Photo Courtesy of Charles Nadeau

CITY OF MORRO BAY
FISHING COMMUNITY SUSTAINABILITY PLAN

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Prepared by:
Lisa Wise Consulting, Inc.

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CITY OF MORRO BAY

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CONTENTS

ACKNOWLEDGEMENTS

The Morro Bay Community Sustainability Plan (CSP) would not have been possible without the insight and participation of the fishing community and the guidance of the City of Morro Bay. It is the cooperation among the fishermen, the City and the community that makes the project valuable and will provide the foundation for the implementation of the recommendations made herein. Several individuals and organizations played key roles in the project; we do our best to list them here.

The Consultant Team would like to acknowledge and thank the National Fish and Wildlife Foundation for their generous financial support of the CSP. The community of Morro Bay views the Fishery Innovation Fund grant as an investment in the community's future, one that will produce long-term economic, social and environmental returns.

The purview of the report includes the entire community but the work was driven by the fishing industry. As such, we would like to thank and acknowledge the entire fishing community, skippers, deckhands, dockworkers, related business owners, drivers, and baiters. Several individuals went out of their way to make themselves available to answer our questions and to help confirm our findings. We would like to thank and acknowledge Jeremiah O'Brien, Tom Hafer, Tom Roff, Mark Tognazzini, Rob Seitz, John French, Fred Cefalu, Reed Hawkins and the entire MBCFO. A special thanks to Lori French and Tiffany Seitz of the Central Coast Women for Fisheries (CCFW).

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The fishing communities in Morro Bay and Port San Luis are considered by many to be inseparable. To that end, we would like to thank Steve McGrath, Harbor Manager Port San Luis Harbor District and Dave Kirk, Commissioner, Board of Harbor Commissioners, Port San Luis Harbor District for their support and input on the Morro Bay CSP.

Finally, we would like to thank each member of the Morro Bay City Council for their foresight in seeking and winning the grant and commitment throughout the project.

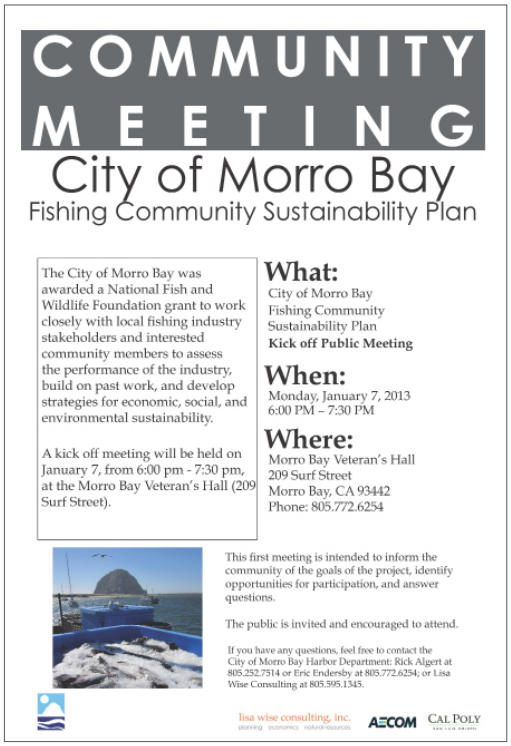
EXECUTIVE SUMMARY

In May of 2012, the City of Morro Bay was awarded a National Fish and Wildlife Foundation (NFWF) grant to develop Community Sustainability Plans (CSP) for the City of Morro Bay and the City of Monterey. The NFWF Fisheries Innovation Fund grant provided funds for these two communities to consider the economic, social and environmental implications of their fishing industries and working waterfronts.

CSPs are cited in the Magnuson Stevens Fishery Conservation and Management Act (MSA) as a requirement for communities that wish to remain eligible to participate in programs such as Individual Transferable Quota (ITQ) that was instituted in the federal groundfish fishery in 2011. The MSA is the overriding law for all federal fisheries in the U.S. This CSP is seen by leaders in Morro Bay as an opportunity to assess current baseline conditions and plan strategically for a stable and vibrant fishing industry and waterfront infrastructure.

The Morro Bay CSP assesses critical infrastructure and services, quantifies the number of jobs generated by the fishing industry, addresses synergies with tourism, aquaculture and recreational fishing, and distinguishes fishing's prominent role in Morro Bay's cultural identity and marine stewardship. The CSP relies heavily on input from the fishing community and local civic leaders gained through dozens of personal interviews and site visits. The Morro Bay CSP culminates with recommendations aimed at the implementation of projects with greatest priority and potential economic, environmental and social return.

The Morro Bay CSP began with a kick-off meeting that included fishing industry representatives and project



Poster notice for first public meeting for the Morro Bay Community Sustainability Plan project.

managers from the City of Morro Bay on November 26, 2012 and a Public Meeting and presentation on January 7, 2013. Throughout the project, the Consultant Team, led by Lisa Wise Consulting, Inc. (LWC) conducted one-on-one interviews with over 35 representatives from the fishing community (retired and active), City Council, local business community, marine dependent businesses, conservation NGOs and City staff. LWC also interviewed representatives from ports, harbor districts and marinas in Port San Luis, Half Moon Bay, Monterey, San Diego, Santa Barbara and the San Joaquin Delta, as well as the Port of San Francisco and Port of Los Angeles. The community outreach also included representatives from fuel cooperatives throughout the U.S. and site visits to boatyard facilities in Moss Landing and Port San Luis.

The grant pursuit process and project management was led by the City of Morro Bay (City) and Rick Algert, former City Harbor Director and Eric Endersby, current Harbor Director. The Consultant Team was made up of LWC as project manager and economics and community engagement lead; Dr. Mike Downs (Ph.D Anthropology) and ethnographer Stephen Weidlich of AECOM providing input and direction on the social and socio-cultural components of the project; and Dr. Dean Wendt, Associate Dean of the Cal Poly College of Science and Math and Director of the Center for Marine Coastal Sciences, providing guidance and input on environmental data gathering, assessment and reporting.

The report is structured in seven chapters: **1) Introduction**, **2) Critical Infrastructure and Services**, followed by **3) Economic Setting** which includes Rents and Wharfages, Tourism and Aquaculture **4) Environmental Setting** and **5) Social Setting.** The report culminates with **6) Recommendations** and **7) Potential Funding Sources.**

PROJECT SETTING

Morro Bay is equidistant from Los Angeles and San Francisco on the coast of California. 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. The port has a rich fishing heritage dating back before the founding of the City in the late 19th century. Native people inhabited Morro Bay for centuries, with evidence of their reliance on fishing in middens scattered along the coast.

Commercial activity grew in the early 1900s with the development of a commercial abalone fishery. By the1930s there were robust sardine, groundfish, salmon, and albacore fisheries in Morro Bay. By this time there was also an active Commercial Passenger Fishing Vessel (CPFV) fleet serving thousands of visitors and locals annually. By the 1960s and 1970s, with the establishment of the MSA, the 200 mile Economic Exclusion Zone (EEZ) and the political

Photo: Capt. Ed Ewing oversees the construction of a trawl net at the MBCFO storage and gear maintenance facility.

and regulatory shift toward securing American fishing dominance in the EEZ, Morro Bay had become a vibrant and productive fishing port, led primarily by the trawl fleet. This vibrancy was complemented by on-shore industry including fish processing, offloading facilities, ice production, seafood buyers, and fuel facilities. Along with the establishment of critical physical infrastructure was a formalization of the social infrastructure. The Morro Bay Commercial Fishermen's Organization (MBCFO) was formed in 1974 and provides leadership, a more concerted voice in fishing related issues, and represents the diversity of fisheries and fishing operations in Morro Bay. By the 1990s and with the influx of inexpensive foreign imports, changes in consumer preferences, the collapse of several groundfish species and heightened regulatory oversight, the industry experienced a downturn. Total ex-vessel value (EVV) or earnings at the dock fell from approximately $8.5 million in 1990 to $1.9 million in 2007. However, since 2007, landings in Morro Bay have rebounded steadily to over $6.3 million in 2012. The fishing community in Morro Bay has accomplished this through hard work, ingenuity, the ability to plan and collaborate with diverse partners and pervasive leadership.

The Morro Bay fishing community is very capable and insightful, and in conjunction with the City and with diverse partners like the State of California, academia and conservation NGOs, has engaged in extensive and consistent strategic planning marked by the 2007 MBCFO Dock Business Plan, 2008 Morro Bay/Port San Luis Commercial Fisheries Business Plan, 2009 Groundfish Threshold Analysis, and Commercial Fishery Economic Impact Reports in 2011, 2012 and 2013.

CRITICAL INFRASTRUCTURE AND SERVICES

Morro Bay maintains much of the critical infrastructure on which a vibrant fishing industry relies, such as a high quality, high-capacity ice facility, fuel facility, four offloading hoists and buyer stations, truck access, bait and baiting service, docks, slips and piers, live fish tanks, dry storage, chandlery and a well-dredged harbor.

Facilities and services that are lacking and indentified as priorities by the fishing community, such as a boatyard and haulout facility, processing and cold/freezer storage, are included in recommendations herein.

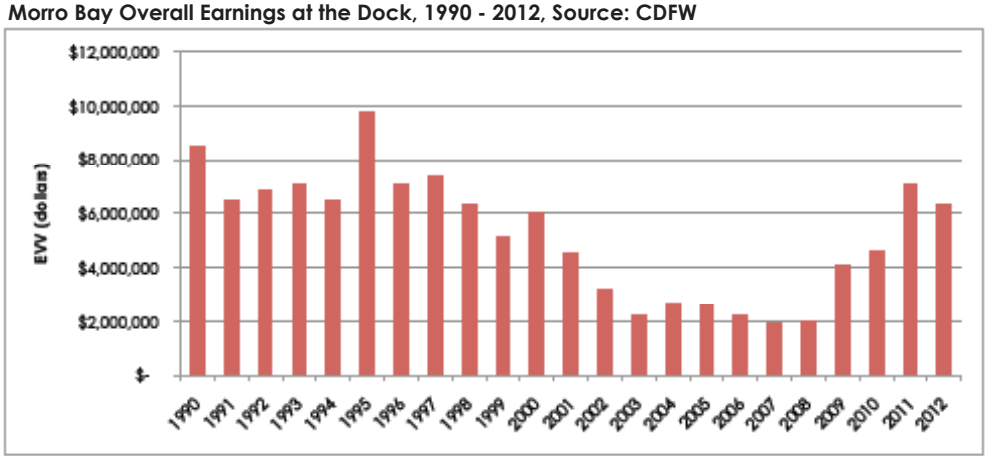
Photo: Ice pumped into the hold of a hook and line vessel, Morro Bay Municipal Dock.

ECONOMIC FINDINGS

The Morro Bay fishing community and broader working waterfront is a vibrant mix of complementary activities and industries, including commercial fishing, recreational fishing, tourism and aquaculture. The working waterfront and a working commercial fishing port are valuable and unique resources and create a strong link to the County's $1.2 billion tourism industry.

Key economic indicators and metrics in the fishing community, those that provide a perspective into the industry's performance, include earnings at the dock for fishermen or ex-vessel value (EVV). EVV has climbed from a 20 year low in 2007 of under $2 million to over $6.3 million in 2012. Steady and or growing EVV is an indicator of economic resilience and well being. That the earnings are spread across a broad range of fishery types, aimed at differing habitats using different gear, is another indicator of sustainability. Fishermen in Morro Bay target spot prawn, Pacific hagfish and sablefish with traps, groundfish with hook and line and trawl, squid with purse seine nets, swordfish with drift gillnets, and salmon by surface troll. Commercial fishing activity indicators such as vessel IDs, fish tickets and trips are on the rise. The number of fishing trips as measured by the Department of Fish and Wildlife has risen from 3,712 in 2008 to 5,889 in 2012. Each trip represents potential wages for crew and skippers, and the purchase of fuel, ice, and supplies as well as landings at the dock. The fishing industry supports between 170 and 194 jobs on the water, on the docks and in the local processing plant. New and returning participants is another key economic indicator. An industry that can attract new players will ultimately be in a better position over the long run. In the last 4 years there have been 17 new and returning fishermen in Morro Bay and numerous new and returning vessels.

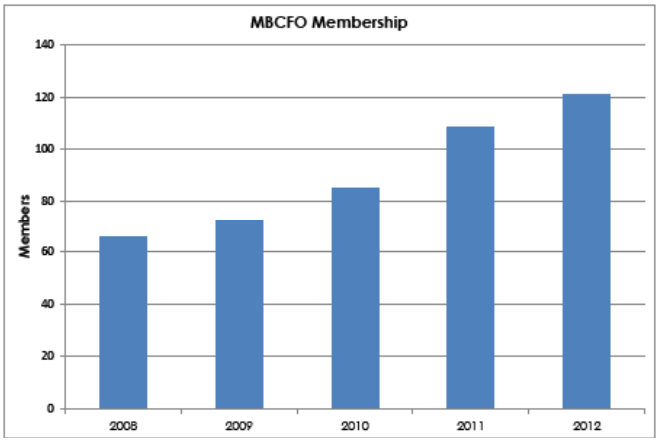
Morro Bay Overall Earnings at the Dock, 1990 - 2012, Source: CDFW



SOCIAL FINDINGS

The Morro Bay fishing community has maintained a strong sense of social cohesion, self organization and leadership, as evidenced by the formation of the Morro Bay Commercial Fisherman's Organization in 1974 and its current membership of over 100 members. Social cohesion is also evidenced by the fishing industry's strong relationships with City of Morro Bay staff and civic leaders, the aquaculture industry, local merchants, and with the Commercial Passenger Fishing Vessel fleet, skippers and deckhands switching back and forth. The fishing fleet has strong ties to the academic community and has engaged in collaborative research with California Polytechnic State University and other institutions for decades. The fishing community has also shown effective communication capabilities, attracting support in the form of grant funding from the California Coastal Conservancy, National Fish and Wildlife Foundation, the Central Coast Joint Cable Fishery Liaison Committee as well as Environmental Defense Fund and The Nature Conservancy. The recent formation and successes of the Central Coast Women for Fisheries is further evidence of the

community's ability to self organize, attract funding, support fishermen and fishing families, and educate the general public.



Morro Bay is an active participant in the regulatory arena for over 40 years and participation, particularly at the Pacific Fishery Management Council level has been substantial as the federal groundfish fishery began transitioning to a quota-based management system in 2003. Participation in the management process, strong relationships within and outside the community, and capable leadership add to a sense of accomplishment and hope for the future, hallmarks of a sustainable human system.

ENVIRONMENTAL FINDINGS

The Morro Bay fishing community 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. Diversity has implications throughout the triple bottom line equation but in the case of environmental indicators, pressures on marine resources are more widely distributed, reducing the intensity of impact on any one species or habitat type and giving systems better opportunity to function and recover.

The Morro Bay marine environment is rich and diverse. The habitats in which the local fishermen operate are marked by steep canyons, rocky in shore habitats, soft and sandy bottoms, sea mounts and the steep continental shelf. How fishing activity is managed or controlled is a prominent environmental sustainability indicator. Every species targeted by the Morro Bay fleet is overseen by state or federal regulators and include one or several spatial or temporal closures, gear restrictions, trap limits or quota based management, and are guided by management plans and science-driven stock assessments. Due to the resilience of the marine environment, efforts of the fishing community and effective management measures, many impacted species, those targeted by Morro Bay fishermen, have regained healthy population levels such as thresher shark, swordfish, salmon, Petrale sole, sablefish and several species of rockfish (bocaccio, dark-blotched, cowcod).

KEY RECOMMENDATIONS

The CSP culminates with a focused list of recommendations and their economic, environmental and social implications. Recommendations are based on extensive guidance from the fishing community, City staff and interviews and field visits conducted with civic leaders, conservation NGOs and the local business community. The development of the Recommendations is also guided by an assessment of the economic, social and environmental setting in which the fishing community operates. The recommendations are aimed at facilitating the sustainability of the fishing community and the working waterfront, and perpetuating the economic, social and environmental return.

BOATYARD AND HAULOUT FACILITY

The community has responded with strong support for a haulout facility and boatyard to serve the needs of a broad cross section of marine users: commercial fishermen, recreational boaters, the CPFV fleet, Coast Guard and Harbor Department. All of these entities haul their vessels out of the water for regular maintenance and major repairs. The community also understands that such a facility is needed so that City can react appropriately to protect the sensitive estuary in the event of an oil (or other hazardous liquid) leak from a compromised or derelict vessel.

Photo: The Aguero, a Morro Bay albacore vessel at Gravelle's Boatyard, Moss Landing for bottom maintenance.

FUEL

The current fuel facility has large capacity underground tanks and an over the water fuel dock and dispensing facility that are compliant with state (SB989) and federal standards. The fuel dock at 1099 Embarcadero provides convenient and consistent access to gas and diesel for the entire fleet. The fuel business is marked by high volume and low margins and the City, the lease holder and fishermen have struggled with pricing. The City should continue to negotiate with the lease holder and investigate approaches for lower prices to fishermen while maintaining a viable return for the operator.

REFRIGERATION AND DEEP FREEZE FACILITIES

Identified as a need in the 2008 Morro Bay/Port San Luis Commercial Fisheries Business Plan, refrigerator and freezer storage would give fishermen a place to store bait and baited gear, making their operations more efficient and enabling faster trip turn-arounds and the ability to hold fish for longer periods to meet market demand and obtain (potentially) better pricing.

PROMOTION AND MARKETING

Morro Bay has a unique and valuable fishing community profile with small scale, family-owned fishing operations, many of them multi-generational and in an environmentally striking setting. There was general agreement among respondents that better promotion and marketing of the fishing community would add to seafood sales and increase earnings at the dock and better invigorate the waterfront and overall Morro Bay economy.

REGULATION AND COMMUNITY PARTICIPATION

Co-management, or participation of the City and fishing community in the development of regulation is considered a hallmark of sustainability. The City and fishing community should continue to take a proactive approach in securing the success of its fishermen and working waterfront as it has in the development of the Morro Bay Community Quota Fund (MBQF) and by supporting measures aimed at reducing costs to fishermen associated with regulatory compliance and protecting legislation such as Measure D.

BERTH AND SLIPS

Safe and convenient options to secure boats is essential to the fishing industry and a healthy working waterfront and should not be reduced.

PROCESSING

Fishermen and the representatives from the City have consistently asked if seafood processing closer to the Embarcadero would give the industry greater control and provide a net benefit with an increase of jobs and return from expanded activities throughout the value chain. There is currently some processing capacity at local seafood retailers and restaurants and Santa Monica Seafoods has a plant in Atascadero (15 miles east), recently acquired from Central Coast Seafoods. A greater diversity of processing options could benefit fishermen and the community. As such, the community should consider a feasibility analysis for a local processing facility.

VEHICLE ACCESS

Vehicle access is constrained but sufficient at present, however continued expansion in the industry may warrant circulation improvements to ensure seafood landed at Morro Bay gets to processing plants, buyers and the market efficiently. Any reduction in the access of large trucks to offloading facilities should be avoided.

MANAGING SEA LEVEL RISE

Sea level rise poses a risk to nearly all facilities serving the fishing community and waterfront in Morro Bay, particularly during high tides and storm events. The City is actively engaged in efforts to understand and address the risk through an update of the Local Coastal Program (LCP). The LCP update is being funded by a Sea Level Rise Adaptation Grant from the Ocean Protection Council (OPC). The City should continue

to pursue actions and strategies outlined in the LCP update to better protect citizens and valuable waterfront infrastructure.

IMPLEMENT AND UPDATE

From the onset of the project, the fishing community stressed that they wanted the CSP to focus on the promotion and implementation of high priority issues. In general, the fishing community believes that they have engaged in effective strategic planning and it is time to focus on implementation. As such, the fishing community and the City should work together to link recommendations to potential funding sources and consider the next steps in the development of a boatyard and haulout facility, freezer/cold storage facility, promotion and marketing, and the on-going development of the Community Quota Fund. The CSP should be distributed as widely as possible in the community and made available on the City, MBCFO, Chamber of Commerce and other related websites. The CSP also should be updated when feasible and progress in the industry should be compared against the benchmarks within.

POTENTIAL FUNDING SOURCES

There are over 20 potential funding sources listed in the CSP, from grants and loans to the formation of special districts. Funding sources include state, federal and local sources as well as public-private partnerships and conservation NGOs.

APPENDICES

A summary of the extensive research on the boatyard and haulout facility and fuel facility and options are included in the appendices as they are too detailed for the main document but may provide guidance to the City and the fishing community when considering implementation alternatives.

Photo: Baiting of a barbless circle hook used by hook and line fishermen, baiting facility, Morro Bay. Photo courtesy of Marigee Bacolod.

1. INTRODUCTION

The Morro Bay Fishing Community Sustainability Plan is a community-driven assessment and use strategy for the variables that make up a resilient and productive fishing industry and contribute to the greater community. The findings of the project are found in this report which is structured in seven chapters; the **1) Introduction**, **2) Critical Facilities and Services,** followed by **3) Economic Setting** which includes Rents and Wharfages, Tourism and Aquaculture **4) Environmental Setting** and **5) Social Setting.** The report culminates with **6) Recommendations** and **7) Potential Funding Sources.**

The first four chapters make up the background and existing conditions and draw heavily from the local fishing community as well as civic leaders, City staff and conservation groups. The Recommendations also rely on direct input from fishermen and the community and are aimed at maintaining and where possible, increasing sustainability by capitalizing on existing resources, attracting new ones and mitigating for constraints. Potential Funding sources are included for industry leaders to consider in the implementation of Recommendations and include state, federal, private and public-private grants and loans.

This Introduction provides an overview of the Morro Bay Fishing Community Sustainability Plan project through a description of:

- Purpose and Motivation, including a discussion on the Morro Bay / Monterey partnership and the funding source
- Project Management Team and Consultant Team, including City staff and the qualifications of those involved
- Approaches and Methods, including an overview of the comprehensive community engagement effort and focus on economic, social and environmental metrics
- Project Setting, including Morro Bay's unique and valuable environmental resources and history
- Community of Morro Bay Profile, including an overview of population and demographics

COMMUNITY
For the purposes of the Fishing Community Sustainability Plan, what is a "fishing community"?

According to the Magnuson-Stevens Act (MSA), a fishing community is described as:

"…a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community."

To take that concept a step further, the Morro Bay fishing community is seen as those members who have direct or indirect involvement, interest, or concern with the fishing industry and its history as located within a geographic proximity of the Morro Bay Embarcadero. This definition of a fishing community also includes a nucleus of fishermen working across gear type and related entities such as processors, offloaders, wholesalers, retailers, regulators, and scientists, all of whom are substantially dependent on fishery resources.

This group constitutes the core of the fishing community but is not the sum. Broader ties to this central community are those citizens of San Luis Obispo County who consume or have an interest in seafood, fishing, and fishing resources. While this definition is more inclusive, spanning across occupation-based and values or interest-based definitions, we understand it as an important conceptual tool when discussing the challenge of sustaining a fishing industry through time.

PROJECT PURPOSE & MOTIVATION

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.

In January of 2011, the Cities of Monterey and Morro Bay teamed to pursue a National Fish and Wildlife Foundation (NFWF) Fishery Innovation Fund (FIF) grant. NFWF provided over $1.5 million in FIF grant funds to 18 recipients nationwide with projects that "foster innovation and support effective participation of fishermen and fishing communities in the implementation of sustainable fisheries in the U.S." (NFWF). As one of these recipients, the Cities of Morro Bay and Monterey were jointly awarded $135,000 in grant monies. Through the grant proposal, the Cities sought support to prepare Community Sustainability Plans (CSP) – one for each of the Cities – consistent with the provisions of primary federal fisheries policy, the Magnuson-Stevens Fisheries and Conservation Act (MSA).

Catch Shares, or Individual Transferable Quota, (also considered a Limited Access Privilege Protocol or LAPP program) is a regulatory system by which fishermen, based on past history, earn and own a percentage of the Total Allowable Catch (TAC) each season. TAC may change based on stock assessments and regulatory decisions but the percentage the fisherman holds does not. Participating fishermen must also hold a Limited Entry trawl permit and are held 100% accountable for catch and discards by carrying a federally trained human observer on board each trip. This concept is discussed in more detail in the Chapter 2.

Morro Bay's partnership with the City of Monterey, pursuit of the NFWF grant, and development of the first two Community Sustainability Plans in California is on-going evidence of Morro Bay's leadership, an ability to form successful alliances and undertake formal strategic planning.

As the term "Community Sustainability Plan" suggests, the City of Morro Bay also saw the project as an opportunity to develop a strategic planning document for the entire fishing community with opportunities in the groundfish fishery as one component, albeit important.

Regarding the groundfish element of the CSP, according to the MSA , "to be eligible to participate in a limited access privilege program to harvest fish, a fishing community shall… "develop and submit a community sustainability plan to the Pacific Fisheries Management Council (PFMC) and the Secretary that demonstrates how the plan will address the social development needs of coastal communities, including those that have not historically had the resources to participate in the fishery, for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register" (MSA 2007 p. 121, Stat. 3587-3588).

Adaptive Management is part of the ITQ or catch share regulatory system that will allow regulators to hold back 10% of the total available quota to be distributed to communities that have been adversely affected by the regulatory change. The criteria for distribution of the 10% hold back quota has not yet been confirmed. Morro Bay's approach includes having a CSP in place to be in a better position when Adaptive Management is implemented.

The catch share regime, or Individual Transferable Quota (ITQ), instituted in the federal groundfish fishery in 2011 is a limited access privilege protocol (LAPP) program. Groundfish is a key fishery in Morro Bay.

Groundfish was the major component in the growth of the Morro Bay fishing community in the 1970s and 1980s. More recently, Morro Bay engaged in preparation to participate in the ITQ groundfish program through and experimental project from 2008, three years before ITQ was formally instituted.

From Morro Bay's perspective, the development of a CSP and the formation of entities like the Morro Bay Community Quota Fund (MBCQF), will better position the community for consideration in ITQ Adaptive Management measures. These associations may be formed to acquire and lease groundfish quota, thereby anchoring access to the resource to a community rather than an individual or vessel.

In 2012, the City of Morro Bay established the MBCQF as a measure to avoid migration of the groundfish resource away from small communities to larger communities or entities that have the capital to acquire quota, a tradable or saleable asset (referred to as "consolidation"). Community Quota Funds may also provide more opportunities for new participants who might not otherwise have access to permits, quota or capital. The attraction of new participants is a high priority for Morro Bay and fishing communities along the coast.

The Morro Bay Community Quota Fund (MBCQF) is a public benefit non-profit corporation intended to permanently secure fishing privileges historically associated with the Central Coast. The long term goal of the CQF is to ensure a financially stable and environmentally sustainable Morro Bay fishery, built upon local stewardship of groundfish resources, sufficient fishing activity to support marine dependent infrastructure and services in Morro Bay, and providing for the next generation of smaller boat fishermen. Under its broader "triple bottom line" mission (social, economic and environmental), the CQF will also engage in collaborative research to improve scientific knowledge and support local fisheries. **www.morrobaycommunityquotafund.org**

The language in MSA directing the development of a CSP is sufficiently broad to enable communities to tailor the document to meet their needs. Such an approach provides more direct and potentially substantive industry and community participation in the formation of policy. This is an example of co-management, where fishing industry participants are engaged in policy formation with regulators, a hallmark of a sustainable fishery.

The NFWF FIF grant directs grant recipients to focus on the triple bottom line of economic, environmental, and social implications of the fishing industry and its relationship with the community. The grant also prioritizes the inclusion of fishermen in the sustainability planning process. Leaders in the Morro Bay fishing community and in the City understand that success and stability depends on sustainability within and across all three dimensions. As such, the sustainable fishing community indicators used in this report are derived from a collaboration among LWC, community stakeholders and research in the field. The indicators for each criterion are described as:

Indicators are the categories of performance (e.g. earnings) and metrics are the measures within the categories (e.g. dollar value).

ECONOMICS

Economic indicators and metrics analyzed for the industry are based on landings and earnings at the dock, species mix and trends, price per pound, the number of trips and vessels operating in the harbor and their changes over time, and demand for offloading, staging, processing, gear storage and retail space. Economic performance also includes employment generation, employment types, synergies with tourism, and alliances between and among industries as well as an assessment of aquaculture in Morro Bay. (See Chapter 2, Economics.)

