

COASTAL PELAGIC SPECIES MANAGEMENT TEAM STATEMENT ON  
PACIFIC MACKEREL HARVEST GUIDELINE FOR THE 2005/2006 FISHERY

The Coastal Pelagic Species Management Team (CPSMT) met in a joint session with a subcommittee of the Scientific and Statistical Committee to review the current stock assessment update for Pacific mackerel. The CPSMT supported conclusions from the most recent Pacific mackerel stock assessment presented at the Southwest Fisheries Science Center in La Jolla, California in May 2006 and further recommends the Pacific Fishery Management Council (Council) implement the resulting harvest guideline (HG) associated with the harvest control rule stipulated in this species' fishery management plan (FMP) for the 2006/2007 management season (i.e., July 1, 2006 through June 30, 2007). Based on a total stock biomass estimate (July 1, 2005) of 112,700 mt, the HG for U.S. fisheries is 19,845 mt. This HG recommendation is roughly 14% greater than the HG adopted by the Council for the 2005/2006 fishing year (17,419 mt).

Stock assessment modeling of Pacific mackerel was conducted using a forward-simulation, maximum likelihood-based Age-structured Assessment Program (referred to as ASAP). The final ASAP model was based on fishery-dependent data from a single fishery (i.e., combined landings from California's commercial and recreational fisheries, and the fishery off Baja California, Mexico). Fishery-independent data used in the model consisted of relative abundance time series (indices) developed from three research surveys: an index ('proportion positive') of spawning abundance based on ichthyoplankton data collected through the ongoing California Cooperative Oceanic Fisheries Investigations (CalCOFI) survey; a standardized, catch per unit effort (CPUE) index from California-based commercial passenger fishing vessel (CPFV) logbooks; and an index of total abundance from aerial spotter plane survey data. Parameterization of the ASAP (2006) baseline model was identical to the 2005 stock assessment.

Finally, 'overfishing' for Pacific mackerel is defined in the CPS FMP as harvest exceeding acceptable biological catch (ABC) for two concurrent years. Recent U.S. annual landings have been well below ABCs or the harvest guideline. The 'cutoff' value (18,200 mt) in the harvest control rule essentially serves as a proxy for a minimum stock size threshold. The current total stock biomass estimate (112,700 mt) is well above this threshold level. It is important to note that over the last several fishing years, the U.S.-based commercial fishery has not realized the recommended HGs. However, uncertainty still exists concerning the magnitude of fisheries in Mexico that harvest Pacific mackerel and thus, caution is recommended when evaluating fishery impacts on transboundary Pacific mackerel stocks.