

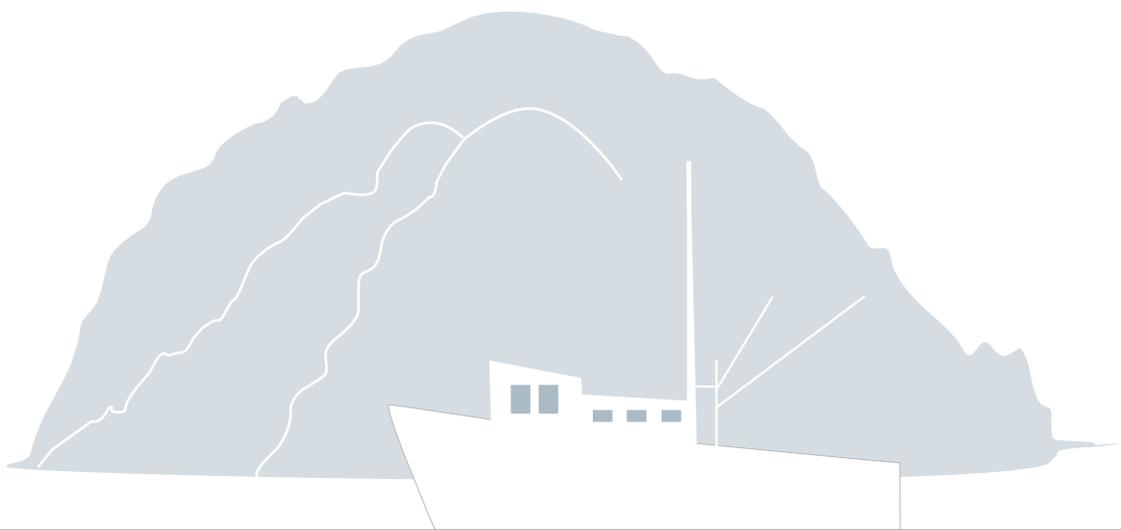


MORRO BAY COMMERCIAL FISHERIES

2015 ECONOMIC IMPACT REPORT WORKING WATERFRONT EDITION

July 2015

Prepared by Lisa Wise Consulting, Inc.



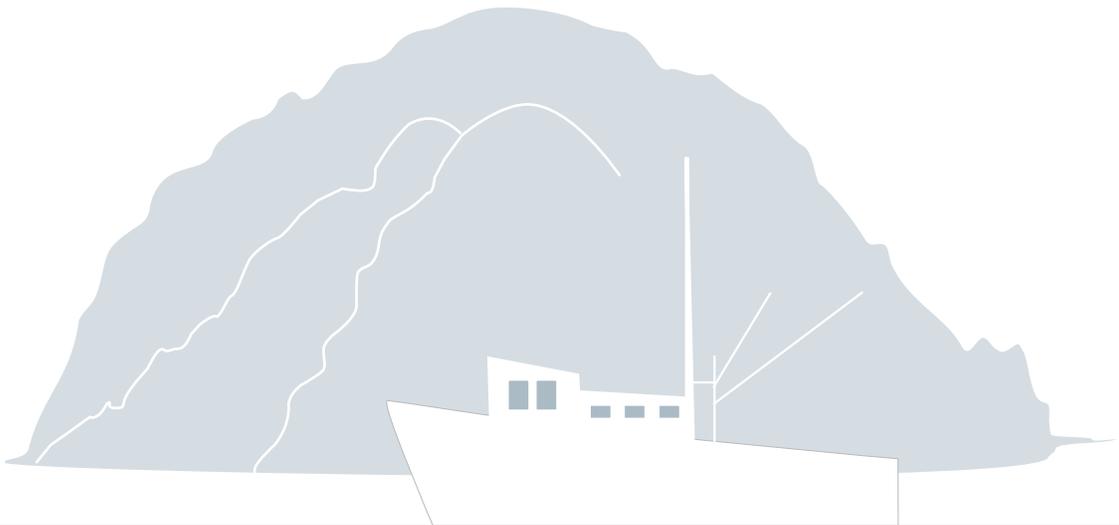
MORRO BAY

2015 Commercial Fisheries Economic Impact Report

CONTENTS

1. Introduction	1
2. Key Findings	3
3. Landings, Earnings, & Price Per Pound	5
4. Important Fisheries	7
5. Marine-Dependent Industries	17
6. Conclusion	23





ACKNOWLEDGEMENTS

2015 marks the fifth consecutive year that the Morro Bay Commercial Fishermen's Organization (MBCFO) has partnered with the Central California Joint Cable Fisheries Liaison Committee (CCJCFLC) to initiate, manage and fund an assessment of the commercial fishing industry's economic contributions.

As in past efforts, the 2015 Commercial Fisheries Economic Impact Report relied heavily on the input from commercial fishermen, related industry stakeholders, waterfront business owners and City of Morro Bay staff. It is, in a true sense, a community effort. As such, we would like to thank the following individuals and organizations. Without their assistance, the report would not have been possible.

Tom Hafer, current President, Jeremiah O'Brien, past President, Captain Bob Maharry and Captain Rob Seitz, Captain Owen Hackleman, the entire membership of the MBCFO, and the on-going and generous support of the CCJCFLC. We would also like to thank Jerry Cottrell of Jerry's Marine and Tackle, Robin Ludwig of Associated Pacific Constructors, Inc., George Trevelyan of Grassy Bar Oyster Company, and Neal Maloney of Morro Bay Oyster Company.

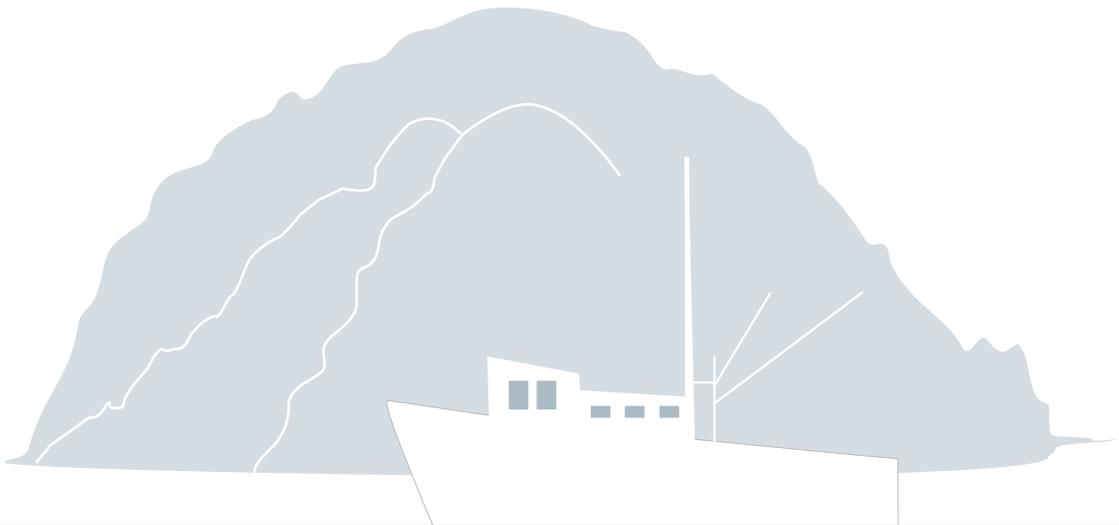
We would also like to acknowledge the continued patience and generosity of Mark Tognazzini (Tognazzini's Dockside Restaurants), Chris Battle and Logan Kock of Santa Monica Seafoods, Giovanni Degarimore of Degarimore's Central Coast Marine Fuel and Ice, and Andrea Lueker, (Morro Bay Community Quota Fund).

On behalf of the entire community, we would like to extend a very special thanks to Jana Robertson and the Marine Fisheries Statistical Unit at the Department of Fish and Wildlife for their support and attention over the last five years.

The report is dedicated to Captain Tom Roff, friend and colleague, who will be missed dearly.



MORRO BAY
COMMERCIAL FISHERMEN'S ORGANIZATION
EST. 1972



1. INTRODUCTION

2015 marks the fifth year that the Morro Bay Commercial Fishermen’s Organization (MBCFO) has produced a report describing the economic contributions of the local commercial fishing industry. As in past efforts, the project was funded by a generous grant from the Central Coast Joint Cable Fisheries Liaison Committee (CCJCFLC). This year, at the direction of the MBCFO, the report again focuses on economic performance of commercial fishing and includes a more comprehensive view of the working waterfront in which commercial fishing is an important component. As such, the report discusses a vibrant marine-based economy made up of commercial fishing, aquaculture, seafood processing, chandlery, commercial passenger fishing activity and marine construction. Together, these industries make up a marine-dependent economy empowered by a ready work force, healthy and productive marine environment, well-dredged harbor, slips and piers, hoists, scales, forklifts, public ice facility, fuel, and access to buyers and distribution routes.

Morro Bay’s working waterfront is also a source of tourism and demand for locally caught and locally raised seafood, and recreational fishing, whale watching and sailing trips. Visitors are drawn to Morro Bay as a working port as well as for its natural beauty, clean beaches, and visitor serving amenities. The diversity and history the marine-dependent economy defines Morro Bay and characterizes a resilient system in which participants complement each other and buffer volatility in any individual business or industry.

