

Biannual Progress Review of Implementation of NOAA Fisheries
Electronic Technologies Policy
October 2015
Southeast Region

- *The number of FMPs with defined fishery-dependent data collection monitoring goals.*

There are 15 fishery management plans (FMPs) in the Southeast Region and all have defined fishery-dependent data collection monitoring goals. The Caribbean Fishery Management Council (Caribbean Council) has four FMPs, including Queen Conch, Spiny Lobster, Reef Fish, and Corals and Reef Associated Plants and Invertebrates (Coral). The Gulf of Mexico Fishery Management Council (Gulf Council) has six FMPs Coral, Red Drum, Shrimp, Reef Fish, Spiny Lobster, and Coastal Migratory Pelagics [CMP], and two FMPs (Spiny Lobster and CMP) are joint between the Gulf Council and South Atlantic Fishery Management Council (South Atlantic Council). The South Atlantic Council has eight FMPs Sargassum, Coral, Golden Crab, Shrimp, Snapper-Grouper, Dolphin Wahoo, Spiny Lobster, and CMP, which includes the two FMPs shared with the Gulf Council.

- *The number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs.*

All 15 FMPs in the Southeast Region have recently been reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate. This review can be found in the *National Marine Fisheries Service Southeast Region Electronic Monitoring and Reporting Regional Implementation Plan* at

http://sero.nmfs.noaa.gov/sustainable_fisheries/documents/pdfs/em_er_implementation_plan_southeast.pdf and is summarized below. Additional electronic technologies are not likely needed for five FMPs in the Southeast Region including Coral (Caribbean), Coral (Gulf of Mexico [Gulf]), Coral (South Atlantic), Sargassum (South Atlantic), and Red Drum (Gulf).

Caribbean Council

For the Caribbean Council, three FMPs (Queen Conch, Spiny Lobster, Reef Fish) are suitable for adoption of electronic reporting technologies. The fourth (Coral) is not very suitable because the only fishing taking place within the context of that FMP is aquarium trade harvest, which is very small scale and primarily an activity conducted in state waters. However, electronic data reporting certainly is possible, but not likely needed.

Gulf Council

Two fisheries managed by the Gulf Council (red drum and coral) prohibit all harvest, thus no monitoring, electronic or otherwise, is needed. Although a FMP (joint with the South Atlantic) exists for spiny lobster, most management occurs via the State of Florida.

Shrimp:

The shrimp fishery is completely commercial in federal waters. A random sample of commercial vessels (ca. 1/3 of the fleet) is equipped with electronic logbooks, which is used to document effort. Catch and bycatch data are collected via an observer program. The observer program samples less than 1% of all shrimp effort; however, the observer program has been in place since 1992 (voluntary), and mandatory since 2007; thus, a long-standing database exists

regarding catch and bycatch. Given the high volume of catch in this trawl fishery, and the multitude of species involved, it would not be practicable to implement electronic (or paper) catch/bycatch reporting by the vessel/crew. In addition, vessel captains are routinely interviewed by port agents to gather additional catch and effort information.

A 2012 Biological Opinion recommended that the National Marine Fisheries Service (NMFS) better assess the impacts of incidental take in fisheries. The Biological Opinion also indicated that NMFS must have a plan to increase observer effort for the shrimp trawl fishery in South and Southwest Florida where sawfish interactions are most likely to occur using standard observer protocols and/or using electronic monitoring. There is some observer coverage in Southwest Florida; however, electronic monitoring could serve as an alternative to observers for documenting sea turtle and sawfish interactions in the shrimp trawl fishery. Pilot testing is currently underway to test the use of camera systems for accurately accounting for smalltooth sawfish interactions onboard Southwest Florida shrimp vessels

Reef Fish:

