34 and they're all over. They bounce from a hundred million to
35 this past year it was seventy-six million and everywhere in
36 between.

37
38 The landings are busy and the CPUE is sort of stable.
39 Everything is stabilized, but when you come back and -- I don't
40 know how many permits were in 2006, but I suspect that that's
41 2,800 or 2,900 number and dropping to 1,933 and so we have
42 omitted people from the industry, but the CPUE has not gone up
43 and the landings haven't gone up, meaning we could take those
44 people back in the industry and let them make a living.

45
46 Do I suspect it's going to be a grave number of boats? No, I
47 don't think it's going to be that many boats at all, but the
48 present situation with a moratorium prevents new entrants and

1 that's what we're trying to do, is allow new entrants into the
2 fishery if they choose to make that investment, to allow them
3 into the fishery.

4
5 What we hear is a man has a boat and he's going to pass it down
6 to his son and that all sounds good, but if the captain is
7 forty-five years old and his son is twenty-five years old and
8 the son wants a boat of his own, he's got to wait twenty more
9 years for his dad to get out of it. It sounds good in
10 conversation and it doesn't really work at times in the real
11 world. I really, really feel we need new entrants in this
12 industry and that's what our state has been crying for.

13
14 **CHAIRMAN PERRET:** Thank you, Mr. Fischer. Let me just give you
15 another piece of data to look at. In D-5 -- I think you've just
16 got the alternatives document you're looking at, but we've got
17 another thing that we need to consider and in the document, the
18 graph, Figure 2.2.1, we've got a target level of shrimp effort.

19
20 If we go over that target level, then we've got to start closing
21 areas of the EEZ, because of the red snapper bycatch and all
22 that other good stuff. So it's like we're working with a wall
23 on each side or on top and bottom and if we go over whatever
24 that level is, we've got some other factors we have to consider,
25 but Dr. Crabtree had his hand up.

26
27 **DR. ROY CRABTREE:** Yes and the figure Corky referenced is just
28 with respect to the red snapper rebuilding plan and you have
29 another effort trigger in the biological opinion related to
30 turtle takes and we're already in court trying to defend that
31 and I can assure you if you let a large number more permits into
32 this fishery that it will significantly complicate all of that.

33
34 I think Leann makes a good point, because what we determine is
35 the target number of permits today is almost certainly not going
36 to be the level of permits that we would calculate a decade from
37 now and so it does seem to me that it's reasonable to have some
38 alternatives in here that would set that as -- I think she
39 called it a soft target, but one that triggers a council review,
40 but doesn't prescribe a set action that's going to happen,
41 because we may get to that point and decide that circumstances
42 have changed or price structures have changed or economics have
43 changed.

44
45 Maybe turtles are recovered and we are harvesting them by then
46 and so we don't have to worry about them and I don't know and I
47 think also for the sake of NEPA and analyzing a reasonable range
48 of alternatives, I think what Leann suggested is certainly a

1 reasonable alternative and so I think it does make sense to put
2 in or structure the alternatives in a way so that these are just
3 triggers so the council would come in and decide what to do, but
4 they don't fire off some pool that takes place at that point and
5 that seems to make sense to me.

6
7 The other concern is if you look at the CPUEs, Myron, that
8 you're talking about, they are stable, but they're more than
9 twice as high of what they historically were when effort was so
10 much higher at this point and my concern is if we get a lot more
11 vessels come in to the fishery that it's almost certainly going
12 to push those CPUEs down and right now to make -- For this
13 fishery to be profitable, we need high CPUEs. Otherwise, I
14 don't think with the price structuring of shrimp that you can
15 really have a viable fishery.

16
17 **CHAIRMAN PERRET:** Thank you, Dr. Crabtree. I am certainly
18 pleased to see that you're with the Gulf Council today and
19 obviously things happening here are much more interesting than
20 what's going on down the street. Mr. Fischer, did you have your
21 hand up?

22
23 **MR. FISCHER:** Yes, Mr. Chair, and I understand both sides. Do
24 remember the red snapper stats are based on ten fathoms to
25 thirty fathoms and the boats we anticipate in the industry are
26 fishing right off the beach and they are not in ten fathoms of
27 water. Those are the ones who have been coming to us with the
28 need for permits and they are outside of our state waters and
29 they're following the shrimp that are going out in the passes
30 and I don't have the answer if it's more subsidence or more
31 erosion, but we have much more water flow and the shrimp are
32 pushing much further out on the outgoing tide than they've ever
33 done and these boats are in federal waters, because they're
34 following the shrimp.

35
36 The CPUE, I don't want to go back to the era where the CPUE was
37 half, but the CPUE in 2006 was higher than it is today with more
38 boats and it's really been flat-lined, if you graph it, from
39 that time on. All we're doing is talking about going back a few
40 years for those amount of permits and not going back to the
41 inception of the moratorium.

42
43 **CHAIRMAN PERRET:** This is a great discussion, but let me just
44 remind you that we're dealing with an option and we have seven
45 alternatives under this option and what I've heard Leann -- What
46 did you call it, a cross something or other?

47
48 **MS. BOSARGE:** A soft floor trigger.

1
2 **CHAIRMAN PERRET:** Anyway, that's the possibility of another
3 alternative and, Dr. Crabtree, was your hand up?
4
5 **DR. CRABTREE:** Yes and I just was going to say you're right
6 about the red snapper trigger, but the turtle trigger is at
7 least as much of a concern as that and those turtle takes are
8 actually higher in those near-shore areas than they are well
9 offshore in deeper water.
10
11 **CHAIRMAN PERRET:** Morgan, you had your hand up, right?
12
13 **DR. KILGOUR:** Yes and I just wanted to review that this is the
14 catch per unit effort graph I think that Dr. Crabtree was
15 referring to and I still haven't reviewed the alternatives for
16 the second action and so we can go over those as well if you
17 wanted to do that.
18
19 **CHAIRMAN PERRET:** (The comment is not audible on the recording.)
20
21 **DR. KILGOUR:** No problem and so this little graph is something
22 that has the effort, the offshore catch, and the catch per unit
23 effort. That dotted line is when the implementation of the
24 commercial shrimp permit moratorium, which was in 2006, but the
25 actual first permit I don't think was given out until March of
26 2007 and so that 2007, right after that, that's the first year
27 of permit moratorium permits and you can see that catch per unit
28 effort kind of wobbles, but it's a lot higher than before the
29 permit moratorium and that the effort and offshore catch --
30 Offshore catches kind of remain stable and it slightly declined
31 if you put a trend line through it, but not significantly and
32 the effort has really decreased.
33
34 These are just to look at the number of landings per vessel and
35 the effort per vessel and so you can see the blue is the
36 landings and they've increased over time and the effort per
37 vessel has decreased over time and that's not in your document.
38 That's something I did kind of back-of-the-envelope for you to
39 see and if this is something you would like us to investigate
40 more, we can do that for sure.
41
42 Action 2 encompasses two actions and one would be to set a
43 target and possibly create a permit pool and Action 2.2 would
44 establish the eligibility for the permit pool. Both actions are
45 only valid if Alternative 2 or 3 is selected in Action 1 and so
46 since you've pretty much directed that your preferred will right
47 now be Alternative 2, then we should proceed with Action 2.
48

1 Just to make it a little bit shorter, the Action 2.1 sets a
2 permit target, which is what everyone has been discussing, and
3 creates a shrimp vessel permit pool, if that's what you so
4 desire.

5
6 The first alternative would be no action and no reserve pool
7 would be created and so if the permit moratorium was extended
8 then if you don't renew your permit in the time allotted, you
9 would still lose it.

10
11 Alternative 2 sets the number of permits necessary to attain the
12 aggregate MSY and that number hasn't been determined yet, but
13 that would basically be the number of permits that are
14 calculated to be needed to achieve MSY. It should be noted that
15 the fishery has been operating well below MSY for a long time
16 and so we haven't reached MSY in a very long time.

17
18 Alternative 3 sets the number of permits based on the beginning
19 of the moratorium, which was an option that was requested at the
20 last council meeting, and that would be 1,933 permits.
21 Alternative 4 would be the number of permits based on the number
22 at the end of 2014. This was an AP recommendation and that
23 would be 1,470 permits.

24
25 Alternative 5 would be some number of permits in the future and
26 so at the end of the moratorium on October 26, 2016 if you do
27 not have a valid or renewable permit then this would be the
28 number of valid or renewable permits on that date and so that
29 would be something that we would have to calculate later.

30
31 Then Alternative 6 would be a biologically-based number of
32 permits and so this would be the number of permits needed to
33 maintain gains in catch per unit effort and Alternative 7 is
34 another biologically-based alternative which would be the number
35 of active permits when vessel landings were highest during the
36 moratorium in the area monitored for red snapper juvenile
37 mortality and I believe that number -- We're still working on
38 it, but I think it might have been sometime in 2009 and I could
39 be wrong on that, but that seems to be the number when the
40 highest effort was.

41
42 **CHAIRMAN PERRET:** Thank you, Morgan, and if I recall, the Shrimp
43 AP, their recommendation was Alternative 4?

44
45 **DR. KILGOUR:** Yes and so their recommendation was the number of
46 valid or renewable permits as of December 31, 2014. Some
47 considerations were the most recent biological opinion for the
48 shrimp fishery was based on effort in the 2009 season and that

1 was with regard to turtle bycatch and exceeding this could
2 result in additional bycatch reduction requirements. Increases
3 in effort could, in certain statistical zones, such as those
4 monitored for juvenile red snapper, could result in closures if
5 the effort is thought to have juvenile red snapper bycatch
6 mortality increase above the limit.

7
8 Three alternatives are date-based and so the start of the
9 moratorium, the December 31, and the end of the moratorium.
10 Three alternatives are management marker-based and so catch per
11 unit effort, MSY, and the biological closures. I am sorry. The
12 effort as being highest during the moratorium.

13
14 All of these analyses were based on the offshore fishery and so
15 that includes effort in state waters if you had a federal permit
16 and so, like I said earlier, we can't differentiate between
17 offshore landings if you have a shrimp permit in state and
18 federal landings.

19
20 **CHAIRMAN PERRET:** Thank you, Morgan. Can you back up one,
21 please, with the 7? Alternative 7, 6, 5, 2, to be determined
22 and so that's information that you all are working on to be able
23 to supply for the future?

24
25 **DR. KILGOUR:** Correct and the only one that we wouldn't
26 potentially be able to give you until -- It's Alternative 5,
27 which would be the number of permits based at the end of the
28 moratorium and so we won't know that number until October 26,
29 2016. We just won't know it, but all the others we should be
30 able to calculate.

31
32 **CHAIRMAN PERRET:** Okay. Thank you. Comments? Anybody?

33
34 **DR. CRABTREE:** So how would you suggest -- Is there a way to
35 structure this to accommodate Leann's suggestion of having these
36 targets just trigger council review rather than triggering -- I
37 am not sure how the best way to structure it is, but there seems
38 like there would be some way we could put a subalternative or
39 something in here that would do that and I think we should do
40 that.

41
42 **CHAIRMAN PERRET:** Or just add an alternative if Leann can give
43 us a little bit of an explanation. Alternative 8 would be what
44 she expressed a little bit earlier.

45
46 **MS. LEVY:** I have a question. Right now, each one of these has
47 this cutoff and then establishes this pool and so the pool is
48 attached to each one and is the suggestion to have an option for

1 either a pool or a soft target or did you want to get rid of the
2 pool and just have the soft target? You could structure it
3 either way. It could be here are the different things and then
4 what are you going to do and a is to have a pool and b is to
5 have a -- Or if you just wanted the soft target, you could get
6 rid of the pool, I guess.

7
8 **DR. CRABTREE:** I would defer to Leann, but yes, that's my
9 desire, is to have it set up in a way to where if we choose that
10 the target is a soft target then there is no pool and that goes
11 away. I think -- I would be okay with getting rid of the option
12 for a pool now, but I don't know if the majority of the
13 committee members would be willing to go to that place.

14
15 **CHAIRMAN PERRET:** Leann, you started it and do you want to try
16 and offer us a little more explanation?

17
18 **MS. BOSARGE:** I guess there is a couple of ways that it could be
19 done. I don't think that Myron would be okay with getting rid
20 of a pool. I might be comfortable with the getting rid of a
21 pool and so maybe we could structure it where we have
22 subalternatives.

23
24 **CHAIRMAN PERRET:** Excuse me, Leann. Just remember we are still
25 very early in the process and we're trying to come up with as
26 many viable options that the council will want to consider in
27 the future and so whether we get rid of something today or get
28 rid of it later or add it today or add it later, but we're at
29 that stage where I think we're trying to be as inclusive as we
30 can.

31
32 **MS. BOSARGE:** Then I guess the suggestion that I would make, and
33 we'll get feedback from Mara and Sue on this, but like on
34 Alternative 4 and let's just take that for example, since that
35 was the AP preferred.

36
37 Number one, I did ask for the active offshore vessels and so
38 that would be a tweak to it, but as far as this soft target,
39 there would be subalternatives underneath it and essentially the
40 first one would say when the number of permits hits whatever we
41 decide this active number of vessels is, then, boom, a pool is
42 formed and any permits that fall off after that point in time go
43 into that pool.

44
45 The next subalternative, b, would say when the number of permits
46 on the books at NOAA reaches that number that we come up with
47 that was actively fishing in 2014, then that triggers the
48 council to evaluate the number of permits that we currently have

1 and see if we're at a good level or do we need to go back and
2 add more permits into the fishery or do we need to allow it to
3 keep losing permits, if that's what it's still doing, but we'll
4 evaluate it at that point and so that would be your two
5 subalternatives, to trigger a vessel pool to be established
6 right then or to trigger an evaluation.

7
8 **DR. BRANSTETTER:** Ms. Bosarge has asked for what the number of
9 active permits are and we got a request a couple of years ago
10 for a very similar type of thing and I got some information from
11 Dr. Nance and this comes with lots of caveats, but there was
12 about 450 vessels that had less than 10,000 pounds of landings
13 and about a thousand vessels that had between 10,000 and 300,000
14 and it was fairly stable between two and three years, but that's
15 kind of a rough ballpark, but there's lots of caveats with that
16 with Louisiana licensing nets and not vessels and that kind of
17 stuff, but that kind of gives you a rough ballpark for what
18 you're looking at and what Dr. Travis is going to come up with
19 is going to be somewhere in that neighborhood.

20
21 **CHAIRMAN PERRET:** Any other comments? I saw some heads shaking
22 yes relative to Leann's possible two options and so is that --
23 That's doable I assume and so just as an example, under
24 Alternative 4, we could have an Option a and b and is that what
25 you're suggesting, Leann?

26
27 **MS. BOSARGE:** Yes, under Alternative 4 for sure and I guess you
28 could do it for 5, 6, and 7 as well.

29
30 **MS. LEVY:** I think we would just do it under each one and so
31 under each alternative as to what the cutoff is you would have
32 the option to establish the pool or to have the council
33 reevaluate.

34
35 **CHAIRMAN PERRET:** We certainly are not going to do it under one,
36 but, anyway, staff and Mara and the people that are going to
37 work on this understand the direction we're trying to go and is
38 that okay? Myron, do you want to comment, please?

39
40 **MR. FISCHER:** Sure and do remember under Alternative 3 that it's
41 not solely either accept it and it's 1,933 automatically. It
42 could be any range between the 1,400 and 1,900 and so we have to
43 give a range there also.

44
45 **CHAIRMAN PERRET:** Is the committee comfortable with that? Staff
46 is going to be able to develop what we've discussed or try to
47 develop it and come up with some information.

48

1 **DR. KILGOUR:** Right and so I can create subalternatives under
2 all of these. It would probably not make sense under
3 Alternative 3, since we are already below 1,933 permits, but for
4 all the rest of them we can have those subalternatives and I can
5 just do the subalternative for creating a pool under Alternative
6 3 if that's okay with the committee. We are already below 1,933
7 and so triggering a council review would be immediate.

8
9 **CHAIRMAN PERRET:** Okay. Are committee members satisfied with
10 that?

11
12 **MR. FISCHER:** No, I think under Alternative 3 that we just want
13 to show the public that we're going to have other choices other
14 than 1,933. That's not to trigger council review, but that
15 would be if -- Give them an opportunity to view their voice on
16 an additional amount of permits in a pool.

17
18 **CHAIRMAN PERRET:** Okay. Morgan, you look perplexed.

19
20 **DR. KILGOUR:** I guess I'm confused, because that's a -- That
21 target was based on the initial -- So we would have a
22 subalternative to look at some range between 1,933, because
23 that's a different -- That would be a different alternative, I
24 think, than what we currently have in the document, which is
25 kind of a hard number at the beginning of the moratorium.

26
27 So I guess we should have that trigger council review so that if
28 you decide that that's the alternative you want, what is the
29 number that would be appropriate?

30
31 **MR. FISCHER:** No trigger council review and try to establish a
32 number somewhere above the present 1,400, but below the 1,900.
33 We might look at, if 2009 was the last opinion, we might like
34 the number of permits in 2010 and give us some room, with a
35 reduced amount, and it may -- It may put another 175 permits in
36 a pool.

37
38 I am still -- I don't want to omit the pool from the theory and
39 I don't think any of us will go to 1,933 permits. I think it's
40 going to be somewhere between 1,400 and 1,900.

41
42 **MR. KEVIN ANSON:** I was just thinking -- I think Dr. Kilgour got
43 Myron's point, but I was just going to suggest maybe combining
44 Alternative 3 and Alternative 4 into one alternative of which
45 you would have this suboption of 1,933 down to 1,750 or 1,500 or
46 whatever and you would just combine the two alternatives is all
47 I was going to suggest.

48

1 **DR. KILGOUR:** We can add a new alternative that has some range
2 therein. I would like to point out that we tried to give you a
3 range and some of these numbers may be in between that 1,933 and
4 1,470 once we get the analyses completed and so just because the
5 number is to be determined -- That Alternative 7 is definitely
6 going to be a number in between 1,470 and 1,933, because that's
7 based on the highest landings for the moratorium and it also --
8 If we look back in the graph, it will also already be there. If
9 you look there, the effort was a little bit higher than the past
10 couple of years and so that's built into the alternatives, but I
11 can for sure do another alternative where we have the options,
12 but that means that we would have to do the analyses for pretty
13 much every year, I'm guessing, or do we just pick some random
14 numbers between 1,933 and 1,470? I guess I'm looking for a
15 little bit more direction on how many alternatives or options
16 under that new combined alternative you would like me to
17 include.

18
19 **CHAIRMAN PERRET:** Ms. Bosarge, have you got any suggestions?

20
21 **MS. BOSARGE:** Yes and we had a little discussion on this at the
22 last meeting and there was some discussion from the committee
23 that they wanted to see a number higher than where it currently
24 was and I think we said, okay, well, we weren't going to do
25 every single year back to the beginning, but pick a number.

26
27 Pick where you think you're wanting to be at and put that in
28 there and then we can get some feedback from the public when we
29 go out to public hearings, but not to have every single year in
30 there and that was the tough part, because we don't know which
31 year is the right year to pick and so what we did instead -- We
32 did go all the way back to the 1,933, but then the rest of the
33 alternatives say, okay, here is some basis for the other numbers
34 that we may choose and so we do have our range in there, but it
35 just is from Alternative 1 to Alternative 7, as opposed to every
36 year from 2007 to 2014.

