Introduction

The Marine Life Management Act (MLMA) changed the way the California Department of Fish and Game (Department) approached management of the State's marine resources. The goal of the act, which became law on January 1, 1999, was to ensure that the marine resources of the State, and the habitats upon which they depend, are used sustainably and conserved. When species have been depleted or habitats degraded, restoration is the management goal. The Department is expected to use the best available science to guide management efforts.

Acknowledging that the Department's resources are limited, the MLMA also prescribed a collaborative and public involvement approach to management. This approach includes all interest groups that have a stake in the State's marine resources, users and non-users alike.

The MLMA also required the Department to prepare regular reports on the status of recreational and commercial marine fisheries managed by the State. In 2001, *California's Living Marine Resources: A Status Report* was published.

The comprehensive 2001 document provides baseline information and references on all of California's economically and ecologically important marine species. In 2004, an *Annual Status of the Fisheries Report Through 2003* was completed by the Department and updated information was provided on 14 species or species groups. In 2008, the *Status of the Fisheries Report-An Update Through 2006* was completed providing updated information on 15 species. This report continues the series, with 23 sections, focusing on new species of interest (Kellet's whelk, hagfish), species with new information (eulachon, giant sea bass), and species with changes to management (thresher shark, sturgeons, groundfish). This continuing series of reports allows those who are interested in or participants in California's marine management, to have a common and updated source of information about important marine resources. All of the mentioned reports can be found on the Department's website at http://www.dfg.ca.gov/marine/status/index.asp.

Several key sources of information were used in writing these species reviews. Fishery-dependent data (information collected from fishers or fishing activities) include:

- Commercial Fisheries Information System (CFIS) Every time a commercial fisher lands his catch, a landing receipt is filled out documenting the market category, poundage, gear, price paid to the fisher, and other relevant information (FGC §8043). Market categories may be identified as individual (Pacific bonito, sablefish) or groups of species (unidentified skate, group deep nearshore rockfish). Landing receipts have been collected since 1916 to the present.
- Marine Recreational Fisheries Statistics Survey (MRFSS) This national survey provided estimates of the fish caught recreationally in California through interviews with anglers and onboard observations. Species may be identified as individual (Pacific bonito, lingcod) or groups of species (skate and ray order, rockfish genus). This program began in 1980, with a brief hiatus from 1990 through 1992, and was terminated in California on December 31, 2003.

- California Recreational Fisheries Survey (CRFS) This statewide survey was begun on January 1, 2004. The CRFS uses interviews with anglers and onboard observations to collect data on California's marine recreational fisheries, and estimates the catch and effort of angler fishing for marine finfish. Species may be identified as individual (Pacific bonito, lingcod) or groups of species (skate and ray order, sturgeon genus). Due to differences in sampling methodology MRFSS and CRFS are not directly comparable.
- Commercial Passenger Fishing Vessel (CPFV) logbooks Every CPFV captain is required to submit a log for each fishing trip which documents the number of anglers aboard and the species and numbers and type of fish caught and released (FGC §7923; Title 14, CCR, §190). Species may be identified as individual (Pacific bonito, cabezon) or groups of species (unspecified rockfish, unspecified sturgeon). This program began in 1936, with a brief hiatus from 1941 through 1946, and continues today.

Whenever available, fishery-independent data (information that is not collected from fishers or fishing activities) were also used in the species reviews. This information is primarily research data collected by the Department or academics using research methodology and technology.