- Economic Impact
- Reports are intended
- to inform elected
- officials, civic leaders,
- and the general public
- on the contributions of
- the local commercial
- fishing industry as
- well as to provide a
- comprehensive source
- of important data for
- commercial fishermen
- and industry-related
- stakeholders.

- All dollar amounts have
- been adjusted to 2014
- levels.

The MBCFO produced Economic Impact reports in 2011, 2012, 2013, and 2014.

They are available on the MBCFO website at:

<http://www.mbcfo.com/what-we-do.html>

2014 is the most recent
and comprehensive
data available in the
commercial fishing
industry.

Commercial fishing in Morro Bay dates back to the late 19th century. By the early 1900s Morro Bay was engaged in a growing commercial abalone fishery. By the 1930s there were robust sardine, groundfish, salmon, and albacore fisheries as well as an active Commercial Passenger Fishing Vessel (CPFV) fleet serving thousands of visitors and locals annually. Despite struggles in the late 1990s and mid 2000s due to increasing and overlapping regulation, rising costs, competition from inexpensive imports and shifts in consumer preferences, Morro Bay has successfully transitioned from a larger fleet reliant on trawl and large volumes of landings to a smaller fleet profile with a wide diversity of species and gear types. This is evidenced by the seventh year of growth in earnings from a 25-year low in 2007. 2015 is the strongest year in the last 20.

The 2015 Economic Impact Report – Working Waterfront Edition, as in past efforts, relies on commercial fishing data provided by the California Department of Fish and Wildlife (CDFW) and the Pacific Fisheries Information Network PacFIN and other archival sources. However, the report would not be possible without the input and insight of commercial fishermen, and related industry stakeholders. This year, the report also draws from sources such as the Pacific Shellfish Grower’s Association, NOAA West Coast Regional Fisheries Recreational Fisheries Database and hours of interviews with owners of local aquaculture, chandlery, marine construction and CPFV businesses. Along with consistent economic performance, the working waterfront community’s ability and willingness to share information and work toward a common goal is one of the key characteristics that makes Morro Bay unique and prepared to continue as a driving force of the local economy.

2. KEY FINDINGS

EARNINGS HIGHEST SINCE 1995

Earnings at the dock in Morro Bay, or ex-vessel value (EVV), exceeded \$8.3 million in 2014, which translates to a 13 percent increase in EVV from 2013. This is the highest since 1995. Earnings have risen nearly every year from a 20 year low in 2007, more than tripling over the last seven years. Between 1990 and 2014, commercial fishermen in Morro Bay generated over \$138 million in earnings.

EVV is a key indicator of economic activity in commercial fishing. Every dollar represents earnings for skippers, wages for deckhands and dockworkers, investments in physical infrastructure and vessel repairs and purchases of ice, fuel, supplies, bait and baiting services, and slip fees.

CONTINUED HIGH LANDINGS

Landings by weight, or the amount of seafood offloaded at the dock, totaled 6.7 million pounds in 2014 - nearly as high as landings in 2013, at 6.8 million pounds and represented a 21-year high. Landings in 2014 represent a 31 percent increase from 2012, a near nine-fold increase from lows in 2007. Since 1990, commercial fishermen have landed over 107 million pounds of seafood at the docks in Morro Bay.

MARKET SQUID, DUNGENESS CRAB: A 25-YEAR HIGH

Dungeness Crab, Morro Bay's top-earning species in 2014, and Market squid, Morro Bay's third top-earning species, brought in \$2.7 million and \$1.4 million, respectively. Both fisheries achieved 25 year-highs in 2014.

RE EMERGING SPECIES

For the first time in 25 years, Lingcod emerged as one of Morro Bay's top-ten earning species, bringing in more than \$95,000 at the dock - a 160 percent increase from earnings in 2013.

- EVV or ex-vessel value is
- calculated by the price
- paid to fishermen at the
- dock and the amount
- landed by weight.



Photo: The Seadler, one of the visiting vessels fishing Dungeness crab out of Morro Bay in 2014.

AQUACULTURE

Morro Bay is one of the top oyster-producing ports in California; it is estimated that 1.5 million oysters were harvested in 2014 and that 2 million will be harvested in 2015 (personal communication, Morro Bay, May 2015). The Morro Bay aquaculture industry employs 10 full time workers and is poised for expansion.

CHARTER PASSENGER BUSINESSES

There are approximately 7 charter fishing vessels and one dive charter business in Morro Bay that conduct thousands of trips per year and take tens of thousand of passengers on fishing, wildlife viewing and scuba diving trips. These businesses generate jobs for skippers, deckhands, and support staff and contribute to the City economy through usage fees and slips fees as well as adding to the draw of a healthy working waterfront with a strong tourist presence.

SEAFOOD PROCESSING

Local seafood processing capability creates jobs and keeps more money and more fish in the local community. Tognazzini's Restaurants and Giovanni's Fish Market process hundreds of pounds of locally caught seafood per week that is served in local restaurants and sold in front of their retail stores. Santa Monica Seafoods (SMS) is one of the state's largest processors, with a plant 15 miles away in Atascadero. SMS employs a dozen filleters and support staff.

MARINE CONSTRUCTION

Morro Bay is home to Associated Pacific Constructors, Inc., the only marine constructors between Santa Cruz and Los Angeles. Associated Pacific gives Morro Bay the capacity and self-sufficiency to salvage sunken and damaged vessels, and address the repair of docks, piers and other critical marine infrastructure with a local business that employs local citizens, keeping money and jobs in the community.

COMMUNITY QUOTA FUND

Morro Bay is the first community in California to establish a quota fund in response to regulation imposed in the Limited Entry Groundfish Trawl fishery. The Morro Bay Community Quota Fund (MBCQF) started leasing licenses and quota in 2014. Participants in the program have landed over 475,000 pounds since the fund's inception.

"In the marine construction industry, waterfront facilities are critical assets that dictate the geographic areas a company can effectively serve."
-Associated Pacific Constructors website.

3. LANDINGS, EARNINGS & PRICE PER POUND

In the last 25 years, Morro Bay commercial fishermen have landed over 107 million pounds of seafood, at an average of 4.3 million pounds per year. Landings by weight have risen steadily from a 20-year low in 2007 of 668,866 pounds to nearly 6.7 million pounds in 2014, the second-highest single year of landings since 1993 (behind 2013’s 6.8 million pounds). This success is due, in part, to Morro Bay’s growing involvement in the high volume Market squid and Dungeness crab fisheries.

Morro Bay, All Species, Landings, 1990 -2014, Source: CDFW

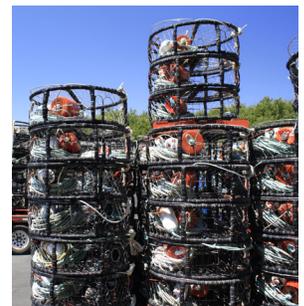
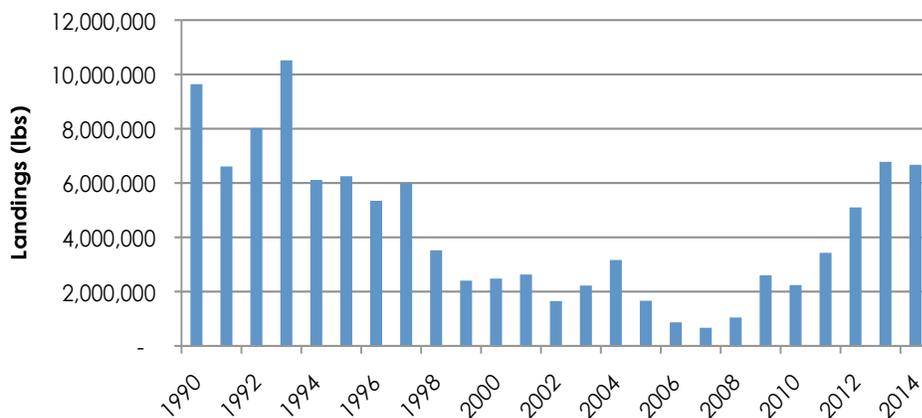
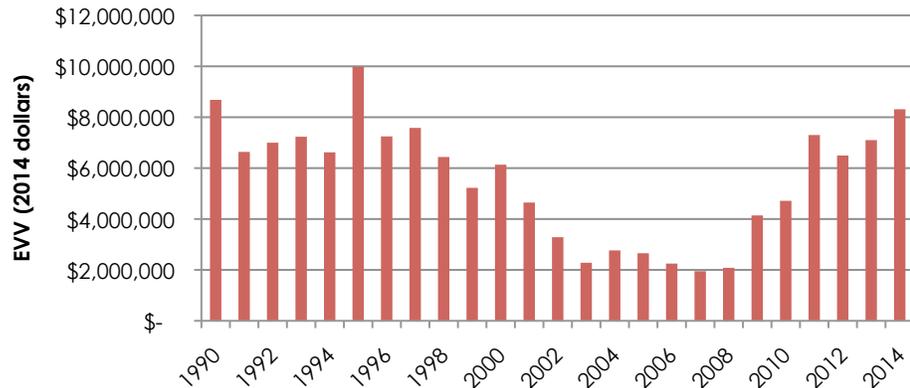


Photo: Crab pots prepped for the upcoming season.