37
38 **DR. KILGOUR:** I guess I'm not making myself -- They don't go in
39 range from highest to lowest is what I'm trying to say.
40 Alternative 7 is going to be some midlevel and Alternative 6
41 we're not sure what the number is. It could be in between our
42 current number and 1,933.

43
44 We're not sure and so the discussion has a lot of "may" and
45 "could" because we don't have those numbers yet, but now I have
46 a little bit clearer of an idea of what I need to provide to the
47 committee for the next draft.

48

1 **CHAIRMAN PERRET:** Sue, did you have your hand up? Did you want
2 to say something?

3
4 **MS. GERHART:** I just want to clarify what Dr. Kilgour just said
5 and that is that we did try to put them in order from the
6 highest number to the lowest number, but because we don't have
7 those numbers, we don't know that they're exactly in that order,
8 but we do anticipate that Alternative 2, for example, will be
9 the highest, because MSY is so much higher than the current
10 landings.

11
12 We did try to go through a range and we focused not on the
13 number itself, but on a rationale for that number and so we will
14 need to analyze specific numbers for economic analysis, for
15 example, and so we can put those two numbers out there and you
16 can look at a difference and if you want something else, we can
17 do that.

18
19 **CHAIRMAN PERRET:** You people will be able to generate some data
20 for us for the next iteration of this document? Okay. Great.
21 Is the committee comfortable with this at this time? Any other
22 discussion? Okay. Morgan, would you proceed, please?

23
24 **DR. KILGOUR:** Sure. Corky has already pointed this out, but I
25 just wanted to reiterate that the target shrimp effort level is
26 based on the 67 percent reduction from the 2001 to 2003 shrimp
27 effort and that was I think in Amendment 14 that that was
28 established and so right now, since the permit moratorium, we've
29 been -- The shrimp fishery has been operating below the target
30 shrimp effort level and it looks like in 2011 it got kind of
31 close, but that's another consideration for setting the number
32 of target permits.

33
34 Action 2.2 is establishing eligibility for a reserve permit if
35 the permit pool is created and so if the permit pool is not
36 created, then Action 2.2 goes away.

37
38 If it is created, there are three alternatives and the first
39 alternative would be no additional requirements and if you were
40 eligible for a shrimp fishing permit then you're eligible for a
41 shrimp fishing permit.

42
43 Alternative 2 would create the reserve permits are available
44 once a year and it would be a on a first-come-first-served
45 basis. You could establish conditions like you must be a U.S.
46 citizen or a business and you might have a vessel length
47 requirement or it might require a U.S. Coast Guard
48 certification.

1
2 It should be noted that the Shrimp AP wanted the U.S. citizen or
3 business and they had a vessel length in there, but they didn't
4 -- They had a vessel length requirement in there, but they
5 couldn't come up with a set vessel length without additional
6 analyses and so they left that blank and so these are some
7 options that you might consider if you're going to do a permit
8 pool.

9
10 Then the third alternative would be similar to Alternative 2,
11 except for instead of it being on a first-come-first-served
12 basis, the applicants would be selected by lottery and so if you
13 submit your application and everything is complete and then you
14 would be eligible for a permit only by lottery.

15
16 **CHAIRMAN PERRET:** Can we have lotteries? Can the government do
17 a lottery, Roy? Is that allowable?

18
19 **DR. CRABTREE:** As far as I know it is.

20
21 **CHAIRMAN PERRET:** Okay. Thank you. The committee has heard
22 Morgan's explanation of Action 2.2 and possible alternatives
23 that would be considered and is there any discussion on this at
24 this time? Any discussion? Morgan, again, this is all -- It
25 depends on what the council will do with the other action item
26 and so I guess at this time there is really no action we need to
27 take on this other than if anyone has got suggestions for
28 additions or deletions.

29
30 **DR. KILGOUR:** Well, you could, even if you're not sure if you're
31 going to create a permit pool, decide whether or not you're
32 going to have eligibility requirements at this time and I should
33 note that Alternatives 2 and 3 are only in effect if the number
34 of permits falls below the target set in Action 2.1 and you
35 could also add other options in here if you wanted to for
36 eligibility.

37
38 I forgot to go over -- Right now, in Method 1, that's how the
39 large and small vessels were differentiated in previous
40 amendments, but if you wanted to make vessel length an
41 eligibility requirement, these are the proportion of vessels
42 that are currently in the shrimp fishery that have federal
43 shrimp permits and what the percentages are.

44
45 **CHAIRMAN PERRET:** What is the -- Leann.

46
47 **MS. BOSARGE:** If you have a question related to that, go ahead,
48 Corky.

1
2 **CHAIRMAN PERRET:** I just wanted to say I definitely think they
3 should be a U.S. citizen and vessel -- Again, I sat through the
4 AP meeting and they really struggled with vessel length and
5 Coast Guard certification. They want something, but, again,
6 like me, they were not able to pick specific things, but go
7 ahead, Leann.

8
9 **MS. BOSARGE:** Morgan, on that Alternative 2, both Alternative 2
10 and 3 say they would be available once per year and on
11 Alternative 2, is it -- If the committee is amenable to it, is
12 it possible to remove that language of once per year and instead
13 it would just read "the reserved Gulf shrimp vessel permits will
14 be available from NMFS and will be issued to eligible applicants
15 in the order in which the applications are received"?

16
17 Otherwise, if it's just once per year, it's still almost going
18 to be a -- I don't understand why if you were ready to move into
19 the industry and you're going to get one of these permits that
20 the only time you can do it is -- I don't know, but December 31
21 or something or January 1 and can you not go and get the permit
22 when that fisherman is ready to enter the fishery?

23
24 **MS. GERHART:** I will address that. We talked about that quite a
25 bit and the problem is with the fairness of the application
26 process and so, first of all, how would someone know there even
27 is a permit available in that pool? Would they know because
28 someone told them that they were giving up their permit and then
29 that wouldn't particularly be fair to other people who might
30 also want that permit?

31
32 If someone puts in an application just hoping there is one
33 available and there isn't, how long is that application valid?
34 Can it sit there and wait until one becomes available or is it
35 still on a first-come-first-served basis that way? Can someone
36 just constantly have an application there waiting for a permit
37 to become available? There are issues to consider if you wanted
38 to do it that way beyond just letting it go there. It becomes
39 more complicated the more we talked about it, but it's not
40 impossible, but it involves addressing these other issues.

41
42 **MS. BOSARGE:** I know that probably made Roy's life more
43 complicated, but I would rather address those issues. I think
44 it would work better that way. I mean it's kind of like being
45 on a waiting list. I don't think we'll ever get to that point
46 where we have a waiting list to get into the shrimp fishery, but
47 I would rather see it happen that way that a man or woman
48 submits their application and they want a permit and their

1 application does stay on file and when one becomes available,
2 they get it.

3
4 Now, as far as the if somebody was to give them inside
5 information that they're about to surrender their permit, I
6 would think that at that point it would just -- That would be a
7 transfer that would end up taking place outside of NOAA/NMFS and
8 they would just get together and that man would buy that permit
9 from the guy that wants to give up his.

10
11 Maybe we can put some timeframes on how long it would sit there
12 and that there's an expiration date after so many years and you
13 would have to reapply again or something like that, but once a
14 year, as far as doing business, it seems like a little bit of a
15 constraint.

16
17 **DR. CRABTREE:** Well, my worry is that we're going to find that
18 creating this pool and doing this is very complicated and there
19 are all kinds of decisions that have to be made and we need to
20 have something implemented by October of 2016 and by tying the
21 pool to the permit moratorium, we're, I'm afraid, going to run
22 out of time to figure it all out.

23
24 Maybe it won't turn out to be so, but you know things like if
25 we're going to put a vessel length in here on the pool -- Well,
26 there is no vessel length though on the permits that are out
27 there now and so it's easy to figure out games to play to work
28 around all that kind of thing and then there's fairness.

29
30 If we already have vessels under twenty-five feet among the
31 holders now, why do the pool people have to have bigger vessels
32 and so I think there's a lot of things in the pool and we can
33 see how this develops, but it seems to me we've only got a few
34 more meetings before we're going to need to vote this amendment
35 up and I'm guessing we probably would want to vote this up in
36 January or April and is that kind of the timeline we're on?
37 April?

38
39 So there is a lot of things to figure out as to how to do this
40 and to complicate it, we have never created a pool before and so
41 we're treading new ground here.

42
43 **MS. LEVY:** Just a comment that the idea that we're somehow
44 making this eligibility linked to being a U.S. citizen or
45 business just raises red flags for me and so it's something that
46 I'm going to need to look into.

47
48 We issue these to vessels and under the Act, the council can

1 require vessel permits for vessels of the United States, which
2 is not the same thing as saying you have to be a U.S. citizen
3 and that also excludes permanent resident aliens and things like
4 that and so it's just something that I feel like I would need to
5 look at further if that's something you really want to pursue.

6
7 **CHAIRMAN PERRET:** Something that seems so easy is not. It's
8 not. Roy brought up an excellent point and I thought definitely
9 there should be a vessel length cutoff, as an example, but when
10 you've got 2.8 percent that are under twenty-five feet, we let
11 them in initially and why are we going to change the rule in the
12 future? We went through the immigrant thing relative to some
13 other fisheries years ago and so I guess nothing is easy in this
14 fishery management scheme. Put the current options you've got
15 up there now, please, on this one. Go ahead, Morgan.

16
17 **DR. KILGOUR:** I would just like to clarify the alternatives are
18 kind of stand-alone and then there's options below them that
19 would be eligibility, which you may choose not to use. You may
20 just choose to make a first-come-first-served permit or a
21 lottery permit and that would be enough and not have these
22 eligibility requirements if you think that's going to be too
23 complicated.

24
25 Those were options that were not built into the alternatives,
26 but were below, because I didn't think you might -- We weren't
27 sure if you would want all of those options included in the
28 alternatives.

29
30 **CHAIRMAN PERRET:** Do committee members have preferences at this
31 time? Something as simple as U.S. citizen or U.S. corporation
32 is not that simple, Mara, but you will check on that, please?
33 Thank you. Any comments relative to this particular action and
34 proposed alternatives? Anything else? Morgan, have we got
35 anything else or is that it?

36
37 **DR. KILGOUR:** We have one more action.

38
39 **CHAIRMAN PERRET:** Go ahead.

40
41 **DR. KILGOUR:** The last part of this draft options paper would be
42 to address the royal red shrimp endorsement and so our
43 Alternative 1, the no action, would be to continue to require
44 the royal red shrimp endorsement.

45
46 Alternative 2 would eliminate the royal red shrimp endorsement
47 and Alternative 3 would require some previous landings to
48 maintain an endorsement and so if you look at the -- The

1 endorsement was created to help collect data from the royal red
2 shrimp industry. There wasn't a lot of data when it was
3 implemented and it helps create some economic data about the
4 industry.

5
6 There has been a little over 300 endorsements since the
7 implementation of the moratorium, but the number of active
8 vessels landing royal red shrimp I think in the last ten years
9 or so have been less than twenty and usually below ten and so
10 this is something that the committee can decide whether or not
11 this is an action that they would like to address in this
12 document or if you wanted to remove alternatives that don't make
13 sense, that would be okay too.

14
15 **CHAIRMAN PERRET:** Thank you. Action 3 is on the board with the
16 various alternatives. Ms. Bosarge.

17
18 **MS. BOSARGE:** I would like to have some committee discussion
19 about this one, because the fishermen that I've talked to, they
20 essentially would be Alternative 1, to continue to require the
21 royal red shrimp endorsement with no landings requirements or
22 anything like that on it.

23
24 There's just a handful of these out there, these endorsements
25 out there. It's a small fishery and sometimes they fish it and
26 sometimes they don't, but they keep it in case they want to move
27 back into that fishery and I don't think a landings requirement
28 would be appropriate at all, especially for that small fishery.
29 I think Alternative 1 would be a good choice on this.

30
31 As far as eliminating it, why I didn't move towards that, we
32 just had a meeting a couple of weeks ago with the Coral AP and
33 there may be some new coral HAPCs or EFH that's lined out
34 somewhere in the Gulf of Mexico and there may actually be an
35 exemption for some of these royal red shrimpers to actually
36 transit/trawl within the box and so you would need to have your
37 endorsement on the boat though at that point and so that -- I
38 would say keep it and Alternative 1. Any feedback from the
39 committee?

40
41 **CHAIRMAN PERRET:** Dr. Branstetter had his hand up first.

42
43 **DR. BRANSTETTER:** Thank you, Mr. Perret. I think you and I
44 probably both remember that this was identified as a way to
45 identify the universe of royal red shrimp fishermen in the Gulf
46 of Mexico.

47
48 Obviously the endorsement does not do that. Not having an

1 endorsement -- Leann, I just don't think that having the
2 endorsement does anything. You can royal red shrimp with or
3 without an endorsement and it was intended to identify the
4 universe and get a better handle on who was doing it and how
5 much and the numbers are so small right now that they're
6 confidential.

7
8 **CHAIRMAN PERRET:** But we are getting the information that we
9 were trying to get from that royal red shrimp fishery by the
10 number of -- Even though it's a handful of participants, we are
11 getting that information, right?

12
13 **DR. BRANSTETTER:** But not because of the endorsement. We get
14 that information no matter what.

15
16 **CHAIRMAN PERRET:** If we don't have mandatory reporting, how
17 would you get it?

18
19 **DR. BRANSTETTER:** There is reporting for the shrimp fishery.
20 It's just not done --

21
22 **CHAIRMAN PERRET:** They do have to report. That's true.

23
24 **DR. BRANSTETTER:** Right. The port agents go, but they have to -
25 - It's still a permitted vessel and whether they are landing
26 pink or brown or red, those numbers are going to be collected.

27
28 **CHAIRMAN PERRET:** The requirement for the endorsement, is it
29 much of a burden for the agency insofar as the paperwork and so
30 on?

31
32 **DR. CRABTREE:** All these things pile up and to the extent we
33 have endorsements or things that don't have any real utility to
34 us, it doesn't make sense to keep doing them. You know when you
35 have three-hundred-plus endorsements and six to eight vessels
36 that are actually landing them, it's clear that lots of people
37 are just checking it and I think they pay a fee and they get it
38 and so it doesn't identify the universe and it doesn't carry any
39 explicit reporting requirements or anything else and it is hard
40 to see at this moment as to what it's doing for us.

41
42 **CHAIRMAN PERRET:** Morgan, refresh my memory. What did the
43 Shrimp Advisory Panel recommend relative to endorsements at the
44 last AP meeting?

45
46 **DR. KILGOUR:** I don't think they made a recommendation about the
47 royal red shrimp endorsements at the last AP meeting. They were
48 really focused on the permit pool and the eligibility

1 requirements and there weren't any royal red shrimpers in the
2 room and so there wasn't really a recommendation from the Shrimp
3 AP that I can recall.

4
5 **MS. BOSARGE:** On that note, Morgan, and it won't address the
6 action on the board and I think that's what Lance wants to do,
7 but there were a few things that, as you said, weren't addressed
8 on this Shrimp Amendment 17 and there are some things coming up
9 with coral that we're probably going to need to have another
10 Shrimp AP meeting on and just to put it out there when we have
11 this next Shrimp AP meeting, which I'm assuming probably should
12 be sometime after the public hearing draft, after you've revised
13 some of this, so that they can see it and work on the coral and
14 address this. Can we make sure that this does get addressed in
15 that next Shrimp AP?

16
17 **DR. KILGOUR:** The royal red shrimp endorsement?

18
19 **MS. BOSARGE:** Well, it would be the Amendment 17 in general.

20
21 **DR. KILGOUR:** Yes, that will definitely be on the next Shrimp
22 AP.

23
24 **MS. BOSARGE:** I would think that that meeting would be -- If our
25 meeting is in October, it would probably be late September,
26 because we're going to need some feedback on the coral as well.

27
28 **DR. KILGOUR:** I think on the timeline we had, because of the
29 analyses that were going to be required for the Shrimp Amendment
30 17, we were going to have a revised draft options to you in
31 August and a public hearing draft to you in October and so would
32 you like the Shrimp AP to weigh in before the public hearing
33 draft is available or after the public hearing draft is
34 available?

35
36 **MS. BOSARGE:** If they have a meeting right before our October
37 meeting, they ought to be able to see it, right, if it's late
38 September? Our meeting is early October, right? Because we
39 have to take final action in January and so I wouldn't want to
40 wait until January to get their feedback again.

41
42 **DR. KILGOUR:** Let me check on the timeline real quick to make
43 sure that I'm not misspeaking about the timeline, because I
44 thought that we needed to take final action in April of 2016.
45 We would have the public hearing draft in October and a meeting
46 in between and then the final draft for April, unless we have
47 the final draft ready for January, in which we're ahead of the
48 game, but we will still be on the timeline if the Shrimp AP

1 waits to meet until after the October council meeting.
2
3 **MR. ROBINSON:** Just a quick question to Leann or Dr. Kilgour.
4 Maybe you can help me and I should have asked it earlier, but
5 Table 2.3.1, just a question. In 2013, unique vessels actively
6 landing doubled from the six or seven previous years and then it
7 went back down and any idea of why that doubling occurred?
8
9 **CHAIRMAN PERRET:** Any explanation? Sue, do you -- Good
10 observation. I looked at it and didn't even notice that, but
11 you're right that they doubled for some reason. Mr. Williams.
12
13 **MR. ROY WILLIAMS:** I'm a non-committee member, but I've got a
14 question for Steve Branstetter. Steve, you said that you could
15 royal red shrimp, go shrimping, with or without a permit? Can
16 you legally fish for royal reds without a permit?
17
18 **CHAIRMAN PERRET:** They have to have the permit, right?
19
20 **MR. WILLIAMS:** The endorsement. Do you have to have the
21 endorsement to go royal red shrimping?
22
23 **DR. BRANSTETTER:** You do at this point.
24
25 **MR. WILLIAMS:** Did you not say that you don't?
26
27 **DR. BRANSTETTER:** If you didn't have the endorsement, you could
28 still go royal red as long as you have a permit.
29
30 **MR. WILLIAMS:** As long as you have a shrimp permit you could go
31 royal red shrimping?
32
33 **DR. BRANSTETTER:** If you didn't have the endorsement. If the
34 endorsement went away, you could still go -- Anybody could go
35 for royal red shrimp.
36
37 **CHAIRMAN PERRET:** The endorsement gives us a universe. Did you
38 have your hand up, Dave?
39
40 **MR. DONALDSON:** But right now, for you to catch royal reds, you
41 need this endorsement, correct? Right now, for you to catch
42 royal red shrimp, you have to have this endorsement?
43
44 **CHAIRMAN PERRET:** Yes. I was going to make a comment, but I'm
45 not. Okay. Relative to Action 3, royal red endorsement, any
46 other comments? Morgan.
47
48 **DR. KILGOUR:** I just wanted to ask, does the committee think

1 that Alternative 3 needs to be in this document? I have been
2 hearing some discussion about the previous landings being a
3 requirement for the endorsement and if the committee doesn't
4 feel that that's a necessary alternative, it would be okay to
5 remove it.

6
7 **DR. CRABTREE:** I think it would, because I think to try and turn
8 this into some kind of limited entry program is going to take a
9 lot of time and thought and I don't think this amendment is
10 where we want to tackle that and so would just leave it to be
11 continue it or eliminate it and if we decide we want to do some
12 sort of limited entry program, we ought to do that in another
13 amendment.

14
15 **CHAIRMAN PERRET:** Thank you, Dr. Crabtree. Any other comments?
16 So you just want to proceed with the document?