ENVIRONMENTAL

Environmental sustainability indicators and metrics include the extent and type of regulation associated with each of the species landed in Morro Bay, summary of science-based directives and assessments of fish stocks, and the diversity of species, and gear types and habitats in which Morro Bay fishermen are engaged. Gains made in rebuilding fish stocks are also touched on briefly. (See Chapter 3, Environmental Setting.)

SOCIAL

Social indicators and metrics were assessed through extensive personal and written interviews with industry participants, civic leaders, related industry stakeholders, and the general community. Social metrics analyzed include leadership, cohesion, collaboration and cooperation among participants, equity/equality among fishing-related businesses, the community's ability and effectiveness to represent itself in the political, local/regional business and regulatory arena, and the degree of community support for fishing and fishermen. That citizens of Morro Bay have access to affordable seafood and that costs and rewards are distributed equitably throughout the seafood distribution chain is also considered. (See Chapter 4, Social Setting.)

These indicators and metrics are the building blocks of the strategic planning process, enabling the community to formalize and communicate its goals and accomplishments and assess on-going performance. The fact that strategic planning in Morro Bay has accompanied growth in earnings and landings from a 20-year low in 2007 is likely not a coincidence but evidence of the community's foresight and ability to adapt to a shifting market, and even more volatile and threatening changes in the regulatory arena. Strategic planning is a tool, which in the hands of a capable community such as Morro Bay, can contribute to greater stability and value for fishermen and the community.

The CSP culminates with recommendations aimed at formalizing items of priority and consensus, and maximizing opportunities and avoiding constraints. It was a clear directive from the fishing community and project managers from the beginning of the project, that the CSP be focused on implementation. The fishing community has consistently engaged in strategic planning from the formulation of the MBCFO Dock Business Plan in 2007, Morro Bay/Port San Luis Commercial Fisheries Business Plan in 2008, Economic Impact Analysis reports in 2011, 2012 and 2013 as well as procuring Exempted Fishing Permits in 2008 and 2012 and several collaborative marine biology research projects. The community is aware and very capable of planning and implementing solutions when the right opportunities and partners are available as is evidenced in the design and construction of the ice plant, establishment of the dry storage facility and the on-going development of the Community Quota Fund. As such, the recommendations are limited to a handful of the most important issues and not a laundry list of alternative projects. Those items include a boatyard and haulout facility, fuel, promotion and marketing, Community Quota Fund, berths and slips, and processing among a couple others.

CSP PROJECT MANAGEMENT TEAM

The successful grant request was overseen by the City of Morro Bay, led by Rick Algert, former Harbor Director and current Special Programs Coordinator – Fisheries. After being awarded the grant in April 2012, the Cities released a request for proposal (RFP) in June. Lisa Wise Consulting, Inc. (LWC), a San Luis Obispo-based economics and land use planning firm, responded to the RFP with AECOM and CalPoly Department of Science and Mathematics as part of a consultant team and were awarded the contract. The consultant team adopted a triple bottom-line approach with LWC addressing project management, community engagement, and economic analysis, Dr. Mike Downs (Ph.D Anthropology) and ethnographer Stephen Weidlich of AECOM providing input and direction on the social and socio-cultural components of the project, and Dr. Dean Wendt, Associate Dean Cal Poly College of Science and Math and Director of the Center for Marine Coastal Sciences, providing guidance and input on environmental data gathering, assessment and reporting. The current Harbor Director, Eric Endersby is also part of the project management team for the City.

APPROACHES & METHODS

Through the CSP, the Morro Bay aims to establish baselines and strategies for planning and development in the fishing industry by matching the community's vision and a "place based" perception of sustainability with existing resources and opportunities. Also through the CSP process, leaders in the fishing industry hope to better anticipate future needs and opportunities. Opportunities range from expansion and improvement of physical infrastructure to the development of marketing programs and strategies for more effective participation in the regulatory process. Goals established early in the process include raising awareness of the value of the fishing industry and strengthening ties with the community.

Data gathering, analysis, reporting, and subsequent recommendations encompass all of the diversity of fisheries in which the community engages as well as related industries and physical infrastructure. Guiding principles are based on the fishing community's reliance on a successful groundfish fishery as well as robust salmon, Dungeness crab, squid, white seabass, hagfish and drift gillnet fisheries. The community also depends on physical infrastructure such as offloading, berthing, and storage and critical services like ice, fuel, hook baiting and chandlery as well as recognition by consumers, and a voice in policy that will ultimately affect their future.

The project employed a constituent driven process that included a broad range of measures to ensure inclusion of industry stakeholders, including public meetings, field visits, and over 30 group and one-on-one interviews with active and retired fishermen, business and civic leaders, City staff, conservation organizations, fishery-related concessionaires, and processors. Findings were supported with data from the California Department of Fish and Wildlife, the National Marine Fisheries Service, Pacific Fisheries Information Network (PacFIN), National Ocean Economics Program, the U.S. Census and the Bureau of Labor Statistics, among others. A more extensive list of data sources is available in the bibliography.

HISTORY

Morro Bay was first inhabited by Native American people and has been the site of a fishing community dating back thousands of years. The town of Morro Bay was founded in 1870 by Franklin Riley who is credited with building the first wharf to support local marine commerce during the late 19th century, in the area which later became the Embarcadero. The City of Morro Bay was incorporated in 1964 and now manages its regional harbor, beaches and much of the working waterfront landside facilities through the City's Harbor Department.

Since the 1920s, Morro Bay has also been known as a beach destination which attracts visitors from California and around the world. Morro Bay's defining features are the 570 foot Morro Rock, open beaches, a healthy bay and estuary and a vibrant working waterfront supporting commercial and recreational fishery, marine tourism, scientific research and oyster farms. In 1995, Morro Bay Estuary was named by the Environmental Protection Agency as one of 28 sites of national significance. The Morro Bay National Estuary Program office and visitor center is located on the Embarcadero at Marina Square.

Photo: Morro Rock, 1940, Scofield

A "peaker facility", also known as a "peak power plant" or "peaker", is a power plant that is only run during periods of high, or "peak" demand from the grid. Peaker plants are generally natural gas powered turbines as most other commonly used forms of power (nuclear, geothermal, coal) can cause strain on equipment when intermittently turned on and off.

During WWII, there was a U.S. Navy facility in Morro Bay where sailors trained to operate amphibious landing craft. The breakwater was constructed as well as significant dredging in 1944-1945 to facilitate those operations. The Navy's creation of the modern embarcadero and an all weather harbor during World War II led to substantial increase in marine dependent commercial activities after the old Navy base was turned over to local jurisdiction in 1947.

From the early 1940s, the first oysters were harvested in Morro Bay (Scofield 1954). Aquaculture remains strong and is a testament to the health of the Bay. Morro Bay is one of the top producers in California behind Humboldt Bay and Tomales Bay. Over 1 million oysters were produced in Morro Bay in 2012 by two aquaculture businesses and plans for expansion are in place.

In 1955, a steam generator power plant was dedicated in Morro Bay. In recent years, the plant changed hands from Pacific Gas & Electric, to Duke Power to Dynegy, who declared bankruptcy in 2012. The plant is currently operated as a "peaker" facility and slated for decommissioning early in 2014.

MORRO BAY FISHING COMMUNITY

As early as 1900, abalone were being harvested in the Morro Bay area and processed for Asian markets. As the population in Morro Bay grew, the emergence of a commercial fishing industry, led by the abalone divers and processing, connected Morro Bay's easy access to abundant fishing grounds with seafood consumers around the world.

Between 1999 and present, fuel prices have quadrupled, while average price per pound has remained stable or declined.

By the 1970s there were 5 processors and an active trawl fishery in Morro Bay (SLO County Waterfront 1970). The trawl fleet, unlike seasonal fisheries generated landings throughout the year and provided a steady source of employment and drove the expansion and maintenance of commercial fishing related infrastructure. Trawlers typically land 20,000-30,000 pounds each trip, many species fetching extremely low prices. Lead by the trawl fleet, commercial fishing activity boomed through the 1980s. By the early 1990s, landings and earnings entered a declining trend and Morro Bay had lost all of its large scale processors. The decline was brought on, in varying proportions, by heightened regulations aimed at protecting fish stocks, competition from inexpensive imports, increasing costs, and disadvantages of trawl's high-volume, low-value business model. The industry hit a twenty year low in 2007 of $1.9 million and has since grown over 300%, clearing $6.3 million in 2012. Commercial fishing in Morro Bay has achieved this resurgence through innovation on the water and in markets, formation of strategic alliances and hard work.

Morro Bay has also been a destination for recreational anglers seeking access to the open ocean. Between 1967 and 1977 there were between 18 and 28 Commercial Passenger Fishing Vessels working out of Morro Bay serving up to 50,000 paying customers annually (SLO County Waterfront 1970). Shifts in recreational preferences, demographics, rising costs, and regulatory closures in key fishing areas have hit this industry hard. There are currently three CPFV vessels working out of Morro Bay.


Photo: Fishing fleet in the Morro Bay Harbor

Today, Morro Bay is part of San Luis Obispo County's growing $1.2 billion tourist industry, with uncrowded beaches, vibrant Embarcadero, natural setting and active working waterfront still drawing visitors from all over California and the world.

Photo: Fishermen preparing for offloading at the dock.

PROJECT SETTING

The City of Morro Bay is situated on California's scenic Central Coast, 182 miles south of San Francisco and 171 miles north of Los Angeles. With nearly 11 miles of ocean and bay front shoreline falling within City limits, the ocean economy has played a major role in the development of the City, in sectors such as fishing, recreation and tourism.[1] The City's name comes from the large volcanic formation looming over the bay, Morro Rock. Morro rock is one of nine such volcanic plugs in San Luis Obispo County, formed when magma hardened in ancient volcanoes. Morro Rock contributed to the material used for the breakwater of Morro Bay and Port San Luis Harbors until about 1963. By 1966, jurisdiction of Morro Rock was transferred to the State of California and two years later declared a California Registered Historical Landmark. Currently, Morro Rock is a protected bird sanctuary, and cannot be climbed or hiked.[2]

Since the early 1900s tourists from all over California have flocked to Morro Bay for summer holidays, and extended weekends. The protected harbor and easy access to Estero Bay and the Pacific Ocean makes the city an ideal destination for a variety of water sports such as kayaking, surfing, sailing, and more recently, stand-up paddle boarding. The Morro Bay State Marine Reserve and Morro Bay State Marine Recreational Management Area provide an essential estuary and wetlands-protected habitat for a multitude of species such as California Sea Lions and an incredibly diverse collection of birds. The area also supports a vibrant sport fishing community with over 19,000 people participating in chartered fishing trips in 2011.[3]

Morro Bay has long served as an active commercial fishing port and its central location enables fishermen relatively easy access to waters, from Santa Barbara and the Channel Islands, to fishing grounds near Monterey Bay and San Francisco. During the mid-1900s the area supported a major sardine fishery, with landings from the 1930s to 1950s averaging over 1.6 million pounds annually, and peaking in 1950 with 11 million pounds unloaded and trucked to the canneries of San Francisco, Monterey, and San Pedro.[4]

1 City of Morro Bay Coastal Land Use Plan, Chapter III, Accessed 6/5/13
2 http://www.slostateparks.com/morro_rock/
3 CDFW 2011, CPFV annual report
4 Scofield 1954, pg. 104

Since then, landings of Pacific sardines has declined in Morro Bay but the fleet stayed active by developing a powerful groundfish fishery as well as targeting swordfish, spot prawn, salmon, Dungeness crab and the nearshore fishery.

The commercial fishery currently serves as a major source of employment and generator of revenue for the City; over $7 million worth of fish, squid and crab was landed at the dock in 2011[5], the result of over 4,000 fishing trips.[6]

Each trip represents wages for the crew as well as purchases of fuel, ice and other supplies, while every pound landed represents revenue for offloaders, buyers, processors, distributors, wholesalers and restaurants.

The working waterfront in Morro Bay serves as a major draw for tourists and supports a variety of attractions including bars, restaurants, coffee houses, wine shop, bakery, museum, gift shops, bed and breakfasts, hotels and sport fishing operations. A 2008 opinion survey of civic leaders and tourism professionals in Crescent City, Monterey and Morro Bay rated tourism from an active waterfront at 8.82 out of 10 in terms of importance to the community's economy, with 50% of respondents rating it a 10.[7] The same survey rated local seafood for purchase at 8.85 out of 10 with 57% of respondents rating it a 10. Such high marks indicate the importance of a working waterfront within a community driven by coastal dependent operations such as commercial and recreational fishing, marine research, marine-based eco tourism, and aquaculture. A vibrant fishing industry enables several local retail markets and restaurants to serve the local catch as well as fresh oysters from the two commercial oyster farms. The U.S. consumer market's push for more sustainable and healthy food and a growing interest in where food comes from bodes well for Morro Bay's seafood the future.

COMMUNITY PROFILE

According to the 2010 U.S. Census, the population of the City of Morro Bay was approximately 10,234, or 3.8% of the total San Luis Obispo County population. Morro Bay's overall population has decreased slightly from 10,350, reported in the 2000 Census.

The age distribution of residents shows a higher percentage of persons 65 years of age and older residing in the City, at 23.7% compared to SLO County at 15.6%. Persons 18 years and under represent 15% of the total population, while five (5) and under represent just 4.4% of the population (2010 U.S. Census).

The City has literacy rates above those of County and Statewide levels. High School graduates or higher who are 25 or older represent 92.5% of the population, approximately 4% above the County and 12% above the state of California. Those older than 25 with bachelor's degrees or higher make up 32.6% of the population, 2.8% above the County average and 2.6% above the State, as of 2010.

5 CDFW, 2011 Landings data

6 PacFIN, 2011

7 California Tourism and Fishing Heritage Assessment, Part I: Survey of Business, Community Leaders and Tourism Professionals, Responsive Management, 2008).

Employment rates in Morro Bay are 94% compared to the County's 91%. Those numbers are derived from a labor force of 5,304 in which 5,001 were classified as employed (2010 U.S. Census).

An informal job may be based on a handshake and involve cash payments. Cash payments might be easier for those who do not have a bank account or are moving frequently seeking employment and affordable accommodations.

As in many small fishing communities, census data shows that there has been a shift from commercial fishing industry related jobs toward construction, service oriented, and other business types. Census data for the fishing industry in a small community is difficult to assess as jobs are lumped in a category with agriculture, forestry, fishing, hunting, and mining. Additionally, some fishing jobs are seasonal or informal and may go unreported.

Fishing industry participants may also travel extensively following fish stocks or opportunities in markets making reporting more difficult. Through direct interviews with industry participants and businesses (and across fisheries), analysis of safety grants awarded by the CCJCFLC and CDFW data on the number of active vessels and trips, the Consultant Team estimates that the Morro Bay commercial fishing industry supports between 170 and 194 jobs in the County.

An example of a seasonal job in the fishing industry may be working as a deckhand in the 5 or 6 month Dungeness crab season or the 4 or 5 month albacore season. Unlike traditional jobs, a deckhand may earn a year's wages during a good season or struggle to make ends meet in a bad season.

The largest industry in the City is the educational services, health care, and the social assistance industry making up approximately 21% of the employed population (1,046 persons), followed closely by the arts, entertainment, recreation, accommodation, and food services employing 18.2% of the workforce population, or 911 persons (2010 Census).

Photo: Workers at the Morro Bay Fish Company ice fish and load them into totes before shipping to the processing plant.

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2. CRITICAL FACILITIES AND SERVICES

CRITICAL FACILITIES AND INFRASTRUCTURE

A sustainable fishing industry relies on physical infrastructure and services that, depending on the degree they are lacking, would make operations much less efficient or impossible. A sustainable fishing community also relies on services such as fish buyers, processing, hook baiting, and diesel engine, electrical and refrigeration mechanics. Physical infrastructure and services are supported by fishing industry activity and earnings as well as a commitment by the City. In Morro Bay, much of the fishing infrastructure such as docks, piers, offloading hoists, a fuel facility, vehicle access, parking, ice, chandlery, and dry and refrigerated storage was developed, maintained and expanded during the 1980s and 1990s when Morro Bay was a major groundfish port with over a dozen active trawlers. Many of these facilities and associated services are still active with limited expansion since the 1990s. Some facilities maintenance was deferred during the downturn in the industry in the 1990s and early 2000s but the City is actively addressing the most critical infrastructure projects as outlined in the Schedule of 5 Year Capital Requirements report and evidenced by a major maintenance and repair project on the north T Pier scheduled for spring of 2014.

Repairs and maintenance of the North T Pier are being funded by the City's capital project funds.

The City of Morro Bay has, through time, shown a very powerful awareness and partnership with the fishing industry and it is clear, particularly at the City management and Harbor Department levels, that any investments made to support the fishing industry are returned through synergies with tourism, local employment and wages, perpetuation of cultural heritage and identity and access to a sustainably harvested food source.

Critical fishing infrastructure includes offloading facilities (hoists, live fish tanks, and fish pumps), fuel dock, berths and slips, launch ramp, dry storage and gear repair space, refrigerated storage, ice, vehicle access and parking, and boatyard and haulout facility. Critical services for the fishing industry include hook baiting, chandlery, and fish processing. They are addressed below:

OFFLOADING

There are currently four commercial fish offloading facilities on the Embarcadero. Each has a mechanical hoist, scales and access to forklifts, totes and other related equipment. Two of the four have live fish holding tanks with circulation pumps. There is also a de-icer and a wetfish pump at the Municipal Dock. Each of these facilities operates as a buyer, offloads for their own business and provides offloading services for non lease-

All of the offloading facilities in Morro Bay have certified scales and all but Ocean Star has a NMFS-approved Catch Monitoring Plan (CMP) required by first shoreside receivers in the ITQ groundfish fishery.

Contents of the CMP include: A) Identifying Information, B) Sorting Requirements, C) Weighing Requirements, D) Catch Monitoring Requirements and E) Diagram of offloading facility.

holder buyers. While buying arrangements in the fishing industry are complicated and based on relationships, access, pricing, and other market forces, there is a diversity of options for fishermen to offload and sell their catch in Morro Bay.

- **715 Embarcadero** is currently leased by Ocean Star Trading, Inc., a Long Beach based company. Ocean Star is an offloader, buyer and distributor focused on Pacific hagfish and the Korean market. The wooden pier at 715 Embarcadero can accept boats up to 50 feet, one at a time, and the davit hoist has an approximate 1,200 pound capacity. The facility also has ten 200 gallon live fish tanks with circulating/aeration pumps as hagfish are typically held for several days before being purchased and shipped live to markets in Korea.

- **1099 Embarcadero**, DeGarimore's Central Coast Marine Fuel and Ice has been serving the commercial fishing industry in Morro Bay since the 1970s. The facility has a 2,000 pound stainless steel offloading hoist built in 2011, limited freezer storage, and can accommodate larger boats of 100 feet or greater. DeGarimore is an offloader, buyer, does some processing and has refrigeration sufficient to support a retail store and restaurant. DeGarimore has recently been working with I Love Blue Sea, an on-line sales platform, and thus ships to customers across the U.S.

- **1245 Embarcadero**, Tognazzini's Dockside Too has a 1,000 pound custom stainless steel hoist installed in 2010-2011, and buys seafood directly from dozens of Morro Bay fishermen for sale at the retail market, restaurants and for the local Community Supported Fishery (SLO Fresh Catch). The Tognazzini facility is an important option for smaller local fishing operations seeking to offload and sell their catch, as it is a connection point for locals and tourists to buy fresh and prepared local seafood.

Santa Monica Seafood is one of the largest seafood distributors in the region.

- **1235 Embarcadero** was recently taken over by Santa Monica Seafood (SMS) and is the largest buyer on the waterfront. The facility has 200 linear feet of waterfront space, a 17,000 pound crane, wetfish pump, de-icer, forklifts, pallet jacks and a small office. SMS has renovated two 20 foot freezer containers on the site, uses one for bait storage, and has made the other available for a handful of fishermen to store bait and baited hooks. The 1235 Embarcadero lease includes the management of the City-owned ice facility. SMS is an offloader, buyer, distributer and processor. The local SMS processing plant is approximately 15 miles east in Atascadero in the recently acquired Central Coast Seafood facility. SMS has facilities in Southern California as well.

LIVE FISH TANKS AT OFFLOADING SITES

Services associated with offloading, de icing, filling totes, operating forklifts, and loading trucks are included here and not called out separately in the Critical Services section.

Ocean Star at 715 Embarcadero and Santa Monica Seafoods at 1235 Embarcadero have live fish tanks with water circulation-aeration pumps. Together, the facilities have the capacity to hold approximately 150-200 fish at a time (between 500 pounds and 2,000 pounds). The live fish fishery in Morro Bay exceeded $300,000 in 2011 and Pacific hagfish earnings exceeded $280,000. Live fish storage increases and strengthens the diversity of markets the Morro Bay fleet can substantively target and contributes to the sustainability of the fishing community.

FUEL

Access to fuel and reasonably priced fuel are critical sustainability performance indicators. Currently, DeGarimore's Fuel and Ice is the sole marine fuel provider in Morro Bay. DeGarimore's is a family-owned and operated marine fuel facility that has been on the Embarcadero since the 1970s. The next closest marine fuel facility is in Port San Luis over 20 miles to the South. At one time, there were several fuel options in Morro Bay for fishermen, recreational boaters, Coast Guard and the Harbor Patrol. Attrition in the fishing fleet, particularly within the trawl fleet, resulted in a decline in dockside fuel demand, creating pressure on fuel suppliers. Giovanni DeGarimore reported that in 1998 fuel sales were approximately 435,000 gallons; by 2005, that number had fallen to approximately 200,000 gallons and is currently below 100,000. He also stressed that during the mid-2000s restaurant and retail establishment earnings enabled the fuel dock to stay in business. By 2007, fuel sales dropped to the point where the fuel facility was forced to seek a City-negotiated subsidy (reduced rent and per gallon fee) to keep the doors open. DeGarimore's operates with one attendant who also works in offloading tasks and in the restaurant.

With only one marine fuel facility, fishermen in Morro Bay have little choice on where to fuel their vessels.

Trawlers are the largest users of fuel in the fleet. A typical trawler uses approximately 250 gallons per day in an average 2-5 day trip.There is currently one trawler operating out of Morro Bay, the majority now 40 feet or under.

The fuel facility in Morro Bay is open from 8 a.m. to 5 p.m., 362 days per year and is available 24 hours a day, 365 days a year for emergency fueling.

BERTHS AND SLIPS

Fishermen rely on safe convenient slips for their vessels. Without such infrastructure, the sustainability of the industry would be compromised and there would be less opportunity for growth. The Morro Bay Municipal Code, Section 15.04.150, designates 50 city slips for commercial fishing vessels. There is a waiting list to obtain a permanent commercial slip and vessels must pre-qualify and pay a deposit to get on the commercial slip waiting list. The City offers a program for fishing vessels that spend time operating out of Morro Bay (away from their slip) by applying a discount for the months they are absent and allowing them to return to the slip once they are back in port. The City is physically and financially constrained by the number and types of slips they can offer the fishing fleet, but generally the current level or greater is seen as favorable.

In all considerations of expansion and improvement of fishing infrastructure and services, the fishing community and the City should maintain awareness and plan for potential conflicts with critical tourism needs: parking, traffic and circulation, pedestrian walkways as well as on the water between small and large vessels.

LAUNCH RAMP

One of the fastest growing sectors of the commercial fishing fleet are smaller, trailerable vessels. Much of the nearshore and live fish fleet in Morro Bay are smaller boats. Such operations rely heavily on a launch ramp. There is a launch ramp located at the southern end of the Embarcadero. While there is no fee for boat launching, there is a fee for parking a vessel or trailer. This is seen as a fair and equitable opportunity for recreational small owner operated commercial fishermen.

ICE

Flaked ice is a critical requirement for the commercial and recreational fishing industry. Every major fishery in Morro Bay relies on ice, on the vessel or in the transport process. The City of Morro Bay has one of the top ice facilities on the coast. The plant is located in a convenient dockside position at the 1235 City-owned Municipal Dock and has conveyor/chute system that can deliver ice directly into the hold of a vessel. The facility can produce 18 tons per day and store up to 35 tons. Ice produced at this facility is ideal for storing and transporting fish due to its light, fluffy nature (less sharp, hard edges) and high air content. According to one fisherman, "Ice in Morro Bay is on par with world-class facilities like those in Sitka, Alaska." Another notes, "Morro Bay has the best ice facility between Bodega Bay and Santa Barbara."

The management of the ice facility is part of the lease agreement at 1235 Embarcadero.

The facility is particularly conducive to fishermen as the delivery system eliminates the need to shovel ice into the holds and makes taking on ice much faster. This translates to time and labor efficiencies. One fisherman comments on the difference between the Morro Bay ice facility and San Francisco ice service, noting the convenience and ease of the former.

The Morro Bay ice facility is an excellent example of the City and the fishing industry working to pursue grant funding and implement the development of a critical service aimed at the long-term viability of the industry. Funding was generously provided by the California Coastal Conservancy, the Central California Joint Cable Fishery Liaison Committee (CCJCFLC), and a CDBG Planning and Technical Assistance Grant. The City invested generously in staff time.

"In San Francisco I have to shovel ice into my hold, which is more costly and time consuming" (personal interview, Morro Bay, 2010).

The facility fosters equity in the accessibility of key inputs in that it is available to all sectors of the fishery, large and small, local and visiting boats. The facility is a constant reminder of the benefits of collaboration and plays a role in generating a positive perspective of the future of the fishing industry.

DRY STORAGE AND GEAR REPAIR

Strategic alliances: The storage yard is another example of the MBCFO's leadership and City's commitment to the fishing industry and the jobs, earnings it creates and its contributions to tourism and cultural heritage.

Convenient, safe storage and dedicated space to repair gear is a top priority for Morro Bay fishermen and essential to an efficient and sustainable fishing industry. The majority of Morro Bay fishermen engage in multiple fisheries or seasonal fisheries and rely on safe storage for gear that is not in use. They also rely on convenient access when it is time to switch fisheries and gear type. Morro Bay has a dedicated storage facility for the commercial fishing industry at 1620 Embarcadero. The MBCFO leases the facility from the City and employs one part time individual to manage the site. The storage facility is paved and surrounded by a cyclone fence with a secure gate, has two forklifts, a mobile hoist and approximately 15 enclosed stalls with secure roll-down entrances. There is also designated outdoor storage with approximately 20 striped spaces. Storage is a performance indicator. The number and type of storage options and supporting resources like security, covered/enclosed spaces, inexpensive but well-marked outdoor options, forklifts, mobile hoists and dedicated management are metrics. Stability or increases in these metrics is seen as favorable and contributes to the sustainability of the fishing industry.

REFRIGERATED STORAGE AND DEEP FREEZE

The present cold storage facilities in Morro Bay are considered insufficient. The two 20 foot refrigerated containers at the Municipal dock were recently renovated by SMS. One is used to store bait that SMS sells (sardines, squid, mackerel and anchovies) and the other has been made available to a handful of fishermen to store bait and baited hooks. Cold storage and freezers are seen as important options for fishermen to store bait and baited gear, hold fish until market conditions improve or to better coordinate pickups. Several fishermen have expressed interest in a cold store and freezer facility in Morro Bay. Fishermen believe it will give them more control of the form, when and how much of their seafood is available on the market as well as to store baited gear and enable faster turn arounds.

VEHICLE ACCESS

In order to maintain essential connections to the market, seafood is loaded on trucks in Morro Bay and shipped to processing plants, secondary shipping or staging

points and buyers throughout the region. There is a constant movement of seafood up and down the California coast. Truck access to the four offloading facilities in Morro Bay is constrained but sufficient. A large refrigerated semi truck may have to undertake some additional maneuvers but can access the 1235 and 1245 Embarcadero sites. DeGarimore's facility is accessible through an unobstructed parking lot and can accommodate large semi-articulated vehicles. The 715 Embarcadero facility has a driveway entrance off the Embarcadero that can accommodate pickup trucks and small panel trucks. Larger, semi-articulated trucks have to park in the street and are loaded with a forklift. While this is seen as inconvenient, lease holders at 715 Embarcadero have and continue to work within these constraints. Vehicle access is a critical sustainability performance indicator in the Morro Bay fishing industry, any lessening of large trucks ability to access the four offloading facilities should be avoided.

Currently, aside from the facility at Port San Luis which is severely limited by tide and swell, commercial and recreational fishermen, sailors and other Morro Bay vessel owners have to travel over 120 miles to Ventura or further to Moss Landing to have their vessels dry docked and serviced (bottom scraping, painting, anode replacement, repairs to rudder, propeller shaft, etc.) Larger vessels (50 feet plus) seeking more extensive work have to go to Richmond or Alameda.

