

(YRCA) has been identified off the north Washington coast, and recreational fishing will be prohibited within that conservation area. In Oregon, the retention of yelloweye rockfish during the all-depth halibut fisheries will be prohibited, otherwise there is a one yelloweye rockfish sub-limit in the ten marine fish bag limit. The California recreational fisheries south of 40° 10' N lat will be closed entirely from January through June and open shoreward of 20 fm (37 m) for July through December. However, the retention of yelloweye rockfish in the California recreational fisheries will be prohibited.

#### Overfishing

None of the 2003 ABCs are knowingly set higher than Fmsy or its proxy, none of the OYs are set higher than the corresponding ABCs, and the management measures in this proposed rule are designed to keep harvest levels within specified OYs. Overfishing is difficult to detect inseason for many groundfish, particularly for minor rockfish species, because most are not individually identified on landing. Species compositions, based on proportions encountered in samples of landings, are applied during the year. However, final results are not available until after the end of the year. Thus, this **Federal Register** document discusses overfishing for 2001, not 2002. If overfishing occurred on any groundfish species in 2002, it will be discussed in the 2004 **Federal Register** publication of the specifications for that year. After the 2001 fishing season, NMFS determined that overfishing had not occurred on any of the groundfish species. However, a new stock assessment on Pacific whiting incorporating 2001 hydroacoustic survey data was completed in early 2002. The new stock assessment revised the spawning stock biomass to be lower than previously estimated over the past several years. Therefore, in retrospect, revised biomass estimates based on the results of the new assessment indicate that the exploitation rates on Pacific whiting in 1999, 2000, and 2001 were above the overfishing level.

In the past, several changes to groundfish management, and rockfish management in particular, were intended to ensure that groundfish species were not subject to overfishing harvest rates. These changes included separating the rockfish complex into species and assemblages (nearshore, shelf, and slope), closing fisheries inseason once the OY has been reached, restructuring the season to reduce bycatch of overfished species, imposing gear restrictions, requiring sorting of rockfish to improve landings data, and

restructuring the season and trip limits inseason. As information on the stocks improves, management measures continue to evolve. For 2003, management measures are more restrictive in order to protect overfished species, including reduced harvest levels, depth based management, closed areas and seasons. Area closures north of Cape Mendocino, CA, were primarily designed to protect canary rockfish, but are also expected to provide protection for other northern overfished species such as darkblotched rockfish, lingcod, POP, yelloweye rockfish, and widow rockfish. Area closures south of Cape Mendocino, CA were primarily designed to protect bocaccio rockfish, but are also expected to provide protection for other southern overfished species such as cowcod, lingcod, and darkblotched rockfish in its southern range.

#### Bycatch and Discard Accounting

The Magnuson-Stevens Act defines bycatch as "fish which are harvested in a fishery, which are not sold or kept for personal use, and include economic discards and regulatory discards." By contrast, Pacific Coast groundfish fishery management and many other fishery management regimes commonly use the term bycatch to describe non-targeted species that are caught in common with (co-occur with) target species, some of which are landed and sold or otherwise used and some of which are discarded. The term "discard" is used to describe those fish harvested that are neither landed nor used. For the purposes of this proposed rule, the term "bycatch" is used to describe a species' co-occurrence with a target species, regardless of that first species' disposition.

West Coast groundfish species are rarely found in isolation. They normally form associations with other groundfish species that vary by geographic location, position in the water column, and season. Fisheries management recognizes this mix by setting management measures that discourage targeting of more abundant stocks in times when and areas where depleted stocks may co-occur with those healthy stocks. Fisheries management also recognizes this mix by structuring retention allowances for the harvestable amounts of depleted stocks so that fisheries have some limited opportunity to access more abundant fish stocks.

With the exception of the mid-water trawl fishery for Pacific whiting, most groundfish vessels sort their catch at sea and discard species that are either in excess of cumulative trip limits, unmarketable, in excess of annual allocations, or incidentally caught non-

groundfish species. Landed or retained catch has been monitored by the three state-run fish ticket programs in Washington, Oregon, and California. Since August 2001, total catch (landed catch + discards) has been monitored through a Federal observer program. (For more information on the NMFS observer program and the observer coverage plan, see <http://www.nwfsc.noaa.gov/fram/Observer>.) Widow, yellowtail, canary and darkblotched rockfish discard in the at-sea whiting fisheries is monitored inseason and actual discard numbers are deducted from the OY.

Groundfish management measures include provisions to reduce trip limit-induced discards and to account for those discards when monitoring harvest levels OYs. Historically, NMFS and the Council have accounted for dead discards by estimating the amounts of certain species OYs that would be discarded dead, and then subtracting those amounts from the total catch OYs to get landed catch levels for those species. These discard rates have been expressed as a percent of total catch OY, so that a 16-percent discard rate for a species meant that 16 percent of that species' total catch OY would be deducted to derive that species' landed catch OY. Then, management measures were set to achieve the landed catch OY for that species. Using discard rates was intended to account for dead fish either as dead discard or in landed catch. For all species except lingcod, sablefish, and nearshore rockfish species, it is assumed that discarded fish are generally dead upon discard or die soon after being discarded. Rockfish, particularly deepwater species, are severely stressed by decompression and temperature shock; however, lingcod discard mortality studies show about a 50-percent discard survival rate. There is no exact measure of discard amounts in most fisheries. Assumed amounts are taken into account to determine the fishing mortality level and to prevent overall harvest from exceeding the OYs.

NMFS approach to bycatch management in the 2002 specifications and management measures was a radical departure from historic bycatch management practices. The primary emphasis of the bycatch modeling that NMFS used in the development of the 2002 management measures was the estimation of the total amounts of bycatch species that would be caught coincidentally with available target species. The new management approach structured the amount and timing of cumulative landings limits for target species so that the expected total catch of both target and bycatch species not