17
18 **MS. BOSARGE:** I will make a motion. **If you need a motion to**
19 **that extent, I will make that motion that we remove Alternative**
20 **3 in Action 3, Alternative 3, to considered but rejected.** Is
21 that how we need to word that?

22
23 **DR. CRABTREE:** Second.

24
25 **CHAIRMAN PERRET:** Dr. Crabtree seconds and so you see the motion
26 on the floor. Any discussion? **All in favor signify by saying**
27 **aye; opposed like sign. The motion passes.** Morgan.

28
29 **DR. KILGOUR:** I am just going to go back through the action
30 guide and make sure that I got everything and I did and so the
31 next step for this document will be to provide you with a
32 revised draft options in August and then we'll proceed with a
33 public hearing draft for the October 2015 meeting and so you
34 will see a new public hearing draft in October.

35
36 **CHAIRMAN PERRET:** Okay and the only thing I will add is I will
37 echo Ms. Bosarge's suggestion on a Shrimp AP meeting prior to
38 the October meeting to try and put that together. Thank you.
39 Anything else on the Shrimp Committee? My last committee
40 meeting and I finish ahead of time and thank you all very much.

41
42 (Whereupon, the meeting adjourned at 10:45 a.m., June 10, 2015.)

43
44 - - -

Shrimp Management Committee Meeting
August 10, 2015
New Orleans, LA

Shrimp Management Committee Meeting: Action Guide and Next Steps

Agenda Item IV: Revised Draft Options paper for Shrimp Amendment 17- Addressing the Expiration of the Shrimp Permit Moratorium

Timeline Status: Options paper

Committee Input and Next Steps:

- Review the purpose and need section
- Review alternatives and suggest modifications, additions or deletions of new alternatives
- The Committee may select preferred alternatives or may wait until a public hearing draft is presented
- The next step will be to develop a public hearing draft for the October 2015 meeting based on the Council's guidance

Agenda Item V: Other Business

Timeline Status: Information

Committee Input and Next Steps:

- The Committee will briefly review the TED regulations in Louisiana
- The Committee may discuss any non-agenda items here.

Addressing the Expiration of the Shrimp Permit Moratorium



Draft Options for Amendment 17 to the Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico, U.S. Waters

August 2015



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Gulf of Mexico Shrimp Amendment 17

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Type of Action

Administrative
 Draft

Legislative
 Final

ABBREVIATIONS USED IN THIS DOCUMENT

ACL	annual catch limit
AM	accountability measure
AP	advisory panel
BRD	bycatch reduction device
CPUE	catch per unit effort
Council	Gulf of Mexico Fishery Management Council
EA	Environmental Assessment
EEZ	exclusive economic zone
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ELB	electronic logbook
ESA	Endangered Species Act
FMP	Fishery Management Plan
GMFMC	Gulf of Mexico Fishery Management Council
Gulf	Gulf of Mexico
lbs	pounds
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
RA	Regional Administrator
Reserve Pool	Gulf Shrimp Vessel Permit Reserve Pool
SEFSC	Southeast Fisheries Science Center
SEIS	Supplemental Environmental Impact Statement
SERO	Southeast Regional Office of NMFS
SPGM	federal Gulf commercial shrimp permit

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FISHERY IMPACT STATEMENT

[This statement is completed after selection of all preferred alternatives.]

CHAPTER 1. INTRODUCTION

1.1 Background

The Gulf of Mexico Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) began managing the shrimp fishery in the Gulf of Mexico (Gulf) in 1981. Four species are included in the fishery management plan: brown shrimp, *Farfantepenaeus aztecus*; pink shrimp, *Farfantepenaeus duorarum*; white shrimp, *Litopenaeus setiferus*; and royal red shrimp, *Pleoticus robustus*.

In 2001, the Council established a federal commercial permit for all vessels harvesting shrimp from federal waters of the Gulf through Amendment 11. Approximately 2,951 vessels had been issued these permits by 2006. After the establishment of the permit, the shrimp fishery experienced economic losses, primarily due to high fuel costs and reduced prices caused by competition with imports. These economic losses resulted in the exodus of vessels from the fishery, and consequently, reduction of effort. The Council determined that the number of vessels in the offshore shrimp fleet would likely decline to a point where the fishery again became profitable for the remaining participants, and new vessels might want to enter the fishery. That additional effort could negate or at least lessen profitability for the fleet as a whole. Consequently, the Council established a 10-year moratorium on the issuance of new federal shrimp vessel permits through Amendment 13 (GMFMC 2005a). The final rule implementing the moratorium was effective October 26, 2006; permits became effective in March 2007.

To be eligible for a commercial shrimp vessel permit under the moratorium, vessels must have been issued a valid permit by NMFS prior to and including December 6, 2003. An exception was made for owners who lost use of a qualified vessel, but who obtained a valid commercial shrimp vessel permit for the same vessel or another vessel prior to the date of publication of the final rule. NMFS estimated 285 of the 2,951 vessels would not meet the control date; thus, the number of permitted vessels under the moratorium would be 2,666. Of those 285 ineligible vessels, 126 were inactive during 2002 (the last year of data available during the time the Council deliberated on this issue). Of the remaining 159 active vessels, only 72 operated in federal waters and were excluded under the moratorium. Of those 72 vessels, 45 were large and 27 were small. The large vessels were expected to be the most affected because the small vessels could continue to fish in state waters.

Vessel owners had one year to obtain the new permit; NMFS issued 1,933 moratorium permits in that time. As of December 31, 2014, 1,470 moratorium permits were valid or renewable (within one year of expiration); therefore, the number of permits decreased by 463 since the moratorium began (Table 1.1.1). These permits have been permanently removed and are no longer available to the fishery. A permit is valid if it has been renewed; a permit is renewable one year from its expiration. After a year with no renewal, a permit is permanently removed from the permit pool.

Table 1.1.1. Number of valid, surrendered, and terminated Gulf commercial shrimp permits as of December 31 each year since implementation of the moratorium. Valid permits are those that were fishable at least one day each year. Surrendered permits are those that were voluntarily returned to NMFS by the permit holder – these permits were valid for part of the year, before being lost from the fishery. Terminated permits are those that were lost from the fishery due to non-renewal by the permit holder.

Year	Number of Valid Permits Each Year	Number of Surrendered Permits Each Year	Number of Permits Terminated Each Year*	Cumulative Number of Permits Lost from the Fishery
2007	1,933	0	NA	NA
2008	1,907	0	26	26
2009	1,722	1	184	211
2010	1,633	1	88	300
2011	1,582	0	51	351
2012	1,534	0	48	399
2013	1,501	0	33	432
2014	1,470	0	31	463

Source: NMFS Southeast Regional Office (SERO) Permits Database

The permit moratorium will expire October 26, 2016. The Council may choose to: 1) allow the moratorium to expire and revert all federal shrimp permits to open access; 2) extend the moratorium for another period of time; or 3) establish a permanent limited access system for Gulf shrimp permits. The Council may also consider setting a target number of permits for the moratorium, creating reserve permits instead of allowing permits to expire, and removing the royal red shrimp endorsement.

1.2 Purpose and Need

Purpose for Action

The purpose of this amendment is to determine if limiting access to federal permits is necessary to prevent overcapacity, promote economic efficiency and stability, maintain high catch per unit effort, and to protect federally managed Gulf shrimp stocks. Another purpose is to determine if the endorsement to harvest royal red shrimp is still necessary to monitor participation and activity in that component of the fishery.

Need for Action

The need for this action is to maintain increases in catch efficiency while preventing overfishing and to obtain the best available information with which to manage the fishery.

1.3 History of Management

The Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico, U.S. Waters (FMP), supported by an environmental impact statement (EIS), was implemented on May 15, 1981. The FMP defined the shrimp fishery management unit to include brown shrimp, white shrimp, pink shrimp, royal red shrimp, seabobs (*Xiphopenaeus kroyeri*), and brown rock shrimp (*Sicyonia brevirostris*). Seabobs and rock shrimp were subsequently removed from the FMP. The actions implemented through the FMP and its subsequent amendments have addressed the following objectives:

1. Optimize the yield from shrimp recruited to the fishery.
2. Encourage habitat protection measures to prevent undue loss of shrimp habitat.
3. Coordinate the development of shrimp management measures by the Gulf of Mexico Fishery Management Council (Council) with the shrimp management programs of the several states, when feasible.
4. Promote consistency with the Endangered Species Act and the Marine Mammal Protection Act.
5. Minimize the incidental capture of finfish by shrimpers, when appropriate.
6. Minimize conflict between shrimp and stone crab fishermen.
7. Minimize adverse effects of obstructions to shrimp trawling.
8. Provide for a statistical reporting system.

The purpose of the plan was to enhance yield in volume and value by deferring harvest of small shrimp to provide for growth. The main actions included: 1) establishing a cooperative Tortugas Shrimp Sanctuary with Florida to close a shrimp trawling area where small pink shrimp comprise the majority of the population most of the time; 2) a cooperative 45-day seasonal closure with Texas to protect small brown shrimp emigrating from bay nursery areas; and 3) a seasonal closure of an area east of the Dry Tortugas to avoid gear conflicts with stone crab fishermen.

Amendment 1/environmental assessment (EA)(1981) provided the Regional Administrator (RA) of the NMFS Southeast Regional Office (SERO) with the authority (after conferring with the Council) to adjust by regulatory amendment the size of the Tortugas Sanctuary or the extent of the Texas closure, or to eliminate either closure for one year.

Amendment 2/EA (1983) updated catch and economic data in the FMP.

Amendment 3/EA (1984) resolved a shrimp-stone crab gear conflict on the west-central coast of Florida.

Amendment 4/EA (1988) identified problems that developed in the fishery and revised the objectives of the FMP accordingly. The annual review process for the Tortugas Sanctuary was simplified, and the Council and RA review for the Texas closure was extended to February 1. A provision that white shrimp taken in the exclusive economic zone (EEZ) be landed in accordance with a state's size/possession regulations to provide consistency and facilitate enforcement with Louisiana was to have been implemented at such time when Louisiana provided for an incidental catch of undersized white shrimp in the fishery for seabobs. This provision was disapproved by

NMFS with the recommendation that it be resubmitted under the expedited 60-day Secretarial review schedule after Louisiana provided for a bycatch of undersized white shrimp in the directed fishery for seabobs. This resubmission was made in February of 1990 and applied to white shrimp taken in the EEZ and landed in Louisiana. It was approved and implemented in May of 1990.

In July 1989, NMFS published revised guidelines for FMPs that interpretatively addressed the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (then called the Magnuson Fishery Conservation and Management Act) National Standards (50 CFR 602). These guidelines required each FMP to include a scientifically measurable definition of overfishing and an action plan to arrest overfishing should it occur.

Amendment 5/EA (1991) defined overfishing for Gulf brown, pink, and royal red shrimp and provided measures to restore overfished stocks if overfishing should occur. Action on the definition of overfishing for white shrimp was deferred, and seabobs and rock shrimp were removed from the management unit. The duration of the seasonal closure to shrimping off Texas was adjusted to conform to the changes in state regulations.

Amendment 6/EA (1992) eliminated the annual reports and reviews of the Tortugas Shrimp Sanctuary in favor of monitoring and an annual stock assessment. Three seasonally opened areas within the sanctuary continue to open seasonally, without need for annual action. A proposed definition of overfishing of white shrimp was rejected by NMFS because it was not based on the best available data.

Amendment 7/EA (1994) defined overfishing for white shrimp and provided for future updating of overfishing indices for brown, white, and pink shrimp as new data become available. A total allowable level of foreign fishing for royal red shrimp was eliminated; however, a redefinition of overfishing for this species was disapproved.

Amendment 8/EA (1995), implemented in early 1996, addressed management of royal red shrimp. It established a procedure that would allow total allowable catch for royal red shrimp to be set up to 30% above maximum sustainable yield (MSY) for no more than two consecutive years so that a better estimate of MSY could be determined. This action was subsequently negated by the 1996 Sustainable Fisheries Act amendment to the Magnuson-Stevens Act that defined overfishing as a fishing level that jeopardizes the capacity of a stock to maintain MSY, and does not allow optimum yield (OY) to exceed MSY.

Amendment 9/supplemental environmental impact statement (SEIS) (1997), required the use of a NMFS certified bycatch reduction device (BRD) in shrimp trawls used in the EEZ from Cape San Blas, Florida to the Texas/Mexico border, and provided for the certification of BRDs and specifications for the placement and construction. The purpose of this action was to reduce the bycatch mortality of juvenile red snapper by 44% from the average mortality for the years 1984 through 1989. This amendment exempted shrimp trawls fishing for royal red shrimp seaward of the 100-fathom contour, as well as groundfish and butterfish trawls, from the BRD requirement. It also excluded small try nets and no more than two ridged frame roller trawls of

limited size. Amendment 9 also provided mechanisms to change the bycatch reduction criterion and to certify additional BRDs.

Amendment 10/EA (2002) required BRDs in shrimp trawls used in the Gulf east of Cape San Blas, Florida. Certified BRDs for this area are required to demonstrate a 30% reduction by weight of finfish.

Amendment 11/EA (2001) required owners and operators of all vessels harvesting shrimp from the EEZ of the Gulf to obtain a federal commercial vessel permit. This amendment also prohibited the use of traps to harvest royal red shrimp from the Gulf and prohibited the transfer of royal red shrimp at sea.

Amendment 12/EA (2001) was included as part of the Generic Essential Fish Habitat (EFH) Amendment that established EFH for shrimp in the Gulf.

Amendment 13/EA (2005) established an endorsement to the federal shrimp vessel permit for vessels harvesting royal red shrimp; defined the overfishing and overfished thresholds for royal red shrimp; defined MSY and OY for the penaeid shrimp stocks in the Gulf; established bycatch reporting methodologies and improved collection of shrimping effort data in the EEZ; required completion of a Gulf Shrimp Vessel and Gear Characterization Form by vessels with federal shrimp permits; established a moratorium on the issuance of federal commercial shrimp vessel permits; and required reporting and certification of landings during the moratorium.

Amendment 14/EIS (2007) was a joint amendment with Reef Fish Amendment 27. It established a target red snapper bycatch mortality goal for the shrimp fishery in the western Gulf and defined seasonal closure restrictions that can be used to manage shrimp fishing efforts in relation to the target red snapper bycatch mortality reduction goal. It also established a framework procedure to streamline the management of shrimp fishing effort in the western Gulf.

The Generic Annual Catch Limit (ACL)/Accountability Measures (AMs) Amendment/EIS (2011) set an ACL and AM for royal red shrimp. Penaeid shrimp were exempt from the ACL/AM requirements because of their annual life cycle.

The Shrimp Electronic Logbook (ELB) Framework Action (2013) established a cost-sharing system for the ELB program, and described new equipment and procedures for the program.

Amendment 15/EA (2015), if implemented, would redefine stock status criteria for the three penaeid species of shrimp, including MSY and overfished/overfishing thresholds. The general framework procedure would also be updated.

Amendment 16/SEIS (2015) eliminated duplicative AMs and the quota for royal red shrimp. The ACL was set equal to the acceptable biological catch and a post-season AM was established.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 – Address the Expiration of the Federal Shrimp Permit Moratorium in the Gulf of Mexico

Alternative 1 – No Action. The moratorium on the issuance of new Gulf of Mexico (Gulf) federal commercial shrimp vessel permits expires on October 26, 2016. With expiration of the federal Gulf commercial shrimp permit moratorium, the commercial shrimp vessel permits would become open access permits, as they were prior to the moratorium, and therefore be available to any eligible applicants.

Preferred Alternative 2 – Extend the moratorium on the issuance of federal Gulf commercial shrimp vessel permits. The moratorium would be extended for:

Option a. 5 years

Preferred Option b. 10 years

Alternative 3 – Create a federal limited access permit for commercial shrimp vessels in the Gulf. To be eligible for a commercial shrimp vessel permit under the limited access system, vessels must have a valid or renewable federal Gulf commercial shrimp vessel permit on October 26, 2016. Federal Gulf commercial shrimp vessel permits will need to be renewed every year and all previous renewal, transfer, and reporting requirements would still be in effect.

NOTE: Action 2.1 and Action 2.2 are relevant only if Preferred Alternative 2 or Alternative 3 in Action 1 is selected by the Council

Discussion: The moratorium on the issuance of federal Gulf commercial shrimp permits (SPGM) was established in Shrimp Amendment 13 (GMFMC 2005a). The purpose of the amendment was to help stabilize the shrimp fishery. Increasing fuel costs, decreasing shrimp prices and increasing foreign shrimp imports all contributed to the overcapitalization of the commercial shrimp fleet. Since the implementation of the moratorium, the number of permits has decreased each year with terminations peaking in 2009, when initially issued SPGMs were terminated due to non-renewal (Table 1.1.1). Vessels were expected to continue to exit the fishery until the reduced number of permits allowed the resource to be harvested profitably (GMFMC 2005a). Effort in the offshore fishery has decreased, and landings have slightly declined (Figure 2.1.1). Additionally, the catch per unit effort (CPUE) for the offshore fishery has remained relatively constant since implementation of the moratorium.

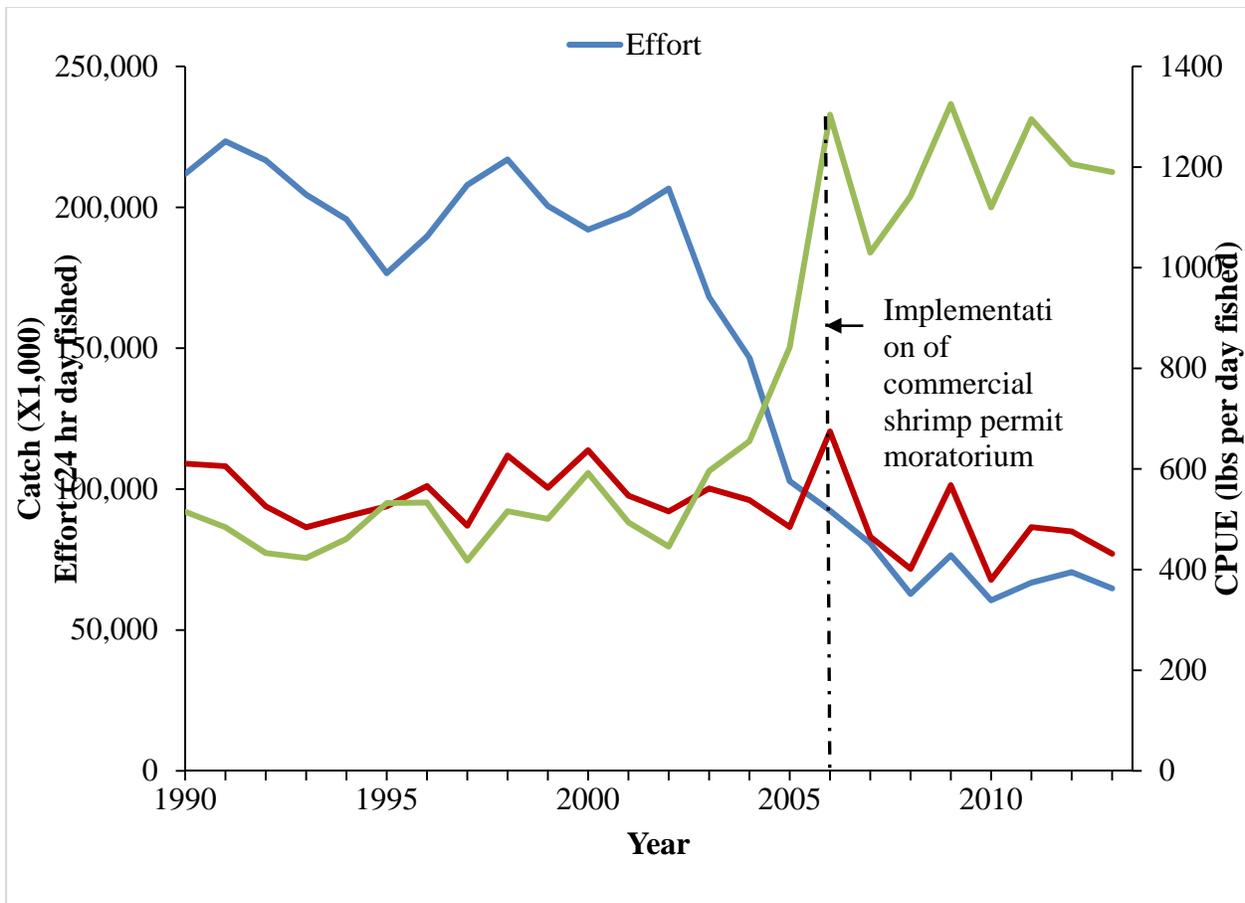


Figure 2.1.1. Catch, effort and CPUE from 1990-2013 for all shrimp caught in offshore waters¹ and landed in Gulf ports.²

Alternative 1 would allow the moratorium to expire and federal Gulf shrimp permits would be open access. This would allow new entrants into the commercial shrimp fishery and could have negative effects if the fishery became overcapitalized. This (overcapitalization and/or effort increases) could lead to increases in protected resources bycatch and potentially result in additional requirements for bycatch reduction. This alternative could undo any positive effects of the moratorium and revert the fishery back to an open access fishery. Under this alternative permits would no longer be transferrable and would have no market value.