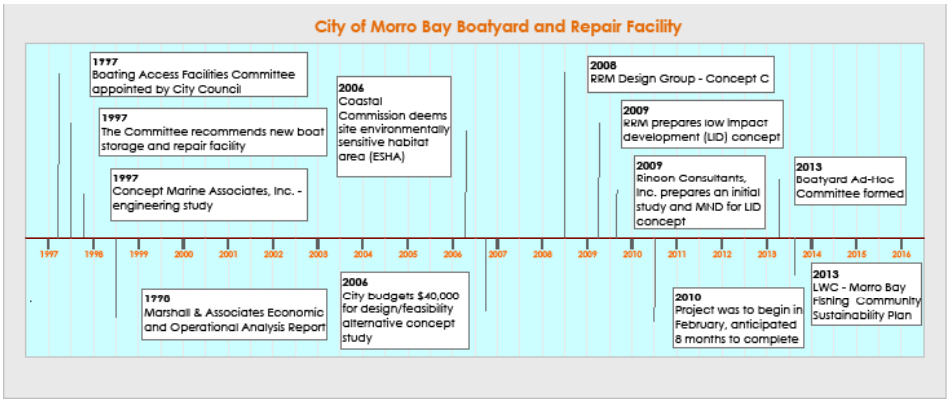
BOATYARD AND HAULOUT FACILITY

The fishing industry, civic leaders and stakeholders on Morro Bay's waterfront have identified the need for a boatyard, and in 1997, the City initiated formal engineering, financial and design alternative studies for a facility capable of hauling out, repairing, maintaining and storing vessels. The City and interested stakeholders continue to assess options and a Boatyard/Haulout Ad-Hoc Committee was formed in 2013. Below is a timeline of events associated with the City's feasibility analysis of a boatyard in Morro Bay.

Access to a boatyard and Haulout facility is seen as a critical need for economic and environmental sustainability of the fishing industry. We want a boat yard, whether it "pencils out" is what the community is trying to figure out (personal communication, August 2013).

The existing boatyard in Morro Bay at 261 Main Street (Morro Bay Boatyard) is limited by its capacity to accommodate approximately one 30-foot boat at a time. The boatyard's water lease expires in 2016. The renegotiation of the lease would optimally include

Figure 2.1 City of Morro Bay Botyard and Repair Facility



advancing environmental best management practices and compliance. However, constraints in the physical size of the current boatyard may render alterations to meet environmental compliance upgrades infeasible.

The Morro Bay National Estuary Program Comprehensive Conservation management Plan which was updated in 2012 recommends a boatyard and haulout facility in Morro Bay to improve environmental performance and better protect the estuary from oil spills and threats from derelict vessels and vessels in distress.

Key objectives of a boatyard are; protecting the City from environmental and legal impacts associated with derelict and/or incapacitated vessels, meeting current fishing and boating industry needs, and positioning the community for new opportunities and future expansion. The majority of boatyard activity is expected to be generated by local vessels but visiting vessels are also expected to take advantage of a haul out and repair facility. A more extensive discussion on the boatyard is contained in the Appendix.

CRITICAL SERVICES

HOOK BAITING

Since 2008, the hook and line fishery in Morro Bay has been active and growing and relies on affordable and fast hook baiting service. Hook and line fishermen often conduct fast turn-around trips because of good weather, observer availability and market demand, and as such need baited equipment quickly. This work might otherwise be undertaken by the skipper and/or the deckhands. Businesses dedicated to this need contribute to better efficiency (specialization of tasks) and safety, through a better rested crew and skipper. Specialization of tasks, such as hook baiting services conducted by dedicated businesses, not by crew, skipper or other less qualified, contributes to sustainability and enables the industry to operate more efficiently and provides more opportunities for growth.

A hook baiting business emerged in Morro Bay in 2009 and has changed hands once. The current business, Morro Bay Hookers, provides brined bait and baiting service and generates two full time and five part-time jobs. The Morro Bay Hookers operate near the City-owned, MBCFO leased storage facility and have plans to include a delivery truck for pick up of spent gear and delivery of baited hooks to the vessel (personal communication, July, 2013).

BAIT

Several Morro Bay commercial fisheries and the recreational fleet rely on bait. Commercial fisheries that use bait include hook and line groundfish, nearshore trap, Pacific hagfish and Dungeness crab. The CPFV rockfish trip businesses also need bait. Bait, frozen and brined is typically provided by commercial fish buyers but often limited to the fishermen from whom they buy. The Morro Bay Hookers provide bait as do the other buyers on the Embarcadero, at some limited level. SMS has a 20 foot container dedicated to storing bait for general sales and Giovanni has some limited freezer space for bait, mainly for his customer-fishermen (those who offload at his facility and sell to him).

Morro Bay Landing, a CPFV business, has reemerged as a bait provider for the recreational and commercial fleet. The current level of bait availability in Morro Bay is described by fishermen as sufficient but with very limited competition. That some fishermen buy bait from suppliers outside of Morro Bay may indicate there are opportunities for more bait suppliers in the community.

CHANDLERY (SHIP'S SUPPLY)

A local ship's supply store like Jerry's keeps fishing related spending in the community and contributes to local fishing industry-related jobs.

Morro Bay has one chandlery, Jerry's Marine and Tackle, 1158 Scott St. Jerry's serves both the recreational fleet and the commercial fleet. The business has expanded by over 20% in the last three or four years. Fishermen perceive that Jerry works hard to get the supplies they need, but there are some items, such as rigging and sophisticated gear for larger vessels, that fishermen must order on-line or travel to West Marine in the San Francisco Bay area to buy. A local chandlery is a key service sustainability indicator. To what extent these businesses serve and how many exist in the community constitute the metric. While the market dictates the feasibility and size of such a business, fishermen report a bigger or expanding store (like Jerry's), one with more offerings as favorable.

FISH PROCESSING

In the 1970s through the 1990s there were up to six commercial fish processors in Morro Bay. Between 1995 and 2001, the two remaining processors closed and Central Coast Seafoods relocated 15 miles east, in Atascadero. Except for some processing at Tognazzini's Dockside Too and Giovanni's Fish Market in their retail and restaurant facilities and some local and outside sales, there are no processors in Morro Bay. Central Coast Seafoods was recently purchased by Santa Monica Seafoods and will keep the facility in Atascadero. This potentially offers Morro Bay fishermen more opportunities in greater demand and access to more markets but also shifts some earnings and control outside of the community. The question remains as to the costs and benefits and of what additional control a locally owned and run processing facility in Morro Bay would bring. As landings and earnings rise, the opportunity may look more attractive and the addition of another trawler may make the prospect even more attractive.

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3. ECONOMIC SETTING

Economics provides the most easily measured and understood performance indicators in a fishing community. Economics encompasses earnings and investment and is part of a system that affects and is affected by environmental and social forces. Economic performance directly influences the level of participation in the industry, species that are targeted, the types of gear used, and spurs and enhances relationships within and outside of the fishing community. Economics also influences a community's sense of accomplishment, well-being and perspective of the future.

In 2011, the National Marine Fisheries Service (NMFS) reported that "by producing and marketing a variety of fishery products for domestic and foreign markets, the commercial marine fishing industry contributed $42.2 billion (in value added) to the U.S. GNP and supported 1.2 million jobs." (Fisheries of the United States 2011, National Marine Fisheries Service, published August 2012)

From that same report; recreational fishing generated $70 billion in sales impacts and $20 billion in income impacts and supported 455,000 jobs.

On the West Coast of the U.S., commercial fishermen generate over $500 million annually in earnings at the dock. The California commercial fleet brought in more than $200 million in 2011 and earnings in Morro Bay topped $7 million in 2011 and $6 million in 2012. Each dollar earned by fishermen represents wages for skippers, deckhands, dock workers, employees in the processing plants, purchases of ice and fuel and supplies at local businesses, slip fees, insurance and earnings for mechanics and other related businesses. It is estimated that, in California, each dollar earned at the dock generates twice that value through the ripple or multiplier effect (The Economic Structure of California's Commercial Fisheries, C. Hackett, et al, 2009). In the last 3 years, it is estimated that 12 new participants have entered the commercial fishing industry in Morro Bay, attracted by 5 years of steady economic growth and increased earnings.

Despite the significance in economic contributions of the commercial and recreational fishing industries, they are often overlooked and misunderstood. Part of the intent of this work is to bring a greater understanding to civic leaders, elected officials, regulators, industry participants and the public, of fishing's contribution to local communities and the overall economy. The work is also aimed at giving industry participants and industry managers tools with which to chart progress, anticipate changes, make adjustments to better assure a robust and on-going fishing industry.

Key economic indicators in the commercial fishing industry include earnings at the dock (ex-vessel value or EVV), landings by weight, price per pound, species diversity, number of trips, vessel identifiers (number of operating commercial vessels), employment, and availability and condition of related infrastructure and connections to markets. New and returning participants are also critical for growth and the commercial fishing industry's future. The working waterfront and fishing community's connection to tourism and alliances with other industries are also important economic indicators and measures of sustainability.

INDICATORS OF SUSTAINABILITY

Table 3.1 Indicators of Sustainability

Indicator	Metric
Production	Landings by weight
Revenue (Gross)	Earnings at the dock, Ex Vessel Value (EVV)
Production Value	Price per Pound
Diversity	Relative Species Weight
Activity	Trips, Vessel ID's
Employment	Number of Jobs and Job Types
Industry Landscape	Presence and condition of critical infrastructure and services
Synergies	Resource sharing within and across industries
Awareness	Level of waterfront tourism, demand for product
Trends	Change in metrics over time

OVERALL LANDINGS

Despite a drop in 2012 of over 1 million pounds in Sablefish, one of Morro Bay's top species, overall landings grew by 150%. Increases in other fisheries like salmon, Dungeness crab and squid made up the difference.

Landings (by weight) are representative of commercial fishing activity and as such, one indicator of sustainability. Greater landings indicate more activity at the dock to support jobs and critical infrastructure, and potentially to generate more earnings for skippers, deckhands, dock workers, processors and throughout the value chain. Consistency of landings throughout the season is also an indicator of sustainability as it lends stability to related businesses and indicates a steadier income for direct participants.

Landings of individual species or in individual fisheries can be highly variable from year to year and are influenced by: migratory patterns, population dynamics, ocean conditions, regulation, markets, weather, and the costs of inputs like marine fuel prices, ice, labor and baiting service. Stability and growth in overall landings are representative of the fishing community's collective ability to mitigate for challenges and capitalize on opportunities. As such, a resilient fishing community is one that is able to adapt to the mercurial nature of the industry and maintain consistency and growth over time.

In the last 23 years fishermen in Morro Bay have landed over 94 million pounds of seafood. In that period, landings have fluctuated between a twenty-year low in 2007 (668,866 lbs) to a high in 1993 (10.5 million lbs).

In Morro Bay and in general, declines in commercial landings can be attributed to increased regulatory pressure, shifts in the market, competition from inexpensive foreign imports, increased costs, and stagnant prices.

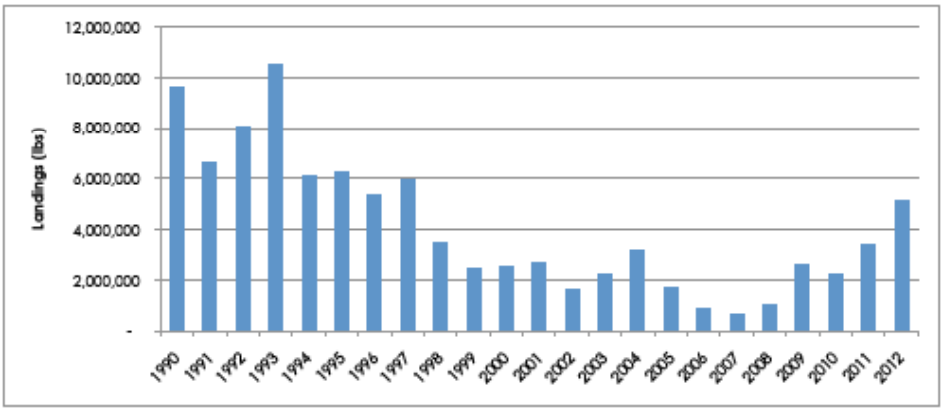
From the 1970s, government programs intended to expand commercial fishing activity in the 200 mile zone off of the coast, resulting in Morro Bay's heavy reliance on the trawl industry. Trawling is a year round fishery that lands high volumes of a wide variety of species and provides robust employment on the vessel, on the dock and in processing plants. Much of the infrastructure in Morro Bay was developed and supported by trawling. As such, Morro Bay was particularly susceptible to increases in regulation starting in the 1990s, shifts in the market and rising costs. With TNC's purchase of trawl permits and vessels in 2006, landings hit a record-low in 2007.

The Morro Bay/Port San Luis Exempted Fishing Permit enabled commercial local fishermen to participate in and test a quota-based management sytem before the regulation was instituted in 2011. It represented a collaboration among the commercial fishing community, regulators and TNC.

Steep drops in landings and earning in Morro Bay through the 1990s were brought on by increased regulation in the trawl fishery, particularly the 1987 Vessel Buyback and the 1994 Limited Entry programs, designed to reduce and limit the number of participating vessels as well as the Rockcod Conservation Area that spans the length of the coast and restricts trawl activity.

In the face of these pressures, the Morro Bay commercial fishing fleet has shown remarkable resilience and adaptability by diversifying their catch, investing in infrastructure (ice facility, hoists, fish pump, forklifts, totes, live fish storage), engaging in the regulatory process, establishing a fish pump and access to the CPS fishery, attracting a dozen new participants, and engaging in a program with TNC that brought $2.5 million in earnings between 2008 and 2010. The result has been landings that exceed 5.1 million pounds in 2012, marking a 13-year high and a continued, strong recovery from the 2007 low.

Figure 3.1 Morro Bay Landings - All Species, 1990 - 2012, Source: CDFW



OVERALL EARNINGS

2011 and 2012 have both been extremely successful years in Morro Bay, which is notable since this suggests how Morro Bay has responded to the various pressures imposed on the commercial fishing industry as a result of increased regulation.

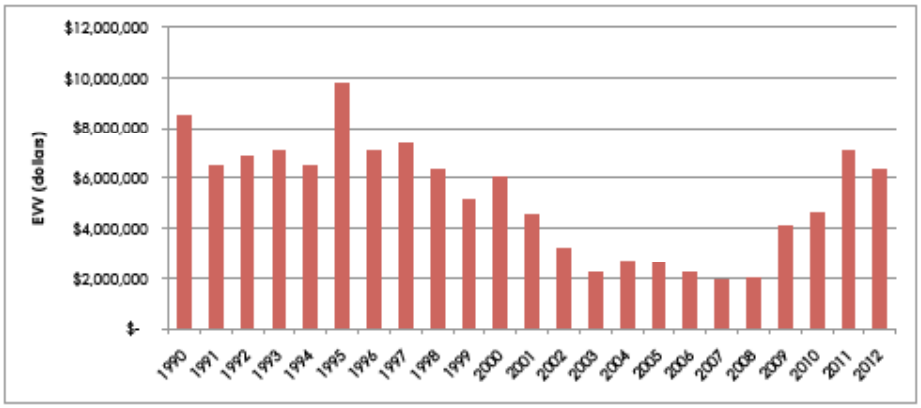
Earnings at the dock, or ex-vessel value (EVV), is one of the strongest indicators of economic activity and sustainability. EVV offers more detailed economic insight as it depicts buyer-fishermen relationships, and the fleet's ability to shift effort to capitalize on higher prices and availability of fish stocks. In 2012, the Morro Bay fleet was able to buffer a drop of $2.24 million in one of its top fisheries, sablefish, primarily through:

- $624,000 in salmon earnings, highest since 2005
- $591,000 in Dungeness crab earnings, highest since 1990, and
- $637,000 in squid earnings, highest since 1993

Over the past 23 years, the Morro Bay commercial fishing fleet has generated over $120 million in earnings at the dock, with revenues exceeding $6 million in 2012.

EVV in Morro Bay has fluctuated from a 23-year high of $9.8 million in 1995 to a low of $1.9 million in 2007. Over the past 23 years, the commercial fishing fleet has generated over $120 million, with revenues exceeding $6 million in 2012. Note, all values are adjusted to 2013 inflation levels.

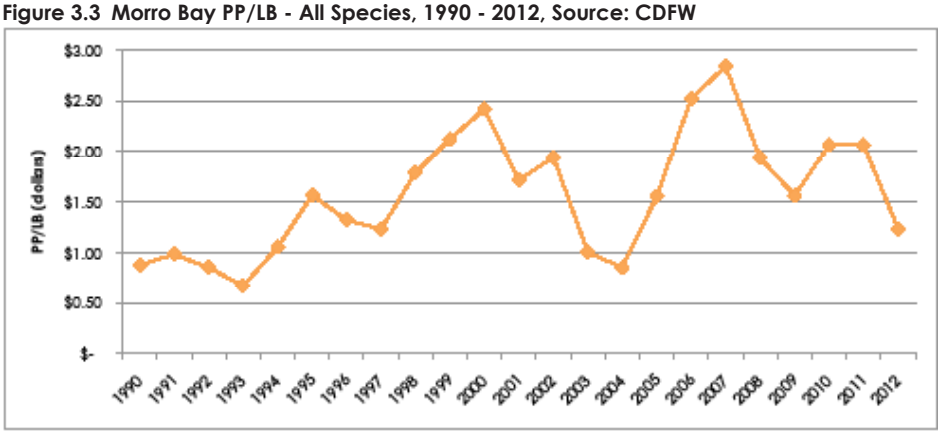
Figure 3.2 Morro Bay EVV - All Species, 1990 - 2011, Source: CDFW



OVERALL PRICE PER POUND

In the last 23 years, price per pound in Morro Bay has fluctuated, while rising from $0.88 to $1.24. Price per pound represents the fleet's ability to take advantage of opportunities in the market, and is a key indicator of sustainability and viability. In assessing price per pound, it is important to understand the effects of species mix. For example, after the establishment of a fish pump at the Municipal Dock in 2009, and ensuing landings of low value, high volume squid, price per pound has experienced downward pressure. Price for market squid is approximately $600 per ton or $0.30 per pound, and landings have grown to over 2 million pounds in 2012. Acknowledging this will push overall price per pound downward, it represents important economic opportunities in Morro Bay's participation in the $75 million California Coastal Pelagic Species fishery and further diversification of landings and earnings. On the other hand, increases in landings of high value species (salmon, Dungeness crab, nearshore spp.), while much lower in volume, will help keep price per pound stable.

Figure 3.3 Morro Bay PP/LB - All Species, 1990 - 2012, Source: CDFW



VESSEL IDs

Vessel IDs are a count of the individual vessels that have engaged in commercial fishing activity in any given year. Vessel IDs are one indicator of the level of commercial activity, and the port's ability to sustain local vessels and attract and accommodate visiting vessels and new participants. Each additional vessel represents new economic activity and an increase in participation. Vessel ID data is collected by the Department of Fish and Wildlife at the County level.

Vessel IDs in SLO County rose from 134 in 2008 to 220 in 2012. According to interviews with fishermen and industry stakeholders, up to 12 of those vessels could be attributed to new entrants in Morro Bay and 3 in Port San Luis. Increases and steady numbers of active participants through Vessel IDs are an indicator of sustainability.

FISH TICKETS

The Department of Fish and Wildlife requires a commercial fisherman to complete and submit a fish ticket with each sale at each landing. If a fisherman sells to 3 buyers, then 3 fish tickets are required. Fish tickets include the skipper's name, start date of the trip, landing date, vessel name, buyer name, vessel registry, permit numbers, identification of geographic areas fished, type of gear used, species, weight and price. This data is collected on the County level.

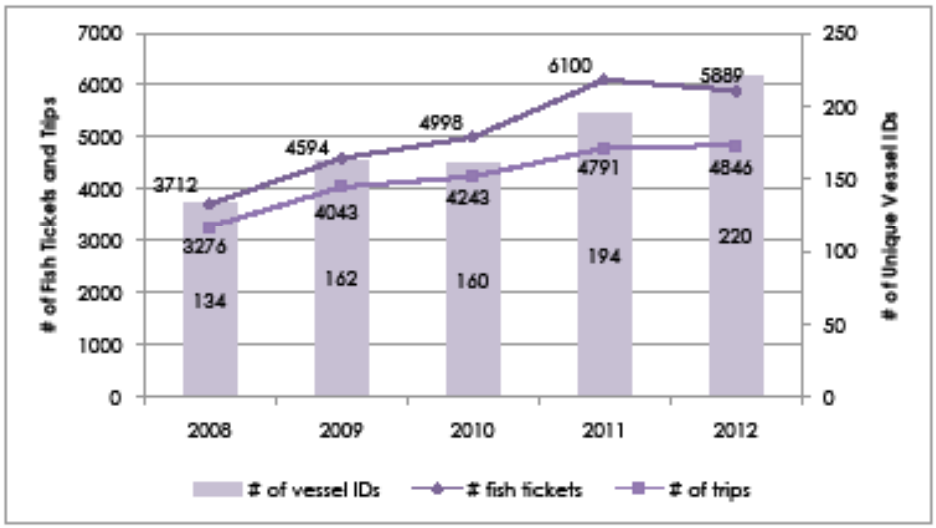
The number of fish tickets generated in SLO County has risen from 3,712 in 2008 to 5,889 in 2012. An increase in fish tickets could indicate that there are more trips, more buyer activity and an increase in competition. Volume in fish tickets are another measure of economic activity and sustainability for a fishing community.

TRIPS

The Department of Fish and Wildlife requires commercial fishermen to report on each fishing trip they undertake (via the fish ticket). The number of trips is indicative of the fleet's size, scope and capability, as well as abundance and proximity of fish stocks, opportunities and ability to connect with markets, weather, and (competing) opportunities in near-by ports. This data is collected on the County level.

The number of trips in SLO County has risen steadily from 3,276 in 2008 to 4,846 in 2012. Each trip represents potential earnings for skipper and crew, purchases of fuel, ice and supplies, offloading fees and more fish in the processing plants. Combined with Vessel IDs and Fish Tickets, the volume of trips in a commercial fishing port is an indicator of economic performance and sustainability.

Figure 3.4 Annual Number of Fish Tickets, Trips and Vessel Identifiers, San Luis Obispo County, 2007-2010. Source: PacFin



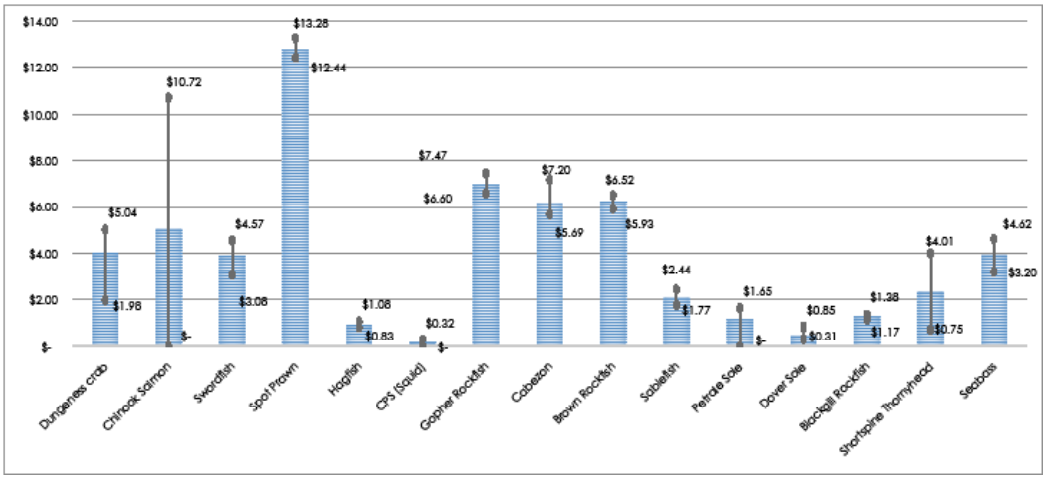
TOP SPECIES

The following is a detailed look at landings and earnings for top species in Morro Bay over the 23 year period from 1990 to 2012. These species have played an important role in the fishing industry, generating jobs and supporting infrastructure and illustrate the high level of diversity in which the Morro Bay fleet is engaged. Top species are depicted in the figures below and are described individually in the following analysis.

PRICE PER POUND BY SPECIES

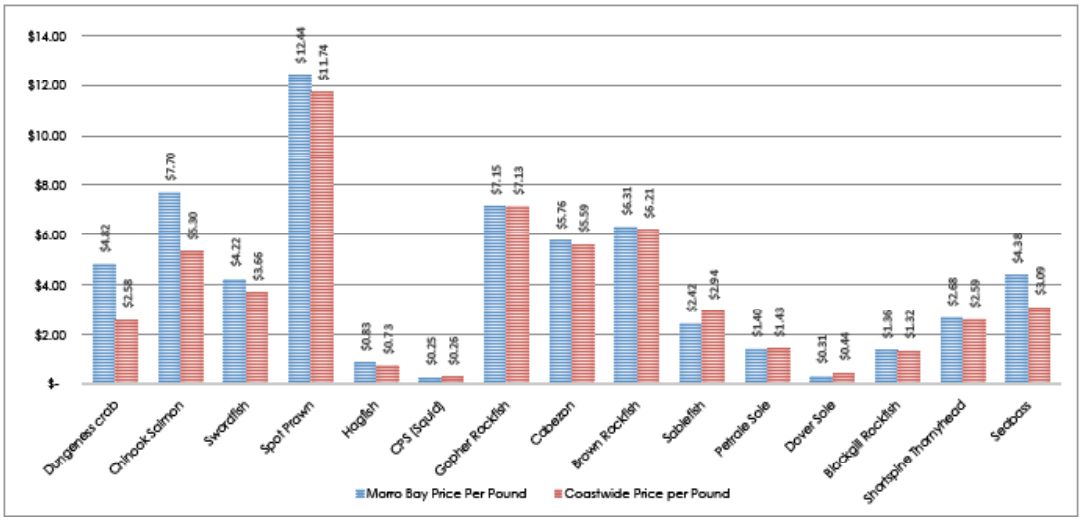
Price per pound varies across top species in the Morro Bay commercial fishing industry. From 2008 through 2012, spot prawn was the most valuable species in Morro Bay. Price per pound for spot prawn was relatively stable, varying by 84 cents over the 5 year period. Other top-valued species include gopher and brown rockfish and cabezon, part of the important live fishery. Chinook salmon, Dungeness crab, swordfish and white seabass are also relatively high value species, though Dungeness crab and salmon have proven more volatile. For example, the five-year average for salmon is $5.04, while the price per pound rose to $10.72 in 2010, and Dungeness crab varied from $1.98 to $5.04 between 2008 and 2012.

Figure 3.5 Morro Bay, Top Species Average Price per Pound (and High-Low range), 2008-2012, Source: CDFW



In 2011, Morro Bay commercial fishermen matched or outperformed the California average for nearly all top species. Price per pound for Dungeness crab and salmon were over $2 per pound higher than the state average. Sablefish and Dover sole were the only two species in which Morro Bay generated lower earnings per pound than the California average. Above average earnings are evidence of the Morro Bay fleet's ability to adapt and take advantage of competitive opportunities. This consistent above average performance is also evident of key relationships in the market and throughout the distribution chain.

