Tab F, No. 5

NOAA FISHERIES

Southeast For-Hire Integrated Electronic Reporting:

June 2019 Update

June 2019

Background

- Both the South Atlantic and Gulf Councils have approved amendments for electronic reporting in the for-hire fleet
- Combined fleet of ~3,500 federally permitted vessels
- Federally permitted vessels span from Texas through Maine
- Only ~130 vessels with existing logbook requirements

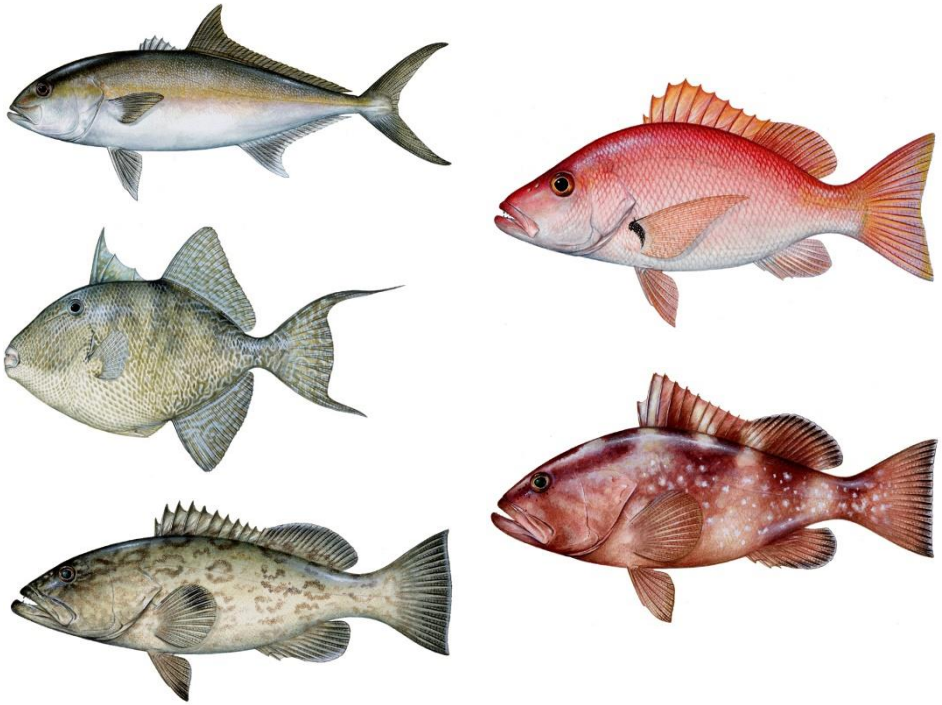
- Anticipated Benefits
  - Census-based reporting
  - Increased accuracy of data
  - Near-real time access to preliminary data
  - Reduction in recall bias

Background – Reporting Requirements

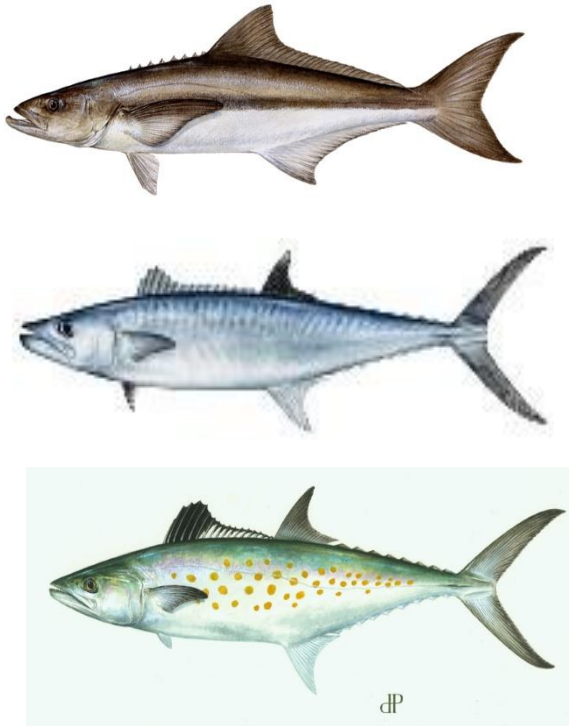
- Hail-out prior to leaving on any trip
  - Must use approved landing location
  - Can declare “out of fishery”
- Trip-level logbooks prior to offload
  - 30 min after landing if no fish
- Location device permanently affixed and on 24/7
  - 1 hour ping rate

Background – Gulf Permits

Charter/Headboat Reef Fish Permits



Charter/Headboat Coastal Migratory Pelagic Permits



Background – Implementation Process (SEFHIER)

- One implementation team formed for both regions
- Large team (50+) to represent NMFS, Councils, FINs/Commissions
- Identified 6 core sub-topics
- Invited speakers during initial meetings
- Contracted a strategic planner to help develop process and documentation
- Development Plan to post soon

Data Elements

Required Data Elements – Trip Information

- Vessel ID and name
- Captain name
- Start and end date of trip
- Start and end time of trip
- Start and end location (port)

These data elements identify the trip.