Commercial dealers are required to report electronically in the Gulf. For the reef fish fishery, all commercial vessels are required to have an operational vessel monitoring system (VMS) unit that transmit a signal (typically once per hour) identifying the exact latitude and longitude of the vessel. Vessels are required to submit a declaration (hail-out) prior to departing port to report their targeted species and gear being used. In addition, all vessels participating in the two Gulf Individual Fishing Quota (IFQ) programs are required to submit pre-landing notifications 3 to 24 hours prior to landing that indicates the landing location, landing date/time, dealer, and estimated pounds to be landed in each share category through the VMS, IFQ website, or phone. IFQ participants are required to report landings through the IFQ website on the day of offload. For non-IFQ reef fish vessels electronic landings are reported through the dealers. All commercial vessels are required to submit paper logbooks as a condition of their permit. This paper logbook could be replaced by electronic reporting requirements; however, funding, and a reporting platform, currently is not available. There is an ongoing pilot study to test at-sea vessel electronic logbooks. Reporting requirements for commercial vessels is ground-truthed through an observer program. In addition, the Gulf of Mexico Reef Fish Shareholders Alliance, through a partnership with Ocean Conservancy and Mote Marine Laboratory, has installed camera-based electronic monitoring systems on seven vessels to test their ability to collect information on reef fish catch and discards.

For the recreational sector of the reef fish fishery, electronic reporting is required of headboats, and the Gulf Council is currently developing an action to require similar electronic reporting by charter vessels. There is an ongoing pilot study in the headboat sector that utilizes VMS to report and monitor the program. All vessels in this study are required to submit a declaration prior to departing port and to submit a pre-landing notification 1 hour prior to landing indicating landing location, landing date/time, and estimated fish retained. There is no electronic reporting by the private recreational component of the fishery, although the private recreational component has identified this as a need. Such a voluntary self-reporting system would need to be ground-truthed and validated through alternative cross sampling. MRIP randomly selects 10% of state and federally licensed charter vessels to report fishing effort each week. This is done through a telephone survey and may also be done through their new mail survey.

Joint Gulf Council and South Atlantic Council CMP:

Commercial dealers are required to report electronically in the Gulf of Mexico and South Atlantic. There is no electronic monitoring/reporting in the commercial CMP sector, and implementing such a requirement might not be feasible. There is a paper logbook submission requirement, and the catches are sampled by port agent intercepts. Although there are some full-time professional king mackerel fishermen, mostly residing on the east coast of Florida, who fish in the Gulf of Mexico during open seasons, for Gulf of Mexico-based fishermen, king mackerel is not a full time occupation, as the various zones are only open seasonally. Many of these fishermen also participate in the reef fish fishery in the Gulf of Mexico and the snapper-grouper fishery in the South Atlantic, and if they are part of the IFQ programs, they do have VMS onboard. Non-IFQ fishermen have been very negative to implementation of an electronic reporting requirement. The Gulf and South Atlantic Councils are interested in electronic logbooks for the CMP commercial sector in the Atlantic. Spanish mackerel is primarily caught in state waters, and cobia is frequently a bycatch while targeting other species, thus electronic reporting may not be desirable for these components of the CMP fishery.

In the recreational sector, mackerels are not necessarily a target species, but will be taken incidentally or targeted as an alternative species during a fishing trip. Headboats may take mackerels or cobia, and as noted for the reef fish and snapper-grouper fisheries, these boats report electronically. Similarly, charter boats will make catch of CMP species part of an overall fishing trip; electronic monitoring and reporting requirements are being developed by the Gulf and South Atlantic Councils. For private anglers, electronic reporting requirements exist but has been primarily focused on reef fish. As noted for reef fish, such voluntary self-reporting would need some sort of ground-truthing and validation. Improvements and development of ER include pilot testing and development of various state-based electronic reporting systems for monitoring red snapper and other reef fish catches of private anglers.

South Atlantic Council

All harvest is prohibited for one fishery managed by the South Atlantic Council (coral), and there is no harvest occurring for Sargassum. Thus, no monitoring, electronic or otherwise, is needed for these FMPs. Although a FMP (joint with the Gulf of Mexico) exists for spiny lobster, most management occurs via the State of Florida.

Snapper-Grouper:

With the exception of electronic reporting for dealers and headboats, electronic reporting is not currently being done in other aspects of the snapper-grouper fishery. The South Atlantic Council is currently developing an action to require electronic logbooks in the charter and commercial sectors of the Snapper-Grouper, dolphin-wahoo, and CMP fisheries to improve assessments and data timeliness, and there is a need to modernize the wreckfish individual transferable quota program, which currently relies on paper-based coupons. Electronic reporting improvements are the primary priority for snapper-grouper, dolphin-wahoo and CMP in the South Atlantic, and there is an ongoing pilot study to test at-sea vessel electronic logbooks. Improvements and development of ER include: pilot testing and developing electronic logbooks for commercial snapper-grouper, dolphin-wahoo, and CMP to obtain more timely and finer spatial resolution

data; development and implementation of an electronic reporting system for federally permitted charter vessels; and adding wreckfish in the SERO Web-based catch share reporting system.