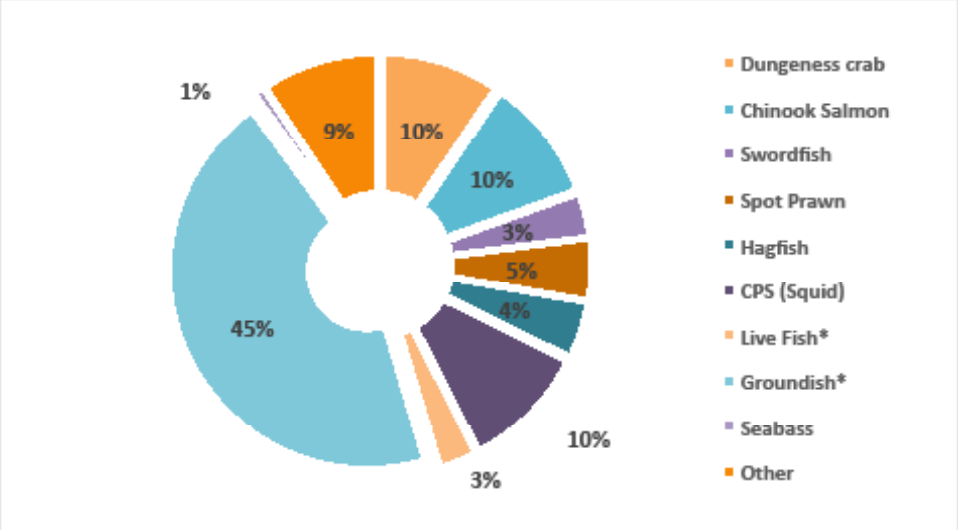
Figure 3.6 Price per Pound Morro Bay versus California Average, 2011, Source: CDFW



TOP SPECIES DISTRIBUTION

Between 2008 and 2012, groundfish led the relative earnings in Morro Bay at 45% of the total, followed by Dungeness crab, Chinook salmon and Market squid at approximately 10% each. Spot prawn represented approximately 5% of total earnings and Pacific hagfish 4%. White seabass, the live fishery and swordfish each generated approximately 3% of total earnings. While it may be difficult to identify the optimal mix of species, as opportunities on the water and in the market come and go, an evenly divided diversity will likely lend to a greater stability and value over the long run.

Figure 3.7 Morro Bay, Top Species Distribution by EVV,2008-2012, Source: CDFW



*Includes major Live Fish and Groundfish species: Live Fish - Gopher & Brown Rockfish and Cabezon. Groundfish -Sablefish, Petrale and Dover Sole, Blackgill Rockfish and Shortspine Thornyhead.

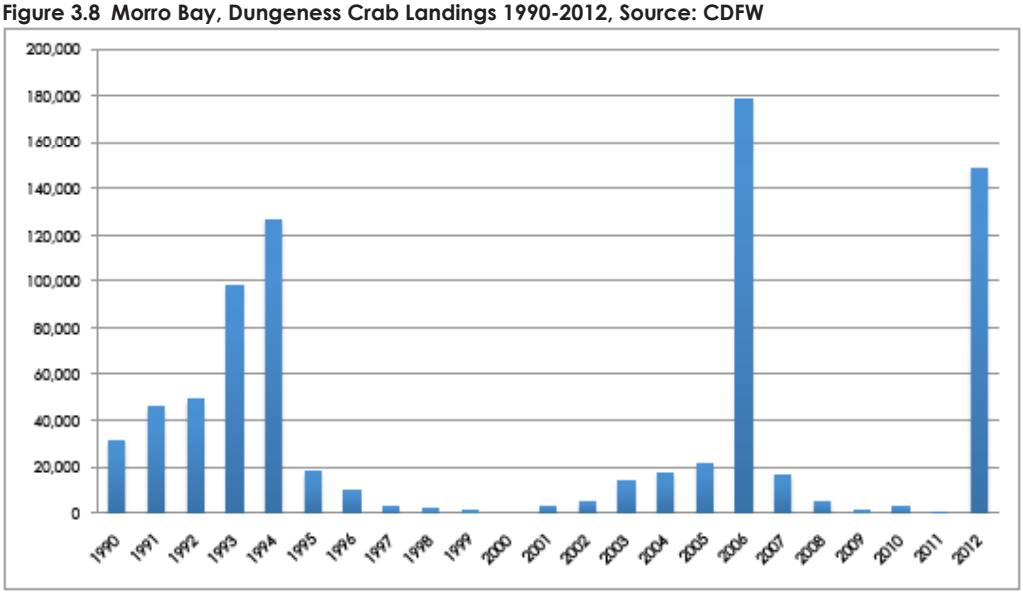
DUNGENESS CRAB

Dungeness crab is a trap fishery. Traps with bait are set on the bottom and "pulled" and emptied after several days, when they are re-baited and set on the bottom once more. There is virtually no bycatch or habitat disturbance in the Dungeness crab fishery.

Dungeness crab is one of the top West Coast fisheries. The most productive Dungeness crab grounds are typically from Bodega Bay to the Oregon border. Several Morro Bay fishermen travel north each year and are prepared to take advantage fishing out of Morro Bay when the opportunity presents itself as it has in 2011 and 2012.

Dungeness crab brought in over $2.6 million in revenue to Morro Bay since 1990. Dungeness crab is a highly cyclical fishery with landings fluctuating over a 5 to 10 year period. Landings and revenue peaked in 2006 with 178,652 lbs and over $430,000, declining to almost zero between 2006 and 2011. In 2012, the Morro Bay Dungeness crab fishery experienced resurgence, with 148,574 pounds in landings.

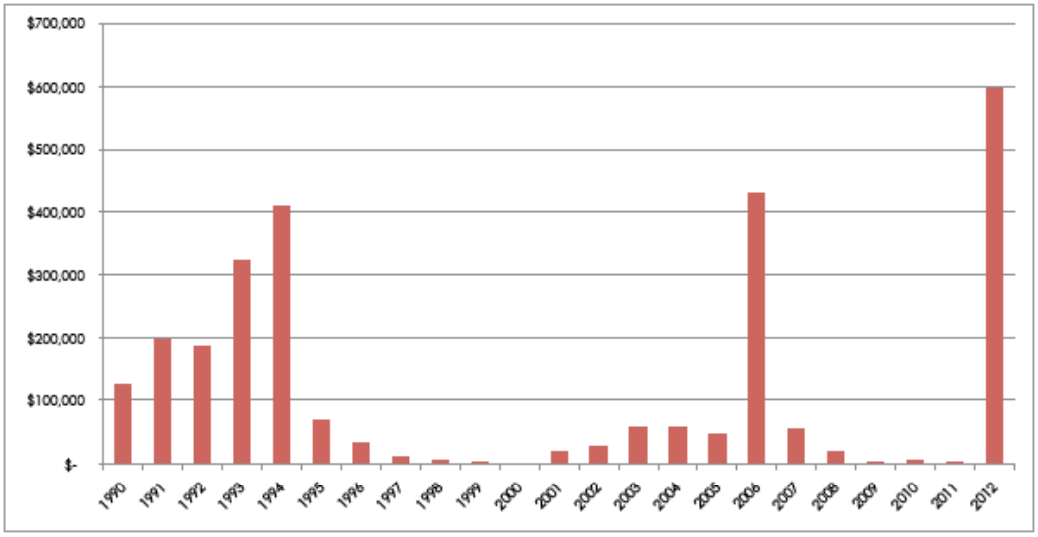
Figure 3.8 Morro Bay, Dungeness Crab Landings 1990-2012, Source: CDFW



Dungeness crab generated approximately $597,000 in earnings at the dock in Morro Bay in 2012, making it the most successful year in the fishery in at least the last 23 years. Personal interviews suggest 2013 will be a bountiful year in the fishery as well, very possibly outpacing 2012.

Taking advantage of Dungeness crab landings when they are available is evidence of the Morro Bay fleet's ability to identify and capitalize on opportunities and is emblematic of a resilient, sustainable system.

Figure 3.9 Morro Bay, Dungeness Crab EVV 1990-2012, Source: CDFW



CHINOOK SALMON

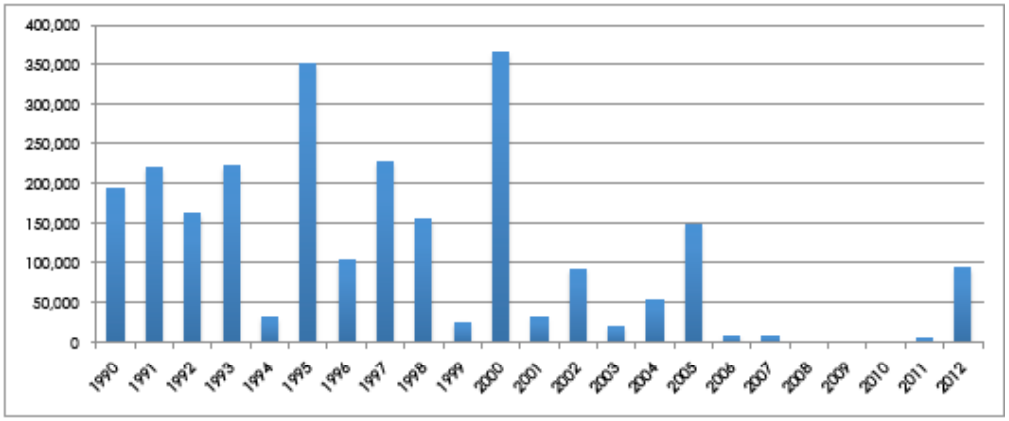
Salmon are taken by trolling, or moving through the water at a slow speed while trailing a "jig" (lure with a hook). Salmon are caught one fish at a time.

One of California's most highly valued natural resources; salmon supports an active commercial fishery along the West Coast. Salmon have brought in over $8.8 million in revenue to Morro Bay since 1990. Morro Bay has a capable and highly experienced salmon fleet, with many who follow stocks north when necessary and are ready to generate landings and earnings in Morro Bay when the fish are present.

All of the salmon landed in Morro Bay in the last 20 years were Chinook, also known as King salmon.

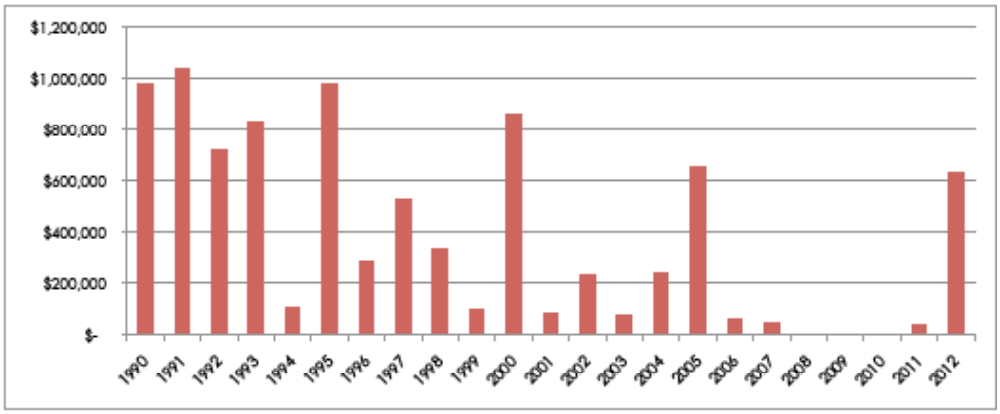
Landings between 2006 and 2011 were the lowest on record and a sudden collapse of the Sacramento River fall stock in 2007 led the Pacific Fishery Management Council (PFMC) to enact a complete closure of the fishery in 2008 and 2009. While the fishery was reopened in 2010, commercial ocean salmon fishing remained severely constrained to allow the stock to rebuild.[8] Signs of successful recovery generated a strong comeback in 2012, and over 92,000 pounds of salmon were landed in Morro Bay by up to 50 vessels (personal communication, Morro Bay 2013).

Figure 3.10 Morro Bay, Salmon Landings 1990-2012, Source: CDFW



The salmon fishery in Morro Bay generated EVV in excess of $631,000 in 2012 and fishermen anticipate another strong season in 2013 with the addition of several new salmon operations. Salmon represented 10% of the total earnings at the dock in Morro Bay in 2012.

Figure 3.11 Morro Bay, Salmon EVV 1990-2012, Source: CDFW



8 Palmer-Zwahlen, Melodie; Kormos, Brett; Simon, Jennifer; Coombes, Julia. "Status of the Fisheries Report: Pacific Salmon" 2011. California Department of Fish and Wildlife.

SWORDFISH

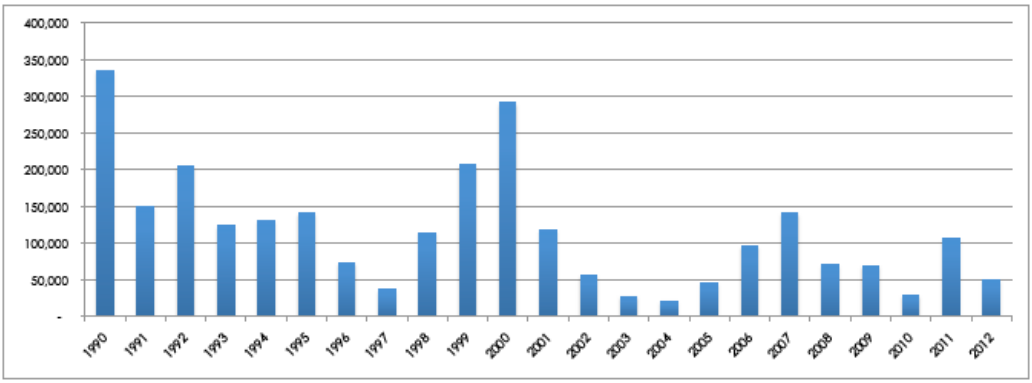
Swordfish are taken, primarily by drift gillnet and some harpoon (while there is no harpoon swordfish fishery in Morro Bay).

Since 1990, Swordfish has ranked among the top ten species in Morro Bay and has generated over $10 million in EVV since 1990. Landings have declined from a peak in 2000, when revenue topped $1 million, due in part to continued spatial closures and gear restrictions that make the CA Thresher Shark/Swordfish Drift Gillnet Fishery one of the most heavily regulated fisheries on the West Coast. The majority of these regulations are aimed at limiting marine mammal and sea turtle interactions.

The Drift Gillnet Fishery brought in over $415,000 in earnings in Morro Bay in 2012, comprised of approximately 50% swordfish with 22% albacore, 18% opah, 4% bluefin and others including, louvar, mako shark, thresher sharks, and pomfret.

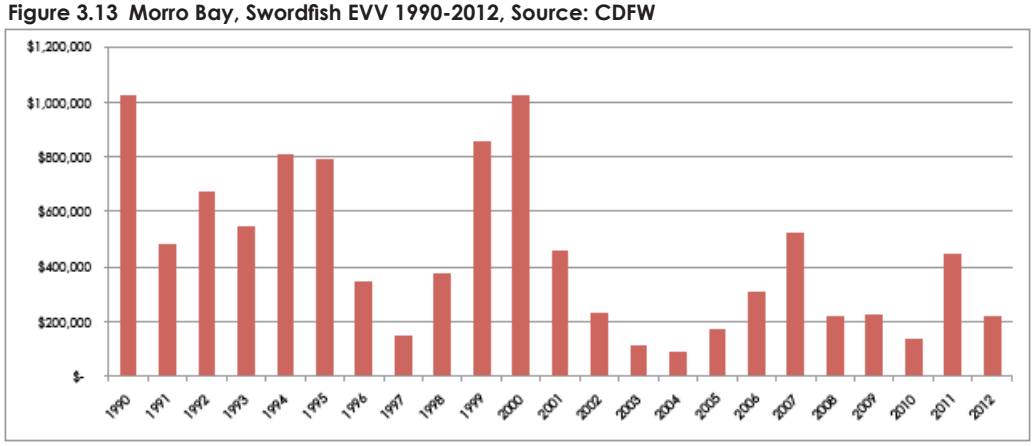
Morro Bay, where the majority of San Luis County's swordfish is landed, is consistently one of the top three swordfish ports in California, second and third to San Diego and Los Angeles Counties, respectively. Landings of swordfish in Morro Bay totaled over 2.6 million pounds since 1990. In 2011, landings cleared 105,000 pounds and over 50,000 pounds in 2012.

Figure 3.12 Morro Bay, Swordfish Landings 1990-2012, Source: CDFW



In spite of a maze of regulations, the Morro Bay swordfish fishery is one of the top performers on the coast, generating earnings of $446,679 in 2011 and $216,654 in 2012. Price per pound in 2011 of $4.22 and 2012 of $4.30 was among the highest since 1996 as demand continues for swordfish as a high-end offering.

Figure 3.13 Morro Bay, Swordfish EVV 1990-2012, Source: CDFW



SPOT PRAWN

Spot prawn is a trap fishery with little or no bycatch or habitat disturbance.

Spot prawn has ranked consistently among the top ten species in EVV in Morro Bay dating back to 1993. Since 1990, Spot prawn has generated over $13 million in revenue at an average of $10.40 per pound.

Landings have declined since the 1990s, due in part to the closure of the trawl fishery in 2003 and a move to a limited access trap fishery. 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 praised as a sustainable catch due to the species' high reproductive capability and the low environmental impact of trap gear. Live prawns caught by the trap fleet generally fetch between $12 and $13 per pound, leading to strong revenue increases since 2009. Numbers from the fishery are not reported as there is only one spot prawn permit holder in Morro Bay.

HAGFISH

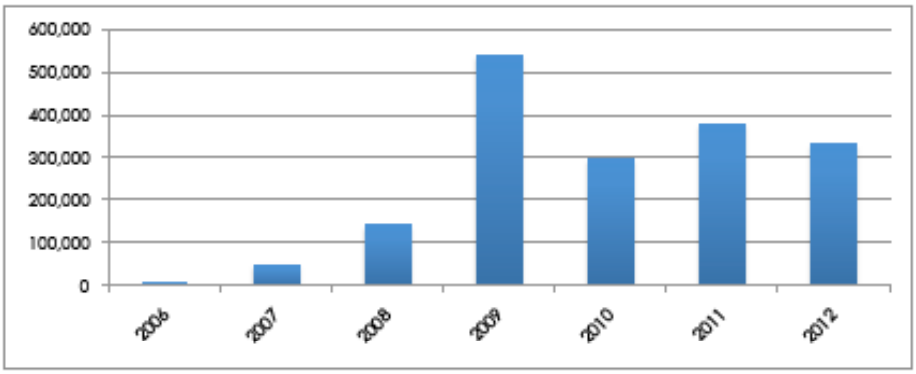
Hagfish are caught using baited traps with hatches that allow smaller/younger individuals to escape.

The Pacific Hagfish, also known as the slime eel, is a deepwater species that has recently become the target of an emerging West Coast fishery aimed at supplying Korean markets. Starting in 2005, the live hagfish fishery experienced an explosion of growth in 2007, when over 1.7 million pounds were landed statewide. Morro Bay joined the fishery in 2006 and has since landed over $1.5 million in hagfish. The gear employed in the hagfish fishery is relatively inexpensive, and there are no permit requirements. These relatively low barriers to entry and a robust, nearby population make the hagfish fishery a strong addition to the species diversity in Morro Bay.

Pacific hagfish are managed by the California Fish and Game Commission, primarily through the number of traps and trap construction, including requirements on escape hatches for undersized fish as well as possession of a valid trap permit.

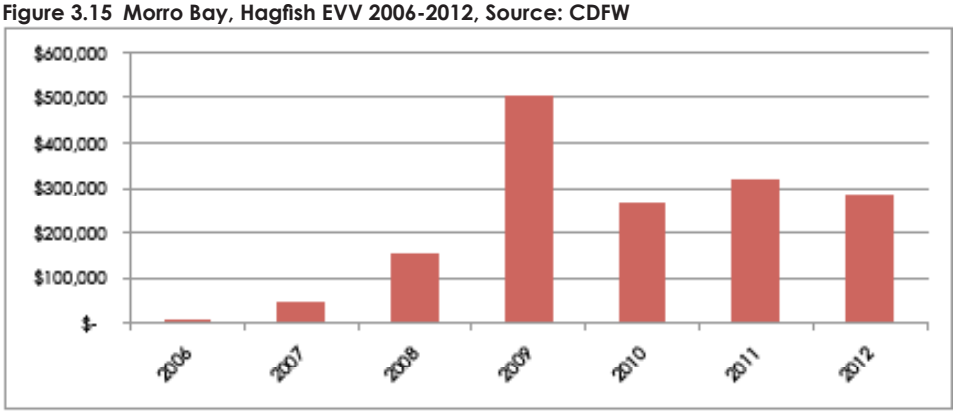
Landings of hagfish in Morro Bay have risen from approximately 6,000 pounds in 2006, the first year of this fishery, to over 500,000 pounds in 2009 followed by three relatively steady seasons at approximately 300,000 pounds in annual landings.

Figure 3.14 Morro Bay, Hagfish Landings 2006-2012, Source: CDFW



Total EVV generated by the hagfish fishery has grown from approximately $7,000 in 2006 to over $500,000 in 2009 and has held a relatively consistent level of about $300,000 in the last three years. In 2012, $281,865 of a total $6.3 million worth of hagfish was landed in Morro Bay.

Figure 3.15 Morro Bay, Hagfish EVV 2006-2012, Source: CDFW



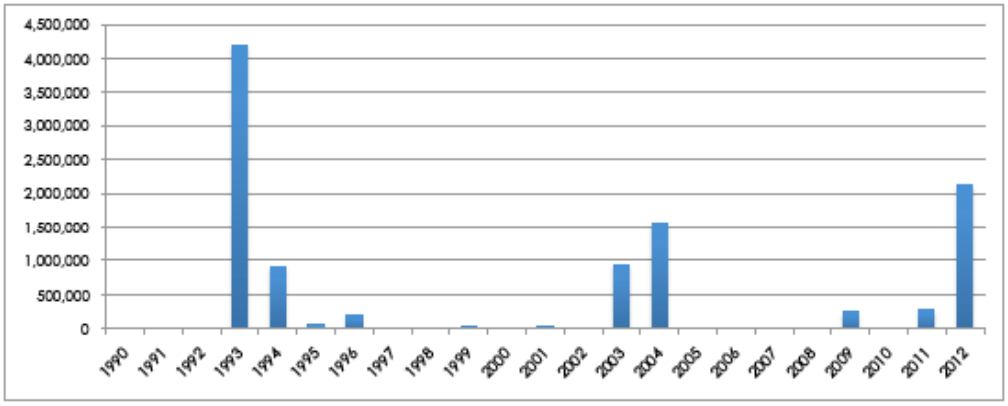
COASTAL PELAGIC SPECIES

The Coastal Pelagic Species (CPS) complex includes: Market squid, Northern anchovy, Pacific sardine, Pacific (chub) mackerel, and Jack mackerel. CPS is an extremely lucrative fishery requiring specialized fishing gear, offloading and processing equipment, and expertise. Morro Bay has had no CPS activity since 2004, primarily due to a lack of offloading infrastructure. In 2009, Tomich Brothers Seafoods, a Southern California seafood buyer and processor, established a wet fish pump at the Municipal dock. This pump has enabled Morro Bay to participate in the lucrative CPS fishery, and in 4 years over 2.6 million pounds (primarily Market squid) have been landed.

CPS are landed using purse seine nets, with no habitat disturbance and little bycatch.

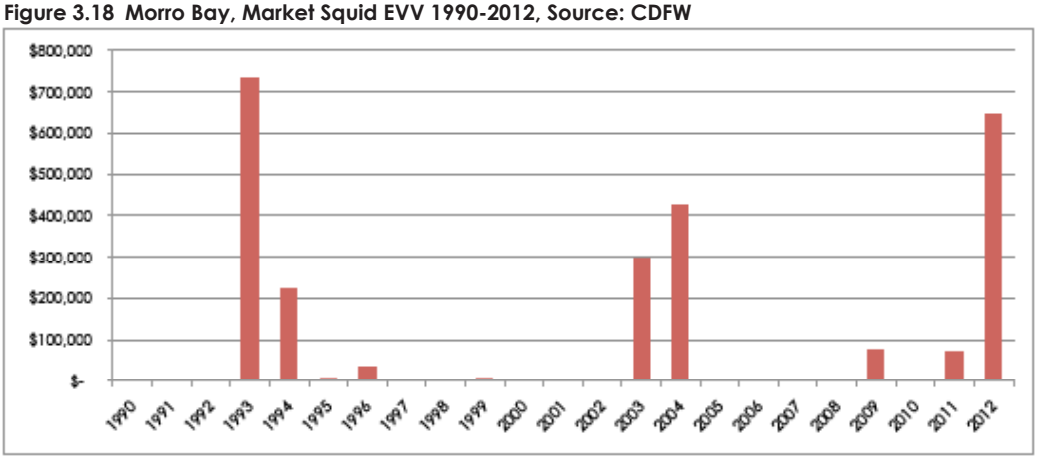
In 2011 the California CPS fishery generated approximately $75 million in earnings.

Figure 3.16 Morro Bay, Market Squid Landings 1990-2012, Source: CDFW



Since 2009 and the establishment of the fish pump on the Municipal dock, EVV of almost $800,000 has been generated in Morro Bay (primarily Market squid).

Figure 3.18 Morro Bay, Market Squid EVV 1990-2012, Source: CDFW

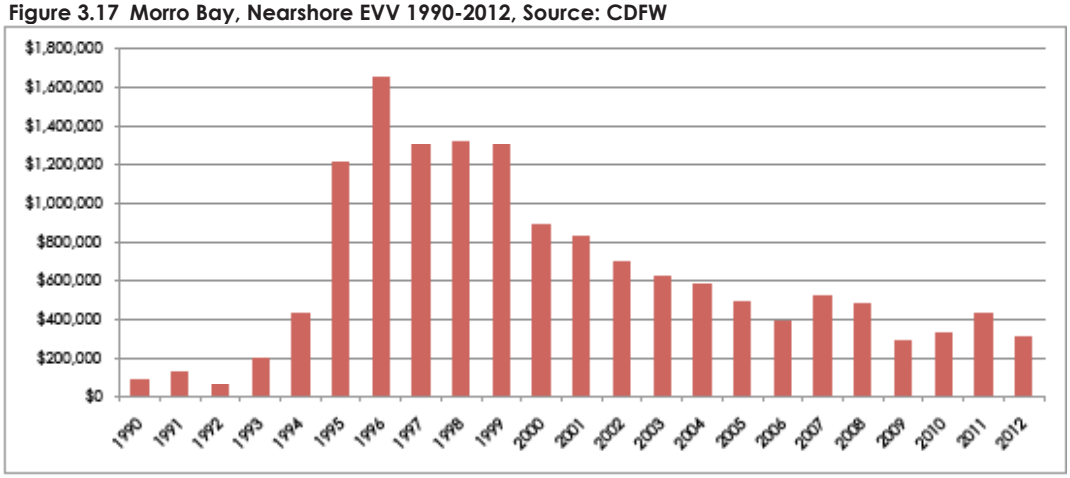


NEARSHORE FISHERY

The nearshore fishery is extremely important in Morro Bay and has generated nearly $14.5 million in EVV since 1990. The Morro Bay nearshore fishery is comprised of several species of rockfish including: gopher rockfish, brown rockfish (bolina), black-and-yellow rockfish, grass rockfish, China rockfish, black rockfish, blue rockfish, copper rockfish, kelp rockfish, tree rockfish, and olive rockfish. Other important species include cabezon, lingcod, kelp greenling, and California sheephead.

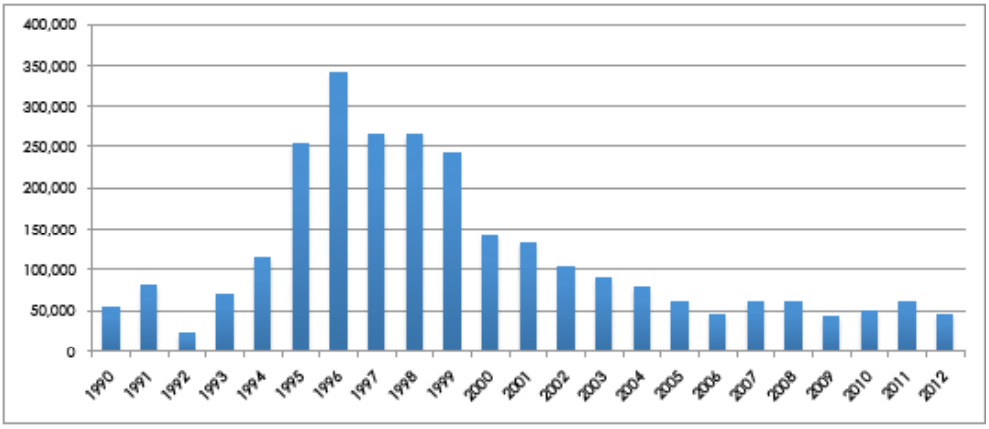
The nearshore fishery generated approximately $301,000 at the dock in 2012. Average price per pound between 1990 and 2012 is $5.41 but has climbed to $7.51 since 2005.

Figure 3.17 Morro Bay, Nearshore EVV 1990-2012, Source: CDFW



Nearshore landings have remained relatively stable from 2005 to 2012 when between 42,000 pounds and 60,000 pounds were landed. Total landings for the 23 years period between 1990 and 2012 topped 2.6 million pounds.

