NOAA FISHERIES
Sustainable Fisheries

Electronic Monitoring Pilot Study

Background

NMFS and the North Pacific Fishery Management Council (Council) support the integration of Electronic Monitoring (EM) into the new Observer Program, which begins in 2013. Compared to a human observer, EM technologies offer a way to obtain independent fishery data on board vessels where space is limited and/or safety is a concern. NMFS is developing EM technologies in conjunction with Saltwater, Inc., to collect catch, discard, and fishing effort data aboard commercial vessels. The goal is to evaluate the utility of EM to monitor catch in the sablefish and halibut sector fleet for vessels between 40 feet and 57.5 feet length overall. The project will commence April 1st on volunteer vessels that return the enclosed self-addressed, stamped postcard by February 1, 2013. To account for differences in geographical location and fishing activity, EM will be deployed on participating vessels based out of Sitka, Petersburg, Homer, and Kodiak ports to assess the applicability of EM. Data obtained from EM will be compared to other catch data such as observer data and vessel landing reports (fish tickets).

Equipment

EM technology is comprised of a control box, user interface (monitor and keyboard), up to three digital video cameras, a GPS receiver, a hydraulic pressure transducer, and a drum rotation sensor. Cameras and sensors will be mounted in various locations based on vessel size and configuration, hauling areas, discard chutes, and catch sorting areas. The control box, mounted in the wheelhouse, receives input from the sensors and logs digital video imagery. Cameras begin recording when the pressure transducer and drum sensor register fishing activity such as setting and retrieving gear. Cameras record activity on deck with a focus on discarded groundfish species. Vessel operators will provide catch, discard, and effort information using electronic logbook software provided by NMFS. The software can be run off a USB memory stick on an already existing onboard computer or a laptop provided with the EM equipment. Catch and discard information will be recorded in numbers of fish for each species on every set for all trips in a calendar quarter.

Why do we need EM monitoring?

In 2013 at-sea monitors will be federally funded and by 2014 monitoring is expected to largely become an industry responsibility through landing fee proceeds. This technology may provide a more cost effective and less burdensome alternative to human observers if it is found to be a suitable replacement. The technology may also provide a more detailed account of catch and catch distribution thereby providing a more accurate representation of discarded catch on a more consistent basis.

Why volunteer for EM?

Several fisheries throughout the world utilize EM as a valuable monitoring tool to provide data for effective fishery management and conservation of living resources. Should EM be found to be a suitable monitoring tool in the North Pacific groundfish fleet, study results will be used to draft monitoring standards for incorporation into

To Find More Information:

- For more information contact:
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- For more detailed information on the Observer Program and the Observer Program regulations, please visit:
  http://www.alaskafisheries.noaa.gov/sustainablefisheries/observers/

monitoring plans that currently only include human observers. You can play a vital role in whether EM is deemed a success and becomes an alternate monitoring tool. Simply mail the enclosed self-addressed, stamped postcard by February 1, 2013, to indicate your willingness to volunteer for this study and help ensure EM will be part of the future.

What happens if I say yes?

The number of EM units we have available is limited in the first year; therefore, we plan to randomly select vessels whose owners have indicated a willingness to work with us. If selected, we will contact you and make arrangements to install the camera equipment on your vessel for a set period of time when you are fishing. Once completed, we will coordinate with you to remove the equipment and video footage, and will provide you a copy of any data collected from your vessel.