Required Data Elements – Effort and Landings

- Number of anglers
- Hours fished within the trip
- All species caught
  - Number of species kept
  - Number of each species released

These data elements help estimate total effort and landings.

Required Data Elements – How Fish Are Targeted

- Target species
- Gear used
- Primary area fished
- Primary fishing depth
- Minimum and maximum depths fished

These data elements help estimate possible mortality if discarded.

Required Data Elements – Socio-economic Information

- Charter trip fee
- Estimated fuel used
- Price of fuel
- Number of Passengers
- Number of Crew

These data elements help estimate the economic effects of management decisions.

Reporting Equipment

Reporting Equipment – Hail-out

- Must be made before leaving the dock
- Reports can be made using:
  - Internet (tablet or PC)
  - Mobile phone app
  - VMS
- Can be the same device as logbook
- If Type is “Non-fishing”, will not need a logbook submission

```
Vessel ID

Trip Type – (Examples…Charter,
Commercial, Recreational, Non-
Fishing Trip)

Landing Location

Trip Start Date

Trip Start Time

Time Zone  (EST/CST)

Trip End Date

Estimated Trip End Time

Time Zone  (EST/CST)
```

Reporting Equipment – Logbooks

- Must be submitted before fish are offloaded
- Logbooks can be submitted using:
  - Internet (tablet or PC)
  - Mobile phone app
  - VMS
- Vendors must be approved specifically for this program
  - All vendors are expected to have both hail-out and logbook forms

Reporting Equipment – Location Devices

- Must at a *minimum* archive location for later transmission
  - VMS devices could also be used
- Must be approved by NMFS (VMS Program)
  - Cellular-based store-and-forward
  - Satellite-based (traditional VMS) real-time
  - Hybrid
- Some can also be used for hail-out and logbook

Reporting Equipment – Cellular Units Being Tested

Unit	Ability to include logbook	Estimated purchase cost	Estimated monthly cost
Faria Bede	No	$295	$25/month
SNAP IT	Yes	$800	$40/month
Rock 7	Yes	$605	$17/month
Succorfish	Yes, with significant conversion	$600	$10/month
Pelagic Data Systems	Can be paired with mobile app for catch reporting	$195	$25/month
Globalstar SmartOne	No	$300	$35/month

Reporting Equipment – Current VMS Units

UNIT	CAPABLE OF USING DROP DOWN MENU	AUTO POPULATE FORM FIRST FEW LETTERS	CREATE FAVORITES OR RECENTLY CHOSEN LIST	CONCERNS
CLS/WOODS HOLE GROUP	YES	YES	NOT YET, BUT IT IS POSSIBLE	LARGE FILE SIZE MUST BE SENT TO UPDATE UNITS
FARIA	YES, BUT MAY BE DIFFICULT TO USE	NO	NO	UNSURE IF UNIT IS CAPABLE OF PRODUCING USABLE SOFTWARE
NETWORK INNOVATIONS	YES	YES	YES	UNIT SCREEN SIZE
SKYMATE	YES	YES	NOT LIKELY	
MCMURDO / BOATRACS	NO	NO	NO	UNABLE TO ACCOMMODATE UPDATE
ADD VALUE IFLEETONE	YES	LIKELY YES	LIKELY YES	

VMS Reimbursement Program
http://www.psmfc.org/program/vessel-monitoring-system-reimbursement-program-vms?pid=17/

Woods Hole (CLS) Charter E-Logbook Project
https://thoriumvms.com/gulf-of-mexico-charter-e-logbook-project/

Sticking Points

Sticking Point #1 – Economic Information

- Potential uses
  - Estimate revenue, value, and economic impacts of for-hire sector
  - Regular reports on the economics of the for-hire sector
  - Improved analysis of regulatory costs and benefits for more effective management
  - Estimate marginal value per fish for individual species or species groups
  - Quota allocation decisions
  - Disaster recovery damage assessment
- Will not be:
  - Available to the public except in aggregate form
  - Provided to the IRS without a court order

Economic Data Elements

Charter Trip Fee (MOST IMPORTANT)	
Description	Total for-hire fees collected from all passengers for the charter trip. *Note: Charter vessels only; headboats have stable, advertised rates.*
Rationale	CRUCIAL for all economic analysis. Charter fees are the price of the service produced and traded; equivalent to price of fish in commercial sector.
Current Sources	• For-hire business websites. • Old survey information.
Weaknesses of Current Data	• Small sample size; infrequently conducted; always outdated. • Simple average only. • Not linked to trip characteristics; hence, variation across trips and species not captured.

Economic Data Elements

Fuel Used	
Description	Estimated gallons of fuel used on the trip.
Rationale	Used to calculate fuel cost and net operating revenue.
Current Sources	• Old survey information. Note: Could deduce from vessel characteristics and GPS.
Weaknesses of Current Data	Less accurate than direct capture. • Small sample size; infrequently conducted; always outdated. • Simple average only. • Less accurate than direct capture.