Figure 3.19 Morro Bay, Nearshore Landings 1990-2012, Source: CDFW



LIVE FISH

Over the last decade, a strong market has emerged for live fish (kept alive from the boat to the customer) with the intent of providing the "freshest" product possible to the consumer. The primary markets for live fish are Asian restaurants in Los Angeles and San Francisco, where fish are held in tanks until processed and cooked. The live fish fishery tends to fish smaller volume, using fishing methods that reduce mortality (hook-and-line, trap, short trawls). Fish landed live fetch far higher prices at the dock than when landed dead; most live species landed in Morro Bay sell for over $6/lb. The catch in Morro Bay is primarily gopher rockfish, brown rockfish and cabezon, with each species accounting for roughly 25% of the total. The remaining 25% is a mixture of black-and-yellow rockfish, grass rockfish, greenling, treefish, and China rockfish.

Figure 3.20 Morro Bay, 2012 Live Fish Landings by Species, Source: CDFW

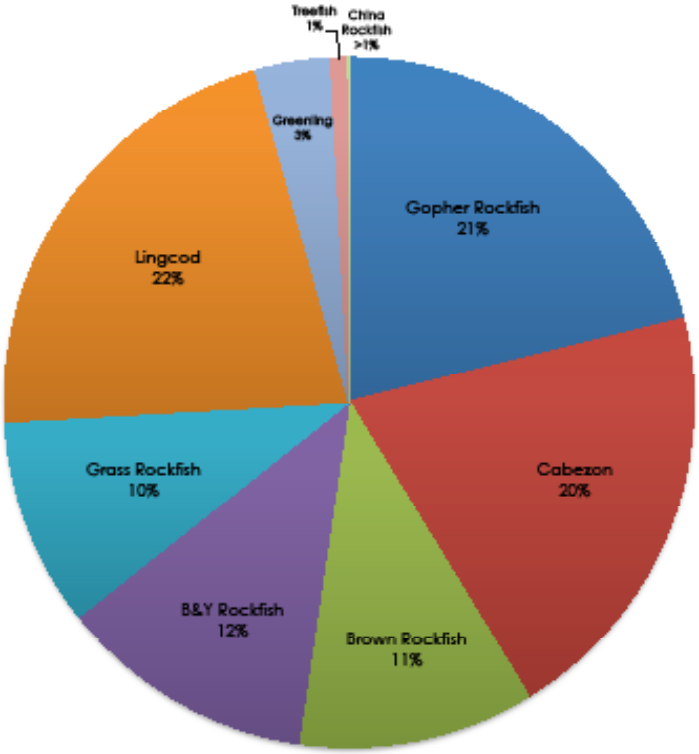
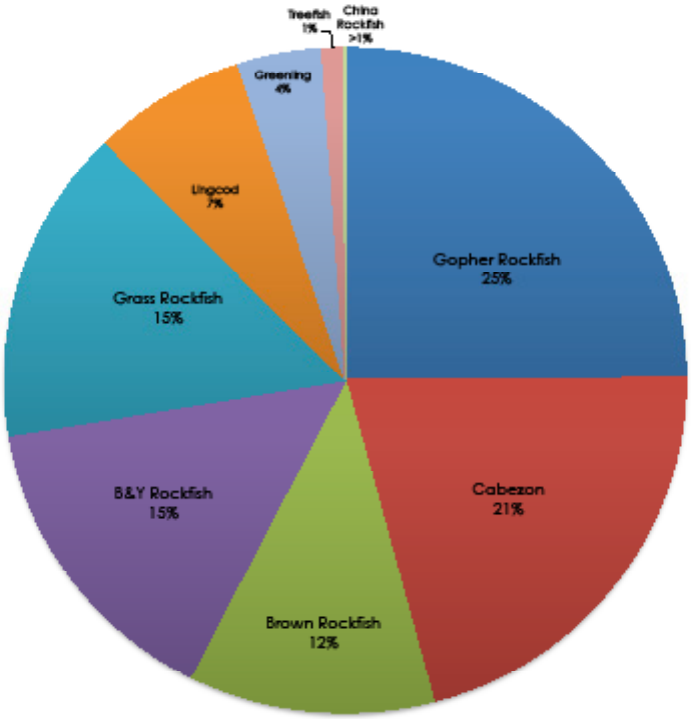


Figure 3.21 Morro Bay, 2012 Live Fish Earnings by Species, Source: CDFW

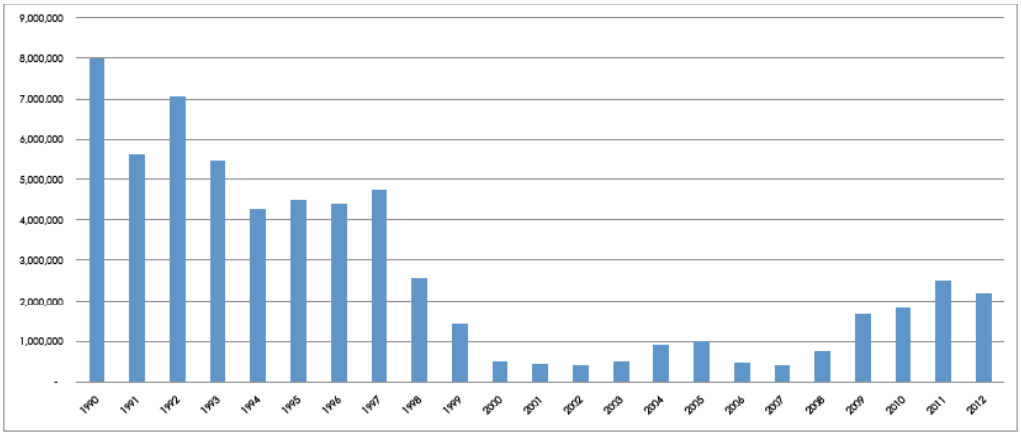


GROUNDFISH FISHERY

Sole, sablefish, blackgill rockfish and thornyheads are key species in the groundfish complex in Morro Bay and made up 45% of total earnings between 2008 and 2012.

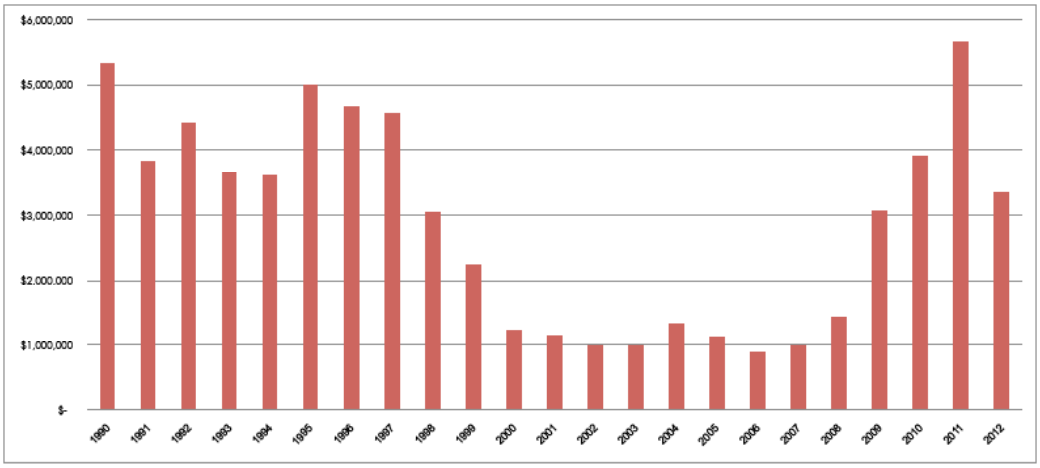
Over 62 million pounds of groundfish have been landed in Morro Bay since 1990, generating over $49 million in EVV. Annual landings declined from approximately 8 million pounds in 1990 to lows near or below 1 million between 2000 and 2007. Landings have since rebounded, reaching over 2 million pounds in 2011 and 2012. Drops in groundfish landings were brought on by increases in regulation, rising costs, competition from inexpensive imports and consumer preferences which have shifted in recent years to favor locally-caught seafood from small, family-owned operations characteristic of Morro Bay. The increases have been lead by the rise in the hook and line and trap fleet, and the return of one trawl vessel.

Figure 3.22 Morro Bay, Groundfish Landings, 1990-2012, Source: CDFW



In the last three years, earnings in the groundfish fishery have returned to 1990 levels. EVV rose from a low of approximately $900,000 in 2006 to over $5 million in 2011 and over $3 million in 2012. Price increases due to a shift in consumer preferences and the hard work of ITQ and open access hook and line and trap fishermen, as well as the return of a trawl operation have fueled this growth.

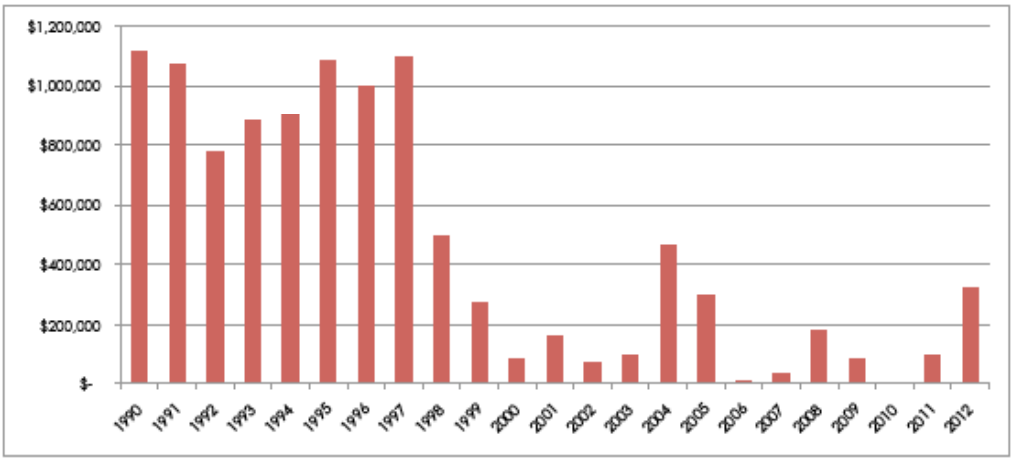
Figure 3.23 Morro Bay, Groundfish EVV, 1990-2012, Source: CDFW



SOLE

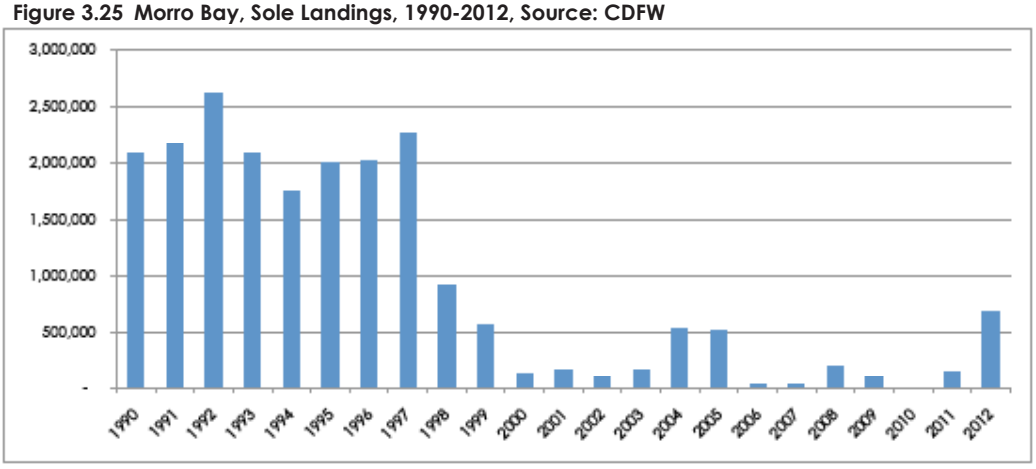
Sole has been a major source of revenue for Morro Bay, bringing in almost $10.6 million since 1990. Top sole species in Morro Bay include petrale and Dover, which ranked among the top 10 species overall (EVV) in Morro Bay during 13 of the last 23 years. In 2012, revenue from sole species was the highest since 2004 at $322,043, of which 68% was from Dover sole and 30% from petrale sole.

Figure 3.24 Morro Bay, Sole EVV, 1990-2012, Source: CDFW



Sole are caught exclusively by trawl and over 21 million pounds have been landed in Morro Bay since 1990, making it one of Morro Bay's most prominent species. Sole landing experienced a downturn since a high of 2.3 million pounds in 1997 and the Morro Bay trawl fleet saw a reduction to one active vessel in 2007. Landings in 2012 were at a 14-year high and indicate changes in the market, and the hard work and ability of the Port's remaining trawl vessel.

Figure 3.25 Morro Bay, Sole Landings, 1990-2012, Source: CDFW

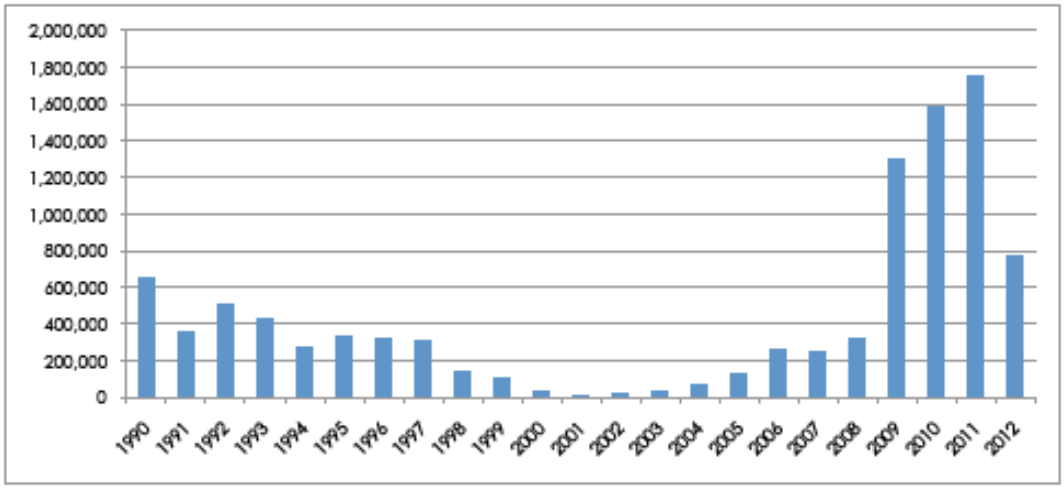


SABLEFISH

A member of the groundfish complex, sablefish has been part of the commercial catch in California since the early 1900s and has emerged in earnest in Morro Bay in the last five years. 2009 was the first major year of activity and sablefish quickly became one of the port's most important species. Often referred to as blackcod, sablefish are caught primarily by long line and trap in Morro Bay. Landings peaked in 2011, when nearly 1.8 million pounds crossed the dock.

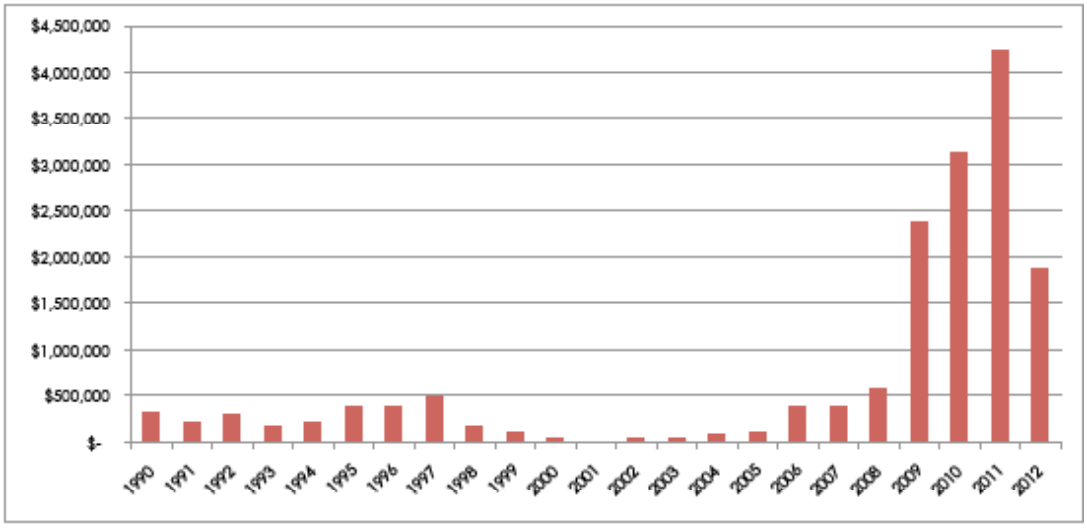
While markets for sablefish are expanding, there is an over reliance on export to Japan (personal communication, Morro Bay, 2013). Shifts in the market and sablefish stocks in 2012 led to landings falling from 1.75 million pounds to 770,357 pounds, or one half of their 2011 levels.

Figure 3.26 Morro Bay, Sablefish Landings 1990-2012, Source: CDFW



While sablefish earnings dropped by 56% between 2011 and 2012, it still represented almost one third of total 2011 earnings of $6.3 million. Continuing demand in Japan and increasing demand in the domestic market between 2009 and 2012 has made sablefish a lucrative catch with a relatively high average price per pound of $2.17.

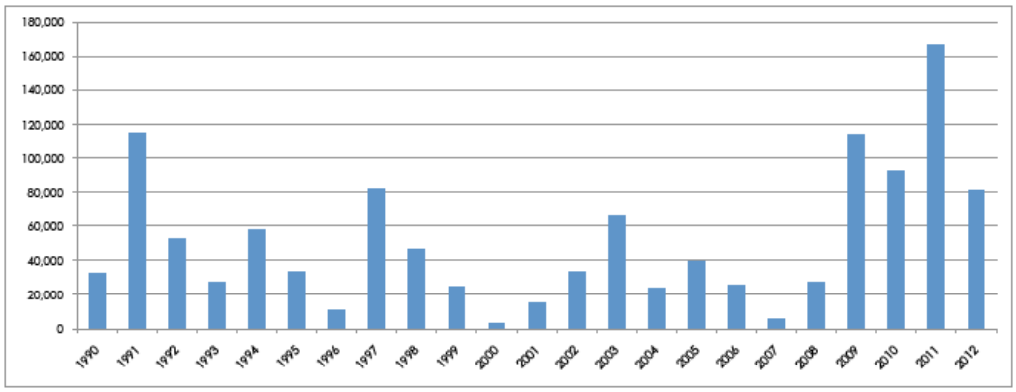
Figure 3.27 Morro Bay, Sablefish EVV 1990-2012, Source: CDFW



BLACKGILL ROCKFISH

An important part of the groundfish complex, blackgill rockfish has been taken in California waters in significant numbers since the 1980s. Since 1990, approximately 1.2 million pounds have been landed in Morro Bay. Landings have increased substantially since 2009, peaking in 2011 when 166,310 pounds came across the dock in Morro Bay.

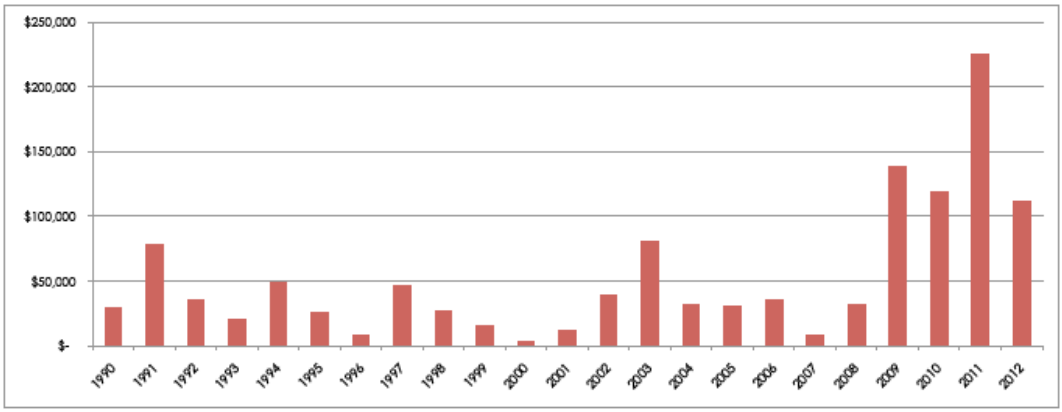
Figure 3.28 Morro Bay, Blackgill Rockfish Landings 1900-2012, Source: CDFW



Some of the demand for blackgill rockfish has been fueled by marketing efforts surrounding the ITQ fishery and Morro Bay fishermen's collaboration with TNC.

Market interest in California caught rockfish species has led a strong increase in EVV in the blackgill fishery that began in 2009 and has continued through 2012. Since 1990, EVV totaled approximately $1.2 million, half of which has come in the last four years. EVV peaked in 2011 at $225,425 and in 2012 totaled $111,391.

Figure 3.29 Morro Bay, Blackgill Rockfish EVV 1990-2012, Source: CDFW



THORNYHEADS

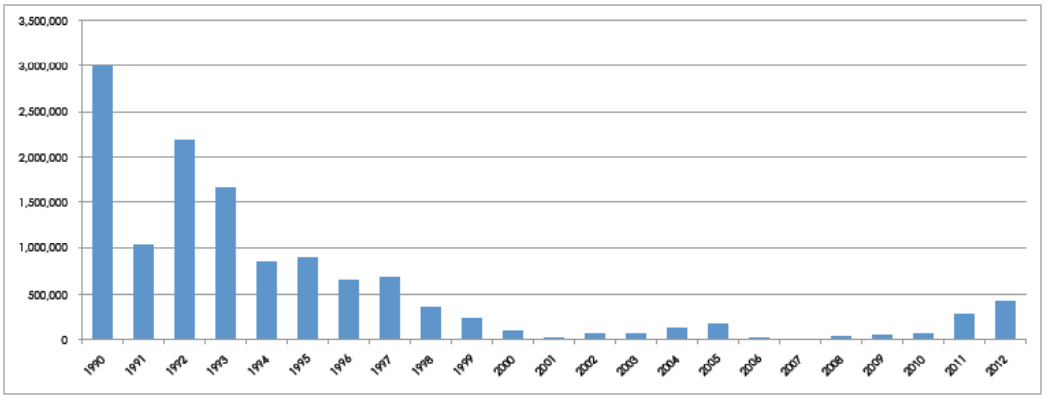
Part of the groundfish fishery, the commercial thornyhead complex is comprised of two species, Longspine (Sebastolobusaltivelis) and Shortspine (S. alascanus). Prior to 1995 landings, data does not distinguish between the two species and currently the CDFW cautions that "distinguishing between them [longspine and shortspine species] can be difficult under field conditions" and advises grouping them in data analysis to ensure reliability.[9] As part of the deepwater complex, along with Dover sole and sablefish, thornyhead is a crucial component of the California groundfish fishery and California leads the West Coast in overall landings.

Since 1990, some 12.9 million pounds of thornyhead have crossed the dock in Morro Bay. Stock assessments in the late 1990s appeared to show a population that was in decline, leading to greatly decreased allowable quotas and a statewide drop in landings through the early 2000s. Landings in Morro Bay reached a low in 2007 when only 4,753 pounds of thornyhead was recorded.

Commercial fishermen in Morro Bay, including the trawl operation, have developed a growing live market for thornyheads.

Since then, moderate increases in landings, particularly in the past two years, may signify a rebound. 2012 landings of 429,376 pounds represent a steep drop from 3 million pounds in 1990, but fishermen are getting a much higher price per pound. For example, landings in 1990 were nearly 3 million pounds and generated $1.13 in price per pound. Landings in 2012 were approximately 235,000 pounds and generated over $580,000 at the dock, or $2.47 per pound.

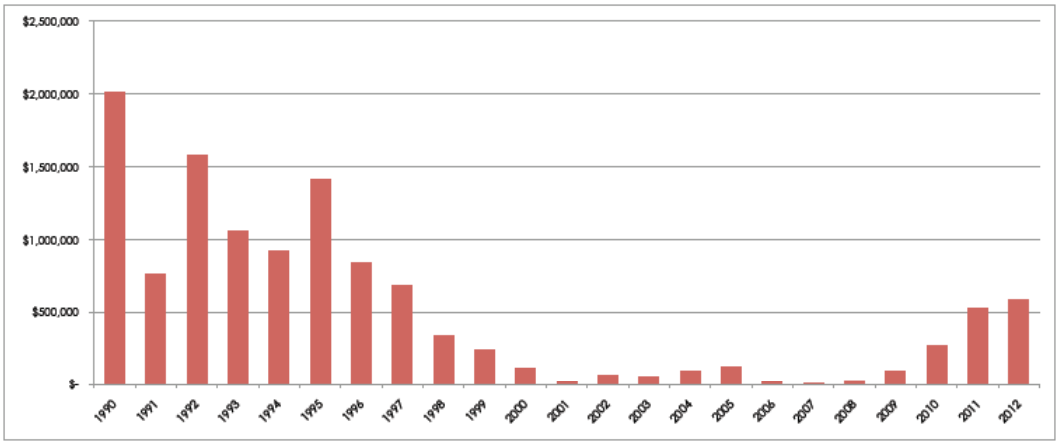
Figure 3.30 Morro Bay, Thornyheads (all species) Landings 1990-2012, Source: CDFW



9 California Department of Fish and Game, Status of the Fisheries 2001: Thornyheads, December 2001.

The two species of thornyhead have contributed approximately $11.8 million to EVV in Morro Bay since 1990. During this period, revenue peaked in 1990 at around $2 million and hit a low of $3,086 in 2007. EVV has steadily increased since then, hitting $580,751 in 2012, the highest value seen in the fishery since 1997.

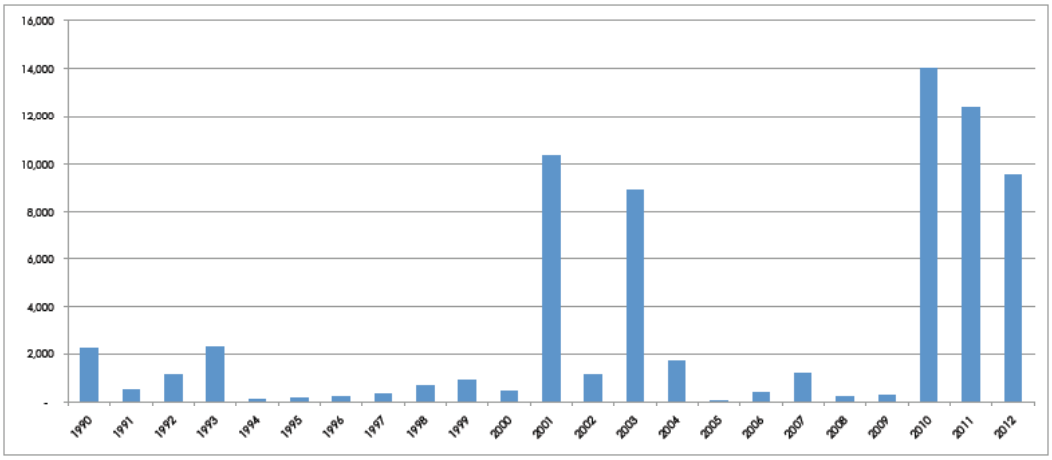
Figure 3.31 Morro Bay, Thornyheads (all species) EVV 1900-2012, Source: CDFW



WHITE SEABASS

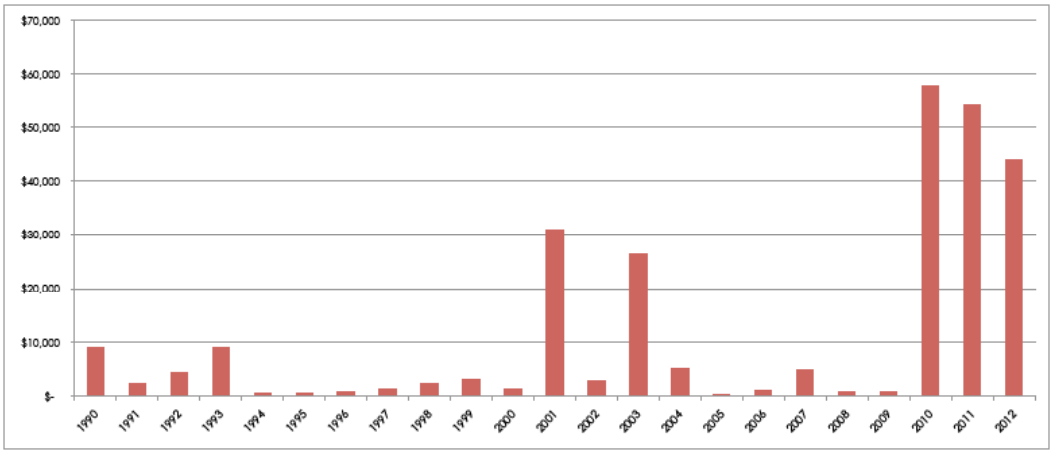
The re-emergence of the white seabass fishery in the early 2000s and again in 2010 is a testament to the adaptability and reslience of the commercial fishing fleet. Due to a state regulatory closure in the set gillnet fishery in 2002, landings shifted away from set gillnet to hook and line. White seabass has steadily returned as a crucial component of the commercial catch in Morro Bay and in 2010 landings topped nearly 14,000 pounds, the highest recorded between 1990 and 2012. The fishery has remained an opportunity for small vessels and fishermen "filling in" when not participating in their target fisheries. In 2012, landings totaled 9,544 pounds.

