The Golden Gate Bridge



PREFACE

This proceedings document describes a catch share workshop that took place in San Francisco, February 2-4, 2010. The workshop was conducted to explore rights-based management approaches, or catch shares, as a potential means for improving the management and operations of the U.S. West Coast coastal pelagic species (CPS) finfish fisheries which target Pacific sardine (*Sardinops sagax caerulea*), Pacific mackerel (*Scomber japonicus*), jack mackerel (*Trachurus symmetricus*), and northern anchovy (*Engraulis mordax*). The workshop focused primarily on the commercial fishing operations, and the conservation and management of the Pacific sardine fishery which has experienced significant reductions in allowable harvest and the length of the fishing seasons in recent years. These occurrences have raised concerns about the CPS fleet's ability to optimize CPS harvest throughout the year.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) (as amended in 2006) contains language supporting limited access privilege programs (LAPPs), a form of rights-based management popularly known as catch shares. By allocating portions of the allowable catch to eligible individuals, fishing entities or communities, LAPPs have the potential to enhance stability and promote long-term gains in conservation, social, and economic benefits from fisheries. Consequently, there is interest on the part of the National Oceanic and Atmospheric Administration's (NOAA), National Marine Fisheries Service (NMFS) to investigate

the potential for further application of LAPPs in U.S. fisheries. Based on conditions in the sardine fishery and NOAA's interest in the potential benefits from catch share management, NMFS began planning this workshop during the summer of 2009. The workshop brought together expertise from foreign fisheries where rights-based management tools have been implemented, as well as from U.S. West Coast fishery managers, the CPS commercial fishing industry and other CPS resource interests to consider the utility of catch shares in the conservation and management of the U.S. West Coast CPS fisheries.

In the case of Pacific sardine, an annual acceptable biological catch (ABC) is allocated to the U.S. fisheries on a seasonal basis according to a formula established in 2005 under Amendment 11 to the Pacific Fishery Management Council's (PFMC) CPS fishery management plan (FMP) (PFMC 2005). Using the best available science and careful management, the fishery has been very successful in achieving its ABC conservation target under Amendment 11. The CPS FMP also includes a vessel limited entry program for finfish CPS which was established to prevent excess capacity and to attain the ABC in an efficient manner. The federal limited entry program applies to vessels fishing south of 39 north latitude (*i.e.* Point Arena, California). Oregon and Washington also have state-enacted limited entry programs for vessels landing sardine into their respective ports.

Despite these limited entry programs, the potential for economic inefficiency exists because limited entry alone does not necessarily remove the incentives for fishermen to increase capacity. Fishermen, for example, can add vessel electronics and other fishing effort enhancements to expand their fishing power, or productivity, and in this sense the fishing capacity of their vessels. In the same vein, fishermen may also increase their harvest rates (i.e., increase the amount of fish caught per unit time) to more fully utilize their existing capacity. With the recent reductions in the ABC this appears to be the situation that currently characterizes U.S. fishing operations for Pacific sardine. Harvest incentives under the Amendment 11 are such that fishermen are compelled to "race for fish" and the Pacific sardine fishery has begun to operate as a "derby" type fishery (sensu Hilborn, 2003; Hackett et al., 2005). Given these circumstances LAPPs may provide one prospective means of improving the management and operations of the U.S. West Coast CPS finfish fisheries.

The proceedings document is organized into five sections. Section I reflects on the purpose and scope of the workshop as well as a series of background and case study presentations intended to improve participant understanding of rights-based management approaches and establish a common reference for discussing different catch share management programs. Section II covers the second part of the workshop which focused on information-sharing among workshop participants. Section III reflects on key issues discussed throughout the workshop and Section IV provides a wrap up of the workshop. Section V concludes the proceedings with final remarks and next steps.

¹ A race for fish occurs when boats compete to catch the fish before a quota is achieved or the fish are caught by someone else. The fishery becomes what is popularly referred to as a derby fishery when the race intensifies due to a low quota and large number of vessels.