OVERALL EARNINGS

The Morro Bay commercial fishing industry has generated over \$138 million in earnings since 1990 at an annual average of over \$5.5 million. In 2014, Ex-Vessel Value (EVV), the price paid to fishermen at the dock, topped \$8.3 million, the highest since 1995. EVV in 2014 represents a 326 percent rise since the 20-year low in 2007 and a 17 percent increase over 2013.

Morro Bay, All Species, EVV, 1990 -2014, Source: CDFW

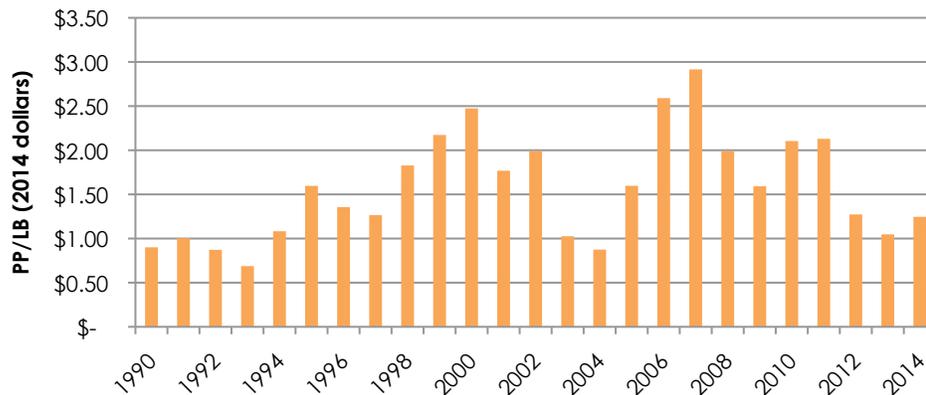


PRICE PER POUND

Morro Bay's highest valued species in 2014 (in order of price per pound) are Spot Prawn (\$13.82), Grass rockfish (\$9.27), Salmon (\$8.30), Treefish rockfish (\$7.46), Black-and-yellow rockfish (\$7.17), and Louvar (\$7.13).

Price per pound is an important economic performance indicator that reflects the effectiveness of the commercial fishing fleet in capturing value for their landings, while adapting to ever changing supply, demand, and regulatory conditions. Price per pound is also reflective of the fisheries in which the local fleet engages. Participation in lower volume higher value fisheries like Market squid and sardines lowers overall price per pound. While EVV and landings have increased, overall price per pound has fallen over the last few years, largely due to Morro Bay's continued participation in the high volume, low value Market squid fishery. Price per pound for Market Squid in Morro Bay averaged \$0.32/lb in 2014. Overall average price per pound in 2014 was \$1.25, up from \$1.05 in 2013.

Morro Bay, All Species, Price Per Pound, 1990 -2014, Source: CDFW



4. IMPORTANT FISHERIES

The ability to adapt to changing conditions is an indicator of the performance and sustainability of the commercial fishing industry. Regulations, markets, ocean conditions and fish stocks are constantly changing. Morro Bay fishermen demonstrate an ability to adapt to these changing conditions, as is reflected by the diversity of species landed, successes in targeting seasonally abundant species like Dungeness crab and Market squid, and continued returns in for small scale operations in the Nearshore and Pacific hagfish fisheries.

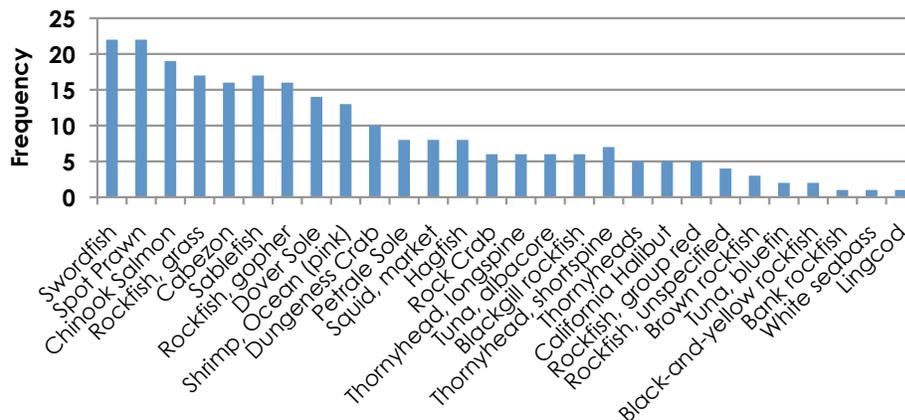
SPECIES DIVERSITY

Species diversity, defined by the number and distribution of species contributing the Morro Bay’s overall earnings (EVV), remains robust. For example, the top five species over the last 25 years are caught using a wide array of gear: traps, trolling, benthic long line, trawling, and drift gillnet. These species are also caught across a broad range of habitats: nearshore, pelagic (open ocean) and on the shelf or the steep transition from shallow to deeper waters. This diversity of gear types and habitats makes commercial fishing in Morro Bay less reliant on abundance, markets and regulatory changes in any one fishery.

• There are a number
 • of guys fishing Halibut
 • and White seabass
 • out of small vessels
 • in Morro Bay and
 • they are damn good
 • fishermen" (personal
 • communication, June
 • 2015).

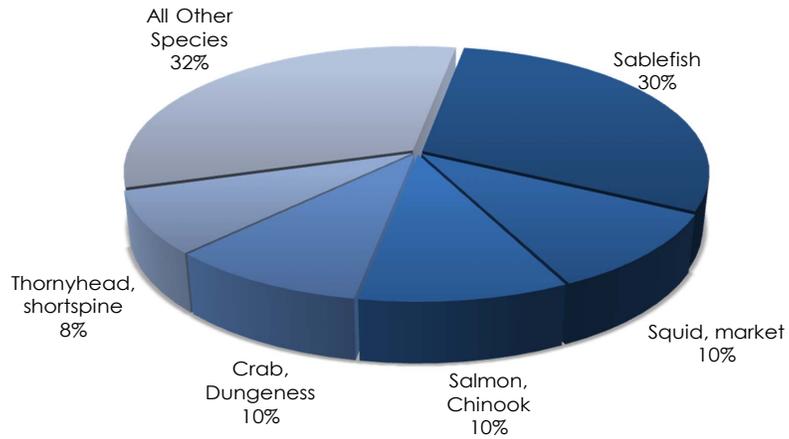
Since 1990, a wide variety of species has appeared with varying frequency as a top ten earner in Morro Bay and indicator of the commercial fleet’s resiliency and hard work.

Frequency at which a species ranks as a Top Ten-Earning Species, 1990-2014, Source: CDFW



Fishing grounds off Morro Bay are marked by a diversity of productive habitats including deep canyons, underwater seamounts, soft sand and mud bottoms and rocky nearshore areas (City of Morro Bay Fishing Community Sustainability Plan, April 2014).

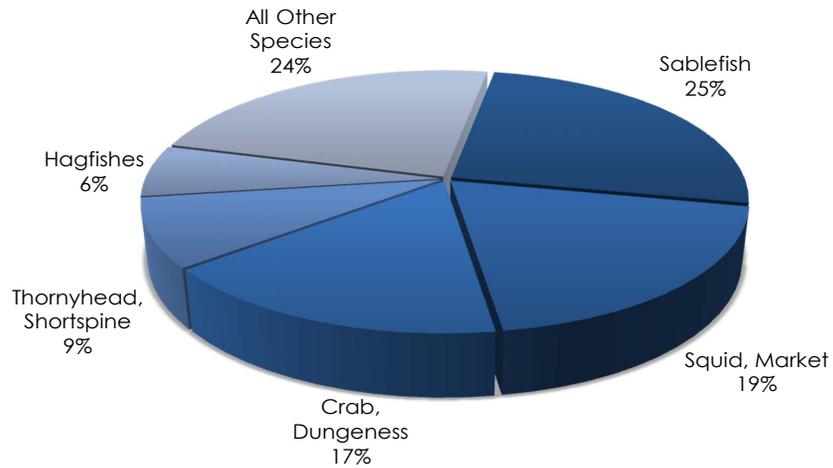
Top Five Species Break Down in Morro Bay (EVV) in 2012, Source: CDFW



2012

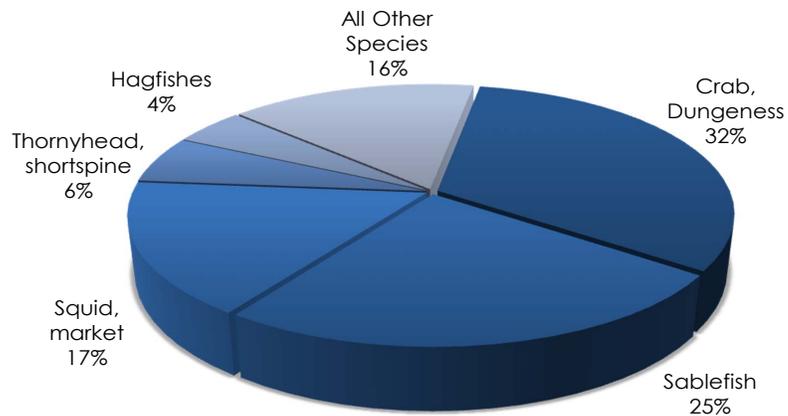
Species diversity in Morro Bay is reflected in landings from bottom habitats; spot prawn, rockfish, Dungeness crab, Pacific hagfish and nearshore species, to mid-water column species; white seabass, salmon, and sablefish to highly migratory species; tuna, swordfish, and shark, as well as forage fish like sardines, and squid (City of Morro Bay Fishing Community Sustainability Plan, April 2014).

