

Monterey Bay National Marine Sanctuary

Commercial Fisheries- Executive Summary



Photo: Becky Slamski / MBNMS

Close up of fishing gear on a boat in Moss Landing Harbor.



Kip Evans
Photo: Kip Evans

There are four major harbors along the shores of the MBNMS.

Economic Impact of the Commercial Fisheries on Local County Economies from Catch in the Monterey Bay National Marine Sanctuary, 2010, 2011 and 2012

Introduction

This fact sheet summarizes a Conservation Series report on the economic impacts of commercial fishing in Monterey Bay National Marine Sanctuary (MBNMS). The California Ocean Fish Harvester Economic Model (COFHE) provides county multipliers to determine direct and indirect impacts on local county economies.

Economic Impacts

According to the three-year average, the commercial fishing industry in the MBNMS generated almost \$26 million in harvest revenues annually. These revenues yielded just over \$42 million in total output, almost \$29 million in value added, almost \$26 million in total income and 843 full-and part-time jobs. In total, this accounted for about 0.007% of income by place of residence, 0.009% of income by place of work and 0.03% of total employment in the 12-county study area in 2011.

While individual fisheries demonstrated wide variability year over year, the overall trends showed a slight decrease in harvest revenue, output, value added and total income from 2010 to 2011 followed by an increase from 2011 to 2012. Employment increased by 56% over the study period.

The majority of economic impacts of commercial fishing in the MBNMS were heavily concentrated in Monterey and San Mateo counties. For the three-year average, the two counties accounted for 86% of harvest revenue, output, value added and income and 88% of employment.

Profiles of the Fisheries

Thirty-four different species/species groups were evaluated in the analysis. *Market squid* was the dominant species caught in the MBNMS. In 2012, *Market squid* landings generated almost \$11 million in value, over 36% of total value landed from the MBNMS. The secondary species was *Dungeness crab* with over \$9 million in value, accounting for almost 32% of total value landed from the MBNMS in 2012.

Economic Impacts (3-year average)

- \$25,962,774 in harvest revenues
- \$42,028,137 in total output
- \$28,633,164 in value added
- \$25,942,900 in total income
- 843 full- and part-time jobs
- Concentrated in Monterey & San Mateo counties

Species & Gears (2012)

- *Market squid* (36% of total value)
- *Dungeness crab* (32% of total value)
- "Pots & Traps" (38% of total value)
- "Other Seine – Dip Net" (21% of total value)
- "Trawl" accounted for \$1,44,023 in total output and 12 jobs (3-year average)

Ports & Vessels (2012)

- \$8,645,506 landed at Moss Landing
- Moss Landing 92% dependent
- \$14,525,315 landed at Princeton-Half Moon
- Princeton-Half Moon 93% dependent
- 601 vessels in 2012
- 414% increase in "Troll" vessels, 2010 to 2012



Photo: Tony Reyer

Overlay of Monterey Bay National Marine Sanctuary and California Department of Fish and Game blocks with three-digit code (light rose). Counties included in economic analysis (rose).

Detailed trends of the top five species/species groups demonstrated strong variability over the study period. Establishing causal relationships was difficult because of multiple dynamics present. For example, the *Dungeness crab* fishery showed cyclical trends according to ocean conditions. In addition, ocean conditions impacted the *Salmon* fishery. However, regulations such as the *Salmon* closure from 2008 to 2009 also helped to describe trends in the fishery.

Study Area

Catch was landed at 62 ports across 17 counties. Due to insignificant landings and distance, only the 12 counties highlighted in rose in the figure above were included. The top two ports in 2012 were Princeton-

Half Moon and Moss Landing. Almost \$15 million was landed Princeton-Half Moon from MBNMS, which represented almost 93% of total value landed at the port. Almost \$9 million was landed from MBNMS at Moss Landing in 2012, which represented almost 92% of the total value landed at the port. All of the top four ports depended on the MBNMS for at least 90% of their total revenues.

Catch from the MBNMS was defined spatially with California Department of Fish and Wildlife blocks. The overlay in the figure above shows the best approximation of blocks representing the MBNMS.

Special Issues

MBNMS management made a special

request for queries of the “trawl” data. All topics addressed in Chapters 1 and 2 of the full report are addressed for trawling. According to the three-year average, “trawl” accounted for \$910,196 in harvest revenue, \$1,443,023 in total output, \$1,039,583 in value added, \$948,254 in total income and 12 jobs. The top species caught with “trawl” were *Dover Sole-Thorneyheads-Sablefish Trawl* at almost 56% of total value. The 12 trawl vessels operating in 2012 were almost 45% dependent on catch from the MBNMS. The overall trawl trends are declining.

More information

The full report can be accessed online at: http://sanctuaries.noaa.gov/science/conservation/pdfs/mbnms_fishing_report.pdf



Photo: Josh Penderson / MBNMS



Photo: Chad King / MBNMS

A vermilion rockfish.

A rock crab.

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