Economic Data Elements

Fuel Price	
Description	Price per gallon for fuel used on the trip.
Rationale	Used to calculate fuel cost and net operating revenue.
Current Sources	Regional averages available from U.S. Energy Information Administration.
Weaknesses of Current Data	Less accurate than direct capture. Averages ignore localized differences in prices, as well as grade of fuel.

Economic Data Elements

Number of Passengers	
Description	Total number of paying passengers on the trip.
Rationale	Used to calculate price per person.
Current Sources	• Old survey information. • SRHS logbooks for headboats.
Weaknesses of Current Data	• Small sample size; infrequently conducted; always outdated. • Simple average only. • Variation across trips not captured.

Economic Data Elements

Number of Crew	
Description	Total number of crew on the trip, including captain.
Rationale	Used to calculate labor cost and net operating revenue.
Current Sources	• Old survey information. • SRHS logbooks for headboats.
Weaknesses of Current Data	• Small sample size; infrequently conducted; always outdated. • Simple average only. • Variation across trips not captured.

Sticking Point #2 – Equipment Failure

- Logbooks and Hail-outs
  - Have a backup - multiple options are available (tablet, PC, cell phone)
  - Phone home!
- Location Devices
  - In the commercial sector, VMS failure rate is around 1%; life of VMS unit is 5-10 years (depending on brand)
  - NMFS is considering development of a trouble-shooting guide
  - NMFS is working towards a solution that balances validation and compliance against fishermen's ability to earn their income
  - Currently do not have funding for call service
  - We hope to work with our state partners for some solutions

Sticking Point #3 – Landing Notification Modifications

- Regulations require an estimate of the landing time not a time-window
- VMS will have an option to submit a new hail-out with the modified landing time or location, similar to the commercial IFQ program
- NMFS is working on a procedure for new submissions for cellular units
- Under any emergency condition, the captain should return without worrying about the hail-out and contact their local law enforcement when it is safe to do so

Sticking Point #4 – Requirements for Inactive Permits

- Logbooks
  - The location device will allow NMFS to know if a vessel has not left the dock and no logbook will be expected
  - If the vessel is carrying out non-fishing activities, the captain will state that in the hail-out, and no trip report will be expected
- Location devices
  - Power-down exemptions allow the units to be turned off as long as the vessel will not leave the dock (minimum 72 hours)
  - NMFS is considering long-term exemptions for vessels that will not be operating during the year

Sticking Point #5 – Loss of GPS/Satellite Signal

- Covered storage
  - For appropriate validation of effort, the units must either have a power-down exemption or be turned on and functional
  - Cellular-based units should work anywhere cell phones work
- Battery drainage
  - Many commercial fishermen have smaller vessels with VMS units that do not drain batteries
  - Solar options may be available that can store power for up to 2 weeks

Sticking Point #6 – Species/Trip Type Subject to Reporting

- Federal permit holders must comply with federal reporting requirements, regardless of where they fish, as a condition of holding the permit
- Catch data may be shared with state agencies that have non-disclosure agreements with NMFS
- NMFS is refining a species list to include specific federal and state managed species; other species are grouped for simplicity
- Depending on the device used for logbooks, a drop-down list, favorites list, or auto-fill option may be available
- When large quantities of baitfish are caught, estimates are acceptable
- If the vessel is carrying out non-fishing activities, the captain must hail-out declaring a non-fishing trip, but does not need to submit a logbook

Timeline

Timeline

- Amendment Comment Period: July-August 2018
- Secretary of Commerce Approval: September 2018
- Proposed rule: October 2018
- NOAA Comment Period Ended: January 9, 2019
- Final Rule in development
- Implementation

Timeline – Challenges

- Funding/staffing
  - No dedicated funds or staff for implementation, validation, etc.
  - FIS grants – short-term contractors
  - Current staff are not subject matter experts in many of the areas needed
  - Outside participation restricted by FACA:
    - Groups are needed to advise for expert advice, ideas, and diverse opinions, but…
    - Groups should only be formed when essential and kept to a minimum
    - No advisory committee shall meet or take any action until an advisory committee charter has been filed;
    - Does not apply to Council, SSC, or AP meetings, but would apply to state participation on the implementation plan

Timeline – Challenges

- Data storage, transmission, and sharing
  - NOAA security requirements – approval for ACCSP, other vendors
  - Protection of PII and BII – algorithm, encryption
  - Multiple data streams to combine – hail-out, logbook, location devices
  - Integration of differing regional and state systems
- Hardware/software approval – logbook and location devices
  - Technical specifications
  - Responsible party – region vs. VMS Program
  - Codifying process – involves proposed and final rule

Timeline – Challenges

- Processes to develop
  - Notification to enforcement
  - Exemptions
  - Data sharing with states - MOUs
- Coordination with South Atlantic
  - Consistent data elements
  - Vessels with permits from both regions
- Paperwork Reduction Act requirements
  - All forms must be approved

Questions?

NOAA FISHERIES