

# Cordell Bank National Marine Sanctuary

## Commercial Fisheries- Executive Summary



Photo: CBNMS

A fishing vessel with pots and traps in CBNMS.



Gulf of the Farallones National Marine Sanctuary

Photo: GFNMS

A *Dungeness crab*, the predominant species caught in the CBNMS.

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

### Introduction

This fact sheet summarizes a Conservation Series report on the economic impacts of commercial fishing in the Cordell Bank National Marine Sanctuary (CBNMS). 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 CBNMS generated almost \$993 thousand in harvest revenues annually. These revenues yielded just under \$1.7 million in total output, over \$1 million in value added, \$929 thousand in total income and 48 full- and part-time jobs. In total, this accounted for about 0.0002% of income by place of residence, 0.0003% of income by place of work and 0.002% of total employment in the seven-county study area in 2012.

While individual fisheries demonstrated wide variability year over year, the overall trends showed a decrease in harvest revenue, output, value added, total income and employment from 2010 to 2012. Consistently, the economic impacts of commercial fishing in the CBNMS were heavily concentrated in San Francisco and Sonoma counties. For the three-year average, the two counties accounted for 96% of harvest revenue, output and value added; 95% of income and 98% of employment.

### Profiles of the Fisheries

Fifteen different species/species groups were evaluated in the analysis. *Dungeness crab* was the dominant species caught in the CBNMS. In 2012, *Dungeness crab* landings generated over \$393 thousand in value, almost 52% of total value landed from the CBNMS. The secondary species was *Salmon* with over \$196 thousand in value, accounting for almost 23% of total value landed from the CBNMS in 2012.

Detailed trends of the top five species/species groups demonstrated strong

### Economic Impacts (3-year average)

- \$992,875 in harvest revenues
- \$1,669,133 in total output
- \$1,040,106 in value added
- \$929,023 in total income
- 48 full- and part-time jobs
- Concentrated in San Francisco & Sonoma counties

### Species & Gears (2012)

- *Dungeness crab* (52% of total value)
- *Salmon* (26% of total value)
- "Pots & Traps" (53% of total value)
- "Troll" (26% of total value)
- "Trawl" predominant for groundfish
- "Longlines" predominant for *Sablefish*  
*Non-trawl*

### Ports & Vessels (2012)

- \$393,764 landed at Bodega Bay
- Bodega Bay 3% dependent
- \$158,802 landed at San Francisco
- San Francisco 1% dependent
- 76 vessels in 2012
- 117% increase in vessels, 2010 to 2012

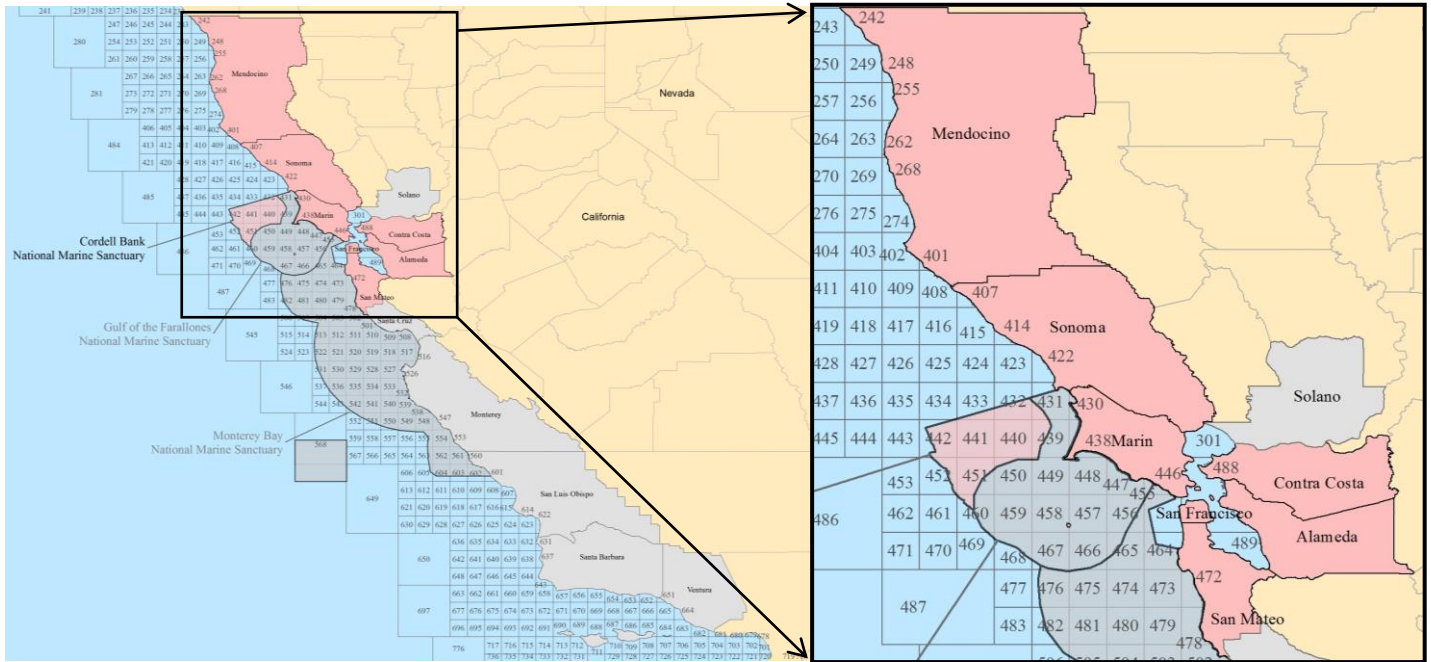


Photo: Tony Reyer

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

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

The study area included the seven counties highlighted in rose in the figure above. Catch was landed at 29 ports across these counties. The top two ports in

2012 were Bodega Bay and San Francisco. Almost \$394 thousand was landed from the CBNMS at Bodega Bay in 2012, which represented about 3% of the total value landed at the port. Almost \$159 thousand was landed at San Francisco from the CBNMS, which represented about 1% of total value landed at the port. In general, the top four ports were not highly dependent on catch from the CBNMS.

Catch from the CBNMS 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 CBNMS.

### Special Issues

Other issues explored in the report include profiles on the groundfish and “Longlines” fisheries. In 2012, groundfish accounted for over 20% of total catch from the CBNMS. The predominant gear type in the groundfish fishery in 2012 was “Trawl” with 47% of total value. These trends were evaluated according to various regulations within the sanctuary focused on rockfish conservation.

The “Longlines” fishery predominantly targeted *Sablefish Non-Trawl* (91%) and *Shelf Rockfish* (5%). Bolinas and Richmond ports were highly dependent on this catch, yet they account for only 20% of total “Longlines” catch from the CBNMS in 2012.

### More information

The full report can be accessed online at: [http://sanctuaries.noaa.gov/science/conservation/pdfs/cbnms\\_fishing\\_report.pdf](http://sanctuaries.noaa.gov/science/conservation/pdfs/cbnms_fishing_report.pdf)

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Photo: Cordell Bank Expeditions



Photo: CBNMS

A rosy rockfish rests near yellow sponges and strawberry anemones at Cordell Bank.

A fishing vessel in CBNMS.