

including research into observer programs for small vessel coverage. This includes the testing of digital cameras strategically placed onboard vessels to monitor fishing activities and catch.

*Comment 5:* One commenter indicated that the North Pacific Fishery Management Council (NPFMC) and NMFS already have an observer program in place, stating that, while the program can be improved, such improvements must come from incremental changes as more information becomes available.

*Response:* NMFS agrees that the observer program in place for monitoring North Pacific groundfish fisheries has benefitted from changes implemented as new information and resources have become available. However, observer programs have not been implemented for all U.S. fisheries. The National Observer Program, a relatively new program within NMFS headquarters, is charged with facilitating the exchange of information and experiences between programs to facilitate the implementation of new programs and to improve the efficiency and effectiveness of existing observer programs.

*Comment 6:* Several commenters indicated that the NPFMC already has a functioning observer program for the North Pacific groundfish fishery that is large scale, mandatory, and industry-funded. At least one of these commenters indicated that as a result, the NPFMC has an observer-generated data base from which to evaluate catch and bycatch mortality levels in those sectors of the fleet that account for virtually all of the groundfish landings in the Bering Sea and Aleutian Islands and a large part of the landings in the Gulf of Alaska.

*Response:* NMFS agrees that industry funding of the North Pacific Groundfish Observer Program (NPGOP) has resulted in comprehensive coverage of North Pacific groundfish fisheries. The data collected by observers are critical to the management of these fisheries. NMFS is working with the NPFMC to review current funding mechanisms and coverage levels in the NPGOP. This review is focused on ensuring that funding mechanisms and coverage levels continue to address the need for collection of high quality catch and bycatch data to support management decisions.

*Comment 7:* Several commenters supported the development and implementation of an observer workplan, with consistent and adequate coverage as necessary to provide more reliable bycatch estimates and facilitate sound management. Commenters noted

that unreliable bycatch estimates can undermine stock assessments and impede rebuilding efforts, and that restrictive management regimes based on flawed data may economically destroy fisheries.

*Response:* For fisheries where observer coverage is needed to monitor bycatch, NMFS agrees that a level of coverage should be deployed that provides statistically reliable bycatch estimates. Because the need for coverage will vary from fishery to fishery, NMFS is undertaking a national review of coverage levels in the coming year to evaluate current mechanisms used for estimating appropriate coverage levels, and to determine the most appropriate statistical methodologies upon which to base sample size determinations. This review will be used in the refinement of future initiatives to address funding for observer programs. This review will also support the development of a national plan for NMFS observer programs, where needs for observer coverage to monitor bycatch will be outlined on a fishery by fishery basis.

*Comment 8:* One commenter supported a national work plan for observer placement that would include: hiring standards; coordination with states; maximum data collection regardless of the statutory authority; adequate support for observers; well-defined objectives and goals for each observer program; data quality and assurances; strong scientific sampling design; annual evaluations; and giving NMFS sole authority to make all decisions in regards to observers (i.e., RFMCs should not be involved in sampling design).

*Response:* NMFS agrees that a national plan for NMFS observer programs is important to address the commenter's concerns, and has initiated development of this plan. Historically, NMFS observer programs have operated independently in each region with little opportunity for exchange of information and with minimal guidance on the development of standardized operating procedures. With the establishment of the National Observer Program in 1999, NMFS has begun to address many issues critical to the effective deployment of observers nationwide, such as program goals and objectives, safety standards for observed vessels, hiring standards and wages for observers, vessel liability, observer compensation in the event of an injury, authorities to collect observer data, and options for industry funding of observer programs. As part of the agency's implementation of the Fisheries Information System, the National Observer Program has also begun to address issues to improve

overall data integrity, such as coordination with states and RFMCs, sampling design and data quality, observer coverage levels, integration of observer data with other fisheries data, data confidentiality, electronic data entry, and improved access to observer data. The National Observer Program will be drafting the national plan for NMFS observer programs in the coming year, in cooperation with each regional NMFS observer program, RFMCs, the states, and the state fishery commissions.

*Comment 9:* Another commenter supported a workplan, but expressed that observers may not necessarily be required in all fisheries if other reliable and accurate methods of assessing bycatch are available. The commenter suggested that NMFS prioritize which fisheries require observers to obtain accurate bycatch data and determine the level of coverage needed.

*Response:* NMFS agrees and is working towards this. Current efforts include research into alternative methods for collection of bycatch data, such as the use of video cameras and other means of electronic monitoring, and identification of fisheries with the highest priority for observer coverage. As discussed below, NMFS will be developing a national approach to standardized bycatch reporting methodology.

*Comment 10:* Commenters asserted that without the immediate implementation of a plan to count, cap, and control bycatch, including the implementation of an observer workplan, our oceans remain at risk from wasteful fishing practices.

*Response:* NMFS continues to work nationally and internationally to reduce bycatch. A wide variety of measures are already in place to monitor and reduce bycatch in numerous fisheries. Bycatch data from observers are used to develop and implement gear improvements and management measures to reduce bycatch. NMFS will continue to work on identifying fisheries for which bycatch is occurring, and furthering strategies for better estimating and reducing bycatch.

*Comment 11:* One commenter supported the development of a workplan for observer placement and suggested that NMFS should: devise a more effective system for observer deployment than the "lottery" system currently in place in the West Coast groundfish fishery; establish minimum standards at the national level for safety, hiring, sampling, and data integrity; require critical evaluation of observer sampling methods and heighten concern for data integrity; and improve