Figure 3.32 Morro Bay, White Seabass Landings 1990-2012, Source: CDFW



White seabass generated over $156,000 in revenue since 2010 and over $264,000 since 1990. EVV in 2012 totaled $44,104. White seabass' economic performance is bolstered by a strong price per pound, which has averaged $4.38 in the last three years, reaching an all time high in 2012 of $4.62.

Figure 3.33 Morro Bay, White Seabass EVV 1990-2012, Source: CDFW



EMPLOYMENT

The commercial fishing industry in Morro Bay has been a consistent generator of employment on the water and through the numerous shore-based services that support the fleet. Each fish landed represents jobs on the boat for skippers and deckhands, jobs at the offloading, fuel and ice facilities, in the processing plants, on the delivery trucks, in local restaurants and at retail counters. The importance of these jobs on the local economy is emphasized in a 2008 Opinion Poll of over 140 tourism professionals in Morro Bay, Crescent City and Monterey, in which 58% of respondents indicated that "the number of jobs directly created by fishing activities was of great importance to their communities". Nearly identical results were reported for the importance of jobs indirectly created by fishing activities.

CDFW Vessel ID figures are calculated on every commercial vessel making landings and submitting a fish ticket in the port during a calendar year, including local and visiting boats.

Employment generated by fishing also contributes to Morro Bay's overall resilience through the diversity of economic activity it brings. Fishing jobs complement the income and jobs generated by traditional tourism and eco-tourism, with Morro Bay convenient to whale and otter watching, a top birding destination, sailing and other ocean activities that engage one of California's few intact tidal estuaries. Such diversity buffers the economy when there is a downturn in one or another industry and rewards the community when the industries are performing well. This synergy can be referred to as the "Blue Collar and the Blue Economy," demonstrating a relationship between commercial and industrial sectors and those economic sectors reliant on the ocean and its resources. Diversity in job types and incomes is a hallmark of sustainability.

Several of the fishermen estimated that, in 2012, due to the higher than average price of salmon ($8.75 at the time of this report) and the strong Dungeness crab season, that 30 full-time jobs was a low estimate, the number could be as high as 50.

In 2012, the CCJCFLC and the MBCFO and PSLCFA issued Safety Grants to 80 local commercial fishing vessels to support compliance with USCG safety requirements.

ON THE WATER

There are a handful of employees currently at the two oyster farms in Morro Bay. That number is expected to grow to grow over 15 this year and to over 40 in the next 5 years. Employment numbers for oyster aquaculture are not included in the calculations in this section.

Based on over a dozen interviews with commercial fishermen and industry-related business owners, it is estimated that of the 220 Vessel Identifiers (Vessel IDs) reported by CDFW in 2012 in San Luis Obispo County, approximately 180 are operating in Morro Bay. Of these 180, approximately 90 can be considered to generate full or part-time employment for at least one skipper or vessel owner. The other 90 are estimated to have participated less than a handful of times throughout the season and are not considered "active" participants. Of the 90 active participants, about 60 can be considered as part-time, with the remaining 30 considered full-time. The relative part time/full time numbers are influenced by a range of factors, including the presence/proximity of fish stocks, pricing at the dock, market influences, regulations like Open Access limits, and salmon closures. The mix of vessels in the local fleet also factor into overall employment. For example, smaller vessels, such as those common in the nearshore fleet, may operate with one deckhand or none. However, the single trawler operating out of Morro Bay employs 2 deckhands, groundfish vessels (hook and line, trap) generally employ one deckhand, and Dungeness crab boats typically employ 1 or 2 deckhands. Based on these trends, a conservative estimate puts the number of jobs on active fishing vessels in Morro Bay at 130-150 in 2012.

Employment on the water is dynamic as many fishermen are active in multiple fisheries, depending on season, market price, and location and abundance of fish stocks. Fishermen may also switch back and forth from working as deckhand or operating their own boats, as skippers.

ON THE DOCK

In addition to jobs on the water, the fleet supports jobs at the four offloading facilities and at the fuel and ice facilities. Also, since 2008 increased demand for hook baiting services has created a new, small employment sector in Morro Bay. This baiting service, known as The Morro Bay Hookers, currently employs 5 part time and 2 full time workers in hook baiting and brining. Between baiting services and facilities associated with fueling, offloading, and ice, approximately 7 full time and 19 part-time jobs on the dock can be attributed to commercial fishing.

AT THE PROCESSING PLANT

Commercial fishing also generates jobs at two local processing plants: Tognazzini's Dockside Too (on the Embarcadero) and Central Coast Seafoods/Santa Monica Seafoods (in Atascadero, approximately 15 miles east). Some processing also takes place at Giovanni's Fish Market (on the Embarcadero) for their retail store, restaurant and internet sales. Approximately 14-18 full time jobs in these processing plants are directly linked to commercial fishing activity in Morro Bay. Employment in the processing plant includes administrative staff, drivers, and skilled and semi-skilled laborers (e.g., cutters or filleters).

Table 3.2 Morro Bay Commercial Fishing Related Employment

Employment Type	Estimated Employment	
	Low	High
On the Vessel, Skipper, or Deck-hand	130	150
On the Dock and Baiting	26	26
Processing Plant	14	18
Total	170	194

Source: Personal interviews, commercial fishermen, industry stakeholders and Harbor Management staff, (Morro Bay, 2013), CDFW and CCJCFLC.

NEW PARTICIPANTS

One of the strongest indicators of performance in the commercial fishing industry is the presence of new and returning vessels and fishermen. Another indicator is the presence of people with multigenerational ties to the commercial fishing industry entering as fisherman. New and returning fishermen are a strong indicator of performance due to the high barriers to entry in commercial fishing: the initial financial investment for a vessel, purchasing permits and gear, a steep learning curve related to vessel and gear operation, locating fish, strict regulatory requirements, and long hours of physically demanding and often dangerous work.

The 2010 NOAA Pacific Trawl Fishery Social Study found that 53% of participants were over 51 years of age and only 23% were under 40.

The decision to enter the industry indicates that there is sufficient profit and stability to draw workers from other employment opportunities. Based on interviews with fishermen and other industry stakeholders, it is estimated that in the last 4 years, there have been 17 new and returning commercial fishermen and numerous new and returning commercial fishing vessels in Morro Bay.

Photo: A vessel, new to Morro Bay, on its way from the East Coast.

Many of these new fishermen are in their 20s and 30s, which is notable because older fishermen retiring and not being replaced, commonly referred to "the graying of the fleet," is seen as a major threat to the sustainability of commercial fishing. While the current trend is informative, a long-time Morro Bay commercial fisherman noted that participation is cyclical; people, young and old, come in and out of the commercial fishery all the time. For example, there was an influx of fishermen in the late 1980s and the mid 1990s attracted by a vibrant and profitable salmon fishery. "It [gaining new fishermen] is not new, but we are glad to see it and its important the community still has sufficient momentum to make it happen".

Some of the new and returning vessels in the commercial fishery in Morro Bay over the last 4-5 years:

- Brita Michelle
- Prime Time
- Mister T
- Dottie K
- Provision
- Ruth Anne II
- Casey
- Dorado II
- Boomerang
- Overtime
- Lost Wages
- Kallen A


Photo: Prime Time readying for a salmon season in Morro Bay.

Photo: Ruth Anne II docked in Morro Bay.


Photo: New participants also support more work on the dock.

RENTS AND WHARFAGE

Rents and wharfages represent the most direct and easily measurable financial return from leaseholders to the City. Rents and wharfages are structured to compensate the City and the public fairly for the use and maintenance of tidelands resources, including docks, piers, and other over-the-water facilities.

RENTS

In the 1940s the State of California began to develop coastal areas along the Morro Bay waterfront, claiming all lands west of Embarcadero road as state-owned public trust lands. Upon its incorporation in 1964-1965, the City of Morro Bay assumed trusteeship of these areas under what is known as the Tidelands Grant. The City is to retain control in perpetuity of these lands so long as the terms of the grant are adhered to.

The terms state that lands must be used for commerce, fisheries, navigation, recreational purposes, parklands, public access, public parking, and/or environmental protection (Harbor Trust Study Session, 2013). Under the Tidelands Grant, Morro Bay has oversight of 43 properties, 36 of which are currently leased for various visitor-serving uses including restaurants, bars, cafes, retail, and shops, in addition to commercial fishing-related business. In 1985, the City created the Harbor Department to help operate, manage, and account for revenues in the Tidelands.

Additionally, the terms of the tidelands grant prohibit residential use of the lands, and set a maximum lease term period of 50 years. Revenue from leases must be reinvested within the area of the granted lands for the purposes of the public trust. During the early stages of leasing, the City set long term leases at relatively low rates to encourage tenant investment. Today, there are 6 properties that were established on the Embarcadero during the 1960s, and continue to operate.

Table 3.3 City of Morro Bay Tidelands Grant Lease Sites, March 25, 2013

Lease Stats	
Average Lease Term	36 Years
Low Lease Term	6 Years
High Lease Term	50 Years
Annual Rent Revenue*	$ 1,055,700
Average Rent Revenue per Per Month*	$ 81,039
High Annual Rent*	$ 66,573
Low Annual Rent*	$ 4,000
High Monthly Rent*	$ 5,548
Low Monthly Rent*	$ 333
Total Properties	43
Vacant**	7
Lease Rate	84%

*** = not including % Gross**
**** = as of March 25, 2013**

Long term leases, ranging from 6 to 50 years, have been the norm In Morro Bay, with an average lease of 36 years. Low turnover from extended lease terms provides financial security to the tidelands trust, and translates to a steadier and more predictable stream of revenue for the City. Long term leases also create a more conducive environment for tenant improvements and investment. Short term leases provide more flexibility and an environment where it is easier for newer businesses to replace older ones, spurring greater competition.

Table 3.4 Lease Structures

	Lease Rate	Lease Term	% of Gross Sales
Morro Bay	% of assessed market value	6 - 50 years; 36 yr avg.	2% - 5% (non-commercial fishing)
Santa Barbara	Individually negotiated as a base, or 10% of gross sales, whichever is greater	5 years; option for extensions thereafter	up to 10% (non-commercial fishing)
Monterey	$0.74 per sq. ft. since 1999 + annual CPI increases of 2% - 4%	10 yrs	No
Port of San Francisco	$0.22 - $1.50 per sq. ft. for commercial fishing related uses	up to 5 years; up to 10 yrs for Pier 45	No
Pillar Point	$2,500 - $3,000 / month	5 yrs; two 5 yr options for renewal	Plus wharfage; $0.01 -$0.05/lb for finfish; $8.00 - $10.00/ton for wetfish
Port of Los Angeles	Individually negotiated by Lease Negotiation Team (LNT), but reflects a "fair market rental price"	Short term (< 5 yrs), or long term (> 5 yrs), or revocable (no specified term)	No
Port of San Diego	Individually negotiated as a base, or % of gross revenue, whichever is greater	Short term (< 5 yrs), or long term (> 5 yrs)	No
Moss Landing HD	Fair Market rate, reviewed by Real Property Committee approved by BOHC, plus annual increases based on CPI	Office, 2-5 years, Commercial/Industrial 30 years	4% food, 2% fresh fish sales

To protect the public trust, the City has altered lease policies, implementing more modern lease structures and setting standards to ensure rents are fair and reflect current market pricing. In 2005, the City adopted the Harbor Lease Management Policy.

Rents are generally determined at fair market price and set at a minimum of 8% of the appraised value of the property. In addition, some tenants pay a percentage of gross sales which can range from 3% to 10% based on negotiations at the time of the lease. As of March 25, 2013, current annual rents (not including gross percentage) range from $4,000 to $66,573. Annual rents in the Tidelands Grant area, not including gross sales percentage, generate approximately $1 million in revenue for the City.

WHARFAGE

In the commercial fishing industry, wharfage is an assessment charged the tenants based on the amount and/or type of seafood landed and the value of seafood brought to the facility by other means (truckage fee). Wharfage and truckage fees vary from port to port. Morro Bay elected to waive the $0.02 per pound wharfage about 10 years ago to support and stimulate the commercial fishing industry and as an acknowledgement that the industry provides valuable synergies with tourism, contributes to a rich cultural heritage and is a source of healthy, sustainably caught food.

There are currently four commercial fish buyer-leased facilities in Morro Bay; Ocean Star, Degarimore's. Central Coast Seafood/Santa Monica Seafood and Tognazzini's.

Some harbors like Santa Barbara and Spud Point Harbor have elected to generate revenue through use fees on public hoists to offload fish, and not levy a wharfage.

The exception to wharfage is an arrangement with the seaweed harvesters primarily associated with the Cayucos Abalone farm, who pay an annual wharfage fee.

Many Morro Bay fishermen would prefer the City install a low cost public hoist, but the City's experience is that as long as a minimum of three buyers remain in operation, competition will result in reasonable offloading fees. The City's approach is that the installation of a public hoist could undercut the viability of lease holder's buyers/ offloaders who employ dock workers, provide insurance and maintain important connections with the market. As such, the City does not charge wharfage to make the offloading process equitable and fair for fishermen and attractive for offloaders and buyers.

Monterey charges wharfage at a rate of $1.30 per ton, set in 1999, with annual increases between 2% and 4%. The current wharfage is approximately $1.74 per ton on all species and a truckage fee of 0.05% of gross receipts. Monterey also levies a fee on the number of abalone sold by the one aquaculture business on Municipal Wharf II of: $0.01 each up to 50,000, $0.02 each for 50,000 to 100,000 and $0.04 each for sales over 100,000. The San Mateo Harbor District at Pillar Point, where most of the commercial fishing activity takes place, charges between $0.01 and $0.05 per pound wharfage on finfish and between $8.00 to $10.00 per ton for coastal pelagic species like Market squid, Pacific sardines.

On the Morro Bay Embarcadero, visitors and locals can buy locally-caught fish at three retail establishments and order locally-caught fish at several restaurants including Tognazzini's Dockside Restaurants, Giovanni's Fish Market, Flying Dutchman's Seafood House, Dorn's, Great American Fish Company, and many others.

The City of Morro Bay has done well keeping the Embarcadero occupied; at the time of this report 36 out of 43 properties are leased, an occupancy rate of 84%. The willingness of tenants to enter into long term leases and the City's ability to attract viable businesses, indicates a structure that appears to be fair, and might be the most appropriate in Morro Bay.

TOURISM

The area from the northernmost part of the Embarcadero near the Harbor Department to the southern end near Anchor Street Park measures nearly one mile and is the primary destination for tourists in Morro Bay. As a coastal town with a history of fishing and waterfront activity, this area is a natural draw for visitors who flock to the shops, restaurants, and marine-related activities.

Tourism is closely tied with the commercial fishing economy. Tourism industries provide for expanded employment opportunities along the working waterfront, income for the City to maintain and expand infrastructure and contribute to providing fresh and healthy regional seafood at restaurants and for retail sale.

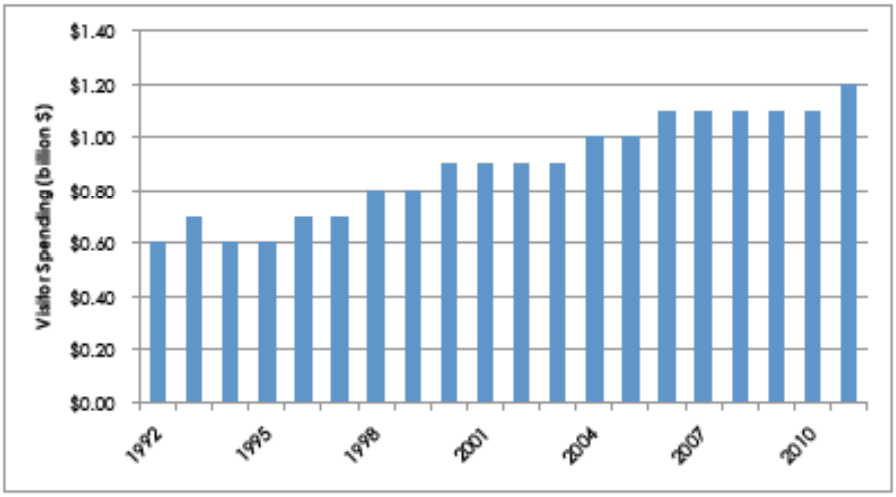
Fishing is part of Morro Bay's identity and is tied closely to the community's cultural and economic heritage, with abalone being harvested and processed as far back as the early 1900s, and sardines, albacore, crab and rockfish being landed and processed back to the 1920s. In 1952, there were nine charter recreational fishing boats operating out of Morro Bay as the community was becoming established as a popular resort area (Scofield 1954). The fishing industry and its presence on the working waterfront adds to the diversity of attractions that draw tourists to Morro Bay and contributes to San Luis Obispo County's current $1.2 billion tourism industry.

A 2007 opinion poll of over 800 California residents found that 71% "seek out and enjoy going to working waterfronts."[10] Furthermore, in a 2008 survey of over 140 tourism professionals in Morro Bay, Monterey, and Crescent City, respondents gave, "tourism from having an active waterfront," a mean rating of 8.82 out of 10 in importance.[11] In that same survey, tourism professionals indicated that, "having local, fresh seafood available was of great importance in attracting business to their community." While these reports are several years old, interviews conducted for this effort suggest that the sentiments expressed therein have remained, and perhaps grown stronger, in favor of the interest in a working waterfront and access to fresh, local, sustainable seafood.

San Luis Obispo County recently saw its highest amount of visitor spending at approximately $1.2 billion in 2011, up 6% from the previous year (visitcalifornia.com). Overall, SLO County has generated $17.8 billion in visitor spending between 1992 and 2011.

The working waterfront, a vibrant Embarcadero, clean open beaches and a beautiful tidal estuary setting are all part of a setting that attracts tourist spending which supports jobs and business improvements and a portion of which is reinvested in generating more tourism.

Figure 3.34 Visitor Spending in Morro Bay, 1992-2011. Source: visitcalifornia.com

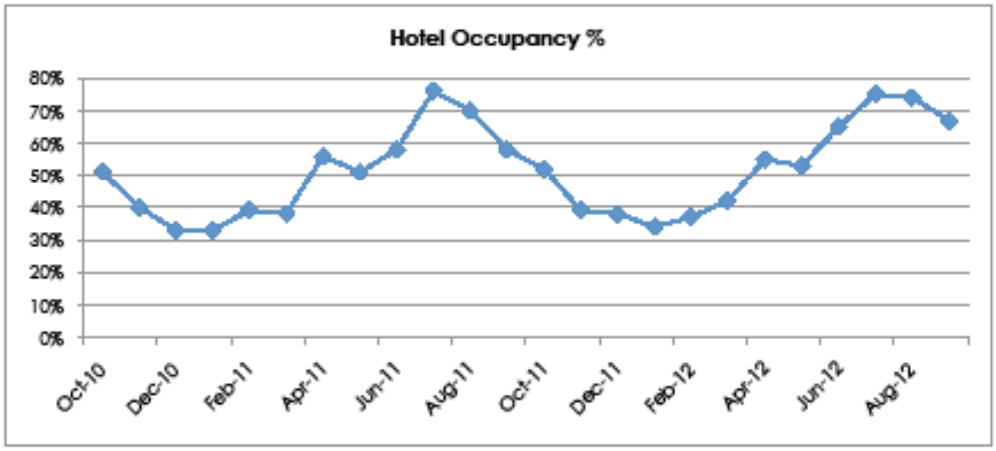


10 CA Resident's Opinion and Attitudes Toward Coastal Fisheries and their Management, Responsive Management, 2007

11 CA Tourism and Tourism Professionals, Responsive Management, 2008

While there are currently no data on the number of tourists' visits to Morro Bay, indicators such as hotel occupancy provided by the Chamber of Commerce can be used as to signify economic impacts. Hotel occupancy in Morro Bay is cyclical, increasing during the summer months, and peaking in July.

Figure 3.35 Hotel Occupancy in Morro Bay, 10/2010 to 10/2012, Source: Morro Bay Chamber of Commerce



Hotel occupancy generates a 3% Tourism and Business Improvement District tax on hotel rooms. This amount is then reinvested, "for the purpose of promoting tourism in Morro Bay."[12] In the 2011/2012 fiscal year, the Tourism Business Improvement District, through the occupancy tax, invested $404,500 in tourism promotion.

Increasing activity at dockside establishments and throughout the City promotes general economic performance, and helps fund the City government through leases that include a percentage of gross sales (3%-5%) on food and beverages that must be reinvested in the tidelands area.

Another indicator of the economic significance of tourism in Morro Bay is gross retail sales in the food and beverage industry. Data provided by the Morro Bay Chamber of Commerce suggest the level of tourist spending at local restaurants and bars, with totals near $10 million during peak summer months. These findings provide additional evidence of Morro Bay's ability to capitalize on its working waterfront, vibrant Embarcadero, and unique natural setting.

"Humans are hardwired to be attracted to the pursuit and capture of food, it's part of our nature" (personal communication, Fisherman's Wharf, Monterey, 2013).

A 2007 opinion poll of California residents found that 82% would buy California seafood over imported seafood when informed of the litany of conservation safeguards in California fisheries.

Several restaurants in Morro Bay are widely known for serving locally-caught seafood. The following were identified by a local fishermen as having purchased his fish in the last year: Tognazzini's Dockside Restaurants, Giovanni's Fish Market, Flying Dutchman, Dorn's, Galley Seafood Bar & Grill, Outrigger, Great American Fish Company, SLO Fresh Catch, and others. Tognazzini's (1235 Embarcadero)and Giovanni's (1009 Embarcadero) have built successful businesses buying, processing, and promoting locally-caught fish. SLO Fresh Catch, the local Community Supported Fishery (CSF) also provides locally caught, locally processed seafood to over 100 members and at 6 farmers' markets every week.

12 City of Morro Bay, Proposed Annual Budget 2012/13

Figure 3.36 Food Service and Drinking Sales, 01/2007 to 10/2012, Source: Morro Bay Chamber of Commerce

Of 800 Californians polled in 2007, only 10% see family-run commercial fishing boats as a high threat to marine waters.

It is common to find tourists and locals gathering along the wharf when fish are coming off the boat. The local and sustainable food movement in the U.S., particularly in California, has increased consumer interest in seafood and demand for locally-caught fish from small family-run fishing operations.

"It's crazy when fish are coming across the dock, people line up to watch and have a very powerful curiosity" (personal communication, Morro Bay, 2011).

This makes Morro Bay unique on a grand scale, as it one of the few tourist destinations where a visitor (or local) can view up to 200 species of birds in the Morro Estuary, view otters within walking distance of town, potentially see a half dozen species of marine mammals on a half-day boat tour, walk on a clean open beach, hike in native chaparral, and watch landings of a sustainably caught seafood, all in one place.

AQUACULTURE AND THE MORRO BAY WORKING WATERFRONT

Excellent water quality and powerful tidal flushing makes Morro Estuary a prime location for raising oysters.

Morro Bay is one of the top five oyster production sites in California, ranked by industry participants as number three in terms of total production behind Humboldt Bay and Tomales Bay. Oyster aquaculture in Morro Bay dates back to the early 1940s and is part of the historic and cultural heritage of the community. Oyster production brings an additional level of capacity and diversity to the Morro Bay waterfront economy, with 2012 gross sales estimated at $600,000.

Oysters are filter feeders, plankton the main constituent of their diet. Their feeding action clarifies water and may make the Bay more productive for eelgrass and other estuarine organisms that thrive on light.

Currently, there are two oyster operations in Morro Bay: Grassy Bay and Morro Bay Oyster Company. These facilities lease intertidal areas of the estuary from the California Department of Fish and Wildlife and are subject to strict oversight from the California Department of Public Health and the FDA/USDA Hazard Analysis and Critical Control Points Program. Additionally, these facilities must meet water quality standards established by the Interstate Shellfish Sanitation Conference and the National Shellfish Sanitation Program. Approximately 15 acres are actively used for

oyster production in the Morro Estuary out of potentially hundreds of acres of suitable habitat. Both operations produce the Pacific oyster, (Crassostrea gigas), which is a species raised along the entire West Coast of the U.S.

The Grassy Bar Oyster Company focuses on the wholesale market while Morro Bay Oyster Company is concentrated on higher value direct sales to restaurants, retail businesses, and the general public. In 2012, both operations each accounted for the sale of approximately one million oysters. Oyster production in Morro Bay currently generates approximately 5 jobs and employs 3 small vessels. Morro Bay Oyster Company hopes to triple their production in 2013 through aggressive plans for expansion that include a depuration facility and hiring up to 40 employees over the next 5 years.[13]

Depuration is a process by which shellfish are held in tanks of clean seawater under conditions which maximize the natural filtering activity which results in expulsion of intestinal contents, and enhances separation of the expelled contaminants from the bivalves, which prevents their recontamination.(Lee, R.; Lovatelli, A.; Ababouch, L., Bivalve depuration: fundamental and practical aspects. FAO Fisheries Technical Paper. No. 511. Rome, FAO. 2008. 139p)

Photo: California Shellfish Co.

Morro Bay Oyster Company also has a retail location on the Embarcadero that generates sales, but plays a more important role of promoting the industry and creating a closer connection between visitors and the healthy, productive estuary.

Much potential exists in this industry in which prices are rising and current production is unable to keep up with demand. However, California is particularly constrained by health regulations relative to producers in Washington and Oregon, and the entire industry is constrained by the availability of "seed" stock. California producers may be able to maximize production through investment in depuration facilities like the one that Morro Bay Oyster Company is currently developing.

13 "Culture of Oysters" Status of the Fisheries Report 2008. California Department of Fish and Game. August 2010. Accessed 5/20/13

Photo: Morro Bay Oyster Co.

Additionally, landings of kelp harvested for use by the Cayucos Abalone Company are also 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. [14] The City collects a landing fee on this renewable resource, which is another source of income and employment on the Morro Bay waterfront.

CPFV INDUSTRY IN MORRO BAY

The CPFV industry created 2,148 jobs in California in 2011, 586 in the Central Coast area; additionally, the industry generated over $405 million in direct trip costs and related sales in California in 2011.

The commercial passenger fishing vessel (CPFV) industry has a long and productive history in Morro Bay, stretching back to 1930 when there was one 45 foot charter vessel that targeted rockcod, flatfish, yellowtail rockfish, and barracuda (Croker 1930). By 1963 there were 14 CPFVs operating out of Morro Bay.[15]

Although traditionally a pastime of the wealthy, the period from about 1930 to 1950 saw significant growth in popularity, to the point that by 1952 there were over 400 "party boats" and about 450 charter fishing vessels operating along the California coast.

TIn 1956, a new U.S. law put partyboats under the jurisdiction of the coast guard and required inspection of the boats as well as proper permitting be held by the operator (Public Law 519).

Since its peak in the mid-1950s, the California CPFV industry has been hit hard by shifts in recreational preferences, rising operational costs, economic downturns, and regulations, most recently the Marine Protected Areas. It is also speculated that the rise of small vessel ownership contributed to a slackening of demand for CPFVs.

14 2007 National Shellfish Sanitation Program Guide. Interstate Shellfish Sanitation Conference and US Food and Drug Administration. March 2009. Accessed 5/20/13

15 The California Partyboat Fishery 1947-1967 California, Department of Fish and Game Fish Bulletin 145, 1967.

By 1962, an estimated 68,000 boats less than 16 feet in length made use of coastal waters (Leeds, Hill and Jewett, Inc., 1963). These boats were estimated to have made 780,000 ocean trips carrying three passengers per trip, or approximately 2.3 million activity days for this class of small craft.

In 2011, 12 registered CPFVs made landings in San Luis Obispo County, with three active vessels in Morro Bay and two in Port San Luis. The remaining seven vessels include very small operations including a dive vessel and visiting boats. In 2011, CPFV anglers landed 166,284 fish in San Luis Obispo County of which 95% were rockfish species (CDFW 2011). This makes the Avila Beach/Morro Bay area the largest CPFV port in California north of Santa Barbara.