¹ Offshore waters are waters outside the COLREGS lines. The COLREGS lines are the set of demarcation lines that have been established by the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (commonly called COLREGS). COLREGS define boundaries across harbor mouths and inlets for navigation purposes.

² Although landings information can be obtained from both the Gulf Shrimp System (GSS) and Annual Landings Form (ALF) databases, effort is not reported on the ALF and it is not possible to determine whether the reported landings on the ALF came from offshore or inshore waters. Thus, landings estimates are based solely on GSS data, and only shrimp landed at Gulf ports is taken into account. Further, because separate permits are not required to harvest each of the penaeid species, and multiple species of shrimp may be harvested simultaneously, these estimates include all shrimp harvested from offshore waters, regardless of whether they are federally managed.

Preferred Alternative 2 would extend the permit moratorium for a specified number of years. This could contract the fishery more if additional permits are terminated. Extending the moratorium for an additional 5 years (**Option a**) would require the Council to review the status of the fishery sooner than if the 10 year option (**Preferred Option b**) was selected. **Option a** gives the least flexibility as the time required to produce an amendment to address an additional expiration date would be between 18 and 24 months, thus not allowing for more than 3 or 4 years of data to be incorporated before re-evaluating the expiration of the SPGM extension. **Preferred Option b** would allow for more data collection and may result in a stable number of permits if fewer fishermen exit the fishery. The number of permits that have been terminated declined from 2010 until 2014, but the number of permits has not yet reached a minimum as the number of terminated permits per year has not reached zero.

Alternative 3 would create a federal limited access permit for commercial shrimp vessels in the Gulf. Current permit holders would receive the limited access permit if their vessel has a valid or renewable federal Gulf commercial shrimp permit on October 26, 2016. Federal Gulf commercial shrimp vessel permits would need to be renewed every year and all previous renewal, transfer, and reporting requirements would still be in effect. This alternative would make the federal commercial shrimp fishery a limited access fishery until the Council takes action to change that status, unlike the moratorium which has an expiration date. Additionally, the number of permits could continue to decline due to non-renewal of permits unless the Council implemented other measures (such as Action 2.1). For both **Preferred Alternative 2** and **Alternative 3**, persons wishing to enter the fishery could purchase a valid permit from another permit holder. Permits that have expired but are still renewable cannot be transferred unless and until they are renewed prior to termination; a permit must be valid to be transferred.

2.2 Action 2 – Target Number of Commercial Shrimp Permits and Disposition of Non-Renewed Permits

Currently any federal permit issued by the NMFS Southeast Regional Office is generally only valid for one year. After the expiration date, the holder of a limited access or moratorium permit has an additional year to renew the permit. If a permit is not renewed within one year of the expiration date, it is terminated; i.e., it is no longer renewable or transferable, and effectively ceases to exist. Through non-renewal, 463 Gulf shrimp permits have been terminated during the moratorium. Action 2 is only appropriate if Alternative 2 (continue the moratorium) or Alternative 3 (create a limited access permit) is chosen in Action 1, because Alternative 1 (no action, moratorium allowed to expire) would result in the permit becoming an open access permit, for which anyone can apply and does not need to be renewed.

Action 2-1. Target Number of Gulf Shrimp Vessel Permits and Creation of a Gulf Shrimp Vessel Permit Reserve Pool

Alternative 1. No Action. Do not set a target number of Gulf shrimp vessel permits. Any Gulf shrimp vessel permit not renewed within one year of the expiration date on the permit will be terminated and no longer available for purchase or use.

Alternative 2. Set a target number of Gulf shrimp vessel permits based on effort needed to attain aggregate maximum sustainable yield (MSY) in the offshore fishery (2,018 permits).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

Alternative 3. Set a target number of Gulf shrimp vessel permits based on the number of valid permits issued at the beginning of the moratorium (1,933 permits).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

Alternative 4. Set a target number of Gulf shrimp vessel permits based on the number of valid or renewable permits at the end of 2014 (1,470 permits).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

Alternative 5. Set a target number of Gulf shrimp vessel permits based on the number of valid or renewable permits at the end of the initial moratorium, October 26, 2016 (number of permits unknown).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

Alternative 6. Set a target number of Gulf shrimp vessel permits based on effort needed to maintain the gains in catch per unit effort (CPUE) in the offshore fishery during the moratorium (882 permits).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

OR

Alternative 6. Set a target number of Gulf shrimp vessel permits based on effort needed to maintain the gains in catch per unit effort (CPUE) in the offshore fishery during the moratorium without substantially reducing landings (between 909 and 1,133 permits depending on year chosen from 2.2.2).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

Alternative 7. Set a target number of Gulf shrimp vessel permits based on the number of active permitted vessels (those with landings from offshore waters) when effort was highest during the moratorium in the area monitored for red snapper juvenile mortality but without reaching the bycatch reduction target and triggering closures (938 permits).

Option a. If the number of permits reaches the target number, any permits that are not or were not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Option b. If the number of permits reaches the target number, the Council will review the status of the fishery to determine if action is needed.

Note: For Alternatives 2-4, the number of permits has already decreased below the target; therefore, Option b encompasses the review included in this amendment.

Discussion: A decrease in the number of permits is an expected part of a moratorium or limited access permit. The federal Gulf commercial shrimp permit moratorium was based on the likelihood that, at some point in time, the number of vessels in the offshore shrimp fleet would decline to a point where the fishery again became profitable for the remaining participants. The Council determined that there was a need to prevent new effort from entering the fishery and

thus negating, or at least lessening, profitability when that time came. Various members of the Council, the Council's Shrimp Advisory Panel (AP), and the public have suggested that the fishery has reached that point, and the decline in permits should end. Others have suggested that the time is past, or that it is in the near future. In any case, the Council may decide to set a target number of permits for the Gulf shrimp fishery. If so, when that target is reached, NMFS would need to determine if the termination of permits should be stopped.

Alternative 1 would not set a target number of permits and would continue the practice of terminating permits that were not renewed within one year of the expiration date. The number of Gulf shrimp permits would be expected to continue to decrease over time, although the rate of decrease would be expected to slow as fewer inactive permits remain. The AP was concerned that the fleet would also continue to shrink because of vessel age and the high cost of replacement. These factors could cause the rate of attrition to increase in the future.

Alternatives 3-5 base the target number of permits on the number of permits at a certain period of time or under certain conditions; **Alternatives 2, 6, and 7** base the target number of permits on a level of effort needed to achieve a specific management goal. The Council does not directly control effort in the offshore fishery, so the relationship between permits and/or vessels and effort needs to be determined. That is, it would be helpful to know how many permits/vessels are needed to achieve alternative levels of effort that may be desired by the Council.

A preliminary model indicates a strong relationship exists between the number of permitted vessels and effort. However, even though the estimated model explained much of the variability in effort, it also consistently overestimated observed effort and thus is not considered reliable for policy purposes. Further, in theory, effort should be more closely related to the number of active vessels rather than the number of permitted vessels in the fishery. For current purposes, a vessel is only considered to be active in a particular year if it had shrimp landings from Gulf offshore³ waters according to the most currently available Gulf Shrimp System (GSS) data for 1990-2013. Thus, for example, if a vessel only had landings from inshore waters or another region (e.g., South Atlantic), it is not considered active in this analysis. The number of active vessels in the offshore fishery declined significantly (49%) between 2002 and 2008, but has remained relatively stable since, with the notable exception of 2010 (Table 2.2.1).

³ Gulf offshore waters includes some state waters, as well as federal waters. Though most of these vessels had federal permits, a federal permit is not required to harvest shrimp in state offshore waters. Thus, the number of active vessels in the offshore fishery will generally exceed the number of permitted or active permitted vessels.

Table 2.2.1. Number of permitted and active vessels by size category in the offshore Gulf shrimp fishery. Large vessels are greater than or equal to 60 feet length, small vessels less than 60 feet length.

Year	Active Vessels	Large Active Vessels	Small Active Vessels	Permitted Vessels	Active Permitted Vessels	Large Active Permitted Vessels ¹	Small Active Permitted Vessels ²
2000	2,989	1,918	1,071	N/A	N/A	N/A	N/A
2001	3,011	2,032	979	N/A	N/A	N/A	N/A
2002	3,357	1,956	1,401 ³	N/A	N/A	N/A	N/A
2003	3,085	1,810	1,275	2,688	1,953	1,656	297
2004	2,888	1,658	1,230	2,791	1,833	1,548	285
2005	2,427	1,493	934	2,713	1,676	1,405	271
2006	2,250	1,252	998	2,578	1,426	1,182	244
2007	1,940	1,137	803	2,514	1,283	1,084	199
2008	1,714	994	720	1,930	1,059	942	117
2009	1,891	1,001	890	1,764	1,075	959	116
2010	1,365	902	463	1,685	951	865	86
2011	1,638	929	709	1,641	1,013	898	115
2012	1,724	938	786	1,587	1,014	885	129
2013	1,649	904	745	1,544	970	858	112

¹ Length data was missing from the Coast Guard database for a small number of documented vessels that did not have permits. These vessels were assumed to be large because only vessels with a net tonnage less than 5 net tons must be documented.

²NMFS does not possess length data for non-permitted vessels. State registered vessels without permits are assumed to be small vessels because vessels with a net tonnage less than 5 net tons must be documented, and vessels less than 5 net tons are typically less than 60 ft in length.

³Reflects artificial increase due to change in Gulf Shrimp System data protocols wherein landings data came from LA and AL trip tickets, rather than port agents, which explicitly identified state registered boats. Florida trip ticket data was also incorporated over the next few years.

An analysis of the relationship between the various estimates of active vessels in the offshore fishery in Table 2.2.1 was conducted to see whether any had a strong, direct relationship with offshore effort (see Table 2.2.2). The analysis found a very strong relationship exists between active permitted vessels and observed offshore effort, which suggests the Council can indirectly control or at least limit offshore effort by controlling the number of vessels with federal permits. The predicted or expected number of active permitted vessels at various levels of observed effort is provided in Table 2.2.2. If a particular level of offshore effort is desired, based on various management objectives, these results are suggestive of what the target number of federally permitted vessels should be if the Council wants to implement a target that implicitly assumes all permitted vessels are and should be active (i.e., the target would not allow for latent permits). If the Council thinks the target number of permits should allow for vessels that are not active in the offshore fishery each year (i.e., vessels that only participate in fishery in certain years), then it may want to consider adding a buffer to the provided estimates. Further, a percentage of the offshore landings in each year cannot be ascribed to a particular vessel due to missing or invalid vessel identifiers in the GSS data. Although this percentage was relatively high before federal permits were required, it has declined from 3% in 2003 to 0.6% in 2013. Nonetheless, the issue

of missing or invalid vessel identifiers suggests the estimates of active vessels in Table 2.2.1 may be slightly underestimated.

Alternative 2 bases the target number of permits on the number of active permitted vessels that could harvest the aggregate MSY in the offshore shrimp fishery. The estimated yield curve (Figure 2.2.1) for the offshore fishery produced by the model indicates that aggregate MSY is 109,237,618 lbs (tails) and effort at MSY is 143,756 days fished.⁴ The predicted number of active permitted vessels and thus the target number of permits needed to attain effort at MSY is 2,018. Model results should only be used to review previously observed data, and thus should not be used to predict what catch/landings would be at effort levels above or below observed levels, as they are subject to year to year variations in the abundance of shrimp stocks.

The level of effort needed to achieve aggregate MSY in the offshore fishery was most closely observed in 2004 (Figure 2.2.1). Recent levels of effort have been well below the level needed to achieve aggregate MSY in the offshore fishery. Based on observed effort in 2013, effort would need to increase by more than 126% from current levels to achieve aggregate MSY.

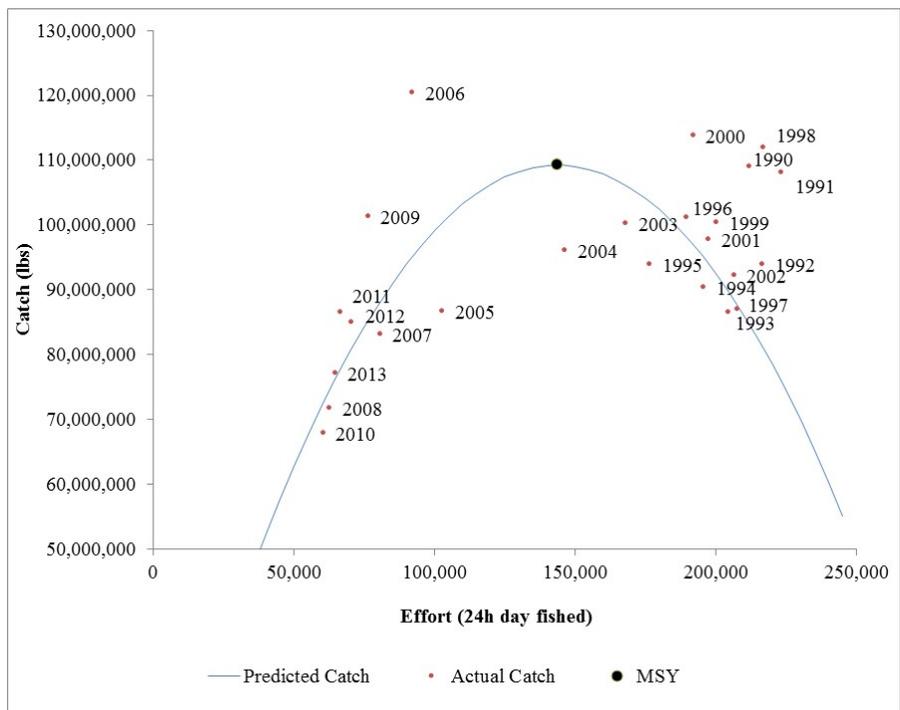


Figure 2.2.1. Yield curve for the offshore Gulf shrimp fishery used to estimate aggregate maximum sustainable yield (MSY). Estimates are based on catch and effort data for all shrimp species caught in offshore Gulf waters and landed in Gulf ports, 1990-2013.

Source: SEFSC, Galveston

Alternative 3 presumes the number of permits at the beginning of the moratorium (1,933) was, in fact, the appropriate number of permits to maintain in the shrimp fishery, and the decrease in permits since then was undesirable. However, between 2007 and 2013, only 1,539 vessels with moratorium permits had landings from Gulf offshore waters in any year. Thus, many of the lost

⁴ Aggregate MSY is not equal to the sum of each species' MSY.

permits may have been inactive. The highest number of terminated permits was in 2009. This was two years after initial issuance of the moratorium permits and is when those initial permits would have terminated if they were never renewed. This suggests that those vessels were not actively fishing in offshore or federal waters. This situation will be explored further with development of this amendment.

Alternative 4 presumes the number of permits at the end of 2014 (1,470) was the appropriate number of permits to maintain in the shrimp fishery. This represents a 24% decrease from the number of permits at the beginning of the moratorium. The Council will need to provide rationale for why this is the appropriate target number of permits.

Alternative 5 presumes the number of permits at the end of the moratorium will be the appropriate number of permits to maintain in the shrimp fishery. This represents an unknown decrease from the number of permits at the beginning of the moratorium. In the last two years, the number of permits lost has leveled at around 32 permits per year. If we assume a similar loss in 2015 and 2016, the number of permits at the end of 2016 would be around 1,406, a decrease of 27% from the beginning of the moratorium. Again, the Council will need to provide rationale for why this is the appropriate target number of permits.

Alternative 6 is an attempt to calculate the number of permits needed to maintain the level of effort that has produced the high CPUE values attained during the moratorium, without allowing total landings to decrease substantially. Economic conditions have led to substantial consolidation in this industry creating significant efficiency gains for the remaining participants. It should be noted that these efficiency gains did not translate into substantial profitability; instead, they allowed survival in the face of deteriorating economic conditions (high fuel prices, decreasing shrimp prices). The relationship between effort and CPUE is strong (Figure 2.2.2); as effort decreases, CPUE increases.

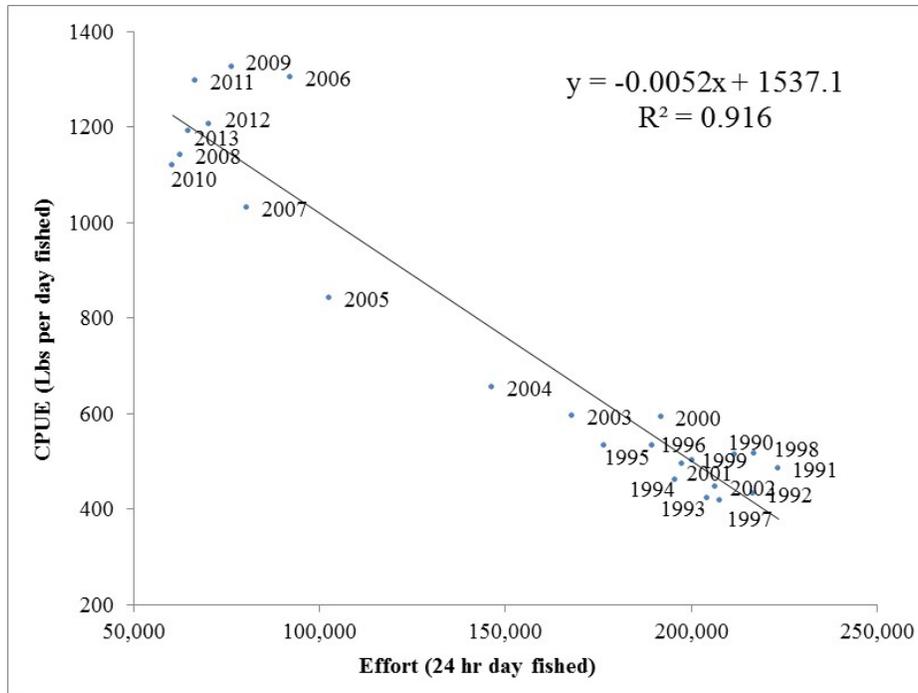


Figure 2.2.2. Relationship between CPUE and effort in the offshore Gulf shrimp fishery, 1990-2013.