Top Five Species Break Down in Morro Bay (EVV) in 2013, Source: CDFW



2013

Top Five Species Break Down in Morro Bay (EVV) in 2014, Source: CDFW



2014

TOP SPECIES

The species discussed in this section represent the top five fisheries in earnings (EVV), and include Dungeness crab, Sablefish, Pacific hagfish, Market squid and Shortspine thornyhead. These accounted for 84 percent of all earnings in Morro Bay in 2014.

Spot prawn, Petrale sole, Gopher rockfish, Salmon, and Lingcod round out the top ten-earnings species at Morro Bay for 2014. Earnings from these ten fisheries make up \$7.5 million of the \$8.3 million total earnings in Morro Bay in 2014.

DUNGENESS CRAB

Representing nearly a third of all EVV at Morro Bay, Dungeness crab earnings in 2014 were the highest in the last 25 years, totaling nearly \$2.7 million, more than double earnings in 2013 and more than tripling earnings from 2012. Commercial fishermen landed almost 489,000 pounds of Dungeness Crab in 2014.

Morro Bay Dungeness Crab EVV, 1990-2014, Source: CDFW

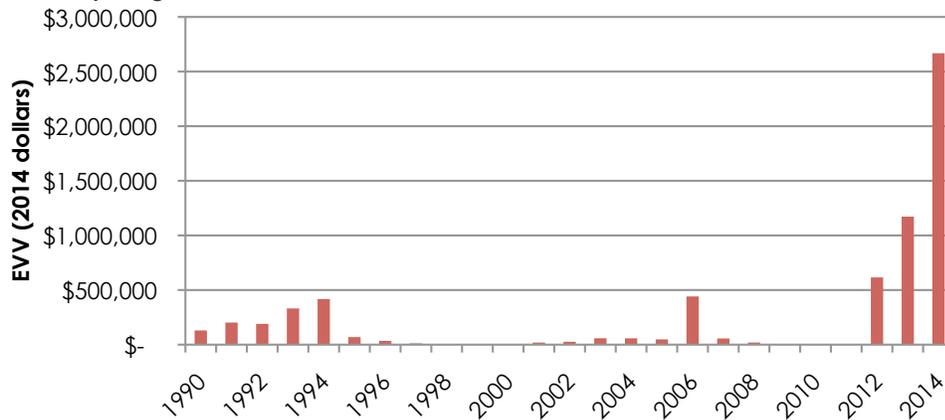
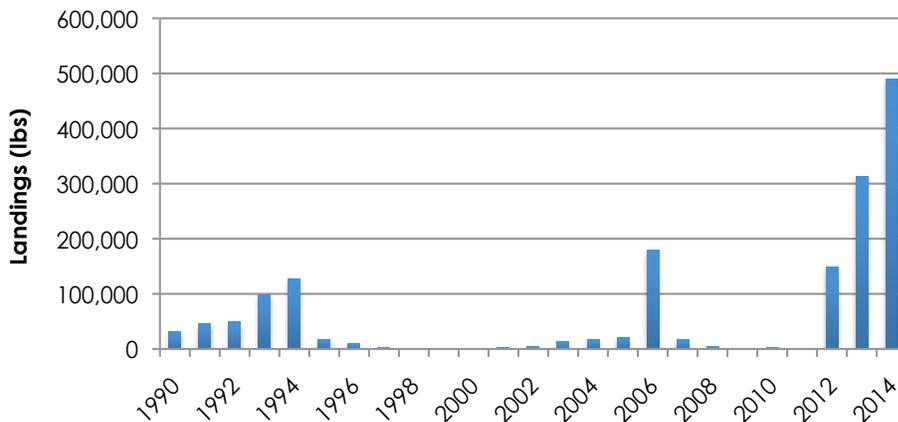


Photo: Dungeness crab catch. Credit: David Parker

Morro Bay Dungeness Crab Landings, 1990-2014, Source: CDFW



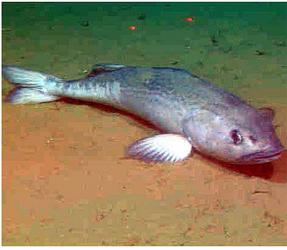


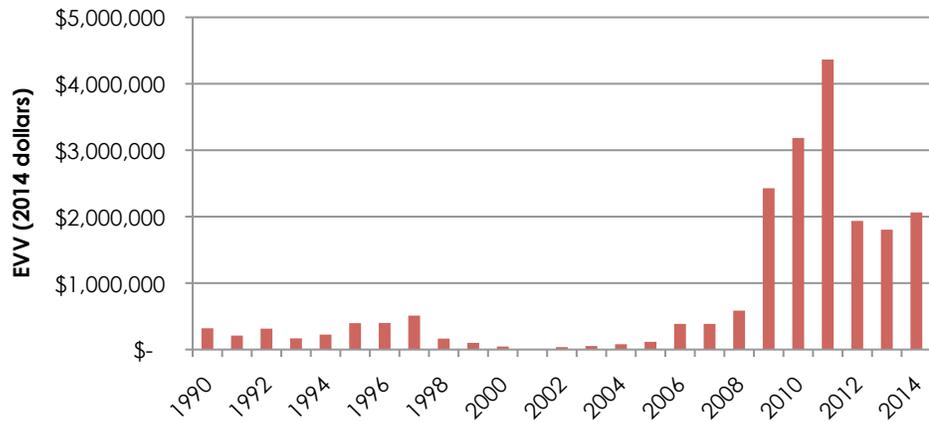
Photo: Sablefish are an important species in Morro Bay and in the greater West Coast commercial fisheries.

SABLEFISH

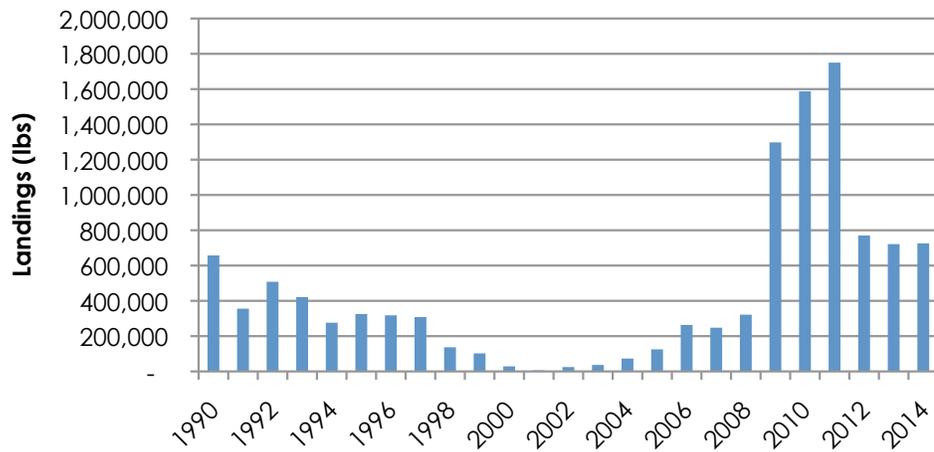
Morro Bay has a long history as a strong Sablefish port. Since 1990, over 11.3 million pounds of Sablefish have been landed in Morro Bay, over half of which (6.8 million pounds) was landed during the last six years. 2014 was the first year in the last six that Sablefish was not the highest earning species by EVV. Landings peaked in 2011 at over 1.7 million pounds and fell to nearly half that amount in 2012. Landings in 2014 totaled to 725,000 pounds.

Since 1990, Sablefish has generated over \$20 million, and earnings have averaged \$2.6 million annually in the last six years. The species has ranked among the top ten in value in Morro Bay every year since 1994. Price per pound has been on the rise since 2005, steadily increasing from less than one dollar in 2005 to \$2.84 in 2014.

Morro Bay Sablefish EVV, 1990-2014, Source: CDFW



Morro Bay Sablefish Landings, 1990-2014, Source: CDFW



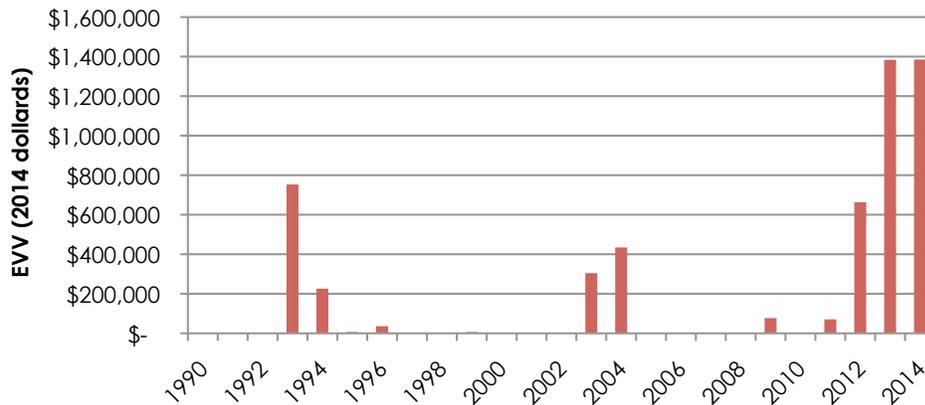
MARKET SQUID

Facilitated by the installation of a specialized offloading pump at the Municipal Dock in 2009, Morro Bay continued to expand its presence in the Market squid fishery. Earnings in 2014 surpassed a record high set in 2013, with commercial fishermen landing nearly 4.3 million pounds, generating almost \$1.4 million in earnings or 16.6 percent of overall EVV in Morro Bay.

