

Pacific Islands Biannual ET Implementation Plan Progress Review

September 24, 2015

1. Number of FMPs with Fishery-dependent data collection monitoring goals:

Zero. The five Fishery Ecosystem Plans (FEPs) do not have specific goals or objectives that describe fishery-dependent data collection or monitoring. The Western Pacific Fishery Management Council (Council) is currently undertaking a comprehensive review of its five FEPs. The goals and the associated objectives in the draft amendments address overall fisheries management. If NMFS approves the amendments, each FEP would have an objective that addresses fishery monitoring and data collection. In October 2015, the Council will review portions of the draft amendments, including the objective for improving fishery monitoring and data collection. This objective does not specifically mention electronic technology, but it does include the following strategies that may be associated with electronic technology:

- a. Improve the timeliness of data availability.
- b. Improve the quantity and quality of relevant fishery data.
- c. Increase the quality and quantity of monitoring and enforcement data through improved technology.

2. Number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs:

Five. We have reviewed all of the fisheries under all of the Pacific Islands FEPs to determine if electronic technology is appropriate. This review is in the Regional Implementation Plan.

3. Number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs

Even though all five FEPs allow electronic reporting using elogbooks, none has the technologies incorporated into fishery-dependent data collection programs, as the FEPs do not describe these programs. Regardless, NMFS will be incorporating electronic technologies into the Hawaii Longline fishery's fishery-dependent data collection program, as authorized by the Pelagics FEP.

4. Progress at the fishery level:

Electronic Reporting:

Observer Program

The eReporting Project team members, for the Observer Program electronic reporting in the Hawaii Longline fishery, have successfully transmitted data from the Thorium Application on the mobile device (Google Asus Nexus 7 Tablet), through the Thorium LEO vessel monitoring system (VMS), and onto the CLS America servers. Data were then successfully loaded into the *Pacific Islands Region Observer Program System (PIROPS)*, validating "end-to-end" functionality of the system. The project team has developed 36 eforms that mimic the workflow

of the observer; and testing of both eform functionality and transmission will continue through October. The project team is also developing a Beta testing plan that will outline the second phase project objectives. Observers will conduct Beta testing in the field beginning November 2015.

The Pacific Islands Region Observer Program (PIROP) requires funding for future transmission costs, software modifications and tablet hardware and future tablet upgrades. Transmission funds are available until May 2016, but the PIROP has not identified transmission funding thereafter or any sustained long term funding.

Elogbooks

The Pacific Islands Fisheries Science Center (PIFSC) is testing elogbooks in the Hawaii Longline fishery. Working with CLS America, PIFSC completed the electronic reporting software certification. CLS America held a Captain's workshops June 15 and June 17, 2015 where the captains received the tablets programmed specifically to their vessel's VMS. The vessel operator uses the new Thorium LEO VMS to transmit the data. The vessel operator uses eforms on an Asus Nexus 7 Tablet. The testing currently involves fishermen submitting both their paper logsheets and an electronic data submission to allow PIFSC to compare the types of data. Captain and fishermen training requires individual training on the software and the training efforts will continue through the summer. Five vessels currently are using the tablets.

Implementation of elogbooks has gone slowly and haltingly. PIFSC initially distributed 40 tablets to vessel captains after the CLS America training in June. Of these 40 tables, only one captain was able to successfully enter and transmit data, which is surprising considering CLS America should have completed beta testing of the software and transmission before distributing the tablets. PIFSC required CLS America to modify their software to improve version control, interface, and function; and continues to work with CLS America to use their product.

PIFSC is not entering data directly into the catch database at this time. Once the data entry and transmissions are functioning, PIFSC will receive the elogbook data and will incorporate the data into the database. PIFSC uses software to recompile data to populate a logsheet, which PIFSC then saves as a PDF and archives. NOAA Office of Law Enforcement (OLE) requires the recompiled logsheets, which has statements regarding catch, Captain's name, commercial marine license, and a check box in lieu of an electronic signature.

PIFSC requires funding for future transmission costs, software modifications and tablet hardware. Transmission funds are available until June 2016, but PIFSC has not identified transmission funding thereafter. In addition, PIFSC had not identified funds for software modifications and tablet hardware.

Although the FEP for the Hawaiian Archipelago does not describe electronic reporting, a form of electronic reporting is ongoing in the Main Hawaiian Islands Deep-7 bottomfish fishery. As part of the joint State and Federal management of this fishery under the FEP, NMFS supports the State of Hawaii's fishery-dependent data collection on fishing occurring in both state and federal waters. A growing proportion of Hawaii deep-7 bottomfish fishermen use online submission to

make their catch reports. These have been helpful in providing more rapid and up-to-date in-season tracking of catch in relation to the annual catch limit (ACL). The FEP calls for a within-season closure of this fishery when harvests reach the ACL.

Though not part of an FEP, all U. S. Purse Seine vessels have Integrated Fisheries Information Management System (IFIMS) subscriptions, and they electronically submit nonfishing day claims to Pacific Island Countries (PIC) that accept them. Almost all PICS accept electronic claims, but Kiribati still requires paper forms. Vessel operators may submit nonfishing day claims or may use the vessel management company to submit the claims. Vessels can submit the claims via their shipboard internet carrier or via transmission from a tablet through a satellite phone. Most vessels relay the information to their companies who then enter the information at the office.

Currently, no vessels are using IFIMS to submit their catch and effort data. Some vessel are using E-Tuna-log, which is a fillable pdf form that is the same as the logsheet, and exports data in an xml format. At this stage, PIFSC is developing the mechanism for importing data into their database and is currently not entering this data into their database.

Electronic Monitoring

The OLE has nearly completed installing upgraded Thorium VMS units on Hawaii and American Samoa longline vessels through a contract with CLS America. Installing VMS units and providing electronic reporting tablets pose some logistical difficulties for vessels that were formerly Hawaii-based and are now U. S. West Coast-based. CLS America installed 135 VMS units on Hawaii longline vessels, and has pending installations on seven vessels in Hawaii and on the U. S. West Coast. Installations for the Hawaii longline vessels is 95% complete. CLS America also installed upgraded VMS units on 12 American Samoa longline vessels, and has seven installations pending for American Samoa longline vessels in Pago Pago and on the U. S. West Coast. VMS installations for American Samoa longline vessels is 63 % complete.

5. Information on why other FMPs or fisheries are not being considered for the incorporation of electronic technologies

As described in our Regional Electronic Technology Implementation Plan, we must carefully evaluate each fishery to determine the need and the practicality of using electronic technology for reporting and monitoring. In reviewing our managed fisheries, we identified those fisheries that have the most urgent need for improved quality and timeliness of data and that may have the capabilities to use electronic technologies. Due to limited resources, we first focus our efforts to implement electronic reporting in the Hawaii longline fishery. Learning from this experience, we will work with the next fishery with the greatest need and most likelihood of success with electronic reporting, the American Samoa longline fishery. We will continue to examine the potential for electronic technologies in other fisheries as we build on our successes and as resources allow.