

and provide the Council with its recommendations at the April 2003 Council meeting. NMFS believes that this SSC review is an important step toward improving the bycatch model to better support groundfish management.

NMFS agrees that observer data from the new NMFS West Coast groundfish observer program needs to be incorporated into the bycatch model. Before using the data for inseason management, NMFS must first review the data for potential sources of bias and, in conjunction with the SSC, determine the most appropriate methods for incorporating the new data into the bycatch model. On January 30, 2003, NMFS released its first report on observer program data. The observer program began in August 2001 and this new report provides data from the August 2001 through August 2002 period. NMFS Northwest Fisheries Science Center is currently determining how best to integrate the new observer data into the model. Results from the first year of the observer program's activities are available online as the West Coast Groundfish Observer Program Initial Data Report and Summary Analyses at <http://www.nwfsc.noaa.gov/fram/Observer/datareport.htm>.

NMFS also agrees that logbook data should not be a primary data source for the bycatch rates used in the model, although the agency notes that logbook and fish ticket data are likely to remain integral to projecting fleet behavior within the bycatch model. One commenter noted that fishing strategies have changed since the 1999 logbook data used in the model became available. While it is true that fishing strategies have changed, the 1999 logbook data are used to show co-occurrence between the more abundant targeted stocks and overfished stocks during a period when fishing was less restricted. Fishery managers need to know how co-occurrence ratios looked during less restrictive fishing periods in order to better craft fishing restrictions that will reduce interceptions of overfished species. Another commenter noted that logbooks only show the beginnings of tow locations, not the direction and duration of the tows. NMFS and the Council need more accurate information on where trawl vessels are fishing throughout their tows. However, individual trawl tows may last for hours and encompass a wide range of depths. Consequently, even complete information regarding the path of any tow would not eliminate all ambiguity on where particular species were caught. NMFS also needs more information on the fishing

locations of the non-trawl and recreational fleets in addition to improvements in trawl fishing location data. If NMFS is able to approve the VMS system regulations discussed above in the response to Comment 11, the agency expects that its data on the locations and depths at which vessels fish will be markedly improved. While the VMS regulations would initially apply to limited entry vessels fishing for West Coast groundfish, NMFS anticipates expanding these requirements to commercial passenger fishing vessels (recreational charter boats) and to the open access groundfish fleet.

NMFS agrees that the current bycatch model only addresses the groundfish trawl fleet. During development of the model, bycatch rate data were unavailable for other fleets that catch groundfish. The NMFS observer program is collecting data from non-trawl fishery participants. As more data become available, it is the agency's intent to expand the bycatch model to include other gear types. With respect to the comment that NMFS needs to conduct a review of its data sources on fishing-related mortality, NMFS refers the public to the NMFS Northwest Fisheries Science Center's 2002 Groundfish Research Plan in 2002, which is available online at <http://www.nwfsc.noaa.gov/fram/GFresearchplan.htm>. Among other things, the Groundfish Research Plan provides planning goals for investigating bycatch and discard, and how these contribute to total groundfish mortality.

*Comment 13:* NMFS has refused to seriously consider the alternative of managing the fishery under a system of discard caps, under which the fishery would be closed if a certain amount of discard occurred.

*Response:* NMFS has refused to seriously consider the alternative of managing the fishery under a system of discard caps, under which the fishery would be closed if a certain amount of discard occurred.

"Discard caps" generally refers to a management tool whereby an entire fishery, or fishing by an individual vessel, is halted when discard quotas for designated species are reached. Administration of such a system requires real-time information on discards as the fishery progresses, either through comprehensive, direct observation by fishery observers, or by a combination of observer and landings data that can be extrapolated to yield a reliable estimate of discards. While NMFS has not "refused to seriously consider" managing the Pacific Coast

groundfish fishery with a discard caps program, there is no data collection system in place, nor is there likely to be in the near future, on which to base a system of discard caps. NMFS will be analyzing discard caps more fully in its Supplemental Programmatic Environmental Impact Statement, a preliminary draft of which should be available for public review in late summer 2003.

West Coast groundfish management uses a similar management tool that has been adapted to account for the relatively data poor conditions in the West Coast groundfish fishery. The bycatch model, which is currently under scientific review as discussed earlier in this section, estimates the amounts of overfished species that will be taken in fisheries targeting more abundant stocks. These estimates are stratified over the months of the year, because historic data has shown that groups of groundfish species are taken in different combinations at different times of the year. Estimated bycatch and discard of overfished species is monitored through the catch and landings levels of targeted species. For example, NMFS will monitor the amounts of Dover sole and sablefish landed to estimate the amount of darkblotched rockfish discard in that sector of the fishery. Darkblotched rockfish is a deepwater rockfish species incidentally taken with Dover sole and sablefish. The Council recommends adjustments to the trip limits and/or closures of different sectors of the fishery if the OYs for overfished species are estimated to be approached. In 2002, for example, the Council learned at its June meeting that it had not accounted for darkblotched rockfish taken south of 40°10' N. lat. when it developed the 2002 specifications and management measures. To prevent the deepwater fisheries from exceeding the darkblotched rockfish OY, the Council reduced trip limits for deepwater species in July and August and recommended area closures in waters where darkblotched rockfish is commonly found for September-December. NMFS implemented the Council's July-August recommendation, but found in investigating its September-December recommendation that darkblotched rockfish are more likely to be taken by vessels targeting deepwater species in September than in the summer or winter months. Thus, NMFS closed deepwater trawl fisheries in September and implemented area closures for October-December via an emergency rule.

NMFS began its observer program in August 2001 and, as mentioned above,