# Tab F, No. 5(a) 10/07/16

# Summary for the Data Collection Technical Committee (Webinar) Tampa, FL September 29, 2016

## **Council and Staff**

Greg Stunz John Froeschke Bernadine Roy Carrie Simmons Myron Fischer Martha Guyas Jessica Matos Camilla Shireman

## Panel Attendance

Gregg Bray Kelly Fitzpatrick (SRHS) Cliff Hutt (HMS) Mark Fisher Andy Strelcheck Dave Van Voorhees Jason Adriance

#### Attendance-Others

Roy Crabtree Nick Farmer Michael Kelly Rich Malinowski Chad Hanson Mathieu David John McGovern Karolyn Stillman Randy Redd Steve Turner Matthew von Moray Eric Alexander Kesley Gibson George Mayo Wintson Richardson George Sedberry Amanda Wimbish Todd Phillips Stephanie Freed Bob Gill Adam Miller Kathleen Chapiesky Jessie Leslie

The meeting was convened at 9:00 a.m. EST via webinar.

## Background

The Gulf Council (Council) is considering a generic amendment that would implement electronic reporting for federally permitted Gulf of Mexico for-hire vessels. The Council requested additional review and input from their Data Collection Technical Committee (Committee), specifically focusing on the recommended data elements that are necessary to improve fisheries and socioeconomic data in the Gulf of Mexico for-hire fishery. The Committee reviewed a list of data elements collected by 23 for-hire programs in the Gulf and Atlantic regions and a list of potential data elements for consideration in the Gulf of Mexico for-hire fishery. The meeting focused on the review and subsequent recommendations of this committee about the data elements to be included as part of the for-hire electronic logbook program. The discussions were guided by the Council objective to keep the reporting as simple as possible, but adequate to achieve a timely and accurate estimate of catch and effort from the for-hire fleet. The Committee reviewed a list of data elements that could be incorporated in a for-hire data collection program. The Committee categorized each element into one of the following categories: Essential, Recommended, or Not Recommended.

## **Essential Elements**

The Committee characterized 21 variables as "Essential" meaning they are necessary to achieve the minimum objectives of the program. These minimum elements are presented in **Table 1**. The Committee emphasized that the reporting requirements should be as simple as possible to complete, noting vessel operators will need to submit the fishing report before completing each trip. Many of the elements necessary to identify an individual trip (e.g., permit number, vessel number, trip type, trip identifier, and hail-out time) could be auto-completed by the reporting software at the beginning of each trip (i.e., submitted via hail-out) and would require little effort by the vessel operator. This greatly improves data quality, validation, and vessel specific effort information. Several additional variables could be configured when the software is initially installed and rarely modified. For example 'trip type' could be defaulted to 'forhire' and only changed occasionally when other trips types are made. These variables would be specified at the beginning of each trip and would not require action from the vessel operator for the remainder of the for-hire trip. Primary target species could also be auto-populated with a default to simplify reporting. This variable is essential for stock assessments and economic analysis. While target species may change during trip due to conditions on the water, bias may exist if defined after a trip (i.e., you targeted what you caught).

## Variables reported at hail-out

Expected landing time, location, and the number of anglers were recommended as variables, to be provided during the hail-out prior to initiating the trip. Expected landing time and location would support increased efficiency of dockside validation and increase the sample size of biological data that is used for stock assessments and management.

## <u>At-sea reporting</u>

The Committee recommended five variables be included in the at-sea report: species harvested, number harvested, number released, disposition of released fish, and primary depth fished (Table 1). These variables comprise the most important elements necessary to estimate harvest of the for-hire fleet. Disposition of released fish was only recommended for HMS species; this query could be automated to only appear when an HMS species was reported as discarded. The reporting protocol would build upon existing software that would support fast, intuitive data entry that would be validated through dockside intercepts. The submission of these data would be provided during the hail-in for each trip and would complete the data submission requirements for each forhire trip.

## **Recommended Data Elements**

The Committee provided recommendations on a set of variables that were deemed important, yet beyond the bare minimum needed to achieve an estimate of catch and effort from the for-hire fleet. These recommended elements are available in **Table 2** and generally considered supplementary (e.g., minimum and maximum depth fished) and provide additional socioeconomic information about the for-hire fishery. For example, fuel price, gallons used, and number of paying customers could be provided to better characterize economic and social impacts of for-hire fishing. However, some of these data may be collected more efficiently by a sample of the fleet (e.g., fuel price). There was concern that too many fields may reduce reporting compliance and stakeholder support.