Source: SEFSC, Galveston

This consolidation and the resulting efficiency gains for fishermen would be locked in by maintaining the number of vessels that could harvest at a high CPUE. This was the objective of the moratorium as stated in Amendment 13 (GMFMC 2005). However, as effort decreases, total landings also decrease (Figure 2.2.3). Landings reductions would be expected to cause adverse economic impacts in the onshore sector (i.e., dealers and processors).

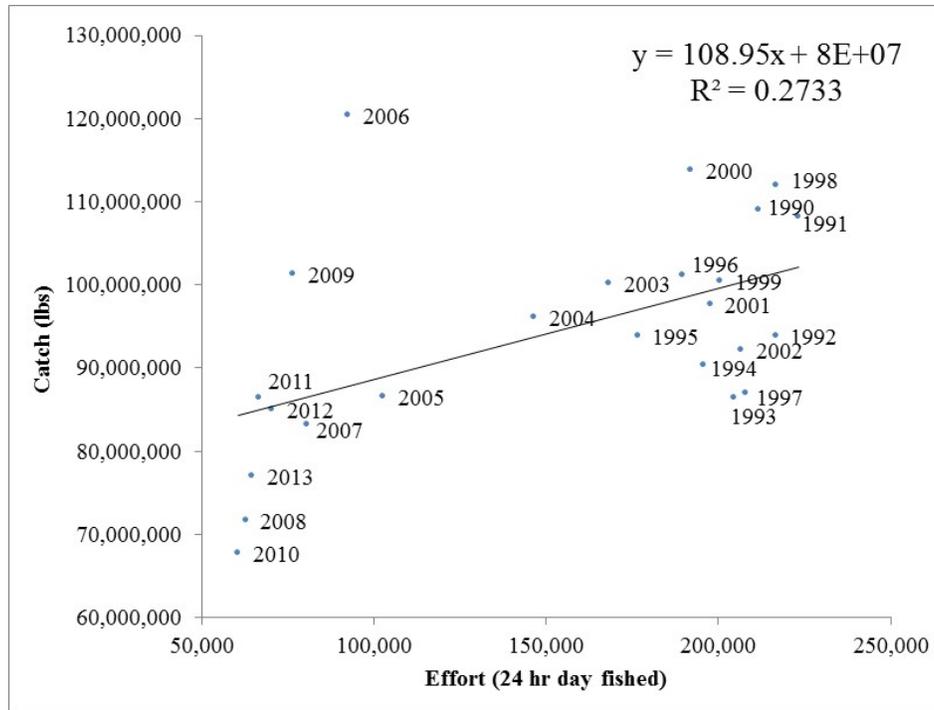


Figure 2.2.3. Relationship between landings and effort in the offshore Gulf shrimp fishery, 1990-2013.

Source: SEFSC, Galveston

Observed CPUE and observed landings during the moratorium were highest in 2009 (Table 2.2.2); however, care must be exercised in relying on trends in observed landings as they are subject to year to year variations in abundance of the shrimp stocks. For example, although observed landings were highest in 2006, the high landings were due to higher than average shrimp abundance in that year. Thus, the level of effort in 2006 would not be expected to generate that same level of landings under long-term average levels of shrimp abundance. Therefore, observed landings levels should not be used to predict what would be expected under average abundance conditions in the future. The same caution applies to using observed levels of CPUE. Although observed CPUE was highest in 2009, this result was similarly driven by above average abundance. It is not prudent to expect or rely on above average abundance conditions in the future.

Instead, the modelled yield curve (Figure 2.2.1) can be used to generate expected values for landings and CPUE that account for changes in abundance over time and thus are more reliable with respect to determining the underlying trends in those values and expected values in the future. Expected CPUE would be highest when effort was lowest. The highest expected CPUE was in 2010, but this finding should be viewed with caution given the effects of the Deepwater Horizon MC 252 oil spill on fishing behavior in 2010. A safer way forward is to omit 2010 and conclude that expected CPUE was at its maximum in 2008. If the Council intends simply to maximize CPUE, the predicted number of active permitted vessels needed to attain effort observed in 2008 produces 882 as a target number of permits (Table 2.2.2).

Table 2.2.2. Observed effort (days fished = 24 hours trawling), landings, and CPUE (pounds per day fished); and expected landings (pounds tails), and CPUE for the offshore component of the fishery (see text for explanation of expected values). The predicted number of active permitted vessels is for the offshore component of the Gulf shrimp fishery.

Year	Observed Effort	Observed Landings	Observed CPUE	Expected Landings	Expected CPUE	Expected Active Permitted Vessels
2000	192,073	113,783,105	592	97,116,225	538	N/A
2001	197,644	97,706,647	494	94,119,050	509	N/A
2002	206,621	92,119,199	446	88,600,977	463	N/A
2003	168,135	100,203,686	596	106,263,503	663	2,361
2004	146,624	96,079,478	655	109,321,652	775	2,059
2005	102,840	86,571,515	842	100,451,078	1,002	1,444
2006	92,372	120,437,081	1,304	95,332,055	1,057	1,297
2007	80,733	83,126,655	1,030	88,281,093	1,117	1,133
2008	62,797	71,689,314	1,142	74,615,625	1,211	882
2009	76,508	101,339,883	1,325	85,368,059	1,139	1,074
2010	60,518	67,790,473	1,120	72,635,863	1,222	850
2011	66,777	86,482,240	1,295	77,941,409	1,190	938
2012	70,505	85,004,590	1,206	80,904,495	1,170	990
2013	64,764	77,063,083	1,190	76,280,038	1,200	909

Source: Landings are based on GSS data, J. Primrose, SEFSC Galveston, 7/10/15; effort and CPUE estimates, R. Hart, SEFSC Galveston, 7/15/15; expected and predicted estimates, M. Travis, NMFS SERO, 7/17/15.

Recent analysis demonstrates the importance of maintaining a relatively high CPUE with respect to profitability in the offshore fishery. Though based on limited data (2006-2013), a linear regression model determined that annual net revenue per vessel is primarily driven by CPUE, with ex-vessel shrimp price also being important though slightly less so, and fuel price somewhat less important. However, reductions in observed effort and fleet size after 2007 have not caused substantial improvements in CPUE, but they have caused noticeable reductions in landings.

The expected values illustrate that landings have been on a downward trend since 2006 (Table 2.2.2). These results suggest that additional effort reductions would be expected to further reduce landings. If the Council wishes to balance CPUE and landings, the number of predicted active permitted vessels in a year other than 2008 (or 2010) may better achieve that intent. Using the number of predicted active permitted vessels from one of these other years would set a target higher than the target based on 2008.

Alternative 7 takes into account the target effort level in specific areas of the western Gulf (statistical zones 10-21, 10-30 fathoms) to protect juvenile red snapper. This target was set in Amendment 14 (GMFMC 2007) as 74% less than the effort in the benchmark years of 2001-2003. That target was reduced in 2012 to 67% less than the benchmark years because the red snapper rebuilding plan was proceeding as planned. If effort in the area increases above this target, selected areas of the EEZ must be closed to shrimp fishing. In 2011, the effort level for the area was very near to exceeding the target effort level (Figure 2.2.3). Therefore, the predicted number of active permitted vessels in that year could be considered a reasonable target for the number of permits in the shrimp fishery. In 2011, 938 permitted vessels were active.

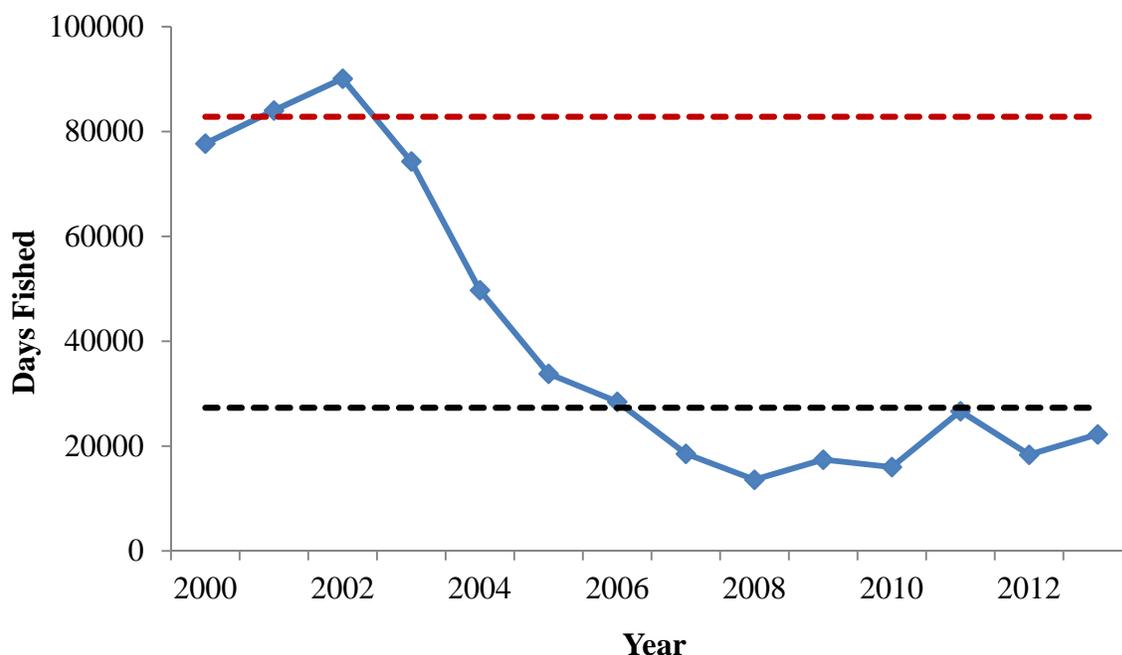


Figure 2.2.3. Offshore Gulf shrimp effort in statistical zones 10-21, 10-30 fathoms relative to target effort levels to reduce red snapper juvenile mortality. The red line shows the baseline 2001-2003 effort levels; the black line shows the target effort level of 67% of the baseline. Source: SEFSC, Galveston.

Alternatives 2-7, Option a would create a Gulf Shrimp Vessel Permit Reserve Pool (Reserve Pool). If the number of permits reaches the target, permits that normally would be terminated, revoked, or surrendered would instead be transformed into “reserved” permits that could be re-issued. The NMFS Pacific Islands Regional Office maintains a similar pool for the American Samoa longline limited access permits, wherein if a permit is relinquished, revoked, or not renewed, the Regional Administrator makes that permit available for re-issuance. Action 2-2 addresses the issuance of Gulf shrimp permits from the reserve pool, if created. **Alternatives 2-4** would be expected to set a target number of permits above the number expected to be valid or renewable when measures in this amendment would be implemented, and would require NMFS to create new permits for the Gulf Shrimp Vessel Permit Reserve Pool. **Alternatives 5-7** would set a target number of permits below the current number, which would delay the creation of the Gulf Shrimp Vessel Permit Reserve Pool until the target is reached. Any reserved permit in the Reserve Pool would not have a landings history associated with it, regardless of whether it was newly created or transformed from a regular permit; in other words, permits in the Reserve Pool will act as new permits without associated catch history.

Alternatives 2-7, Option b would set a target number of permits for the shrimp fishery, but not establish any specific response to reaching that target. Instead, NMFS would notify the Council that the target had been reached, and then the Council would review the status of the fishery to decide what action might be needed. Depending on the alternative, the target could be reached far into the future. Economic conditions, health of the stocks, and other factors may have changed by that time, and the target number of permits set in this amendment may no longer be

appropriate for the fishery. Thus, **Option b** allows the Council flexibility to tailor future management measures to the actual situation at that time, rather than analysis based on the current situation. For **Alternatives 2-4**, **Option b** would not be valid, as the target number of permits in those alternatives has already passed. In other words, the trigger for Council review would be immediate; because this amendment actually is a Council review, the decision made here would fulfill the terms in **Option b** and no additional action beyond this amendment would be warranted.

Summary of Potential Impacts

Alternatives 2-4 would set the target number of Gulf shrimp permits above where they are expected to be when the measures in this amendment are implemented. If the Council implemented a permit pool, as in Option a, this increase in permits could allow effort to increase, which could provide a greater chance of harvesting more shrimp. On the other hand, increased effort increases the risk of exceeding the target bycatch mortality of juvenile red snapper and protected species in shrimp trawls. Also, the effort⁵ in 2009 was the baseline effort level used for the most recent biological opinion to evaluate the present and future effect of the shrimp fishery on ESA-listed species (NMFS 2014). The biological opinion concluded that this level of effort would not jeopardize the continued existence of protected sea turtles, small-tooth sawfish, and sturgeon. If effort levels are expected to increase above this level, a new biological opinion would be needed; and if captures of protected species increase, additional requirements for bycatch reduction could be imposed. Finally, only 1,539 vessels with moratorium permits had landings from Gulf offshore waters in any year between 2007 and 2013, indicating any permits beyond that number have not been used for shrimping in the past seven years. Thus any target higher than 1,539 permits (**Alternatives 2 and 3**) would allow inactive permits to continue in the fishery.

Alternatives 5-7 would allow a passive reduction in the number of permits from where they are now. Fewer permits could result in a lower number of vessels actively fishing, decreasing bycatch and impacts on the environment. If fewer vessels could maintain the same level of total landings, each remaining vessel would have more landings and greater benefit. However, vessels cannot continue to increase CPUE indefinitely, and landings have been declining as effort has decreased in recent years. If the number of vessels is severely limited, shrimp harvest may not be able to support the shore-side infrastructure needed by the industry.

The expected effects of these alternatives are dependent on changes in fishing effort, which may or may not change based on the number of permits. Inactive permits during the moratorium years have provided an opportunity for increased effort, either by the owners of those vessels starting to fish or by transferring permits to new entrants that intend to fish. Yet effort has not increased. Reasons to maintain a permit that is not being used to harvest shrimp include waiting for fishing to be more economical, accounting for bycatch of shrimp when trawling for other purposes, or speculating that the value of the permit will increase in the future. This last reason would be negated by a permit pool as reserve permits could be purchased from NMFS for only \$25 each.

⁵ Effort from otter trawls only, inshore and offshore waters.

Action 2-2. Issuance of Reserved Gulf Shrimp Vessel Permits

Note: Action 2-2 presumes Option a in Action 2-1 is chosen. If any Option b is chosen, Action 2-2 is not applicable.

Alternative 1. No action. Individuals must submit a completed application to NMFS to be issued a Reserved Gulf Shrimp Vessel Permit. Eligible applicants will receive a Gulf Shrimp Vessel Permit Reserve Pool permit if one is available.

Alternative 2. The Reserved Gulf Shrimp Vessel Permits will be available from NMFS and will be issued to eligible applicants in the order in which applications are received. Individuals must submit a completed and up-to-date application to NMFS to be issued a Reserved Gulf Shrimp Vessel Permit. To be eligible for a Reserved Gulf Shrimp Vessel Permit the applicant must also:

Option a - be a U.S. citizen or business

Option b - assign the permit to a vessel that is of at least X length on the application

Option c - assign the permit to a vessel with a USCG Certificate of Documentation on the application (five net ton minimum)

Alternative 3. The Reserved Gulf Shrimp Vessel Permits will be available from NMFS *once per year* and will be issued to eligible applicants in the order in which applications are received. Individuals must submit a completed application to NMFS to be issued a Reserved Gulf Shrimp Vessel Permit. To be eligible for a Reserved Gulf Shrimp Vessel Permit the applicant must also:

Option a - be a U.S. citizen or business

Option b - assign the permit to a vessel that is of at least X length on the application

Option c - assign the permit to a vessel with a USCG Certificate of Documentation on the application (five net ton minimum)

Alternative 4. The Reserved Gulf Shrimp Vessel Permits will be available from NMFS *once per year*. If the number of applicants is greater than the number of Reserved Gulf Shrimp Vessel Permit, NMFS will conduct a lottery to determine which individuals may be issued the available permits. Individuals must submit a completed application by the published deadline to NMFS to be eligible for the lottery. To be eligible for a Reserved Gulf Shrimp Vessel Permit the applicant must:

Option a - be a U.S. citizen or business

Option b - assign the permit to a vessel that is of at least X length

Option c - assign the permit to a vessel with a USCG Certificate of Documentation on the application (five net ton minimum)

Note: All current permit renewal/transferability and recordkeeping/reporting requirements would apply regardless of the alternative chosen. These requirements can be found in detail in 50 CFR 622.4 and 622.51.

IPT Questions for Council: Would each individual be limited to one application? How long would the applications be valid? Would these permits be transferrable?

Discussion: If a reserve pool for Gulf shrimp permits is created through Action 2-1, distribution of those permits must also be considered. Distribution could follow the regular permit application process with no additional restrictions with **Alternative 1**. The Reserved Gulf Shrimp Vessel Permits would be obtained by submitting a completed application and the appropriate application fee (currently \$25 for the first permit, \$10 for each additional permit on the application). If a Reserved Gulf Shrimp Vessel Permits is available, it would be assigned to the applicant. However, if a permit is not available, the application fee would be forfeited. This alternative would require the applicant to have some knowledge of permits that may have an upcoming termination date, or of someone willing to surrender their permit, or for applicants to simply apply based on speculation.

With **Alternative 2**, NMFS would issue a Reserved Gulf Shrimp Vessel Permit to any qualified applicant, if a permit is available. Again, if a permit is not available, the application fee would be forfeited and the applicant would need some knowledge of permits that may have an upcoming termination date, or of someone willing to surrender their permit, be willing to submit an application on speculation. NMFS could create a waiting list for Reserved Gulf Shrimp Vessel Permits, but updated applications would still need to be submitted regularly. If one or more of the options are selected, NMFS would only accept applications from certain entities. The AP suggested these options to help reduce the number of people obtaining reserve permits to resell. However, restricting applicants would set a new precedent, as no other permits restrict who may apply.

With **Alternative 3**, NMFS would hold all Reserved Gulf Shrimp Vessel Permits in the pool until a specific date, when a notice would be published in the *Federal Register* announcing the availability of those permits. NMFS would also distribute a Southeast Fisheries Bulletin. After the announcement, the permits would be distributed to entities submitting a completed application and the appropriate fee on a first come, first served basis, until no permits were left in the pool. As with **Alternative 2**, if one or more of the options are selected, NMFS would only accept applications from applicants who met the eligibility requirements.

Alternative 4 is similar to **Alternative 3** in that NMFS would hold all Reserved Gulf Shrimp Vessel Permits in the pool until a specific date, when a notice would be published in the *Federal Register* announcing an application period for those permits. NMFS would also distribute a Southeast Fisheries Bulletin announcing the application period. Applications would be held until the end of the announced application period before being issued. If NMFS received more completed applications and fees than the number of available Reserved Gulf Shrimp Vessel Permits, a lottery would be conducted to determine which qualified applicants would receive a permit. As with **Alternative 2**, if one or more of the options are selected, NMFS would only accept applications from those who met the eligibility requirements.