The establishment of Market squid as a top species represents a diversification of the commercial fishing industry in Morro Bay and is an example of the community's ability to capitalize on opportunities on the ocean and in the market.

- Market squid accounted
- for almost \$74 million
- in California in 2013,
- 28.7 percent of total
- state commercial fishing
- EVV, making it one
- of California's most
- lucrative fisheries.

Morro Bay Market Squid EVV, 1990-2014, Source: CDFW



Market Squid Landings, 1990-2014, Source: CDFW

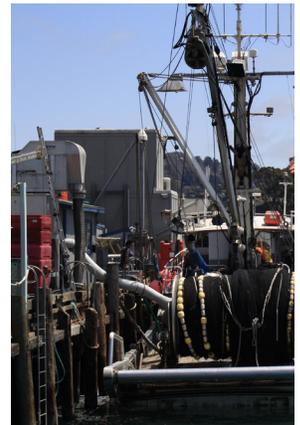
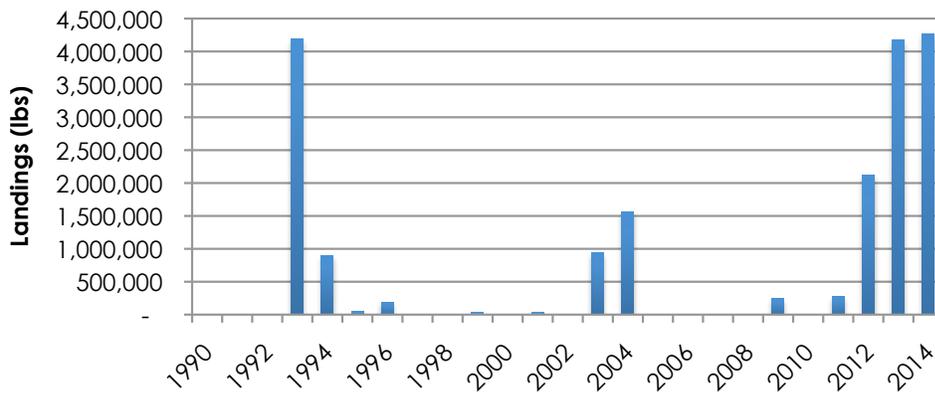


Photo: Squid offloading at Morro Bay. Squid landings in 2014 topped 4 million pounds for the second year in a row.

PACIFIC HAGFISH

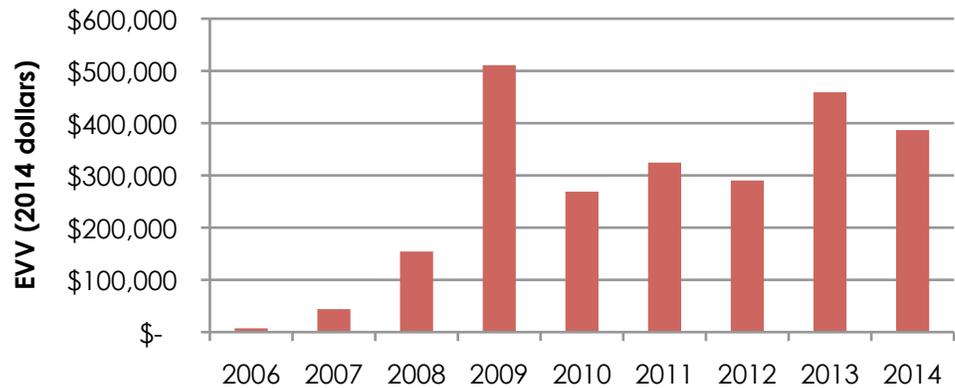
Since the first commercial landings in 2006, Pacific hagfish has grown into a top fishery in Morro Bay, and continues to play an important role in contributing the diversity of species, scale of operation and export market opportunities. Since 2006, hagfish accounted for nearly 2.7 million pounds in landings and over \$2.4 million in EVV. Landings in 2014 totaled 440,00 pounds and generated \$386,000 in EVV.

Also known as slime eel, Pacific hagfish is primarily exported to markets in Korea.

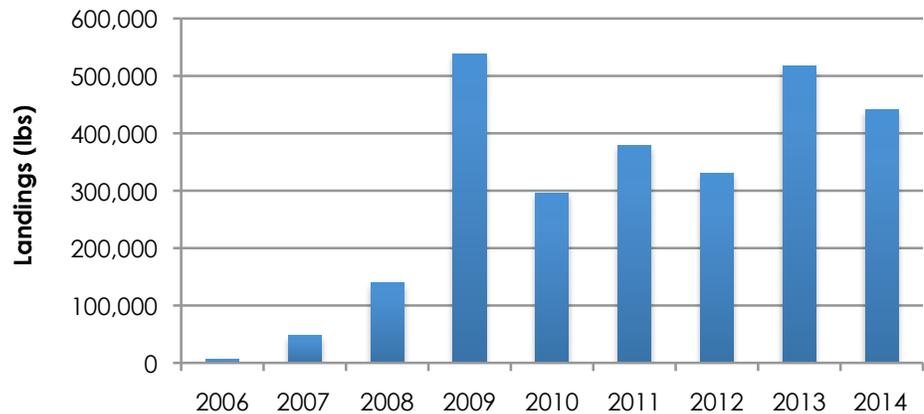


Photo: The primary Hagfish offloading facility, Ocean Star at 715 Embarcadero.

Morro Bay Pacific Hagfish EVV, 1990-2014, Source: CDFW



Morro Bay Pacific Hagfish Landings, 1990-2014, Source: CDFW

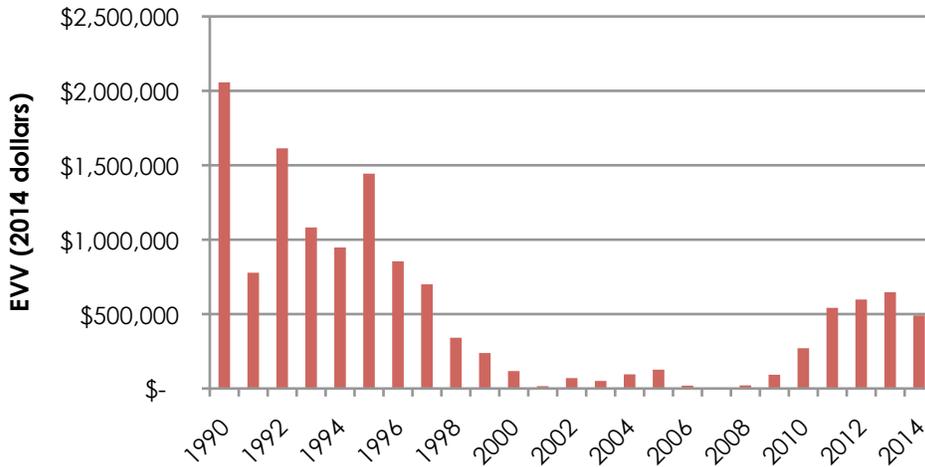


SHORTSPINE THORNYHEAD

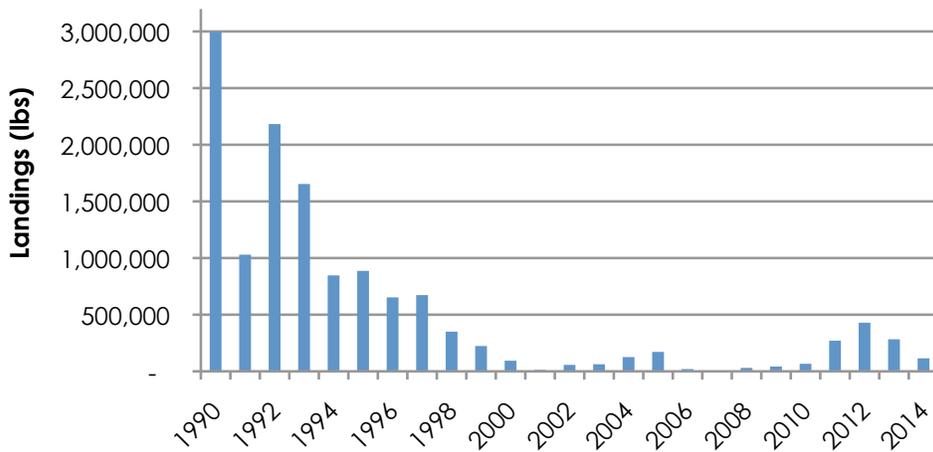
Earnings generated from Shortspine thornyheads represents more than \$13.2 million in EVV and has been a top-ten earning fishery in Morro Bay seven times. In 2014, commercial fishermen landed 115,000 pounds and earned more than \$386,000 from the species.

*Note that in the graphs below, the data for years 1990-1994 represents longspine and shortspine thornyhead species as CDFW data did not separate the two prior to 1995.