## **Data Elements Not Recommended**

The Committee recommended that several data elements be removed from consideration as part of the for-hire reporting program. These elements are listed in **Table 3**. The rationale for removal was varied. Some elements were considered too burdensome to collect relative to the value added to the data (e.g., hook size, number of lines fished), were potentially ambiguous (e.g., number of crew members fishing) or were difficult to validate (e.g., charter fees). The Committee discussed that these variables could provide important information, but again, was guided by the objective to focus on the minimum elements to characterize catch and effort of the fleet.

The meeting was adjourned at 1:00 PM EST.

Variable	Description	Comments	Committee Recommendation	Submission Type
Permit Number	Federal for-hire permit number for the vessel	Owner could configure initial account with all Permit Numbers; NMFS can links and validate to Vessel ID, which is easier for captain to report and easier for agent to validate	Essential	Auto-complete
Vessel Number	USCG vessel id	Provided by captain, could be prefilled or selected from drop down menu to save time.	Essential	Auto-complete
Тгір Туре	Commercial/Headboat /Charter/Private/Other (incl. research trips)	Helps law enforcement identify trip and associated regulations that apply	Essential	Auto-complete with custom defaults
Trip Identifier	Unique identifier for current trip assigned at Hail-Out; cannot obtain new trip identifier until current trip's final logbook is received.	Critical to maintain data integrity and to ensure trip reports are completed in timely manner.	Essential	Auto-complete

Variable	Description	Comments	Committee Recommendation	Submission Type
Landing Location	Location for vessel landing, transmitted to law enforcement	Critical for dockside validation; will need call service for weekends	Essential	Auto-complete with custom defaults
Landing Date	Date for vessel landing, transmitted to law enforcement	Critical for dockside validation; will need call service for weekends	Essential	Auto-complete with custom defaults
Landing Time	Time for vessel landing, transmitted to law enforcement	Estimate provided at Hail-out, Actual potentially collected 30 min in advance of landing (1 hr: HBS Collaborative, 3 hr: Commercial - 1 hr window)	Essential	Provide at hail-out
Primary Method of Fishing	Primary Method {troll, drift, bottom, spear} used on the trip	Critical for accurate CPUE computations; gear impacts selectivity, discard rates	Essential	Auto-complete with custom defaults

Variable	Description	Comments	Committee Recommendation	Submission Type
Anglers	Number of anglers fishing on the vessel (distinct from number of passengers and crew)	Critical metric for CPUE computations ([anglers+fishing crew] X fishing hours = angler- hours)	Essential	Provide at hail-out
Number of Crew	Number of crew on the boat	Useful for economic analysis, bag limit analysis, etc.	Essential, included in current SRHS	Auto-complete with custom defaults
Hours Fished	Hours spent fishing (avg. per angler)	Effort metric for CPUE computations used for stock assessment indices of abundance	Essential	Auto-complete with custom defaults
Primary Target Species	Primary species targeted on trip	Critical metric for CPUE computations, as not all trips targeting a species land the species, but the effort is still effort directed towards the species.	Essential for stock assessments and economic analysis; target species may change during trip due to conditions on the water; however, bias may exist if defined after a trip (i.e., you targeted what you caught). Might need a few aggregate fields like "Reef Fish," "Migratory Pelagics," "HMS Pelagic Species," "Coastal Sharks," "No Intended Target." Might be useful to have software auto-populate "default" target species or carry forward selected target species from previous trip.	Auto-complete with custom defaults

Variable	Description	Comments	Committee Recommendation	Submission Type
Species	Species caught on trip	Critical for ACL monitoring	Essential	At-sea report
Retained Catch	Number of each species caught on trip	Critical for ACL monitoring	Essential	At-sea report
Released Catch	Number of each species released on trip	Critical for stock assessment	Essential	At-sea report
Disposition	Status of discarded species	Useful for stock assessment	Essential for HMS targeted species (if HMS targeted species reported as discarded, this question pops up)	At-sea report

Variable	Description	Comments	Committee Recommendation	Submission Type
Area	Area fished at set intervals from real- time or archived GPS track	Important for evaluation of barotrauma, assignment of fishing to jurisdiction, evaluation of spatial management, understanding impacts of climate change on stock distribution, safety at sea	Essential (Auto- populated)	Auto-complete
Primary Depth Fished	Self-reported Primary depth fished in feet (what depth was your gear? – this is the critical question for barotrauma, not the depth of the bottom)	Critical to evaluation of barotrauma and associated release mortality	Essential; Min, Max, and Primary Depth collected by SRHS starting in 2013.	At-sea report
Hail-out Time	Time vessel leaves dock		Required by Council	Auto-complete
Hail-in Time	Time vessel returns to dock		Required by Council	Auto-complete