The AP was concerned that if Reserved Gulf Shrimp Vessel Permits were available to anyone for \$25 from NMFS, some people might buy all available permits to control the cost of permits on the market. A permit must be attached to a vessel, but the vessel can be of any size, such as a canoe. To help ensure Reserved Gulf Shrimp Vessel Permits are only issued to entities intending to use them for shrimping, the AP suggested qualifications be established, such as U.S. citizenship (**Option a**) and a minimum vessel size (**Options b** and **c**).

The AP considered various minimum vessel lengths, but deferred making a recommendation until information about vessel lengths associated with current permits could be available. Two methods of classifying vessels by length are presented in Table 2.2.3. Method 1 is based on a longstanding distinction between large and small vessels in historical economic analyses as a proxy between vessels used to harvest shrimp in offshore versus inshore waters. Method 2 separates vessels into four classes by 25-foot lengths to allow a finer distinction. The Council should choose which method to use for **Option b**.

Table 2.2.3. Proportion of vessels with valid or renewable SPGM permits in each size class (as of January 6, 2015). Methods are explained in the text.

		Method 1			
Vessel Length		< 60 ft		≥ 60 ft	
Proportion of Vessels		24.3%		75.7%	
		Method 2			
Vessel Length		<25 ft	25 - <50 ft	50 - <75 ft	≥75 ft
Proportion of Vessels		2.8%	13.6%	42.8%	40.8%

Source: NMFS SERO permits database.

The AP also discussed USCG regulations certifying only vessels of five net tons or larger. Vessel documentation (**Option c**) is a national form of vessel registration issued by the USCG. Vessels which engage in either coastwide trade or fisheries on navigable waters of the U.S. or in the EEZ, must be documented, subject to certain exclusion or exemption provisions. Vessels of less than five net tons are excluded from such documentation. Thus, **Option c** would only allow applications for vessels of at least five net tons. However, vessels not engaged in commercial fishing or owned by foreign entities may also be certified, so the Council may wish to use this option in conjunction with another option. Currently, federally permitted vessels can be registered with the USCG or a state, and owners of state-registered vessels are not required to submit the tonnage of their vessel; therefore, the number of current federally permitted vessels below five net tons cannot be determined.

Additional options the Council may consider:

Option d - have **X** lb shrimp landings associated with the vessel via a state permit or another federal permit (e.g. South Atlantic) – This option would restrict Reserved Gulf Shrimp Vessel Permits to vessels already harvesting shrimp elsewhere.

Option e – assign the permit to a vessel that has not been issued a SPGM permit during the last 5 years (unless the current owner purchased the vessel in a market or arms-length transaction during this time) – This option would prevent a current permit holder from moving their permit to a small vessel, then applying for a Reserved Gulf Shrimp Vessel Permits with the original vessel, circumventing Option b or c.

2.3 Action 3 – Royal red shrimp endorsement

Alternative 1 – No Action. Continue to require a royal red shrimp endorsement to the federal Gulf shrimp vessel permit to harvest royal red shrimp from the Gulf EEZ. Endorsements are open access for entities with a federal Gulf shrimp vessel permits

Alternative 2 – Discontinue the royal red shrimp endorsement. Only the Gulf shrimp vessel permit will be required to harvest royal red shrimp.

Discussion:

In Amendment 13 to the FMP for the Shrimp Fishery in the Gulf of Mexico (GMFMC 2005a), an endorsement for royal red shrimp was required to conduct commercial harvest of royal red shrimp. The purpose was to help inform data collectors about who the royal red shrimpers were and collect better information about the fishery. Royal red shrimp are primarily harvested from deep waters, so historically, only a small number of boats has been engaged in harvesting them. Information for the fishery was lacking, particularly for catch, effort, operating costs and maximum sustainable yield estimates. With the extensive number of endorsements and the limited number of active royal red shrimping vessels (Table 2.3.1), it is unclear if the establishment of the endorsement has helped with collecting the desired data outlined in Shrimp Amendment 13.

Table 2.3.1. Number of royal red shrimp endorsements and the number of vessels actively landing royal red shrimp (as of May 26, 2015).

Year	Number of Royal Red Shrimp Endorsements	Number of Unique Vessels Actively Landing Royal Red Shrimp
2003		17
2004		17
2005		12
2006		6
2007	369	8
2008	388	8
2009	339	6
2010	325	7
2011	331	8
2012	351	7
2013	332	15
2014	323	7

Source: NMFS Southeast Fisheries Science Center (SEFSC).

Alternative 1 would continue the royal red shrimp endorsement requirement. This would require anyone with a federal Gulf commercial shrimp permit to also have a royal red shrimp endorsement to harvest royal red shrimp. These endorsements are available to anyone with a federal commercial shrimp permit. This alternative would continue to provide a readily accessible royal red shrimp database.

Alternative 2 would eliminate the requirement for a royal red shrimp endorsement; however, a federal Gulf commercial shrimp permit would still be required to harvest royal red shrimp. This would decrease administrative costs to NMFS, and be a minor cost savings of ten dollars to applicants. Additionally, an economic database specific to royal red shrimp would not be maintained. This may hinder data collection in the future on this fishery. However, royal red shrimp landings are still collected.

CHAPTER 3. AFFECTED ENVIRONMENT

3.1 Description of the Fishery

The Environmental Impact Statement (EIS) for the original shrimp fishery management plan (FMP) and the FMP as revised in 1981 contain a description of the Gulf of Mexico (Gulf) shrimp fishery. This material is incorporated by reference and is not repeated here in detail.

Amendment 9 (GMFMC 1997) with supplemental environmental impact statement (SEIS) updated this information. The management unit of this FMP consists of brown, white, pink, and royal red shrimp. Seabobs and rock shrimp occur as incidental catch in the fishery.

Brown shrimp is the most important species in the U.S. Gulf shrimp fishery with most catches made from June through October. Annual commercial landings in 2003 through 2013 have ranged from about 45 to 88 million pounds (mp) of tails (Table 3.1.1). The fishery is prosecuted to about 40 fathoms and is highly dependent on environmental factors such as temperature and salinity. The maximum sustainable yield established in Shrimp Amendment 15 is 146,923,100 lbs of tails (GMFMC 2015).

White shrimp are found in nearshore waters to about 20 fathoms from Texas through Alabama. The majority are taken from August through December though there is a small spring and summer fishery. From 2003 through 2013, annual commercial landings have ranged from approximately 55 to 87 mp of tails (Table 3.1.1). The maximum sustainable yield established in Shrimp Amendment 15 is 89,436,907 lbs of tails (GMFMC 2015).

Pink shrimp are found off all Gulf states but are most abundant off Florida's west coast, particularly in the Tortugas grounds off the Florida Keys. Annual commercial landings in 2003 through 2013 have ranged from approximately 3 to 11 mp of tails (Table 3.1.1); most landings are made from October through May in 30 fathoms of water. In the northern and western Gulf states, pink shrimp are sometimes mistakenly counted as brown shrimp. The maximum sustainable yield established in Shrimp Amendment 15 is 17,345,130 lbs of tails (GMFMC 2015).

Royal red shrimp occur only in federal waters. Commercial fishing for royal red shrimp is most common on the continental shelf from about 140 to 300 fathoms, and east of the Mississippi River (GMFMC 2005a). The peak fishing season is March through June. Royal red shrimp are available in other areas and at other times, but costs are generally too high to make fishing practical (GMFMC 2005a). Thus far, landings have not reached the current maximum sustainable yield (MSY) estimate of 392,000 lbs of tails in the years 2003 through 2013 and have ranged from approximately 130,000 to 353,000 lbs of tails (Table 3.1.1). In 2013, 74% of landings were from federal waters off Alabama, 24% were from off Florida, and 2% were from off Louisiana.

The three species of penaeids are short-lived and provide annual crops; royal red shrimp live longer, and several year classes may occur on the fishing grounds at one time. The condition of

each penaeid shrimp stock is monitored annually, and none has been overfished for more than 40 years.

Table 3.1.1. Landings (pounds of tails) of shrimp from the Gulf, 2003-2013.

Year	All Species	Brown	White	Pink	Royal R	Others
2003	161,010,611	84,077,981	61,029,451	9,992,981	279,013	5,631,185
2004	162,372,773	74,512,744	72,992,775	10,245,766	278,519	4,342,969
2005	135,418,633	58,658,224	65,399,784	8,784,798	150,316	2,425,511
2006	182,981,364	87,471,753	86,229,598	7,691,431	163,323	1,425,259
2007	139,962,049	70,675,513	64,350,692	3,459,355	229,024	1,247,465
2008	120,209,917	50,344,159	63,738,475	4,919,903	138,116	1,069,264
2009	154,642,342	75,372,722	74,431,059	4,113,970	173,065	551,526
2010	110,491,956	44,951,233	59,032,638	5,243,681	127,358	1,137,046
2011	136,543,421	72,387,001	57,969,171	4,070,606	195,354	1,921,289
2012	136,717,883	64,674,384	67,787,889	3,213,402	177,658	864,550
2013	123,471,746	62,475,827	55,869,792	3,241,638	103,076	1,781,413
Average	142,165,699	67,781,958	66,257,393	5,907,048	183,166	2,036,134

Source: NMFS Gulf Shrimp Survey, James Primrose, pers. comm., 2014; Rick Hart, pers. comm. 2013.

Cooperative management of penaeid shrimp species include: simultaneous closure in both state and federal waters off the coast of Texas, the Tortugas Shrimp Sanctuary, and seasonally closed zones for the shrimp and stone crab fisheries off the coast of Florida. The royal red shrimp fishery is only prosecuted in deeper waters of the exclusive economic zone (EEZ). An endorsement to the federal permit is required for vessels engaging in royal red shrimp fishing.

As of May 7, 2015, there were 1,468 valid or renewable federal Gulf shrimp permits and 289 endorsements for royal red shrimp. There has been a moratorium on the issuance of new Gulf shrimp permits since 2007. Permits are fully transferrable, and renewal of the moratorium permit is contingent upon compliance with recordkeeping and reporting requirements. State licenses may vary and vessels may have more than one state license. If selected, a vessel with a Gulf shrimp permit must carry a National Marine Fisheries Service (NMFS) approved observer. The size of the shrimp industry and its total effort has been substantially reduced since the benchmark 2001-2003 time period established in Amendment 14 (GMFMC 2007).

Approximately 500 vessels with SPGM have electronic logbooks (ELBs) which help monitor shrimping effort in the Gulf. This effort reduction reflects both a reduction in the number of vessels estimated to be participating in the fishery, and a reduction in the level of activity for those vessels remaining in the fishery.

Commercial shrimp vessels are classified by NMFS as part of either a nearshore or an offshore fleet. More than half of the commercial shrimp vessels fall into a size range from 56 to 75 feet (Table 2.2.2). The number of vessels prosecuting the fishery at any one time varies because of economic factors such as the price and availability of shrimp and cost of fuel. In addition to the federal shrimp vessel permits, NMFS maintains three types of databases/files, two of which are largely dependent on port agent records. One, the shrimp landings file or GSS database, is based almost entirely on trip ticket data; another is the annual landings form which is submitted by the

permit holders; the last is the vessel operating units file that lists vessels observed at ports. In the past, NMFS estimated fishing effort independently from the number of vessels fishing. NMFS used the number of hours actually spent fishing from interview data with vessel captains to develop reports as 24-hour days fished. NMFS currently uses the ELB program from the selected number of vessels fishing and the number of hours spent towing to calculate effort.

A shrimp trawl fishery occurs seasonally inside state waters. However, not all states have a permitting system for shrimping in state waters and not all states track the amount of bait shrimp landed. In 2012, there were approximately 4,000 shrimp permits for Texas, Louisiana and Mississippi; Florida and Alabama do not require special shrimp permits for state waters. There are about 3,500 small boats participating using trawls up to 16 feet in width. More than 75% of the state licenses are in Louisiana.

Bait landings of juvenile brown, pink, and white shrimp, occur in all states. Estimates from 2012 suggest landings of at least 2.5 mp (whole weight). Total values for this component of the fishery cannot be calculated as not all states estimate values.

Various types of gear are used to capture shrimp including but not limited to: cast nets, haul seines, stationary butterfly nets, wing nets, skimmer nets, traps, and beam trawls. The otter trawl, with various modifications, is the dominant gear used in offshore waters, and there has been a decline in the number of otter trawls in recent years (NMFS 2014). Details about the specifics of each gear type as well as the historical development of the fishery can be found in Shrimp Amendment 14 (GMFMC 2007). Royal red shrimp have been a small component of Gulf shrimp landings since the early 1960s. A few vessels in the Gulf shrimp fishery have targeted royal red shrimp, but fishing effort has been variable and inconsistent. Participation in this fishery requires larger vessels and heavier gear than used for shallow-water penaeid shrimp. Although the industry continuously works to develop more efficient gear designs and fishing methods, the quad rig is still the primary gear used in federal waters; each gear type is well outlined in Shrimp Amendments 13 and 14 (GMFMC 2005a, 2007). In recent years, the skimmer trawl has become a major gear in the inshore shrimp fishery in the northern Gulf. All trawls used in federal waters are required to have bycatch reduction devices (BRDs) unless: the vessel is fishing for and catching more than 90% royal red shrimp; the vessel is using a try net; the trawl is a rigid frame roller trawl; the vessel is trawling within the tow-time restrictions; or the vessel is testing the efficacy of a BRD under an authorization by NMFS.

3.2 Description of the Physical Environment

The EIS for the original Shrimp FMP and the FMP as revised in 1981 contains a description of the physical environment. The physical environment for penaeid shrimp is also detailed in the Generic Essential Fish Habitat (EFH) Amendment (GMFMC 2005b). This material is incorporated by reference and is not repeated here in detail.

The Gulf is a semi-enclosed oceanic basin of approximately 600,000 square miles (Gore 1992). It is connected to the Atlantic Ocean by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel. Oceanic conditions are primarily influenced by the Loop Current, the discharge of freshwater into the northern Gulf, and a semi-permanent, anticyclonic gyre in the

western Gulf. Gulf water temperatures range from 12° C to 29° C (54° F to 84° F) depending on depth and season. In the Gulf, adult penaeid shrimp are found in nearshore and offshore on silt, mud, and sand bottoms; juveniles are found in estuaries. Primary fishing grounds for royal red shrimp are the Desoto Canyon about 75 miles off Mobile, Alabama; offshore of Tampa Bay, Florida; and the Dry Tortugas northwest of the Florida Keys.

Several area closures, including gear restrictions, may affect targeted and incidental harvest of penaeid shrimp species in the Gulf. These are described in detail in Amendment 13 (GMFMC 2005a) and incorporated by reference. The areas include:

- Cooperative Texas Shrimp Closure
- Tortugas Shrimp Sanctuary
- Southwest Florida Seasonal Closure
- Central Florida Seasonal Closure
- Longline/Buoy Gear Area Closure
- Madison-Swanson and Steamboat Lumps Marine Reserves
- The Edges Marine Reserve
- Tortugas North and South Marine Reserves
- Tortugas Shrimp Sanctuary
- Alabama Special Management Zone

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, Florida Middle Grounds HAPC and Pulley Ridge HAPC.

Generic Amendment 3 addressed EFH requirements (GMFMC 2005b) and established that a weak link in the tickler chain is required on bottom trawls for all habitats throughout the Gulf EEZ. 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. The amendment established an education program on the protection of coral reefs when using various fishing gears in coral reef areas for recreational and commercial fishermen.

3.3 Description of the Biological/Ecological Environment

The EIS for the original Shrimp FMP and the FMP as revised in 1981 contains a description of the biology of the shrimp species. In its appendix, the EIS of February 1981 includes the habitats, distribution, and incidental capture of sea turtles. This material is incorporated by reference and is not repeated here in detail. Amendment 9 (GMFMC 1997) updated this information which has essentially remain unchanged, except with respect to protected species as discussed below.

3.3.1 Target Species

Brown, white, and pink shrimp use a variety of habitats as they grow from planktonic larvae to spawning adults (GMFMC 1981). Brown shrimp eggs are demersal and occur offshore. Post-

larvae migrate to estuaries through passes on flood tides at night mainly from February until April; there is another minor peak in the fall. Post-larvae and juveniles are common in all U.S. estuaries from Apalachicola Bay, Florida to the Mexican border. Brown shrimp post-larvae and juveniles are associated with shallow, vegetated, estuarine habitats, but may occur on silt, sand, and non-vegetated mud bottoms. Adult brown shrimp occur in marine waters extending from mean low tide to the edge of the continental shelf and are associated with silt, muddy sand, and sandy substrates. More detailed discussion on habitat associations of brown shrimp is provided in Nelson (1992) and Pattillo et al. (1997).

White shrimp eggs are demersal and larval stages are planktonic in nearshore marine waters. Post-larvae migrate through passes mainly from May until November with peaks in June and September. Juveniles are common in all Gulf estuaries from Texas to the Suwannee River in Florida. Post-larvae and juveniles commonly occur on bottoms with large quantities of decaying organic matter or vegetative cover such as mud or peat. Juvenile migration from estuaries occurs in late August and September and is related to juvenile size and environmental conditions (e.g., sharp temperature drops in fall and winter). Adult white shrimp are demersal and inhabit nearshore Gulf waters to depths of 16 fathoms on soft bottoms. More detailed information on habitat associations of white shrimp is available from Nelson (1992) and Pattillo et al. (1997).

Pink shrimp eggs are demersal, early larvae are planktonic, and post-larvae are demersal in marine waters. Juveniles inhabit almost every U.S. estuary in the Gulf but are most abundant in Florida. Juveniles are commonly found in estuarine areas with seagrass where they burrow into the substrate by day and emerge at night. Adults inhabit offshore marine waters with the highest concentrations in depths of 5 to 25 fathoms.

Royal red shrimp occur exclusively in the EEZ, live longer than penaeid shrimp and many year classes may be present on fishing grounds at one time. The fishery occurs in water depths of 80 to 300 fathoms.

3.3.2 Bycatch

Between 2007 and 2010, 185 species were observed as bycatch in the shrimp fishery (Scott-Denton et al. 2012). By weight, approximately 57% of the catch was finfish, 29% was commercial shrimp, and 12% was invertebrates. The species composition is spatially and bathymetrically dependent, but for the Gulf overall, Atlantic croaker, sea trout, and longspine porgy are the dominant finfish species taken in trawls (approximately 26% of the total catch by weight). Other commonly occurring species include portunid crabs, mantis shrimp, spot, inshore lizardfish, searobins, and Gulf butterflyfish. Although red snapper comprise a very small percentage (0.3% by weight) of overall bycatch, the mortality associated with this bycatch affects the recruitment of older fish (age 2 and above) to the directed fishery and ultimately the recovery of the red snapper stock.

To address finfish bycatch issues, especially bycatch of red snapper, the Gulf of Mexico Fishery Management Council (Council) initially established regulations requiring BRDs specifically to reduce the bycatch of juvenile red snapper. In 1998, all shrimp trawlers operating in the EEZ, inshore of the 100-fathom contour, west of Cape San Blas, Florida were required to use BRDs;

later BRDs were required in the eastern Gulf (GMFMC 2002). Only two Gulf states (Florida and Texas) require the use of BRDs in state waters. Shrimp trawls fishing for royal red shrimp seaward of the 100-fathom contour are exempt from the requirement for BRDs. The shrimp fishery is also a source of bycatch mortality on sea turtles (see Section 3.3.3). Bycatch is currently considered to be reduced to the extent practicable in the Gulf shrimp fishery. The actions in this amendment are not likely to change bycatch in the shrimp fishery. Bycatch levels and associated implications will continue to be monitored and issues will be addressed based on new information.

