

Channel Islands National Marine Sanctuary

Commercial Fisheries- Executive Summary



A trawling vessel operating in the CINMS.



photo: Laura Francis

A Purple Sea Urchin. Urchins are the second-largest grossing species from CINMS in 2012.

Economic Impact of the Commercial Fisheries on Local County Economies from Catch in the Channel Islands 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 Channel Islands National Marine Sanctuary (CINMS). The California Ocean Fish Harvester Economic Model (COFHE) provides multipliers to determine direct and indirect impacts on local county economies.

Economic Impacts

Commercial fishing in the CINMS, as a three-year average of 2010-2012, generates nearly \$27.3 million in harvest revenue each year. This in turn creates \$45.3 million in output, \$30.9 million in value added, \$27.8 million in total income and 659 full and part-time jobs.

In 2011, this accounted for a total of about 0.0248% of income by place of residence, 0.0327% of income by place of work and 0.009% of total

employment in the local counties.

Individual counties vary at different rates and in different directions. As a whole, the overall trends for the CINMS counties show a small increase in harvest revenue, output, value added, total income and employment from 2010 to 2012. 2011 was an overall poor year; 2012 was a rebound.

Profiles of the Fisheries

Twenty-two different species groups, including *All Other*, were evaluated in the report. The most valuable fishery was *Market Squid*, accounting for \$7.5 million in 2012, 40% of all harvest value (\$18.5 million) in the Channel Islands NMS that year. *Urchin* ranked second, with a value of \$4.2 million, for 23% of the total value of harvest in CINMS in 2012.

The 12-year trends of each of the top 5 species can be found mapped out in the report. Despite its high rank, *Market Squid* showed high variability. Other species varied as well. *Urchin*, *Spiny Lobster*, and *Crab* trended generally upward, while

Economic Impacts (3-year Average)

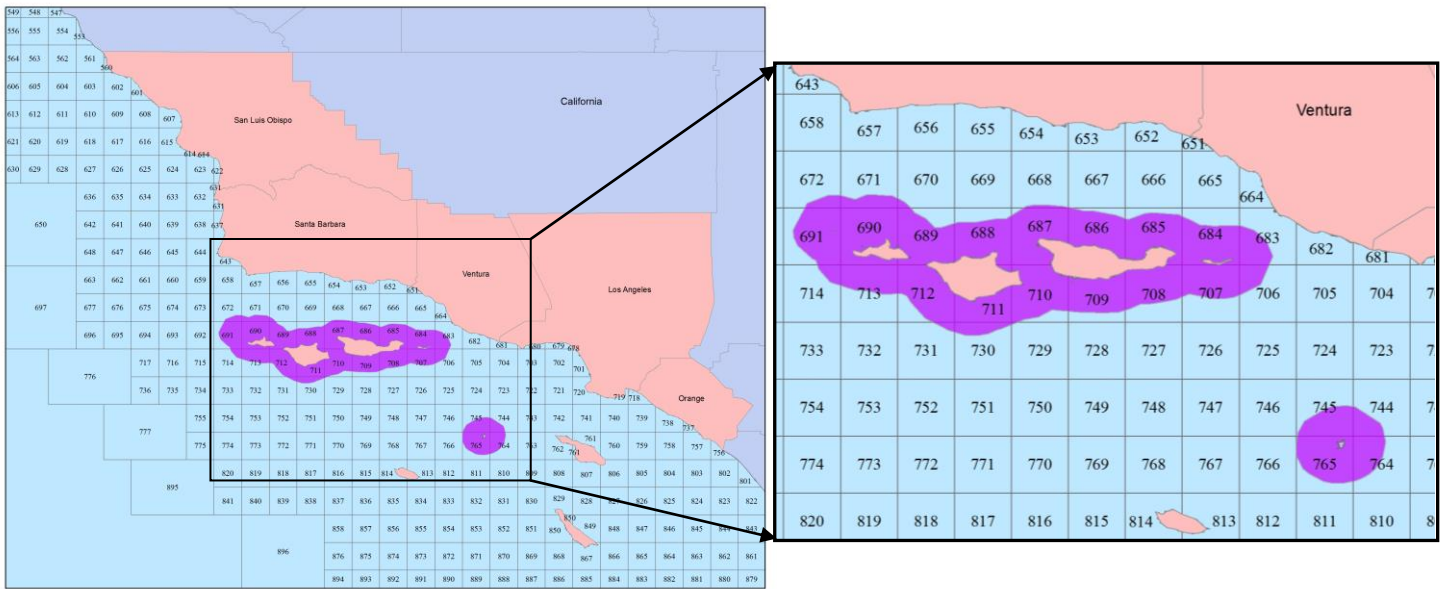
- \$27,275,539 in harvest revenue
- \$45,396,225 in output
- \$30,894,393 value added
- \$27,836,552 total income
- 659 full- and part-time jobs

Species & Gears (2012)

- *Market Squid* (40% of total value)
- *Urchin* (23% of total value)
- "Purse Seine" (29% of total value)
- "Pots and Traps" (27% of total value)
- *Sardines & Anchovies* (1.2% of total value)

Ports & Vessels (2012)

- \$6,817,933 landed at Santa Barbara Harbor
- Santa Barbara Harbor has 64% dependence
- \$4,503,065 landed at Ventura
- Ventura has 30% dependence
- 3-year average of 248 vessels per year



Overlay of the Channel Islands National Marine Sanctuary and California Department of Fish and Game blocks with three-digit code (purple). Counties included in economic analysis (rose).

Prawn & Shrimp experienced a strong decline.

Possible causes of these trends are identified, but no conclusions are drawn by the authors. For example, the top species *Market Squid* trend analysis includes information on the Market Squid Fishery Management Plan, information on the ENSO cycle and effects of the El Niño ENSO cycle on the fishery as suggested by outside sources.

Study Area

The study area includes the five counties indicated in the figure above: Los Angeles, Orange, San Luis Obispo, Santa Barbara, and Ventura. Catch was

landed in 45 ports within these counties.

The Santa Barbara Harbor and Ventura ports were the top two ports in 2012. Santa Barbara Harbor saw \$6,817,933 landed from the CINMS, representing 64% of all catch landed at that port. \$4,503,065 was landed at Ventura from the CINMS, 30% of the total port landings. Port dependence of the top four ports ranged from 30% to 67%.

Catch from the CINMS 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 CINMS.

Special Issues

Special Issues examined in the report were profiles of the *Anchovy* and *Sardine* fisheries within the CINMS, as compared with the rest of California and the California Southern Bight. This request was made by management as part of an investigation into the declining Pelican population (Pictured below).

In all locations *Anchovy* declined around 2008, but especially so in the CINMS. *Sardine* catch reflected a similar trend.



Shane Anderson
Photo: Shane Anderson

A California Spiny Lobster.



Shane Anderson
Photo: Shane Anderson

A Brown Pelican (*Pelecanus occidentalis*), rests in the CINMS.

More Information

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

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