Shortspine Thornyhead EVV, 1990-2014, Source: CDFW



Shortspine Thornyhead Landings, 1990-2014, Source: CDFW



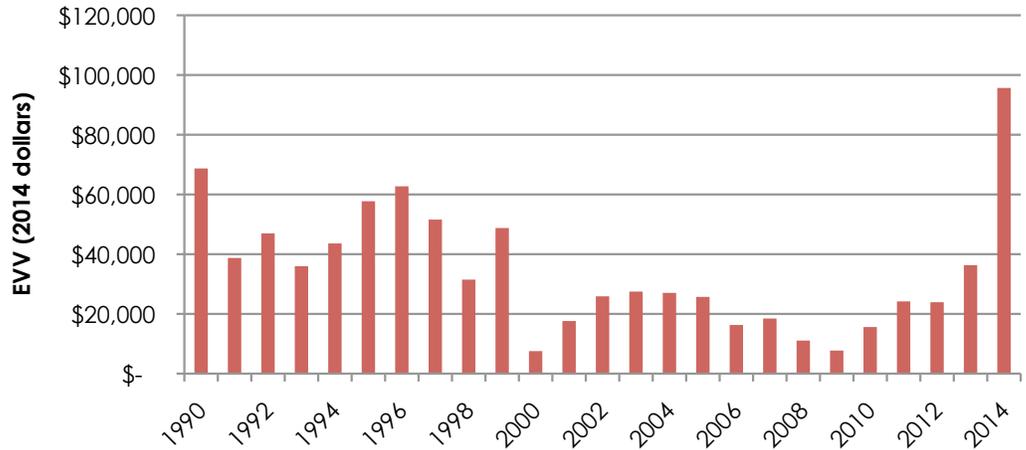
RE EMERGING SPECIES

LINGCOD

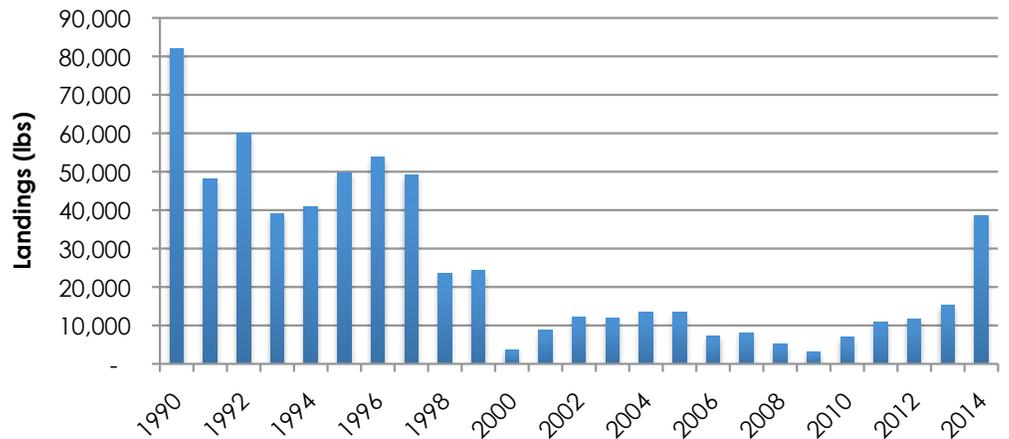
At \$95,661, earnings in 2014 mark the highest for Lingcod in 25 years.

Lingcod has played an important role in Morro Bay and represents a total of \$866,882 in earnings for commercial fishermen between 1990 and 2014. At \$95,661, earnings in 2014 mark the highest for Lingcod in 25 years. Total landings for Lingcod between 1990 and 2014 exceeded 640,000 pounds. Landings by weight in 2014 returned to mid-1990s levels at over 38,000 pounds. In 2014 the average price per pound for the species was \$2.47.

Morro Bay Lingcod Earnings, 1990-2014, Source: CDFW



Morro Bay Lingcod Landings, 1990-2014, Source: CDFW



OTHER IMPORTANT SPECIES

In addition to those mentioned above, there are a number of fisheries that have long supported commercial fishermen and fishing families in Morro Bay. Those include the Halibut and Spot Prawn, and the Nearshore, Drift Gillnet/Highly Migratory Species and Groundfish fisheries, among others.

CALIFORNIA HALIBUT

California Halibut are targeted in commercial fisheries from Bodega Bay to San Diego. Since 1990, California Halibut fishermen in Morro Bay have generated approximately \$1.7 million at the dock. Landings and earnings have historically been higher, however the species remains important as it fetches one of the highest market prices at the Port, which has risen to over \$6.50 per pound in recent years. In 2014, California Halibut landings in Morro Bay totaled over 5,000 pounds and generated \$34,327 in EVV.

- Most, if not all of the
- halibut landed in
- Morro Bay is processed
- and consumed in
- the County (personal
- communication, Morro
- Bay, August, 2014)

Despite being a relatively small operation, the Halibut fishery is accessible to small fishing operations that use small, trailerable boats, does not require expensive permits or relatively expensive gear. The fishery provides opportunities for new participants in the commercial fishing industry, as well as the helping existing fishermen more readily diversify their catch and source of income.

WHITE SEABASS

White seabass are a valuable species in Morro Bay and have provided over \$314,000 in earnings for commercial fishermen in the last 25 years. White seabass is an Open Access fishery: there are no restrictive permits, and as such, it provides a safety buffer for commercial fishermen when there is a downturn in their primary fishery due to changes in regulation, movement of fish stock (based on oceanic conditions) or changes in the market. Like California halibut, the White seabass fishery provides opportunities for small operators to enter the commercial fishing industry and capitalize on a species that was valued at \$5.25 per pound in 2014.

SPOT PRAWN

Fetching one of the highest prices of all species landed at Morro Bay, Spot prawn have generated over \$14.4 million in earnings at the dock since 1990 at an average of over \$10.73 per pound. Price per pound in 2014 was \$13.82, making it the most highly valued species in Morro Bay.

NOAA fisheries estimates a total of 27 participants in the California Spot Prawn trap fishery, of which one vessel is active in Morro Bay. Spot prawn is viewed as a sustainable catch due to the species' high reproductive capability and the low environmental impact of trap gear. More detailed reporting is not included due to an observance of confidentiality.

NEARSHORE

Also generally comprised of smaller fishing operations, Morro Bay Nearshore fishermen have generated over \$15.4 million in earnings in the last 25 years, and nearly 2.8 million pounds in landings. In 2014, the Nearshore fleet earned over \$317,000 at the dock at approximately \$6.73 per pound, well above the port average.

- Nearshore species
- include Kelp Greenling,
- Cabezon, California
- Sheephead, Monkey
- face prickleback
- California Scorpionfish
- and various types of
- rockfish.



Photo: Groundfish being offloaded at the Municipal Wharf offloading facility.

Groundfish made up nearly half of total earnings in Morro Bay between 2008 and 2012 and have represented more than \$49 million in earnings between 1990 and 2012.

HIGHLY MIGRATORY SPECIES/DRIFT GILLNET

In 2014, drift gillnet landings topped 39,000 pounds and over \$112,000 in earnings in Morro Bay. The Drift gillnet fleet targets valuable species: Swordfish, Thresher shark, Mako shark, Bluefin tuna, Louvar, Opah, Albacore, Pomfret.

Fisheries-specific statutes set allowable mesh size as well as requirements on extenders and pingers or sonic devices to reduce interactions with sea mammals. Drift gillnet restrictions also include the time of the day nets can be deployed and retrieved and greatly reduced fishing grounds to avoid, with a buffer, the migratory path of sea turtles.

Despite a near perfect record in avoiding turtles and sea mammals and a rousing defeat of a bill (AB 2019) that would make drift gillnet landings illegal in California, this fishery continues to face battles on the regulatory arena.

GROUNDFISH

The groundfish fishery is made up of over 90 species of fish including Rockfish, Sole, Lingcod, Thornyheads, Flounder, and Sablefish. Groundfish are targeted by the Limited Entry Fixed gear fleet, limited entry groundfish trawl, and the Open Access fixed gear fleet. The Limited Entry fleet targets groundfish using non-trawl gear (hook and line, trap, long line).

In 2014, Morro Bay commercial fishermen landed 1.3 million pounds of groundfish species. The fishery as a whole generated more than \$3.1 million in earnings. 89 percent of this sum was made up of Dover sole, Petrale sole, Sablefish, and Shortspine thornyhead

“The majority of groundfish value is still landed by owner operators with fixed gear permits” (personal communication, Morro Bay, June 2015).

5. MARINE-DEPENDENT INDUSTRIES

Morro Bay is defined by its commercial fishing industry and working waterfront.

Morro Bay’s working waterfront generates hundreds of jobs and provides a key connection with the County’s “billion dollar plus” tourism industry. In a 2008 opinion survey, civic leaders and tourism professionals in Crescent City, Monterey and Morro Bay rated tourism from an active working waterfront at 8.82 out of 10 in terms of importance to the community’s economy. The same survey rated local seafood for purchase at 8.85 out of 10 in importance as a driver for waterfront tourism.