The primary CPFV operator in Morro Bay, Virg's Landing, employs 15 individuals and conducts roughly 1,400 trips during the peak season (summer months). During the off season, Virg's shifts their attention to whale watching and conducts roughly 500 trips per season (personal communication, Morro Bay, August, 2013).

While reduced in recent years by shifts in recreational preferences, economic downturns, rising costs and regulatory closures, the CPFV industry remains a strong contributor to the Morro Bay economy and the identity of the unique working fishing port. The industry also provides 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.

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 take advantage of opportunities. Fishermen and civic leaders surveyed voiced strong support for the CPFV industry and stressed its importance for Morro Bay's future.

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4. ENVIRONMENTAL SETTING

Environmental performance is one of the foundational components of a sustainable system. The focus of this section is to provide a brief description of the rich marine environment in which the Morro Bay fleet operates, the extent to which Morro Bay fishermen are faced with an array of regulation and reporting requirements, and some examples on the efficacy of those regulations. The level of regulatory oversight, and measures such as science-based stock assessments, fishery management plans and a host of spatial, gear, and temporal restrictions are identified as a hallmark of how well the ecosystem resource is being conserved relative to a sustainable yield and long-term health and abundance.

It is not the intent of the Morro Bay Community Sustainability Plan to prescribe new management measures outside the rigorous state and federal systems in place.

The marine eco-system off the Central Coast of California is one of the richest in the world, and is characterized by a nutrient-rich upwelling of cold water that supports marine life from plankton to whales, seabirds and a number of important fisheries. The marine habitat off of Morro Bay boasts a wide diversity of productive habitats, including rocky intertidal areas and estuaries, soft sandy bottoms, rocky canyons, sea mounts and the Continental Shelf. This diversity is reflected in seafood 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.

Like many other upwelling ecosystems, the California Current is characterized by environmental variability at multiple scales (Huyer 1983, Checkley and Barth 2009).

Each and every species landed in Morro Bay is regulated by state or federal law and carries strict reporting requirements. Upon each landing and the sale of fish, commercial fishermen and buyers are required to submit information, through a fish ticket, on the catch location, date, type of gear used, skipper name, vessel identification number, permit numbers, as well as weight, price and total earnings for each species. All of this data is aggregated and posted on the California Department of Fish and Wildlife website (with an approximate 8 month lag). Transparency of activity on the water, as divulged through the fish ticket and in the formulation of fishing regulation are prerequisites for sustainable outcomes.

In the 2009 paper, Leadership, Social Capital and Incentives Promote Successful Fisheries, the authors (Gutierrez, Hillborn, DeFeo) cite "community-based co-management as the best way to create a sustainable fishery".

Co-management, or the participation of fishing stakeholders in the formulation of fishing policy, is cited as crucial to sustainable management of the marine resource. Economist and Nobel Laureate Elinor Ostrom, in her work, cited the importance of collective-choice arrangements wherein "most individuals affected by the operational rules can participate in modifying the operational rules."[16] Morro Bay has a long history of participation in fishing policy.

Elements of an FMP include:

- Description of the fishery
- Fishery science and essential fishery information
- Basic fishery conservation measures
- Habitat provisions
- Bycatch and discards
- Overfishing and rebuilding
- Procedure for review and amendment of an FMP

16 Ostrom, Elinor. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press, 1990. Print.

Salmon fishermen in Morro Bay joined together as early as the late 1960s to travel as a group and comment on impending regulation (personal communication August 2013, Morro Bay). The City of Morro Bay and the groundfish fishermen have invested in representation at PFMC meetings as the ITQ regulation was imposed. The City of Morro Bay and fishermen's groups submitted written comment, made public statements and worked closely with regulators on issues such as increasing the control limit for community quota funds, the implementation of the Marine Life Protection Act, and refinancing the trawl buy back loan. Morro Bay fishermen also contributed to the body of knowledge available on electronic monitoring (on-board camera system) as an alternative to 100% human observer coverage. Currently Morro Bay continues to address concerns with proposed changes to the National Marine Sanctuary. To be effective, all of above requires close participation of the Morro Bay fleet.

SAFE reports combine empirical data collection with ecologically informed statistical modeling to present a valid estimation of stock status among a single species or species grouping.

Management measures for the top fisheries in Morro Bay; squid, salmon, groundfish, nearshore, deep nearshore, white seabass and the Highly Migratory Species (swordfish, tuna, opah, louvar), are guided by Fishery Management Plans (FMP). FMPs are informed by periodic scientific field research-based Stock Assessments and Fishery Evaluations (SAFE) and outline the geographic areas, species, regulations, and methods that regulators must follow to make changes to the fishery. FMPs include an assessment of total fishing-related mortality and socioeconomic impacts relative to management objectives in order to consider modifying harvest specifications and management measures. As such, the FMPs and SAFE reports serve as an evaluation of current management measures ("*The Master Plan: A Guide for the Development of Fishery Management Plans*" 2001 CDFG, Marine Region) 2013 Econ Impact report, Pg. 30).

Ghost fishing describes a situation where gear is not retrieved or lost and continues "catching" fish.

Additional top species in Morro Bay and their management measures include Dungeness crab, which is regulated by the California Department of Fish and Wildlife (CDFW) with input from the Fish and Game Commission. In January of 2009, a task force made up of CDFW scientists, commercial fishermen, processors and harbor officials was formed to review and evaluate the Dungeness crab fishery in California, the result of which is a trap limit program which will take effect in November of 2013.

Hillborn, DeFeo and Guttierez in their 2011 paper on sustainable management identify community quotas followed by long-term management policies and protected areas... as the most important management attributes.

Pacific hagfish are also managed by the CDFW and carry restrictions on trap design to eliminate "ghost fishing", and traps must be fitted with escape doors to allow undersized individuals to escape. Fishermen are also required to report all of their landings, carry a valid trap permit, and may not undertake any other fishery while fishing for hagfish. Hagfish fishermen are further restricted to 200 bucket (or 500 Korean cylindrical) traps aboard the vessel or in the water (FGC § 9001.6b).

In 2009, the world's leading fisheries population biologists, Boris Worm, Ray Hillborn and 19 of their peers, published a paper, Rebuilding Global Fisheries, in the journal Science, that stated: "regulatory efforts in California have been "one of the most spectacular rebuilding efforts among global fisheries".

MORRO BAY TOP SPECIES MANAGEMENT MEASURES

Morro Bay fishermen are also faced with a host of other management measures that include spatial closures, seasonal closures, gear restrictions, size and sex restrictions, limits on the number of vessels, restrictions on permit transfers and quota based management and on-board human observer requirements. These measures are considered hallmarks of sustainable fishery management.

Table 4.1 Management Measures for Top Species in Morro Bay

	CPS	Crab	Nearshore	Salmon	White Seabass	Groundfish	California Halibut	Pacific Hagfish	Highly Migratory Species	Spot Prawn
Management Oversight	State/Fed	State	State/Fed	State/Fed	State/Fed	State/Fed	State	State	Fed	State
Stock Assessment	•		•	•	•	•	•		•	
Reporting Requirements	•	•	•	•	•	•	•	•	•	•
Spatial Closures			•			•	•		•	•
Catch Limits	•		•	•		•	•			
Seasonal Closures	•	•		•	•		•		•	•
Gear Restrictions		•	•	•	•		•	•		
Sex/Size		•	•	•	•		•			
Number of Vessels	•		•			•	•			•
Trap Limits		•						•		•
Quota-Based Management						•				

SPATIAL CLOSURES

The Morro Bay commercial fishing fleet operates within a complex system of spatial closures in the form of Marine Protected Areas (MPAs), Essential Fish Habitats (EFHs), Rockfish Conservation Areas (RCAs), and an array of trawl and bottom contact gear bans and restrictions. Morro Bay ranks among the densest collection of spatial closures on the West Coast.

MARINE PROTECTED AREAS (MPAS)

The Central Coast MPA network includes 29 new or modified areas (28 MPAs and one marine recreational management area), covering approximately 204 square miles or about 18 percent of Central Coast. Many of the MPA closures include traditionally productive fishing grounds and have forced dozens of nearshore fishermen and all but a couple commercial passenger fishing vessels out of business (personal communication, Morro Bay, July 2013).

Morro Bay's central location allows fishermen to be active in waters not only proximal to the port, but also productive grounds to the north and south, namely Monterey Bay and the Channel Islands.

ESSENTIAL FISH HABITAT (EFH)

Since 2006, NOAA has designated more than 130,000 square miles of marine waters off the West Coast as essential fish habitat for Groundfish. In much of this area, fishing methods such as bottom trawling are prohibited. Fishing grounds off of Morro Bay encompass some of the most expansive EFHs on the West Coast. They include: the Monterey Bay / Canyon Conservation Area; the East San Lucia Bank; the Point Conception EFH; the Davidson Seamount; and the largest, the Big Sur Coast-Port San Luis EFH which encompasses 3.8 million acres, an area roughly the size of Connecticut. There also exist several smaller EFHs around the Channel Islands and in southern California waters near Los Angeles.

ROCKFISH CONSERVATION AREAS (RCAS)

Gillnet gear was prohibited in California State waters in the 1990s through Proposition 132 (3 miles from the shore).

There are two RCAs that affect Morro Bay fishermen. Both span the length of the coast and prohibit the use of hooks and traps in waters from 30 to 150 fathoms and prohibit trawling from 100 to 150 fathoms.

AREA CLOSURES DRIFT GILLNET

Morro Bay drift gillnet fishermen must fish outside of 12 miles to avoid interaction with juvenile shark and in December are forced outside of 25 miles to avoid the migration of grey whales.

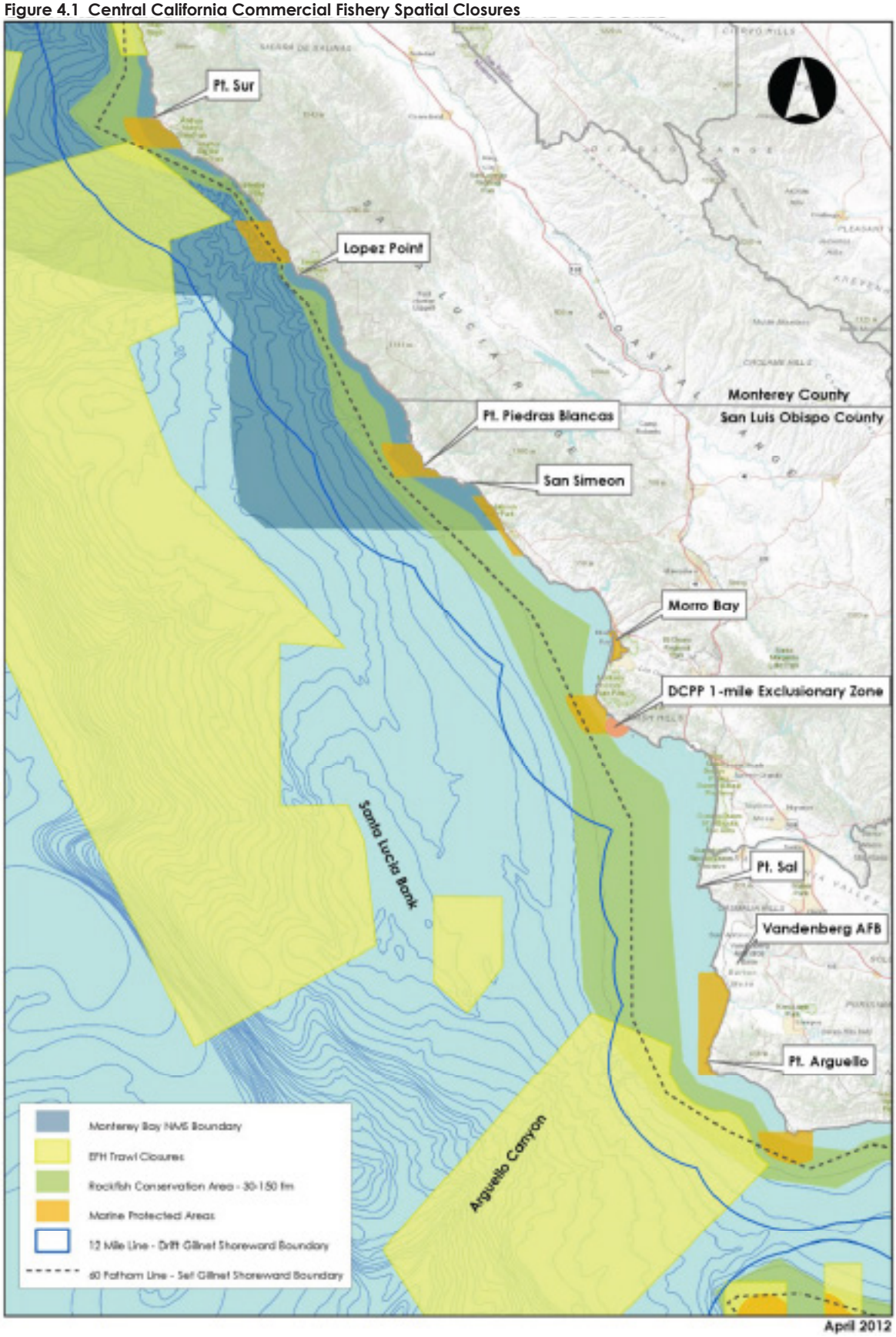
CATCH LIMITS

Several of Morro Bay's top fisheries are subject to catch limits as set by relevant Fishery Management Plans. Most notably, groundfish species are limited by weight and Open Access fishermen (those without permits) are restricted by bi-monthly limits. Pacific sardine are also restricted by catch limits. Once catch limits are reached all fishing effort is required to cease.

TEMPORAL CLOSURES

Several top species in Morro Bay are subject to some variety of temporal closure such as salmon, white seabass, Dungeness crab, swordfish, spot prawn and Market squid. Salmon fishing is restricted to a defined season, although additional adaptive closures may occur throughout the season. Dungeness crab traditionally begins in November and closes in June. Spot prawn face several closures and Market squid is restricted to 5 days per week. While closures differ in Southern California and off of San Francisco, the swordfish season opens for Morro Bay fishermen on August 15 and closes on January 31. Closures are aimed at protecting various species of sea mammals, turtles and sharks.

Figure 4.1 Central California Commercial Fishery Spatial Closures



SIZE AND SEX RESTRICTIONS

Setting standards of minimum size and sex of individuals is a key component of traditional fisheries management. While not necessarily useful for all species, it has proven especially effective at maintaining the Dungeness crab stock[17], with acceptable take limited to males exceeding 6 1/4 inches in width. Salmon size is set each season and varies by region, but generally ranges between 26 and 28 inches in total length. White Seabass must meet a minimum size limit of 28 inches. Halibut must be 22 inches in total length, unless the weight is at least four pounds whole, 3.5 pounds dressed with the head on, or 3 pounds dressed with head off. (www.dfg.ca.gov/marine/pdfs/response/halibut.pdf)

VESSEL MONITORING SYSTEM (VMS)

All vessels engaged in the limited entry trawl, limited entry fixed gear groundfish fleet and drift gillnet fleet, which represents approximately 20 boats in Morro Bay, must carry a working satellite location device, or VMS on board. The VMS transmits information about the vessel's position to enforcement agencies via satellite. Maintenance of a VMS system runs about $40 - $50 per month, with the cost borne by the vessel owner as is the installation of the unit. Fishermen can be compensated for the cost of the unit, up to $5,000, through a Saltonstall-Kennedy Grant administered by the Pacific States Marine Fishery Commission. However, the unit must be purchased, installed and deemed functional by the Office of Law Enforcement (OLE) before the grant request will be honored.

In 1987, federal regulators instituted a buy-back program aimed at reducing the capacity of the groundfish fleet. Between 2003 and 2005, the buyback program removed about one-third of vessels from the Pacific Trawl Fleet (PFMC 2005).

LIMITING THE NUMBER OF VESSELS

Select fisheries in Morro Bay are also regulated by restricted access, such as limitations on the number of participants. Examples include the market squid fishery, the spot prawn fishery and the groundfish trawl fishery, in which regulators instituted a limited entry program in 1994. At the time of this report, the statewide market squid fishery is limited to 55 vessels. The spot prawn fishery is controlled through limited permits, of which there are currently 26 active statewide. The halibut trawl fleet is limited through control of permits, primarily through strict limits on transfers and sales.

Catch shares were identified as a key management condition towards co-management success while stressing that users' security is more important than catch or space. The authors praise catch shares as having helped to prevent overfishing, promote stability, and ecological stewardship (Leadership, Social Capital And Incentives Promote Successful Fisheries, Nicolás L. Gutiérrez, Ray Hilborn & Omar Defeo, 2009)

GEAR RESTRICTIONS

Most types of gear used by fishermen in Morro Bay are governed by various state and federal regulations. Traps used in the spot prawn, Dungeness crab, rock crab and Pacific hagfish fisheries must meet restrictions on mesh and entry ring size and have features such as escape doors for undersized individuals and degradable materials to prevent "ghost fishing" should the traps be lost. Salmon fishermen must use barbless hooks and no more than 6 lines are allowed per vessel.

17 Parrish, Richard H. 2007. A Review of Traditional and Ecosystem-Based Fishery Management in the Monterey Bay National Marine Sanctuary.

QUOTA BASED MANAGEMENT, INDIVIDUAL TRANSFER QUOTA (ITQ)

The Limited Entry Trawl Groundfish Fishery is the only fishery in California, Washington and Oregon that is managed through an Individual Transferable Quota (ITQ) system.

Groundfish, currently and historically, represent the most valuable fishery in Morro Bay. Over 62 million pounds of groundfish have been landed in Morro Bay since 1990, generating over $49 million in EVV.

In the ITQ program, each year, fishermen receive a percentage of the total allowable catch (TAC) based on their history of landings. If fishermen exceed the amount allotted to them, particularly with overfished species (OFS), they must cease fishing until they can buy quota on the open market and reconcile their account. Thus, fishermen have a strong incentive to avoid interaction with OFS, and to better plan and pace their fishing effort. In addition to reducing the race to catch as much as possible before the season ends, the ITQ system is also intended to attract a better return for fishermen through a more consistent supply and a higher quality product.

As stated in a recent report by the National Panel on the Community Dimension of Fisheries Catch Share Programs, "fishing communities on every coast are bearing the brunt of the transition to catch shares."[20]

Catch shares are generally seen as a beneficial management tool and a move away from a traditional top-down management approach. However, catch shares create risks for small communities from consolidation or the migration of quota (a saleable asset) to larger communities or entities with greater access to capital. Catch shares also represent higher costs for fishermen to comply with scheduling federal on-board observers, managing quota share and quota pounds (QS & QP) account transfers, carry-over leases, and reconciling accounts when they exceed limits. Fishermen must also be prepared to engage with regulators at the Pacific Fisheries Management Council level, to support changes to the ITQ program that will benefit them and oppose those that will not.

Adaptive Management is a program proposed as part of the limited Entry Groundfish ITQ program whereby 10% of the total available quota will be withheld and distributed to communities that have been adversely affected by those regulations. The program has yet to be implemented or further defined.

These unintended consequences raise barriers to entry and limit opportunities for new participants, particularly smaller operations. Regulators and fishermen must work to ensure that small fishing communities retain their traditional access to fishing resources and the associated economic, social, and environmental benefits. Regulators and fishermen must also work to ensure there is a diversity of opportunities in the ITQ fishery, for small boats as well as large, and trawl as well as hook, line and trap. Diversity represents a stronger resilience and greater potential for sustainability.

Federal regulators are helping defray costs by subsidizing some observer costs and potentially considering the refinance of the Buy Back Loan, a program intended to reduce the number of boats in the fleet. Fishermen are responsible for paying back the loan through landing fees. Regulators are also considering Adaptive Management, where 10 percent of available quota is set aside to be distributed to communities that suffer negative consequences from catch shares. The City of Morro Bay and leaders in the fishing community have worked hard to develop key partnerships and put the community in the best possible position to benefit under the new regulations. Those efforts include the development of the Community Sustainability Plan and the newly formed Morro Bay Community Quota Fund. More time is needed to determine whether intended goals and objectives of ITQ measures are realized.

18 Ecotrust. 2011. Community Dimensions of Fishery Catch Share Programs. Integrating Economy, Equity, and Environment. National Panel on the Community Dimensions of Fisheries Catch Share Programs.

FISH STOCK STATUS

Stock status are based on scientific analysis of data collected from field.

Of the thousands of species off the coast of Morro Bay, all of the approximately 30 to 40 targeted by the commercial fishing industry are managed by state and federal agencies and subject to science-based stock assessments and evaluations, strict reporting requirements and enforcement. Many species are considered by regulators and fisheries biologists to have healthy populations, and a number of impacted fisheries are showing evidence of sustained improvement. Healthy fish populations can be attributed to a robust marine environment, resilient fish stocks and fishermen's and regulators' efforts to maintain sustainable yields. Some examples of healthy or improving fish populations include swordfish, thresher shark, salmon, Petrale sole, bocaccio and cowcod, and are listed below.

NOAA Fisheries, 2013 Fishwatch Program stated that the population of North Pacific swordfish is healthy, abundant, and harvested at sustainable levels.

Based on analyses of productivity, catch per unit effort (CPUE), and catch data, Federal Regulators report that thresher shark mortality is estimated to be below the rate that would produce maximum sustainable yield and biomass is estimated to be above that required for maximum sustainable yield. As a result, the stock is reportedly not overfished (PFMC 2010).

Although many vulnerable species still require reduced exploitation to recover, the exploitation rates in a number of well studied ecosystems [like California] are below levels the models predict to be sustainable (Worm, Hillborn et al., 2009).

The North Pacific swordfish (NP swordfish) stocks are separate from the North Atlantic swordfish stock which was overfished, but has been fully rebuilt since 2009.

Thresher shark and swordfish are part of the drift gillnet complex and overseen by the Highly Migratory Species Fishery Management Plan. The drift gillnet fleet generated over $400,000 in landings in Morro Bay in 2012.

In 2011, the NOAA declared the Chinook salmon fishery as "rebuilt" following a complete closure in 2008 and 2009 (National Marine Fisheries Service 2011 Report to Congress, The Status Of U.S. Fisheries). Salmon earnings topped $600,000 in Morro Bay in 2012 from over 92,000 pounds in landings. The same report declared widow rockfish rebuilt in 2011. Widow rockfish are caught by trawl and are a prevalent species in Morro Bay.

Unfished Spawning Biomass is a variable used in stock assessments that refers to the total weight of the fish in a stock that are old enough to reproduce and are estimated to have reached levels before fishing occured (American Fisherman's Research Foundation, Stock Assessment Primer).

The PFMC states that under current annual catch limit targets and catches, the continued long-term decline of bocaccio rockfish is very unlikely and that rebuilding is projected to continue faster than previously estimated (2013 Groundfish SAFE Report Update).

After being declared overfished in 2000, preliminary reports from the June 2013 PFMC briefing book state that dark blotched rockfish have returned to unfished spawning biomass levels above the overfished threshold, but remain below management target levels. Spawning output has been slowly increasing since management regulations were instituted for the species in 2000.

Per the PFMC September 2013 briefing book: Median spawning biomass for cowcod fell below the Minimum Stock Size Threshold (MSST) from 1983 through 2004, with a low of 9% of unfished biomass in 1987. Since then, the base model median result suggests the stock has increased to 34%. Closures such as the RCA, EFHs and Cowcod Conservation Areas are intended to increase cowcod populations since their stock was declared overfished in 1999.

Petrale sole, part of the groundfish complex, are no longer overfished as part of a successful rebuilding plan, though unexploited levels remain slightly below management targets (2013 PFMC Stock Assessment Review (STAR) Panel).

Sablefish stocks are considered to be abundant per NOAA's Fishwatch website.

According to the most recent PFMC SAFE report in 2011, Dover sole exploitation rates are unlikely to have fallen below the management target threshold and "Recent exploitation rates on Dover sole have been small, even after management increased catch levels in 2007."

NOAA states that because market squid grow fast and have a short life span, populations are difficult to estimate but can also therefore" handle a relatively high amount of fishing pressure."

Bocaccio rockfish, dark blotched rockfish, cowcod, sablefish, Dover sole and Petrale sole are part of the groundfish complex and subject to spatial closures, catch limits, quota-based management, limited entry of vessels and strict monitoring, reporting requirements and enforcement.

DEVELOPMENT AND HEALTH OF THE BAY

In planning expansion or improvement of shore side or over-the-water infrastructure, leaders at the City and the fishing community should continue to consider potential impacts on water quality as well as shading and its effects on eelgrass. The City and fishing industry leaders acknowledge the clear connection between offshore fisheries and the health of the estuary. The City has been compliant with CEQA, Regional Quality Water Board, EPA and other agencies guidelines in dredging and expanding and improving slips, piers and moorings. The health of the estuary depends on the entire community's awareness and participation.

SEA LEVEL CHANGE

Docks, piers, hoists, fuel facility, ice plant and other over the water infrastructure as well as truck access routes in Morro Bay contribute directly to a healthy fishing economy and generate ripple effects in tourism and employment. Changes in sea level, particularly in the context of extreme tides and storm events puts waterfront infrastructure on the frontline of vulnerability, threatening the local economy and the sustainability of marine-dependent businesses. Sea levels are the highest they have been in 120,000 years, ocean temperatures are higher than they have been in 150 years and sea levels have increased by 8 inches over the last 100 years. Scientists have concluded that even if we stopped all human-generated CO2 and methane emissions, sea level would continue to rise, so planning for long-term change is a necessity for the sustainability of the community. Current accepted levels are a rise of three feet by 2100 (United Nations Climate Panel, 2012).

Planning for an event that will manifest itself slowly over a generation is not a task that humankind is accustomed to.

Coastal communities are planning for rising sea levels and extreme tide and storm events by identifying areas that are most susceptible and applying practices that keep infrastructure and facilities out of harm's way, such as raised foundations, wash through first floors, floating facilities, construction of berms and levees and active retreat.

Table 4.2 Environmental Indicators and Metrics

Indicator	Metric
Robust, Productive Ecosystem	Stable and growing fish populations across a wide range of species, age classes, and sex distributions as evidenced by stock assessments and empirical observation by fishermen. Number of new fish stocks considered "rebuilt" and/or actively rebuilding. Water quality offshore and in the Bay.
Effective and Appropriate Regulation	Management measures based on scientific evidence with input from fishermen that avoid value driven and untested beliefs as influences. Reassessment and measurement: regular, consistent and science-driven testing to assure management measures are appropriate and effective.
Transparency	Data on habitat, stock health and management decisions accessible to public, easy to understand, inexpensive and appropriate to reflect status and changes. Landings by species and port available to public, as gleaned from fish tickets and made available on the CDF&W website. Opportunities for the fishing community and coastal communities to participate in fishery management decisions.
Sea Level Change Preparation	Sea level change considerations in key local planning documents (LCP) aimed at protecting working waterfront infrastructure and access roads using generally accepted guidelines from the California Coastal Conservancy, California Coastal Commission, Intergovernmental Panel on Climate Change (IPCC) and Army Corps of Engineers, among others. Effective education programs for local residents and lease holders.

5. SOCIAL SETTING

SOCIAL IMPACTS AND CAPACITY

The history of Morro Bay's commercial fishing community is one of change, evolving from a large fleet, heavily reliant on trawl to a smaller and more widely distributed mix including hook and line, troll, trap as well as drift gillnet within a context of increased regulation, rising costs and growing competition from corporate fishing operations. In this transition, Morro Bay commercial fishermen have championed the small-scale, family-operated business model with distribution to a diversity of markets: local, regional and international. These forces, coupled with the unique personalities of fishermen, the growing level of local and regional food consciousness, and high level of civic and historic pride, have shaped a fishing community that is unique in its relatively tight cohesion and sense of ownership of fishing heritage.

Social resilience within communities dependent on environmental resources has shown to be directly linked to ecological resilience (see e.g. Acheson 2004; Adger 2000; Berkes and Folke 2000; Glasser and Diele 2004; Golombi 2012). As each community is unique, the social features that contribute to social sustainability and resilience is case-by-case specific; but the fact that social sustainability and well-being is interdependent with environmental sustainability and resilience is understood to be universal.