Golden Crab:

There are only 11 permitted vessels that participate in the golden crab fishery. Golden crab vessels are required to maintain logbooks, but there are often significant lags in data reporting and data entry. Data timeliness could be greatly improved and data entry costs could be reduced through implementation of electronic logbooks. Additionally, the South Atlantic Council is interested in exploring the use of trap gear pingers to differentiate trap locations from vessel location, as traps are often deployed near habitat areas of particular concern or other closed areas. Currently, the South Atlantic Council is not taking action to address golden crab electronic reporting or monitoring.

Shrimp:

Unlike the Gulf of Mexico, the use of electronic logbooks is not required in the South Atlantic shrimp fishery. Like the Gulf of Mexico shrimp fishery, expanded use of electronic monitoring may be warranted for the South Atlantic shrimp fishery.

There are approximately 100 federally permitted vessels with limited access South Atlantic rock shrimp permits, and another 100 federally permitted vessels with open access rock shrimp permits that can shrimp off North Carolina and South Carolina. Rock shrimp vessels have been required to carry a VMS since 2003. The South Atlantic Council is interested in expanding the use of electronic monitoring to link location-specific catch and bycatch data to VMS data to better evaluate the impacts and trade-offs of spatial-area closures on shrimp harvest and coral protection. Currently, the South Atlantic Council is not taking action to require additional shrimp electronic reporting or monitoring requirements.

Dolphin-Wahoo:

Commercial fishers are required to report paper-based logbooks for dolphin-wahoo, while commercial dealers and headboats are required to report purchases and catches of dolphin-wahoo electronically on a weekly basis. Similar to snapper-grouper and CMP species, it is a priority to pilot test and develop electronic logbooks for the commercial sector to obtain more timely and finer spatial resolution data and to develop and implement an electronic reporting system for federally permitted charter vessels, in accordance with recommendations made by the Gulf of Mexico and South Atlantic Council's Technical Subcommittee.

- *For fisheries where additional electronic technologies are identified as appropriate, the number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs.*

Five FMPs (Gulf Shrimp, Reef Fish, Snapper-Grouper, Dolphin-Wahoo, and CMP) in the Southeast Region currently have electronic technologies incorporated into fishery-dependent data collection programs.

- *Address progress at the fisheries level, i.e. the appropriate unit within a FMP that better reflects the application of electronic technologies. This might be sector, cooperative, or other unit with a FMP, as appropriate. For example, the plan for electronic monitoring implementation in the New England Multispecies Fishery is two sectors out of 17.*

A coastal logbook is shared by the commercial sector of the Gulf of Mexico Reef Fish, South Atlantic Snapper-Grouper, South Atlantic Dolphin-Wahoo, and Joint Gulf of Mexico and South Atlantic CMP fisheries. The Gulf and South Atlantic Councils are developing amendments to put electronic reporting in place for charter boats for these fisheries in the Gulf of Mexico and South Atlantic. Electronic reporting improvements are the primary priority for these fisheries in the Gulf of Mexico and South Atlantic, and there is an ongoing commercial pilot study to test at-sea vessel electronic logbooks. The Gulf and South Atlantic Councils intend to develop an amendment to require electronic logbook reporting for these fisheries when the commercial logbook pilot study is completed. Additionally, a catch-share system with electronic reporting requirements and VMS has been tested for headboats in the Gulf of Mexico since 2014 and a NFWF funded project to test VMS electronic logbooks on up to 275 charter vessels is set to begin in 2016.

- *In addition to discussing which FMPs or fisheries are appropriate for the application of electronic technologies, include information on why other FMPs or fisheries are not being considered for the incorporation of electronic technologies.*

In the Caribbean, the Coral FMP is not very suitable for electronic technologies because the only fishing taking place within the context of that FMP is aquarium trade harvest, which is very small scale and primarily an activity conducted in state waters.

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All harvest is prohibited for one fishery managed by the South Atlantic Council (coral), and there is no harvest occurring for Sargassum. Thus, no monitoring, electronic or otherwise, is needed for these FMPs.