Key sectors of Morro Bay’s working port economy and those addressed in this section include:

- **Aquaculture** – Morro Bay is one of California’s top oyster producers
- **Charter Fishing and Diving** – up to eight vessels generate thousands of recreational fishing, wild life viewing and dive trips annually
- **Chandlery** – commercial and recreational vessel owners can access supplies locally
- **Seafood Processing** – local seafood processors keep jobs and earnings in the community and process thousands of pounds of seafood
- **Marine Construction** – barges, tugboats and cranes give the community an advantage in repair, expansion and replacement of over the water infrastructure, salvage of vessels and local employment
- **Morro Bay Community Quota Fund** – California’s first legal entity established to anchor access to fishing resources in the community and help attract and support commercial groundfish fishermen
- **Tourism** – the working waterfront supports and attracts tourism and generates spending and employment in local restaurants, hotels, and shops.

• **Marine Industry Business Cluster**

• The Morro Bay waterfront provides a marine-related business cluster in being home to a ready work force, hoists, scales, forklifts, ice, chandlery, slips and piers, a well-dredged harbor and access to buyers and distribution routes all empower local marine-dependent businesses and provide an economic advantage for the City. The waterfront is also a source of tourism and demand for locally caught seafood. Many visitors are drawn to Morro Bay because it is a working port.

• According to Brent Haugen, Morro Bay Tourism Bureau Executive Director, “We estimate Morro Bay serves over two million visitors each year, making tourism the number one economic driver in our community.”

AQUACULTURE/OYSTER PRODUCTION

Overall, farmed oysters available on the U.S. market get a high overall score of 8.06 out of 10... and the overall ranking is "green." Therefore, the final recommendation is "Best Choice."

Monterey Aquarium Seafood Watch, Farmed Oysters, October 2014.

Morro Bay is one of the top oyster production ports in California and has been engaged in oyster harvest as far back to the 1940s (Scofield 1954). There are currently two operators raising oysters on approximately 15 acres of tidal flats in Morro Bay: Grassy Bar Oyster Company and Morro Bay Oyster Company. Both operations offload at the Municipal Launch Ramp and Municipal Wharf, where the oysters are packed on ice and shipped all over the country. Oyster production is heavily dependent on ice and relies on Morro Bay's state-of-the-art ice facility. As such, oyster landings contribute to vibrant employment on the docks, purchases at the City ice facility and employ 10 full-time workers to sort, transport, harvest, and monitor and maintain the oyster beds. Approximately 1.5 million oysters were harvested in Morro Bay in 2014 and 2015 production is estimated to be 2 million. A large percentage of the harvest is shipped directly to the Santa Monica Seafood's processing plant in San Luis Obispo County (Atascadero). Keeping production, distribution, processing and consumption "local" makes for a more sustainable system, less food miles traveled and more work for local employees.



Photo: A Morro Bay Oyster Co. employee prepares seed from the nursery for planting in Morro Bay.

Morro Bay Oyster Company recently purchased a 2,000 square foot space on the Embarcadero for offices and to raise seed oysters before they are transferred to the Bay. Both Grassy Bar and Morro Bay Oyster have plans for expanding their oyster beds, work force and expanding production to other sustainable species such as algae, clams and seaweed. Much potential exists in this industry in which prices are rising and current production is unable to keep up with demand.

The oyster farms in Morro Bay are subject to strict oversight from the California Department of Public Health and the FDA/USDA Hazard Analysis and Critical Control Points Program. They must also meet water quality standards established by the Interstate Shellfish Sanitation Conference and the National Shellfish Sanitation Program.

Kelp harvest also occurs off of Morro Bay. Landings of kelp harvested for the Cayucos Abalone Company are made in Morro Bay by the motor vessel Ocean Rose. Able to grow as many as 18 inches per day, Giant Kelp (*Macrocystis pyrifera*) is ideal for sustainable aquaculture. The City collects a landing fee on this renewable resource, which is another source of income and employment on the Morro Bay waterfront.

CPFV AND DIVE CHARTER

Morro Bay has a long history as one of the top Commercial Passenger Fishing Vessel (CPFV) ports on the coast. The CPFV industry (for hire fishing vessels) provides a strong draw for tourism and further strengthens Morro Bay’s place as an active working waterfront. In 1930 there was a single 45-foot charter vessel (Croker 1930) in Morro Bay; by 1963 there were 14 CPFV’s in operation (The California Partyboat Fishery 1947-1967 California, Department of Fish and Game Fish Bulletin).

The following four charter fishing and diving companies operate nine vessels and conduct thousands of fishing and wildlife viewing tours per year, providing access to the ocean for several thousands of people. While these operations focus primarily on the tourism/recreation market, they provide employment, purchases of ice, fuel and supplies, and generate spending in the City.

- **Virg’s Landing** established their business in Morro Bay in 1954 and today has four boats which making over 1,400 fishing and whale watching trips annually. Virg’s employs approximately 15 deckhands, skippers and support staff throughout the year and has a storefront location on Scott Street.
- **Morro Bay Landing** has 2 – 3 active vessels conducting fishing charters and wildlife viewing trips.
- **J&T’s Full On Fishing Charters** operates a 22 foot vessel and has been operating charter fishing trips and whale watching for over 6 years on the Morro Bay waterfront.
- **SloDivers** is the only scuba dive charter operation in Morro Bay and focuses on spearfishing, photography, exploration diving and commercial dive support.

The CPFV industry plays an active part in providing affordable access to the ocean for those without a vessel and promotes a strong appreciation for the ocean resources across a broad range of users. In Morro Bay, the CPFV and commercial fleet share strong ties, many vessels in Morro Bay have both commercial and CPFV licenses and skippers and deckhands switch back and forth to capitalize on opportunities. Charter businesses generate a range of employment opportunities from head-of-household jobs for skippers to seasonal jobs for crew and support staff. The charter industry also supports local marine-related businesses in the purchase of ice, fuel, supplies and fishing gear.

- CPFVs are vessels that
- are licensed to carry
- passengers for hire who
- conduct sportfishing
- activities while under
- charter (NOAA, Code of
- Federal Regulations).

- There are approximately
- nine CPFV operators
- in Morro Bay serving
- recreational fishermen,
- and divers. CPFV
- skippers have expanded
- their businesses by also
- offering whale watching
- and wildlife viewing
- tours. One skipper
- described running
- fishing charters in the
- morning and whale
- watching tours in the
- afternoon

- Harbor Manager Eric
- Endersby points out
- that in addition to the
- CPFV fleet, Morro Bay
- draws hundreds of small,
- trailerable recreational
- fishing boats, that put
- in at the Municipal Boat
- Launch throughout the
- year and purchase ice,
- fuel and supplies in
- Morro Bay.



Photo: Jerry's Marine and Tackle storefront

CHANDLERY (SHIP'S SUPPLY)

Morro Bay has supported a ship's supply or chandlery since the 1960s, on the south Embarcadero and eventually at its current location on Scott Street. In 2005, Jerry's Marine and Tackle was established and continues to supply the commercial and recreational fishermen and a wide array of vessel owners with critical marine products including diesel parts, cable and electrical wire, paints and resin, tools, foul-weather gear, hooks, fishing line, and lures. The fishing and boating community also relies on Jerry's as a local source of marine equipment and supplies based on Jerry's decades-long relationship with major marine equipment manufacturers and distributors all over the country. Jerry's has expanded with the growing activity in the commercial fishing industry and employs one full-time employee.

A newcomer to the Morro Bay chandlery industry is Rock Harbor Marine on 10th Street in Los Osos. Rock Harbor Marine was established in early 2014. The store's inventory serves recreational and commercial fishermen and oyster farmers. Steve's vision is that the store enables local and visiting vessels to stay in the area for supply and services, keeping revenue local. The operation has seen a good start to business in 2015, and is ramping up publicity efforts, largely through social media.

MARINE CONSTRUCTION

Since the mid 1970s, the Embarcadero has been home to Associated Pacific Constructors (APC), the only marine construction business between Santa Cruz and Los Angeles. APC employs 20 local staff members, from business support staff to crane operators, and maintains 200 linear feet of berthing, a full workshop, and 4,700 square feet of waterfront staging area. APC has two construction barges, crane and pile driving equipment and three working tug boats. APC specializes in marina renovation, dredging support, seawall, bulkhead and wharf repair, pile replacement, boat launch construction and repair and decommissioning, replacement and repair of sub-sea pipe lines. APC is engaged domestic and international projects and in Morro Bay, has conducted vessel salvage, dock installation, structural repairs and reconstruction of piers and docks and is currently leading a structural upgrade of the historic Cayucos Pier.

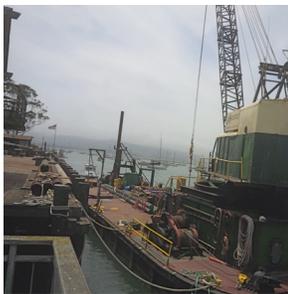


Photo: APC's 120 foot barge features a pedestal-mount crane and off-shore capability due to a four-point anchor system.

MORRO BAY COMMUNITY QUOTA FUND

The Morro Bay Community Quota Fund (CQF) is a local non-profit established in 2014 in response to the Individual Transfer Quota/catch-share system imposed in the Limited Entry Trawl fishery in 2011 by the National Marine Fisheries Service. The CQF was established in order to make quota and permits available to individual Morro Bay fishermen.

The CQF officially started leasing quota and permits in June 2014; between June and December of 2014, participating fishermen had earned \$102,000 from landings of CQF fish.