3.3.3 Protected Species

Species in the Gulf protected under the Endangered Species Act (ESA) include: five marine mammal species (sei, fin, humpback, sperm whales, and manatees); five sea turtles (Kemp's ridley, loggerhead, green, leatherback, and hawksbill); two fish species (Gulf sturgeon and smalltooth sawfish); and four coral species (elkhorn coral, lobed star coral, boulder star coral, and mountainous star coral). Seven species of fish and invertebrates in the Gulf are currently listed as species of concern.

Otter trawls may directly affect smalltooth sawfish that are foraging within or moving through an active trawling location via direct contact with the gear. The long toothed rostrum of the smalltooth sawfish causes this species to be particularly vulnerable to entanglement in any type of netting gear, including the netting used in shrimp trawls.

Green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles are all highly migratory and are known to occur in areas subject to shrimp trawling. Bycatch of the species by commercial fisheries is a major contributor to past declines and a potential threat to future recovery (NMFS and USFWS 1991, 1992a, 1992b, 2008; NMFS et al. 2011). Historically, southeastern U.S. shrimp fisheries (both Gulf and South Atlantic) have been the largest threat to benthic sea turtles. Regulations requiring turtle excluder devices (TEDs) have reduced mortalities from trawl fisheries on sea turtles. During a four year study period, 55 sea turtles were captured in shrimp trawls; 80% were released alive and conscious (Scott-Denton et al 2012).

The most recent biological opinion evaluated was the continued implementation of the sea turtle conservation regulations under the ESA and the continued authorization of the Southeast U.S. Shrimp Fisheries in Federal Waters (NMFS 2014). The Gulf shrimp fishery was considered specifically as part of this larger consultation. The biological opinion, which was based on the best available commercial and scientific data, concluded the continued authorization of the Southeast U.S. Shrimp Fisheries in Federal Waters (including the Gulf shrimp fishery) is not likely to jeopardize the continued existence of threatened or endangered species (NMFS 2014). The biological opinion implemented measures to minimize the impacts of incidental take to sea turtle or smalltooth sawfish. After the completion of the biological opinion, NMFS designated new critical habitat for the Northwestern Atlantic distinct population segment of loggerhead sea turtles defined by 5 specific habitat types. Two of those habitat types (nearshore reproductive and *Sargassum*) occur within the GMFMC's jurisdiction. NMFS determined that all federal Gulf fisheries operate outside the nearshore reproductive habitat and will not affect it. Gulf fisheries

(including the shrimp fishery) could overlap with the *Sargassum* habitat. However, NMFS determined any effects from those fisheries would be insignificant and were not likely to adversely affect the *Sargassum* habitat unit.

The shrimp fishery is classified in the 2015 List of Fisheries as a Category II fishery (79 FR 77919; January 28, 2015). This classification indicates the annual mortality and serious injury of a marine mammal stock is greater than 1% but less than 50 % of the stocks potential biological removal (PBR), not including natural mortalities, which may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. This fishery was elevated to Category II from Category III (mortality or serious injury to <1% of the PBR) in 2011 based on increased interactions reported by observers, strandings, and fisheries research data.⁶

3.3.4 Status of the Shrimp Stocks

The three species of penaeid shrimp harvested by the shrimp fishery are short-lived and provide annual crops; royal red shrimp live longer (2-5 years) and multiple year classes can be found on the same fishing grounds. The condition of each shrimp stock is monitored annually, and none has been classified as overfished or undergoing overfishing (Hart 2013). Specific landings and values are provided in Table 3.1.1.

3.4 Description of the Economic Environment

3.5 Description of the Social Environment

Regional Quotients by Community

Descriptions of the social environment associated with the Gulf shrimp fishery have been provided in previous amendments and documents (GMFMC 2005a, 2007, 2013) and will be incorporated herein by reference if appropriate. However, recent descriptions of the Gulf shrimp fishery's social environment do not provide a historical trend related to the moratorium or recent landings; therefore, more recent data are presented that will update more recent descriptions and focus on the moratorium and changes over time.

The regional quotient (RQ) is a way to measure 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 graphical representation of this proportional measure does not provide the number of pounds or the value of the catch, data which 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 within the Gulf of Mexico region. This measure includes all landings of a particular species, but it does not distinguish where they may have been caught. It is important to note that for some communities, especially in the Florida Keys, catches from South Atlantic vessels, that are not affected by this amendment, may be included in summary data for certain

⁶ http://www.nmfs.noaa.gov/pr/pdfs/fisheries/lof2012/southeastern_us_atlantic_gulf_shrimp_trawl.pdf.

shrimp species and the communities where they are landed. It is also important to note that location of the dealer in the ALS dataset may not always correspond to where seafood was harvested. The landings associated with a dealer location within a community are derived from the reported address of that dealer, which is not always the docks where some product may have been landed.

Depending upon which shrimp species is being targeted, the volume and value for regional quotient varies considerably by community. In Figure 3.5.1, except for Bayou La Batre, Alabama, the top five communities are in Texas. In fact, Texas and Louisiana communities dominate brown shrimp landings. Louisiana communities tend to have higher landings but lower value compared to dealers in other states, which may be indicative of size differentiation in harvest, with smaller sizes being landed from inshore fisheries in Louisiana that bring lower prices than larger shrimp from offshore waters.

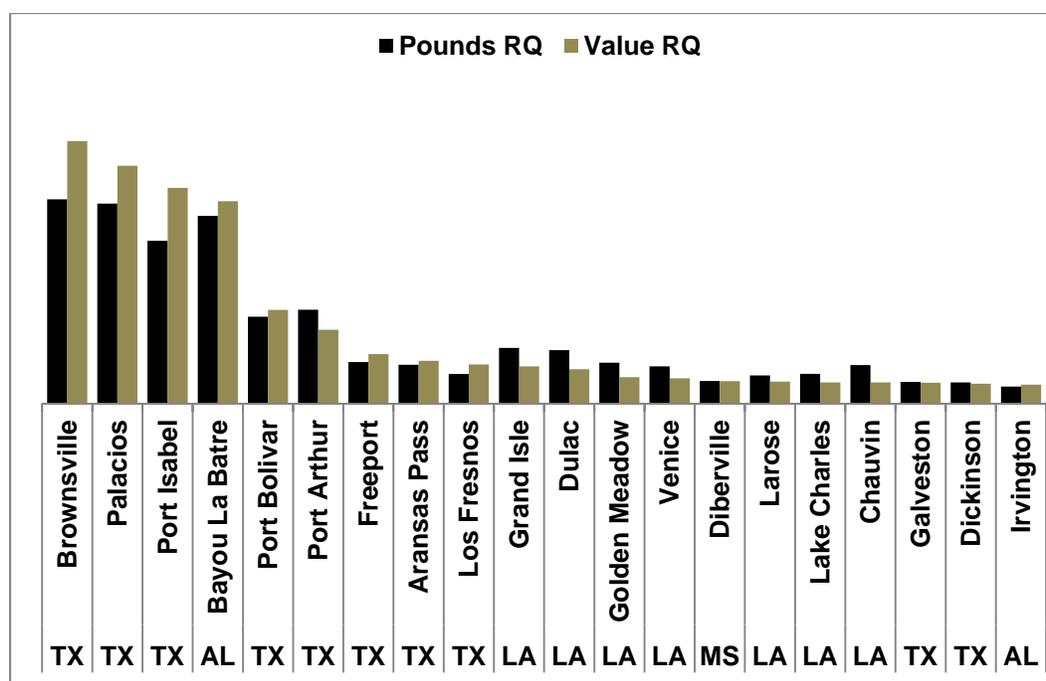


Figure 3.5.1. Top twenty communities based upon pounds and value regional quotient (RQ) for brown shrimp in the Gulf.

Source: SERO ALS 2012

Pink shrimp landings are primarily in Florida with the majority of landings in Fort Myers Beach (Figure 3.5.2). Tampa, Key West, and Tarpon Springs follow with Bayou LaBatre, Alabama fifth in ranking. There are several Texas communities within the top twenty, although pink shrimp landed in Texas may have been harvested elsewhere since the majority of pink shrimp are harvested off the west coast of Florida. Although, there may also be some mislabeling of brown shrimp.

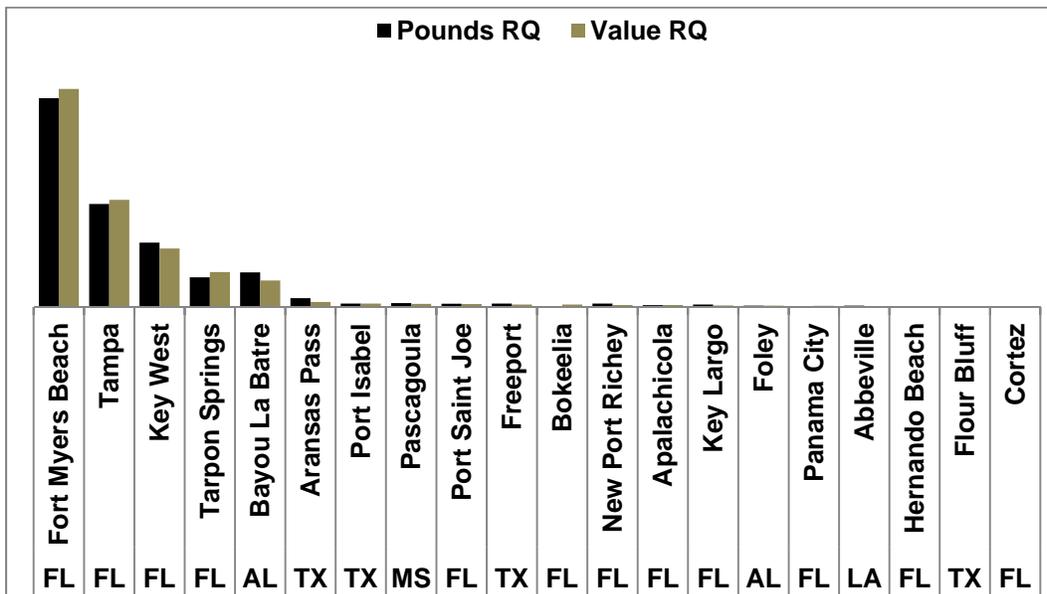


Figure 3.5.2. Top twenty communities based upon pounds and value regional quotient (RQ) for pink shrimp in the Gulf.
Source: SERO ALS 2012

White shrimp landings (Figure 3.5.3) are primarily in the northern and western Gulf with Port Arthur, Texas having the highest regional quotient in terms of pounds and value. Other communities have comparable regional quotients with regard to pounds landed but are not near the value quotient found in Port Arthur.

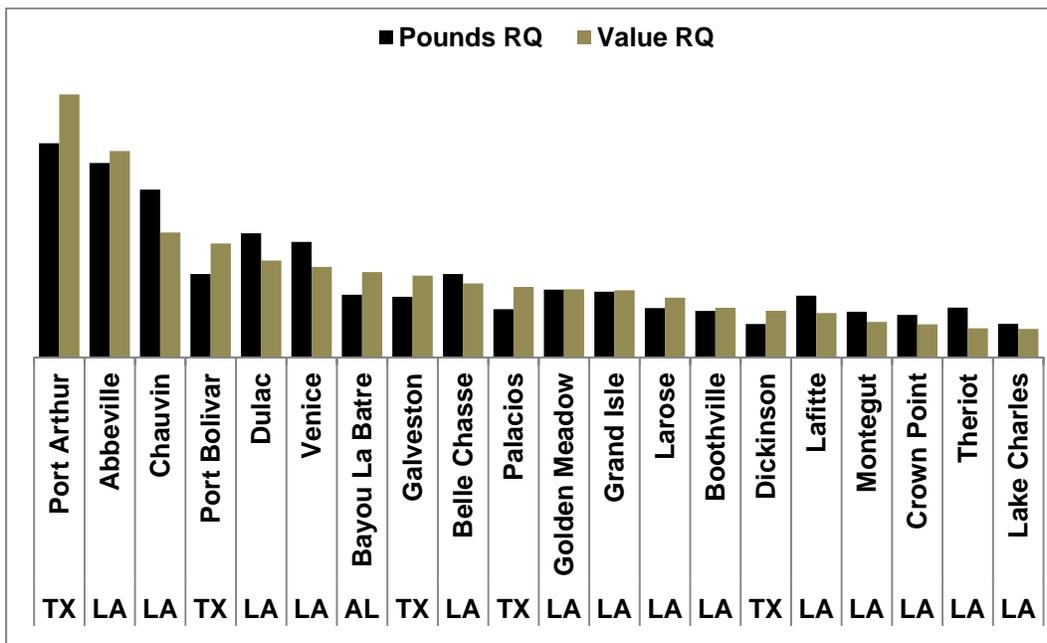


Figure 3.5.3. Top twenty communities based upon pounds and value regional quotient (RQ) for white shrimp in the Gulf.
Source: SERO ALS 2012

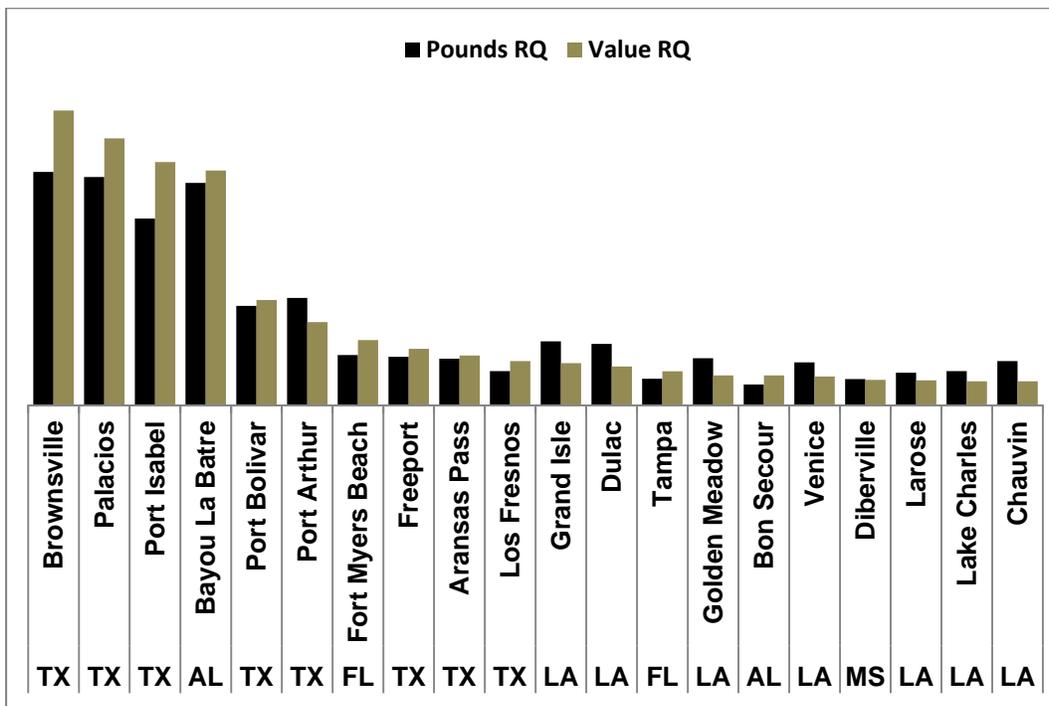


Figure 3.5.4. Top twenty communities based upon pounds and value regional quotient for total shrimp in the Gulf.

Source: SERO ALS 2012

When the combined landings of shrimp are compared in Figure 3.5.4, the landings are dominated by Texas communities with Bayou La Batre, AL fourth and Fort Myers Beach, FL ranked sixth in terms of value. Overall, communities from Texas and Louisiana dominate the top twenty communities in terms of regional quotient for shrimp.

Demographics and Fleet Characteristics

Vessel Permits

As stated earlier, at the end of 2014, there were 1,470 valid Gulf commercial shrimp permits, with 463 permits terminated since the inception of the moratorium. Figure 3.5.5 displays the distribution of all Gulf shrimp permits by homeport community as of 2014. The majority of permits are in the Western Gulf; New Orleans, LA, Brownsville, TX, and Bayou La Batre, AL have more permits than other communities.

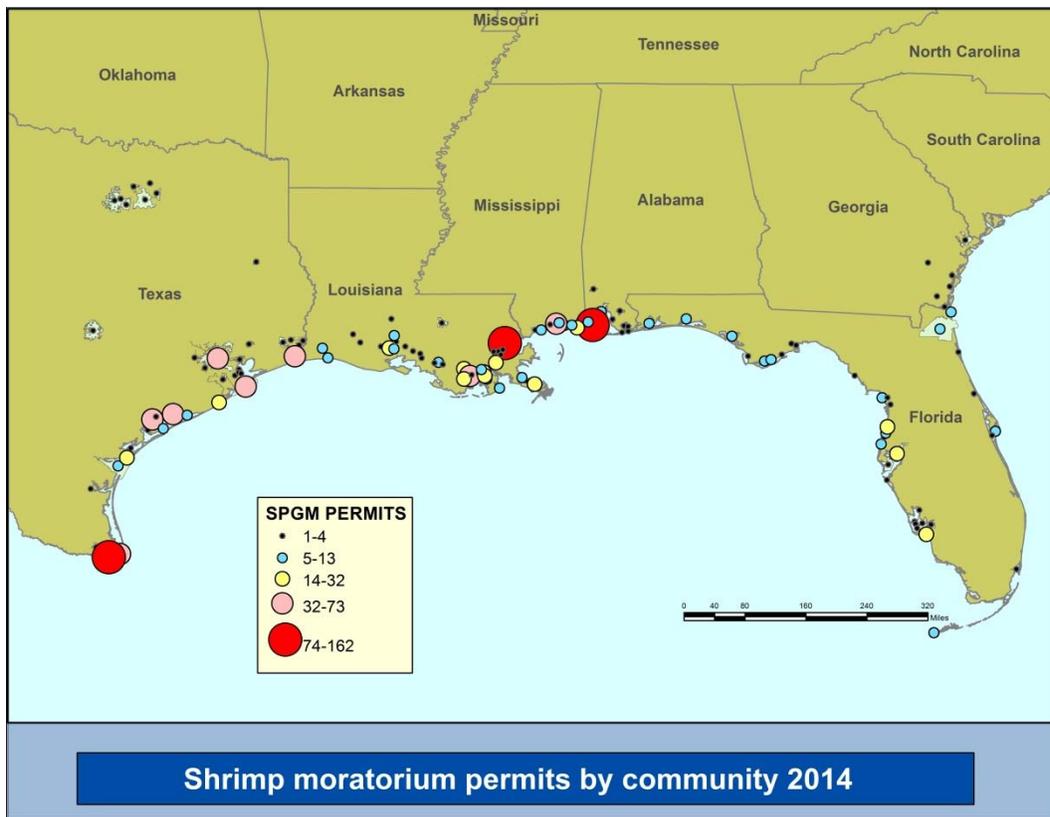


Figure 3.5.5. Number of Gulf shrimp permits by homeport communities.
 Source: NMFS SERO Permits Database

As shown in Table 3.5.1, the three above mentioned communities have considerably more Gulf shrimp permits held by vessels homeported in those communities. It should be mentioned that while the designated homeport may not be where a vessel is docked most of the time, it is the best approximation given the data available to be able to collocate people and infrastructure in a port. These three communities also have the largest number of terminated permits since the inception of the moratorium. Several communities have had a larger portion of permits terminated over the years. The states of Texas and Louisiana have the largest share of Gulf shrimp permits and terminated permits.