Variable	Description	Comments	Committee Recommendation	Submission Type
Trip Duration	Duration of Trip (hours)	Easily computed from Hail-Out and Hail-In, but less useful than Hours Fished for CPUE computations	Could be easily calculated from Hail- in and Hail-out if needed [add Hail-in time and Hail-out time to database]; essential for continuity of data for trip type assignments for SRHS	Auto-complete; Based on hail- out/hail-in times

Variable	Description	Comments	Committee Recommendation	Submission Type
Secondary Target Species	Secondary species targeted on trip	Some vessels may target multiple species, especially vessels making multi-day trips.	Recommended	Auto-complete with custom defaults
Min Depth Fished	Self-reported Min depth fished in feet	Critical to evaluation of barotrauma and associated release mortality	Recommended	At-sea report
Max Depth Fished	Self-reported Max depth fished in feet	Critical to evaluation of barotrauma and associated release mortality	Recommended	At-sea report
Vessel Length	Length of vessel in feet	Owner could configure account with information for all vessels, NMFS can link and validate.	Recommended (auto-populated)	Auto-complete
Fuel Quantity	Estimated gallons of fuel used on trip	Useful to assess economics of the for-hire sector	Recommended, included in current SRHS. May be possible to compute from VMS track rather than require operator to report.	Recommended, included in current SRHS. May be possible to compute from VMS track rather than require operator to report.
Fuel Price	Price per gallon paid for fuel used on trip	Useful to assess economics of the for-hire sector	Recommended, included in current SRHS. Secondary data sources exist for this information.	Recommended, included in current SRHS. Secondary data sources exist for this information.

Table 2. Data elements recommended by the Technical Data Committee at their September 2016 meeting.

Variable	Description	Comments	Committee Recommendation	Submission Type
Passengers	Number of passengers (not including crew)	Used to compute total trip fee (website posted headboat cost/person X passengers), essential for bag limit analysis	Recommended; note some passengers may not have paid, which introduces some bias in the economic analysis	Recommended; note some passengers may not have paid, which introduces some bias in the economic analysis
Secondary Method of Fishing [optional]	Secondary Method {troll, drift, bottom, spear} used on the trip; field not required, optional if applicable to the trip	Critical for accurate CPUE computations; gear impacts selectivity, discard rates	Suggested as "Optional" field	Select from list

Table 2 (con't) Data elements recommended by the Technical Data Committee at their September 2016 meeting.

Variable	Description	Comments	Committee Recommendation
Number of Hooks	Mean number of hooks in the water	Useful for CPUE, difficult for large boats with many anglers	Not recommended
Рау Туре	Per person, per group, or no charge (mixed pay types defaults to per person)	Useful to assess economics of the for-hire sector; and delineation of for-hire sub-sectors	Not recommended
Hook Manufacturer	Manufacturer of hooks used to catch each species (if hook gear reported)	Useful for CPUE computations; hook size impacts selectivity - hook sizes vary by manufacturer	Not recommended
Hook Number	Number of hooks used	Useful to convert angler-hours to hook-hours for CPUE computations	Not recommended
Hook Size	Size of hook used	Useful for CPUE computations; hook size impacts selectivity - hook sizes vary by manufacturer	Not recommended
# of Crew Fishing	Number of crew that were fishing on the boat	Critical metric for CPUE computations ([anglers+fishing crew] X fishing hours = angler- hours)	Not Recommended - Difficult to define – what if a crew member deploys the line and the angler lands the fish?

Table 3. Data elements not recommended by the Technical Data Committee at their September	2016 meeting.

Variable	Description	Comments	Committee Recommendation
Number of Lines	Mean number of lines being fished	Useful for CPUE, difficult for large boats with many anglers	Not recommended for Headboat; Potentially useful for Charter – if vessel is trolling this is probably a more accurate measure of effort than number of anglers
Charter Fee	Total for-hire fees collected from all passengers for this trip	Critical for ANY economic analysis/assessment	Not recommended in eLogbook, but highly recommended for Separate survey. Can also be obtained online. Vessel operator may not have this information available prior to hitting dock.
Crew Pay	Total compensation received by hired crew for this trip	Useful to assess economics of the for-hire sector	Not recommended in eLogbook, but highly recommended for Separate survey. Requesting tip information may reduce compliance. Vessel operator may not have this information available prior to hitting dock.

Table 3. Data elements not recommended by the Technical Data Committee at their September 2016 meeting.