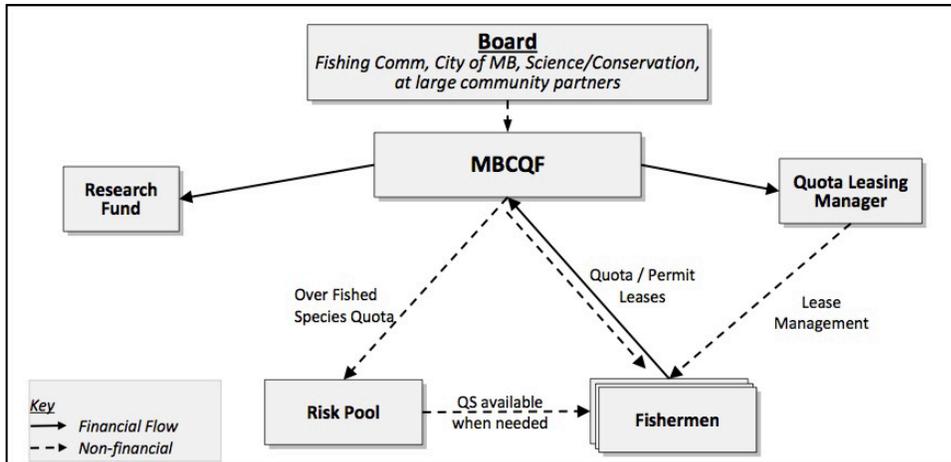
In total, during the first (partial) year of operation, the CQF licensed more than 1.7 million pounds of groundfish, excluding Whiting (a species not typically caught in Morro Bay), 78 percent of the CQF's quota was leased to local fishermen.

Encouraged by the CQF's successes this year, other California coastal communities are following suit; Fort Bragg, Monterey, Half Moon Bay, Bodega Bay, and Bolinas are all in the process of setting up their own Community Quota Funds.

Marine construction is a crucial element on a working waterfront and a community's capacity to maintain physical infrastructure, undertake new over-the-water expansion projects and conduct critical services such as dredging between slips and piers.

The CQF also recently founded its Science Advisory Committee, with funding for small scientific research projects intended to help preserve Morro Bay’s environmental and social resources. The CQF also started a Social Fund which covers some startup and equipment costs for newcomers to the local commercial fishing industry.

- The Morro Bay
- Community Quota Fund
- (CQF) has a diverse
- board of directors that
- includes commercial
- fishermen, academics,
- the City, and The Nature
- Conservancy.



SEAFOOD PROCESSING

While seafood processing in the U.S. has seen widespread consolidation fueled by competition from inexpensive imports and cheap foreign labor, processing still takes place on the Embarcadero and San Luis Obispo County is home to Santa Monica Seafoods’ processing plant which employs approximately 10 skilled filleters, boasts extensive cold and freezer storage, and processes over 27 million pounds of seafood annually. Tognazzini’s Restaurants and Giovanni’s Fish Market employ 72 employees in total and process hundreds of thousands of pounds of seafood annually for local restaurants and retailers and to service patrons of their restaurants and fish markets. Keeping processing “local” enables the community to generate more employment and investment per pound of fish landed and gives local fishermen more options on where to sell their catch.

- Morro Bay has a long
- history of local seafood
- processing dating back
- to the Gold Nugget and
- Brebe's in the 1970s,
- and Morro Bay Seafood,
- Central Coast Seafood
- and Cordero-Wilson in
- the 1980s and 1990s.
- Central Coast Seafood
- moved to Atascadero in
- 1992 and was purchased
- by Rancho Dominguez-
- based Santa Monica
- Seafood in 2012 but
- the processing facility
- remains in San Luis
- Obispo County.

- Tognazzini's processed
- approximately
- 100,000 pounds of
- fish in 2014. (Personal
- Communication, May
- 2015)



Fishing Related Businesses and Services, Morro Bay

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> ■ Berthing <ul style="list-style-type: none"> 1. North T-Peir (side-by-side tie up) 2. South T-Pier (large vessel side-by-side tie up) 3. Slips Designated for Commercial Fishing Only (50) ■ Commercial Passenger Fishing Vessels <ul style="list-style-type: none"> 4. Virg's Landing (dock) ■ Fuel <ul style="list-style-type: none"> 5. Degarimore's Central Coast Marine Fuel & Ice ■ Ice <ul style="list-style-type: none"> 6. Ice Machine & Delivery Chute | <ul style="list-style-type: none"> ■ Live Fish Storage <ul style="list-style-type: none"> 7. 715 Embarcadero facility, TBD commercial fish (primarily hagfish) 8. Municipal Wharf (Santa Monica Seafood/Central Coast Seafood) ■ Launch Facility <ul style="list-style-type: none"> 9. Boat Launch at Pirate Park (trailerable vessels, parking) ■ Offloading Facility/Buying Station <ul style="list-style-type: none"> 10. 715 Embarcadero facility, TBD commercial fishing (primarily hagfish) 11. Degarimore's Central Coast Marine Fuel & Ice 12. Tognazzini's Dockside Restaurants 13. Municipal Wharf (Santa Monica Seafood/Central Coast Seafood) | <ul style="list-style-type: none"> ■ Storage <ul style="list-style-type: none"> 14. Commercial Fishermen's Dry Storage & Gear Repair Facility ■ Supplies <ul style="list-style-type: none"> 15. Jerry's Marine & Tackle 16. Virg's Landing (shop) ■ Other <ul style="list-style-type: none"> 17. Harbor Department 18. U.S. Coast Guard |
|---|---|---|

Image, County of San Luis Obispo

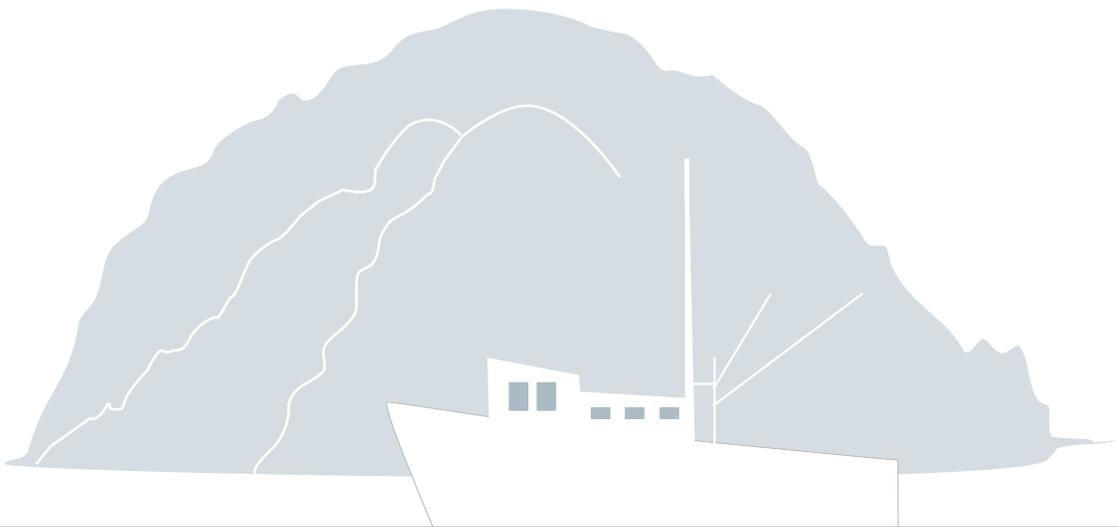
6. CONCLUSION

The commercial fishing industry in Morro Bay is alive and well and has experienced over 300 percent growth in annual earnings from a 25-year low in 2007. In 2014, commercial fishermen generated \$8.3 million in earnings at the dock and between 1990 and 2014, commercial fishing industry earnings represented over \$380 million for the Morro Bay economy. Commercial fishing is responsible for approximately 195 jobs for skippers, deckhands, dock workers and local seafood processors (Morro Bay Community Sustainability Plan, April 2014). The commercial fishing industry and all the activity driven by the working waterfront makes up the backbone of a robust and diverse economy in Morro Bay.

The 2015 version of the Morro Bay Commercial Fisheries Economic Impact Report marks the 5th year of a collaboration between the Morro Bay Commercial Fisherman’s Organization and the Central Coast Joint Cable Fisheries Liaison Committee to illustrate the accomplishments of the commercial fishing fleet in Morro Bay. This year’s Working Waterfront Edition also highlights the unique and interconnected marine-dependent businesses that make up Morro Bay as a working port. These include: two aquaculture businesses that make Morro Bay one of the top oyster producing ports in California, nine charter vessels that conduct thousands of recreational, wildlife viewing and scuba diving trips every year, the only marine construction operator between Santa Cruz and Los Angeles, marine chandlery/ marine supply stores and local seafood processing that keeps jobs and dollars in the community. The Morro Bay working waterfront also includes innovative and collaborative approaches to adapting to fishery regulation in the formation of the Morro Bay Community Quota Fund, the first of its kind in California. Together, these businesses generate local jobs, spur investment and spending in the community and attract and support tourism.

Commercial fishing as a part of this vibrant and interconnected working waterfront economy represents the heart and soul of Morro Bay and points to a resilient and productive future.

• “The enduring
• competitive advantages
• in a global economy
• lie increasingly in local
• things—knowledge,
• relationships,
• motivation—that distant
• rivals cannot match.”
•
• -Michael Porter, Harvard
• Business Review,
• November-December,
• 1998.



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