Table 3.5.1. Gulf shrimp permits and terminated permits for top 35 homeport communities.

State	Homeport Community	SPGM Permits	Terminated Permits
LA	New Orleans	162	35
TX	Brownsville	109	41
AL	Bayou La Batre	91	29
MS	Biloxi	73	15
TX	Port Isabel	53	21
TX	Port Lavaca	53	6
TX	Palacios	51	14
TX	Houston	49	24
TX	Port Arthur	49	12
LA	Chauvin	48	7
TX	Galveston	37	7
FL	Hernando Beach	32	6
LA	Cut Off	27	3
LA	Galliano	25	5
FL	Fort Myers Beach	21	12
LA	Abbeville	21	4
MS	Pascagoula	18	0
TX	Aransas Pass	17	10
FL	Tampa	16	6
LA	Dulac	16	4
TX	Freeport	16	4
LA	Intracoastal City	15	5
LA	Venice	15	5
LA	Houma	14	9
LA	Lafitte	14	1
LA	Grand Isle	13	4
FL	Jacksonville	12	2
FL	Panama City	12	0
LA	Cameron	12	4
TX	Port Bolivar	12	0
FL	Key West	11	6
AL	Mobile	10	4
LA	Lafayette	10	2
FL	Apalachicola	8	2
LA	Larose	8	2

Source: SERO Permits Database 2014

Figure 3.5.6 provides an overall representation of the geographical distribution of all terminated permits. It should be noted that some vessels with terminated shrimp permits did have designated homeports outside of the Southeast, and they may not appear in the map.

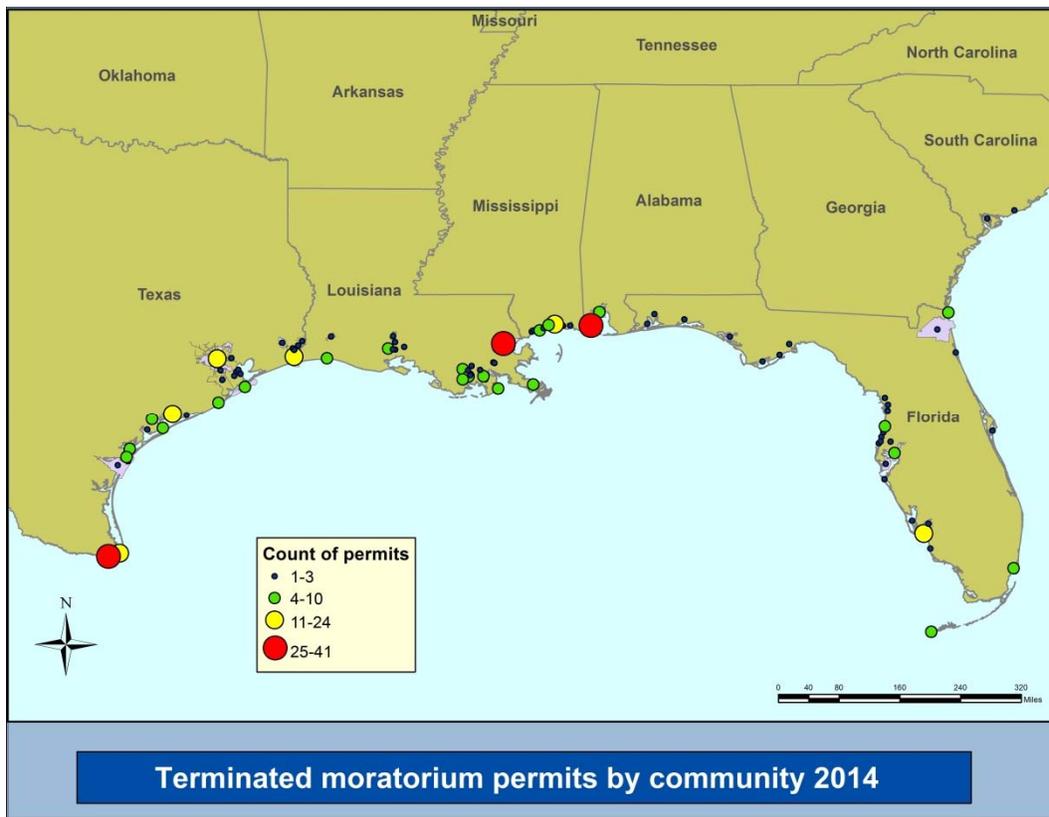


Figure 3.5.6. Terminated Gulf shrimp permits by community since moratorium.
Source: NMFS SERO Permits Database

Overall Fishing Engagement and Reliance

While we can characterize the fleet landings with regard to those communities that have high regional quotients for landings and value, it is more difficult to characterize the fleet and its labor force regarding demographics and places of residence for captains and crew of vessels. There is little to no information on captains and crew including demographic makeup.

To better understand how Gulf shrimp fishing communities are engaged and reliant on fishing overall, several indices composed of existing permit and landings data were created to provide a more empirical measure of fishing dependence (Jepson and Colburn 2013; Colburn and Jepson 2012; Jacob et al. 2012). Fishing engagement uses the absolute numbers of permits, landings, and value, while fishing reliance includes many of the same variables as engagement, but divides 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. Factor scores of both engagement and reliance on commercial fishing for the top 20 communities from Figure 3.5.4 were plotted onto graphs (Figure 3.5.7). For some communities data were not available to calculate a factor score and do not appear on the chart. Each community's factor score is located on the Y axis, the higher the score the more engaged or reliant. Factor scores are standardized, therefore the mean is zero. Two thresholds of 1 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. Those communities with factor scores above the thresholds should be considered to have high engagement and reliance upon commercial fishing. Those that exceed both thresholds might be considered dependent upon commercial fishing.

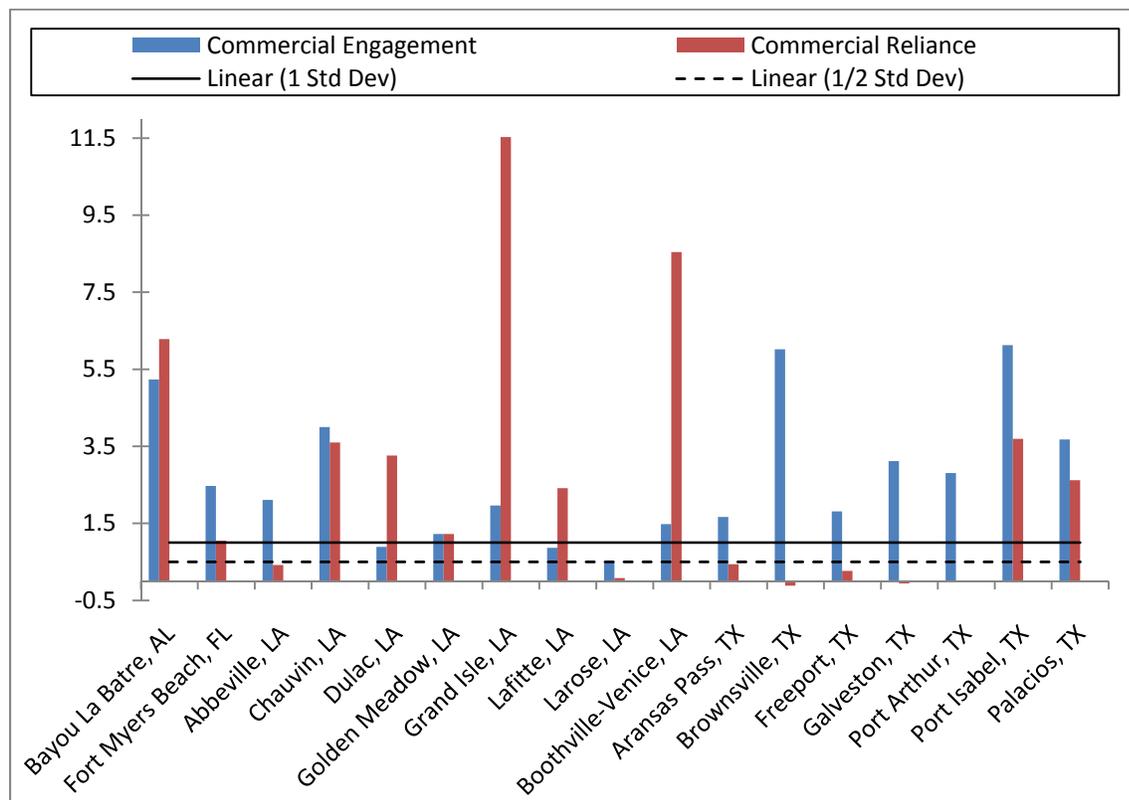


Figure 3.5.7. Commercial fishing engagement and reliance indices for top twenty communities in terms of pounds and value regional quotient for total shrimp in the Gulf.
Source: SERO Social Indicator Database

In Figure 3.5.7, all communities exceed either one or both of the thresholds of ½ or 1 standard deviation, which means they are highly engaged or reliant on commercial fishing. Those that exceed thresholds for both indices have a substantial component of their local economy dependent upon commercial fishing. The ten communities that exceed both thresholds are: Bayou LaBatre, AL; Fort Myers Beach, FL; Chauvin, LA; Dulac, LA; Golden Meadow, LA; Grand Isle, LA; Laftite, LA; Boothville-Venice, LA; Port Isabel, TX; and Palacios, TX. More in-depth profiles of some of these communities appear in previous amendments (GMFMC 2005a, 2007).

There have been relatively few if any recent descriptions of the Gulf shrimp fishery from both a social and economic perspective. Liese and Travis (2010) have provided the most recent economic analysis of fleet-wide economic performance, but there is little information concerning the demographic makeup or characterization of the fleet. While we do not have demographics for captains and crew, we can identify a proxy for the number of vessels that may have minorities associated with the vessel by looking at surnames from the permit file and counting

those that are Southeast Asian in their origin. This technique was first utilized in a memorandum from Gulf Council Director Wayne Swingle to the Shrimp Management Committee dated March 28, 2003. In that memorandum Dr. Swingle indicated that of the 1,836 federally permitted shrimp vessels, 524 (or 28.7%) had owners with Southeast Asian surnames or corporate names. A similar count conducted by SERO in 2009 resulted in 484 out of 1853⁷ (or 26.1%) of permit owners with Southeast Asian surnames. Unfortunately, we do not know if these are active vessels and whether the crew is also of Southeast Asian ethnicity. However, this does give a rough indication of the participation rate of Southeast Asians within the Gulf shrimp fishery.

When we examine terminated permits using this same methodology, we also find that approximately 28% of those permits had owners or lessees with Southeast Asian surnames. Thus, the proportion of terminated permits for those owned by those of Southeast Asian descent is approximately the same as their participation in the shrimp fishery overall.

3.5.1 Environmental Justice Considerations

Executive Order 12898 requires that 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. This executive order is generally referred to as environmental justice (EJ).

In order to assess whether a community may be experiencing EJ issues, a suite of indices created to examine the social vulnerability of coastal communities (Colburn and Jepson 2012; Jacob et al. 2012) is presented in Figure 4.2.1. The three indices are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified as important components that contribute to a community's vulnerability. Indicators such as increased poverty rates for different groups, more single female-headed households and children under the age of 5, disruptions such as higher separation rates, higher crime rates, and unemployment all are signs of vulnerable populations. These indicators are closely aligned to previously used measures of EJ which used thresholds for the number of minorities and those in poverty. For those communities that exceed the threshold, it is expected that they would exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change.

⁷ This is a snapshot of permits at one point in time and not exclusive to shrimp vessels, so numbers may vary at different points in time. This is a very rough estimate of the number of vessels with owners of Indochinese background. It is not a precise count of persons involved in the fishery who may be of Southeast Asian descent or other minorities.

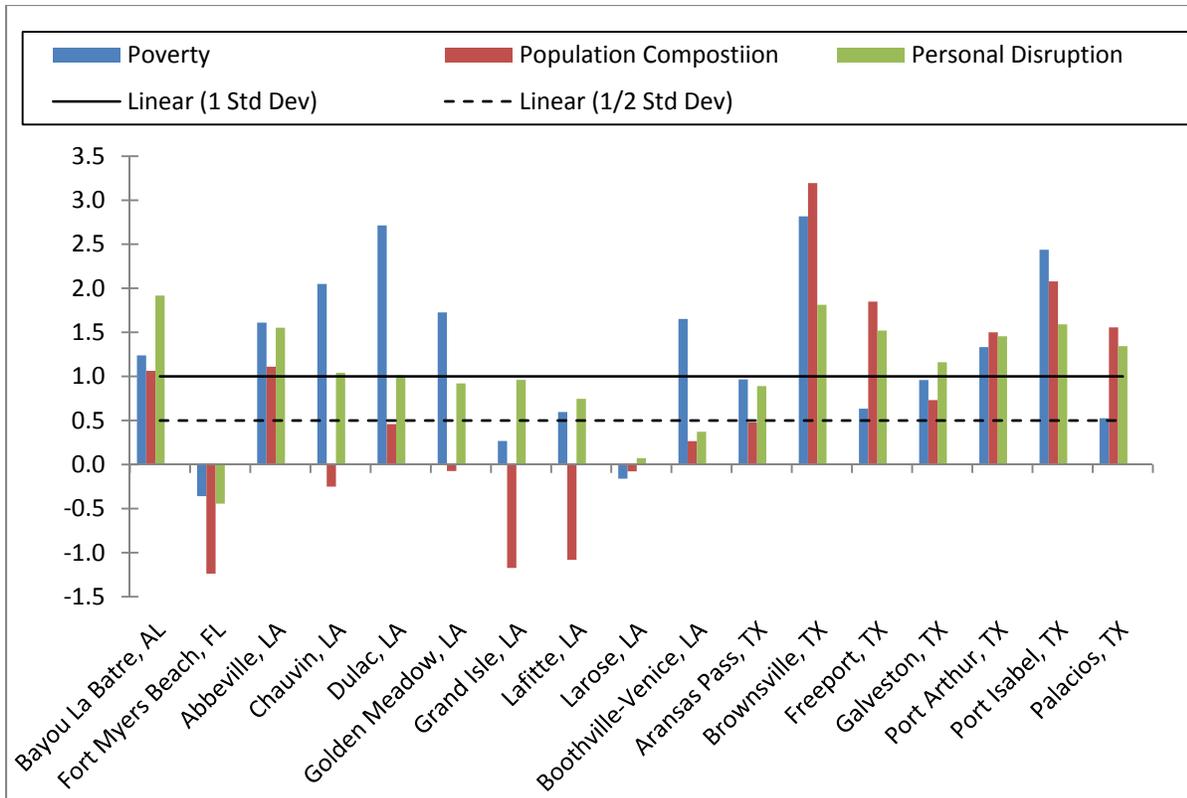


Figure 4.2.1. Social vulnerability indices for top twenty communities in terms of pounds and value regional quotient for total shrimp in the Gulf.

Source: SERO Social Indicator Database

In terms of social vulnerabilities, several of the top shrimp fishing communities exhibit medium to high vulnerabilities. In fact, only four communities are below the thresholds for two or more indices and do not exhibit vulnerabilities. Those that exceed both thresholds for two or more indices are: Bayou LaBatre, Alabama; Abbeville, Chauvin, Dulac, Golden, Meadow, and Boothville-Venice in Louisiana; Aransas Pass, Brownsville, Freeport, Galveston, Port Isabel, and Palacios in Texas (Figure 4.2.1). It is expected that these communities would be especially vulnerable to any social or economic disruption because of regulatory change, depending upon their engagement and reliance upon commercial fisheries. Because most of these communities are either highly engaged or reliant on commercial fishing, it is likely that any negative social effects from regulatory changes will have an impact. Whether that impact will be long-term or short-term would depend upon the regulatory change.

These indicators of vulnerability have been developed using secondary data at the community level. Because these types of data are not collected at the individual level by NMFS or other agencies, it is difficult to understand the social vulnerabilities that might exist on either a household or individual level. It is hard to recognize or attribute impacts that will directly affect individuals who are fishermen or work in a related business because we do not know what those specific vulnerabilities may be. Therefore, our measure of vulnerability is a broader measure at the community level and not specific to fishermen or the related businesses and their employees. Furthermore, there has been little research and relatively no data collected on subsistence fishing patterns of fishermen in the Southeast. Impacts on subsistence fishing within the Gulf shrimp

fishery cannot be assessed, other than to say we know very little and it is unlikely because it is an offshore fishery.

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 EEZ, 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 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 that 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 Council consists of 17 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. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard (USCG), and Gulf States Marine Fisheries Commission.

The Council uses its Science and Statistical Committee to review data and science used in assessments and fishery management plans/amendments. Regulations contained within FMPs are enforced through actions of the NMFS' Office for Law Enforcement, the USCG, and various state authorities.

The public is involved in the fishery management process through participation at public meetings, on advisory panels and through Council meetings that, with few exceptions for discussing personnel matters, are open to the public. The regulatory process is 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.

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 have the authority to manage their respective state fisheries including enforcement of fishing regulations. Each of the five states exercises legislative and regulatory authority over its state's natural resources through discrete administrative units. Although each agency listed below is the primary administrative body with respect to the state's natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources. The states are also involved through the Gulf States Marine Fisheries Commission in management of marine fisheries. This commission was created to coordinate state regulations and develop management plans for interstate fisheries.

NMFS' State-Federal Fisheries Division is responsible for building cooperative partnerships to strengthen marine fisheries management and conservation at the state, inter-regional, and national levels. This division implements and oversees the distribution of grants for two national Acts (Inter-jurisdictional Fisheries Act and Anadromous Fish Conservation Act). Additionally, it works with the Gulf States Marine Fisheries Commission to develop and implement cooperative State-Federal fisheries regulations.

Texas Parks & Wildlife Department - <http://www.tpwd.state.tx.us>

Louisiana Department of Wildlife and Fisheries <http://www.wlf.louisiana.gov/fishing>

Mississippi Department of Marine Resources <http://www.dmr.state.ms.us/>

Alabama Department of Conservation and Natural Resources

<http://www.outdooralabama.com/fishing-alabama>

Florida Fish and Wildlife Conservation Commission <http://www.myfwc.com>

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Appendix A. ALTERNATIVES CONSIDERED BUT REJECTED

REMOVED AT JUNE 2015 COUNCIL MEETING

One alternative from Action 3- Royal red shrimp endorsement

Alternative 3 – To renew a royal red shrimp endorsement, the applicant must have had a minimum royal red shrimp landings during one of the three calendar years preceding the application

Option a: 300 lbs

Option b: 1,000 lbs

Option c: 10,000 lbs

Alternative 3 would require landings to be eligible to be issued a royal red shrimp endorsement. **Option a** is the minimum landings that have been recorded from a vessel in the past 5 years. **Options b** and **c** are larger values that indicate that the fisher is targeting royal red shrimp at least sometime during the year. In 2013, the landings for royal red shrimp were below 200,000 lbs of tails (GMFMC 2014). The maximum landings recorded for royal red shrimp (from the years 1962-2013) was 336,710 lbs of tails in 1994. **Alternative 3** would prevent new entrants into the fishery from gaining a royal red endorsement and would eliminate latent endorsements.