Social sustainability is the ability of a community or other social groups to maintain and strengthen group cohesiveness, resilience to economic and political forces, and sense of identity, such that the benefits of the group can be maintained across generations. In U.S. fishing communities, social sustainability has been threatened through economic and environmental challenges. Among those are rising operation costs, such as fuel, labor and insurance, increased competition from inexpensive imports, declines in certain fish stocks, interaction with non-target species and marine mammals, regulations that restrict effort, volume of catch, length of season, and access to viable fishing grounds as well as well funded and orchestrated opposition from conservation organizations.

Resilience within the U.S. fishing fleet has frequently been examined in terms of economic or environmental standards. Less frequent are discussions of the role that relationships, communication, respect, social cohesion, trust, leadership, organization and perspective of the future play in determining the long-term viability of a commercial fishing community. Yet, the more cohesive and effective the leadership (respect,

The Consultant Team has worked with the fishing community consistently since 2007, conducting economic, social and regulatory analysis and reporting and has developed close ties with industry participants.

communication, shared knowledge), the larger and more capable a group can grow and the more complicated and sophisticated tasks it can accomplish.

This section addresses the social component of the Morro Bay fishing community, drawing from literature on social performance and interviews with fishing industry participants. The following social sustainability metrics have been identified as most critical.

- Social cohesion
- Sense of identity
- Self organization
- Leadership
- Communication and education
- Intergenerational employment

Of the approximately dozen fishermen that were interviewed for this project, they all had a strong foundational knowledge of key fisheries other than their own in Morro Bay as well as an awareness of current regulatory and market forces and level of participation. It is clear that while each fisherman was an advocate for his or her fishery, they are strong supporters of Morro Bay and the entire West Coast commercial and recreational fleet.

SOCIAL COHESION

The extent to which a community is socially cohesive largely determines the long-term success and sense of well-being it is able to maintain. Relationships are an extremely important part of any social or economic structure and enable a group to accomplish much more than any one individual or loose group of individuals. Trust, understanding, communication and respect are the key elements of social cohesion. This section depicts the nature of social cohesion within the industry and between the industry and the community of Morro Bay, as identified by stakeholders and through years of observation. A variety of relationships prevail within the community, but those most relevant to the fishing community include:

- Relationships within the commercial fishing industry
- Relationship between fishing industry and the community of Morro Bay
- Relationship between commercial fishermen and recreational fishermen
- Relationships between Morro Bay commercial fishermen and other regional fishing groups
- Relationships between fishing industry and conservation groups
- Relationships with support groups for fisheries

Commercial fishermen in Morro Bay operate through a code of honor, where a promise or a handshake holds all the obligations that may a signed contract. This code also means that if a fisherman finds himself in trouble at sea, he or she has the attention and support of possibly hundreds of people.

RELATIONSHIPS WITHIN THE COMMERCIAL FISHING INDUSTRY

The fishermen of Morro Bay do not all live in Morro Bay. Some travel from Atascadero, Paso Robles and San Luis Obispo to work at the docks and on vessels. As such, this fishing community is defined as a community by work relations and by a shared knowledge set; it is also defined as a community through each participant's interest in strengthening the industry as a whole.

Fishing practices, gear type, regulations, processing procedures, and markets among the key fisheries in Morro Bay; CPS, groundfish, spot prawn, Dungeness crab, Pacific hagfish, HMS, nearshore, spot prawn and salmon are vastly different. However, Morro Bay fishermen, in general, have a solid understanding of the nature of each other's fishing businesses and healthy respect for fellow fishing business owners, fishermen, and industry employees. While tension between fishermen of different gear types may arise from time to time it is clear that the industry regards itself as a discrete and capable unit, borne out of a common connection to the sea, hard work, independence as well as mutual respect.

The MBCFO was incorporated in 1972 but several fishermen have stated that a formal organization existed long before that.

Social cohesion within the commercial fishing industry of Morro Bay is marked by the close and ongoing communication between fishermen through a variety of organizations, most notable the Morro Bay Commercial Fishermen's Organization (MBCFO). This organization has been a vital mechanism to ensure the wellbeing of the fishing industry within Morro Bay and to connect it to the wider community since 1972. Founded by fishermen, this organization serves as a mechanism for members to assemble to voice concerns, collectively solve local problems, and organize to participate in regional and national meetings and events. The organization also funds a number of programs and studies to advance commercial fishing. It is a model of effective organization from which other communities may borrow.

Obvious examples of community interest and support include the Oyster Festival that attracted 4,000 attendees its first year and the annual Harbor Festival that attracts thousands of visitors but also provide a means of connecting the commercial fishing community to the wider Morro Bay community.

RELATIONSHIP BETWEEN THE FISHING INDUSTRY AND THE COMMUNITY OF MORRO BAY

The commercial fishing industry of Morro Bay is recognized as an integral part of the identity and economic well-being of the area and provides a sense of pride and a powerful link to the past. One of the most powerful statements of support by the community of Morro Bay is the passing of Ballot Measure D in 1985 that created a Commercial Fishing Zone along the Embarcadero north of Beach Street and protected fishing related uses into the future.

The City, largely through the Harbor Department, works closely with and for commercial fishermen, supporting community awareness events and programs such as a Memorial Day Lost at Sea Ceremony, and the Blessing of the Fleet. The City also provides a seat on the seven-person Harbor Advisory Board for a member of the commercial fishing industry to ensure cohesive relations among all working waterfront users. Through these efforts, the City exhibits support and an awareness of the role that commercial fishing plays in the overall economic vitality of the community. From incorporation in 1964, the Morro Bay City Council has passed over 24 separate resolutions, or ordinances, supporting and promoting commercial fishing. These range from priority assignment of City slips and subsidized rates for qualified fishing vessels to passing the Measure D initiative in 1985. The City also provided critical support to launch the Morro Bay Community Quota Fund, and establish the state-of-the-art ice facility and gear storage yard.

RELATIONSHIP WITH THE CONSERVATION COMMUNITY AND THE NATURE CONSERVANCY

Following a push in the 1970s and 1980s to expand the fleet and facilitate American dominance in the EEZ and a regulatory shift in the 1990s to limit fishing, conservation groups have become more engaged in the commercial fishing arena. While California fishermen and conservation groups have generally battled over environmental concerns, most stakeholders realize that some conservation groups are more solutions-

oriented than others. Morro Bay has worked closely with The Nature Conservancy (TNC) and Environmental Defense Fund since 2005 and members of the risk pool in Morro Bay are working with the Monterey Bay Aquarium Seafood Watch program to refine ratings on locally-caught rockfish.

Leaders in the fishing community and the City of Morro Bay worked closely with TNC and EDF to procure and Exempted Fishing Permit (EFP) from the PFMC. The work proved beneficial as the EFP was granted and landings began in 2008.

In 2005, as part of the acquisition of several permits and vessels in the West Coast Limited Entry groundfish trawl fishery, TNC purchased all of the active groundfish trawl permits and trawl vessels in Morro Bay. Through this acquisition and negotiations with fishermen and regulators, TNC facilitated the establishment of 3.8 million acres of Essential Habitat off the Central Coast and averted a lawsuit against federal regulators brought by conservation groups. At that time, TNC established an office in San Luis Obispo and eventually relocated to Morro Bay to maintain, strengthen and expand the relationships it had established in the fishing community and launch the Central Coast Groundfish Project that included an Exempted Fishing Permit (EFP) aimed at mimicking the Individual Transferable Quota management structure and testing the social, environmental and economic implications of gear switching and cooperation among fishermen. While some factions in the community are still distrustful, TNC has worked hard and invested heavily in Morro Bay and developed strong friendships and partnerships. Between 2008 and 2010, the EFP generated over $2.5 million in earnings at the dock and provided fishing opportunities for four local fishermen and one operation from Half Moon Bay. TNC initiated an electronic monitoring pilot as part of the EFP and negotiated and funded human observer coverage requirements as well as assessments and reporting on economic, environmental and social performance. TNC is currently engaged in working with the Morro Bay Community Quota Fund to assure that trawl quota stays in the community and has also spearheaded an EFP to allow access to underutilized species in the RCA. The ability of local fishing industry leaders to engage in non-traditional partnerships, like the one with TNC, is illustrative of the community's capacity to adapt to change and understanding that the future may be far different than the past. These are hallmarks of social sustainability.

COMMUNITY OF MORRO BAY AND THE NATURE CONSERVANCY, A PRODUCTIVE ALLIANCE

TNC's purchase of trawl permits and trawl vessels in 2006, ensuing negotiations with fishermen and eventual establishment of the Essential Fish Habitat off the Central Coast helped avert a lawsuit aimed at federal regulators by NGOs.

The success of the Central Coast Groundfish Project (CCGP) is in very large part due to the hard work and foresight of local fishermen, community and conservation leaders, and the City of Morro Bay. The project benefitted greatly from TNC's commitment, and went so far as to deploy the Project's Manager in the community and to heed directives that came out of this "bottom up" organizational approach.

Unlike many conservation-driven initiatives in the fishing industry, the CCGP provided benefits for a range of stakeholders, including regulators, the conservation community, the local economy and the community at large.

REGULATORY: From 2008 to 2010 the CCGP operated on an Exempted Fishing Permit that allowed gear switching from trawl to fixed gear with 100% human observers, running a real-life model of how small, fixed gear operations would perform in the ITQ program. The observer data from this model is currently being used in the development of an Electronic Monitoring program as a lower cost alternative to 100% human observer requirements.

ENVIRONMENTAL: The CCGP originated in a unique partnership in 2005 between the fishing and conservation industries to create a jointly supported designation of Trawl Essential Fish Habitat (EFH) on the Central Coast. The establishment of the EFH averted a costly and time consuming lawsuit brought against regulators. Participating vessels in the CCGP also entered into voluntary conservation agreements with TNC to improve environmental performance, better manage overfished species and avoid sensitive habitats. The CCGP was also the incubator for development of the California Risk Pool, an innovative collaboration of fishermen and conservationists to reduce bycatch and provide better access to healthy fish stocks.

COMMUNITY AND ECONOMY: The community of Morro Bay benefitted from approximately $2.5 million in CCGP-generated earnings between 2008 and 2010, increased employment, and spending on ice, fuel, marine supplies, hook baiting services, offloading and processing. Seven years later, Morro Bay is poised to be the first Community Quota Fund in California and much of the initial quota purchase will be made directly from TNC. Community Quota Funds may mean the difference between participation in the valuable ITQ Limited Entry Ground fish fishery or not, and more secure landing activity that maintains commercial fishing infrastructure.

Seafood consumers, domestic and international, gained from the development or reconnection of Morro Bay with markets and the community's return as one of the top fishing ports in California. A stable supply of local fresh sustainably caught seafood contributes to the Central Coast tourist economy and meets increasing consumer demand for those products.

RELATIONSHIP WITH THE MORRO BAY NATIONAL ESTUARY PROGRAM

The Morro Bay National Estuary Program (MBNEP) is an important partner to the fishing industry and the community and is a leader in collaborative research, environmental conservation and the promotion of environmentally sustainable harbor facilities. The MBNEP was established in 1995 with strong support of the local community with a mission to engage citizens, government, non-profit organizations, and landowners in protecting and restoring Morro Bay. The MBNEP's management committee includes a designated fisheries representative seat which is currently occupied by a member of the Central Coast Women for Fisheries. The MBNEP's Comprehensive Conservation and Management Plan (CCMP) acknowledges the importance of biological and human systems in assessing the health and future of the estuary. The newly updated CCMP identifies several action plans that support Best Management Practices (BMP) in boating and harbor management and uses of the Bay as well as a boatyard/haulout facility and promotes the connection between a healthy estuary and healthy offshore fisheries.

The MBNEP focuses its work in three areas - monitoring and research, restoration and conservation, and public.

RELATIONSHIP BETWEEN COMMERCIAL FISHERMEN AND RECREATIONAL FISHERMEN

Commercial fishermen and charter fishing businesses have a good understanding of each other's operations, including seasons, regulations, fishing grounds and economic challenges. Some deckhands and skippers in Morro Bay participate in or switch between commercial and recreational efforts. While some tension regarding catch levels and reporting requirements have arisen in the past, particularly with closures brought on by

Marine Protected Areas, the two groups work together and support each other, and recognize the important contributions each makes to the small operation, family-based fishing community. "It's a small community, you know, so everyone knows and supports everyone else" notes one captain. Commercial fishermen recognize that the recreational fishing industry creates an important draw for tourists, who fill the markets and restaurants that are supplied by the local commercial fleet. Recreational fishermen recognize the role that the commercial passenger fishing fleet plays in drawing tourists – and customers to the Embarcadero and raising awareness of the healthy Central Coast marine environment.

RELATIONSHIPS BETWEEN MORRO BAY COMMERCIAL FISHERMEN AND OTHER CENTRAL COAST FISHING GROUPS

The Morro Bay commercial fleet maintains decades-long relationships with fishermen and fishing groups in other ports. Until 2000, Morro Bay was the jumping off point for the California surface troll albacore fishery. The Morro Bay fishing community exhibits a keen knowledge of marketing and technical advances of fishermen along the coast. Morro Bay fishermen work together to share seats in larger associations, at times traveling together to attend meetings.

Tell an albacore fisherman in San Diego that you are from Morro Bay and it will become clear they regard it as their second home port.

At one time Morro Bay fishermen held president positions with the Western Fishboat Owner's Association, one of the two major associations in the West Coast surface troll albacore fishery as well as the United Troller's Association.

Though relationships with fishermen in the region, including Santa Barbara, Ventura and Monterey, have been strengthened through time, relationships with members of the Northern California and Oregon communities are also strong. ITQ groundfish fishermen in Morro Bay are participating in the California Risk Pool that includes participants from Half Moon Bay, Moss Landing, Fort Bragg and Ilwaco, Washington. Participation in the risk pool is predicated by cooperation on the water and on shore, through sharing knowledge, avoiding areas where overfished species might be caught and helping advise regulators on best practices in the new management structure.

Morro Bay albacore fishermen engage in powerful social interactions on the water through code groups that include fishermen from San Diego, Moss Landing, Washington, Oregon and across affiliations. A code group often fishes close together, communicating on the radio and constantly sharing valuable information on weather and the movement of fish stocks, and to be on hand if something goes wrong.

Morro Bay plays host to numerous visiting vessels from Moss Landing, San Diego, Monterey, and Santa Barbara in the open access groundfish fishery, drift gillnet swordfish fishermen, and salmon and Dungeness crab fisheries when they are running.

The Central California Joint Cable/Fisheries Liaison Committee was established to facilitate the relationships between major telecommunication companies (PG&E, ATT and Verizon) and mitigate for the loss of fishing grounds as cable routes were being

set on the ocean floor. The CCJCFLC presently works to maintain these relationships and has distributed approximately $5.2 million in grants that have supported U.S. Coast Guard safety compliance requirements for vessel owners, maintenance of the Faces of California Fisheries website, the Central Coast Women for Fisheries educational scholarship program, and economic impact reports for the MBCFO and PSLCFA, among much more.

RELATIONSHIPS BETWEEN FISHING INDUSTRY AND REGULATORY AND SCIENTIFIC GROUPS

The value of the fishing industry comes from a knowledge base that has been acquired over many years of hands-on experience. The fishermen of Morro Bay hold profound knowledge of the diverse fisheries along the coast, ocean habitats, life cycles, migratory patterns, and foraging behavior, as well as the regulations that govern seasons, catch methods, etc. They are also skilled in operating an array of fishing gear and on-board equipment. This knowledge of regulations, species, gear type, weather, boats and markets makes up a fishing community's collective value. There is a growing movement among scientists, conservation agencies, and others who work in fisheries to recognize and appreciate the value of this experiential-based knowledge and expertise in management and are increasingly including fishermen in collaborative opportunities. Fishermen in Morro Bay have a long history of participating with regulators, academics and conservation groups, evidence of the ability to build valuable relationships and a hallmark of sustainability.

SCIENTIFIC COMMUNITY

An increasing number of scientific groups recognize the benefits of working with fishermen, and learning from their expertise in understanding and managing ocean resources. The California Collaborative Fisheries Research Program, formed in 2006, was created through a partnership among Morro Bay and Monterey Bay fishermen, California Polytechnic State University, San Luis Obispo (Cal Poly), and Sea Grant to help monitor marine reserves established through California's Marine Life Protection Act. This collaborative research project has been instrumental in bridging the relationship between commercial fishermen and the scientific community and is a successful example of such partnerships.

REGULATORY AND OVERSIGHT AGENCIES

The City of Morro Bay and the local groundfish association have supported co-management efforts by sending representatives to PFMC meetings to, among other items, push for the approval of EFPs and for changes to regulations, such as raising the control limit for community quota funds and allowing the less expensive on-board cameras in place of human observers. The City also collaborated with TNC and the Moore Foundation to facilitate the return of Rick Algert, retired Harbor Director to assist with special programs in the fisheries. The City also supported the formation of the Morro Bay Community Quota Fund.

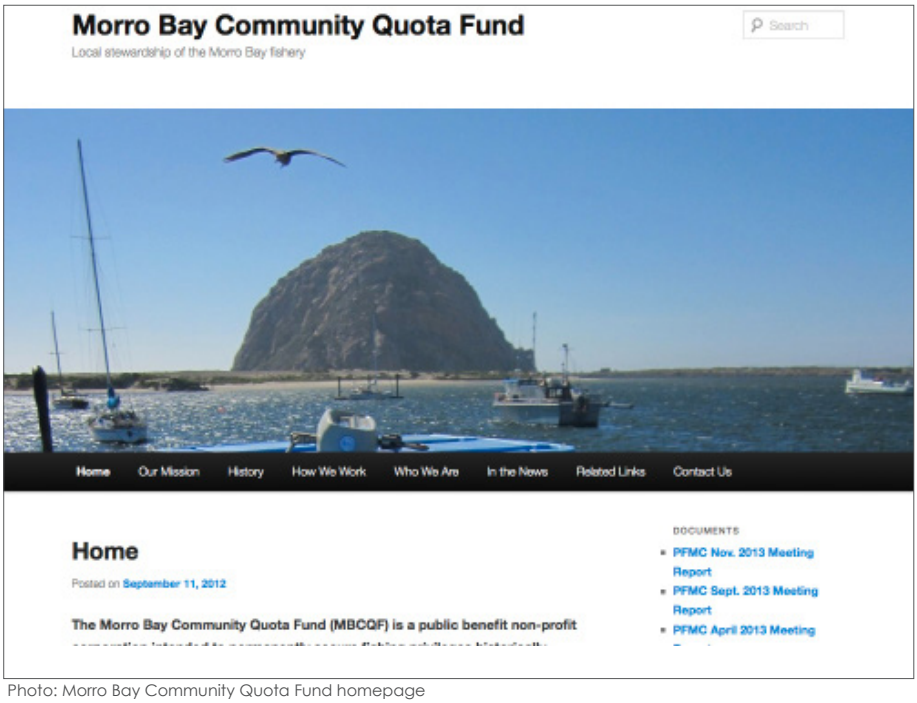


Photo: Morro Bay Community Quota Fund homepage

In 2012, fishermen in Morro Bay and Port San Luis joined with Cal Poly and conservationists and took a very active and informed approach to oppose seismic testing that was part of the renewal of PG&E's Diablo Nuclear Power Plant license. Fishermen coordinated amongst themselves to assure maximum participation at State Lands Commission, California Coastal Commission and PG&E Meetings. They also coordinated talking points and used economic data from MBCFO economic impact reports to substantiate their opposition. It was one of the most concerted and coordinated displays of fishermen taking control of their future and the forces that affect them (personal communication, Morro Bay August, 2013).

RELATIONSHIPS WITH SUPPORT GROUPS FOR FISHERIES

SLO Fresh Catch

San Luis Obispo Fresh Catch is the County's only Community Supported Fisheries program and one of approximately 6 in California. SLO Fresh Catch was established in June of 2010 and has grown to 125 shareholders receiving 8 oz. of fresh, locally-caught, locally-processed seafood per week. SLO Fresh Catch addresses several key objectives; providing (slightly) higher prices at the dock, taking advantage of local demand for seafood, strengthening the relationship between the fleet and the local community and making better use of resources by taking advantage of the proximity of extraction and consumption.

Women in the Role of Fishing

Stakeholders frequently mentioned the role that women in the community play in the viability and success of the fishing industry in Morro Bay. The support and effort that wives and daughters of the fishermen provide is important and often goes unrecognized. Steady wage income and other support efforts provided by wives of fishermen (e.g. keeping financial books and records, managing email and other messages, tracking and attending meetings, managing supplies, coordinating with contractors for maintenance and repairs, working on the vessel as a deckhand, etc.) are instrumental to the success of the fishing community.

Morro Bay is unique, however, in that wives and daughters of fishermen have more formally organized into the Central Coast Women for Fisheries (CCWF). At 100 members strong, the CCWF is a 501(c)(3) non-profit comprised of women who are fishermen, who are related to fishermen, who are part of the support sector of the industry, or generally supporters of small-scale, family-operated fishing enterprises. These women work to promote and maintain a sense of living fishing heritage and culture within the larger Morro Bay community. Their work includes: "Educational programs for the public, fishermen and family members, including transitional programs; Preservation of maritime heritage; Charitable and social services for families in fishing and related industries, especially in times of disaster; Conservation of ocean ecosystems; and Promotion of local and/or underutilized species" (CCWF website). Recent work within the CCWF has included a Fishing Heritage Scholarship Program which has distributed over 85 scholarships.

CCWF strengthens the bond between the general community and the fishing community, between the recreational fisheries and the commercial fisheries (as it includes members from both groups), and among members of the commercial fishing industry. It is instrumental in creating a sense of pride, community, and place to local fishermen and their families.

Supporting education and research related to the Morro Bay fishing heritage, CCWF raises capital through their local fundraisers, the sale of merchandise and prepared seafood, on-line fundraising, and through a strong partnership with the Central California Joint Cable/Fisheries Liason Committee. This union reflects the nature of cooperation between the Morro Bay fishing-based organizations and a shared concern for strengthening social bonds in the community.

The mission of Central Coast Women for Fisheries, Inc., a California nonprofit public benefit corporation ("CCWF"), is to foster and promote a sense of the living culture of fishing communities by providing education, training, research and support for:

- Educational programs for the public, fishermen and family members, including transitional programs;
- Preservation of maritime heritage;
- Charitable and social services for families in fishing and related industries, especially in times of disaster;
- Conservation of ocean ecosystems; and
- Promotion of local and/or underutilized species.

The CCWF Volunteer Program, the Lost at Sea memorial, Aloha Community, the Pelorus Newsletter and the Fishing Heritage Scholarship Program are pragmatic examples of the capability and importance of the CCWF.

Sense of Identity

Having a sense of belonging to a larger community, a heritage, a culture and a place is key to creating long-term viability of a social group. Groups with a strong identity effectively work to meet and overcome challenges, an essential quality in a climate of increasing regulations and restrictions. Fishermen in Morro Bay and those interviewed for this project consistently report having a strong sense of identity to the fishing heritage of the area.

Self-Organization and Participation in Organizations

The Central California Seafood Marketing Association (CCSMA) is a non-profit fisherman's cooperative marketing association based in Morro Bay. Through implementation and marketing of industry-leading co-management and on-the-water sustainability initiatives, the CCSMA is bringing high quality, locally harvested wild California seafood to consumers while protecting the health and productivity of fish stocks and habitat, and helping to stabilize commercial fishing activity in Morro Bay.

Membership and participation in the Central Coast Women for Fisheries, Morro Bay Commercial Fishermen's Organization, Central California Seafood Marketing Association, Pacific Coast Federation of Fishermen's Association, the Western Fishboat Owners Association, Southern California Trawlers Association, the American Fishermen's Research Foundation and the Alliance of Communities for Sustainable Fisheries reflect the involvement that Morro Bay commercial fishermen and wives have in fishing-related organizations and their ability to effectively organize and partake in decision-making roles. Moreover, local fishermen have served on the board of directors of insurance pools including the United Reserve Fund and the United Trollers Fund.

Leadership and Political Representation

Leadership ensures sustainability of a community as leaders initiate action to protect and strengthen the fishing industry through involvement in policy making, promotion and generally bringing more light on fishing-related issues through inclusion in the public and political dialogue.

Members of the Morro Bay fishing community report that several individuals play important roles in guiding the community through their personalities and through the positions they fill in industry organizations and on executive boards. There are two commercial fishermen on the Morro Bay Community Quota Fund Board, a commercial fishing seat on the Morro Bay Harbor Advisory Board and several commercial fishermen serve on the CCJCFLC board. The commercial fishing fleet maintains a close relationship with civic leaders in Morro Bay, regularly advising the mayor and the City Council on issues that affect the commercial fishing industry. Commercial fishermen have also developed a close relationship with Lois Capps, U.S. Representative for California's 24th Congressional District who has supported numerous initiatives that favor commercial fishing, particularly funding for dredging the harbor.

Because the leadership within the Morro Bay fishing community is distributed across a range of individuals who lead by way of community involvement and communication and interaction with the broader fleet, the fishing community may be described as more horizontally, rather than vertically distributed and organized. As such, many industry members are actively involved in decision-making processes.

Further, leadership positions in organizations rotate over time, enabling more individuals to participate in decision making over time. This type of structure provides members of the community with greater voice and a greater capacity to work together to achieve goals, mitigate challenges, and create social sustainability. It also fosters greater mutual respect.

EDUCATION, COMMUNICATION, AND PRESENCE IN THE MEDIA

Educational and promotional programs provide important opportunities to link the world of commercial fishing to the broader Morro Bay and San Luis Obispo County community. Programs that generate knowledge about how local seafood is harvested, the history and culture behind it, and the role it plays in the general economy are essential to maintaining ongoing support to the commercial fishing fleet.

The MBCFO recently created the Fishline Mobile Application for smartphones and tablets. The app provides info on purchasing directly off-the-boat from fishermen and from local seafood markets, farmer's markets, restaurants and cafés, as well as by mail order.

The San Luis Obispo Telegraph Tribune, the free weekly, New Times, the on-line SLO Coast Journal and other local news sources serve as a means of wider communication of the role of fishing in the larger San Luis Obispo County community. National publications, including the New York Times, have drawn considerable attention to the advances the local fishermen and TNC have made on the Central Coast Groundfish Project. The City of Morro Bay sponsors a "Commercial Fishing Corner" webpage for enhanced communication between the general public and the commercial fishing industry. The Morro Bay commercial fishing industry is regularly featured in trade journals like Pacific Fisherman and comments of then president Jeremiah O'Brien appeared in National Geographic in 2008. The CCWF also sponsors a newsletter and maintains a website that helps inform the wider San Luis Obispo County community of fishery-related events, programs, and scholarships as well as volunteer opportunities. CCWF also provides a number of educational and outreach programs to foster a sense of fishing heritage and identity. The MBCFO, and MBCQF have excellent websites with easy access to information on the fishing industry and the Central Coast Sustainable Marketing Association (CCSMA) has a website, blog, Facebook page and an active Twitter feed.

The Faces of California Fishing web page links the commercial fishing industry and the general public through shared, real-life stories of fishermen and the industry and creates awareness of the role that California fishermen play in food provision and environmental stewardship,. The site includes information about the individual fishermen, gear type, personal history and perspectives. A number of Morro Bay fishermen participate in the "Faces" effort, which is reported to be valuable to marketing efforts within the local community and beyond.

Other forms of communication include targeted industry reports sponsored by the City of Morro Bay and the MBCFO, including the 2011, 2012 and 2013 Commercial Fisheries Economic Impact Reports, funded by the Central Coast Joint Cable/Fisheries Liaison Committee and administered by the Morro Bay Fishermen's Organization. Formal strategic planning and reporting was undertaken by a wide collaboration including the California Coastal Conservancy (CCC) going back to 2007. The CCC, MBCFO, City of Morro Bay partnership produced a Commercial Fisheries Business Plan in 2008 and an update in 2010. These reports have been drawn from heavily for reporting to the local media, informing civic and elected officials, and to substantiate initiatives sought at the state and federal regulatory level. Planning, reporting and collaboration are hallmarks of sustainability and capability.

A 2010 NOAA Fisheries survey in the West Coast Groundfish fishery found that: One-third of study participants are 51-60 years old. The small percentage of participants under 30 years old sug¬gests that younger people may not be entering the fishery or industry.

INTERGENERATIONAL EMPLOYMENT

The fact that new and returning fishermen and vessels have joined the fleet over the last 4-5 years is an important performance indicator of the community's ability to generate a response to growing opportunities. Opportunities for smaller operations attracted by a strong price per pound in the re-opened commercial salmon fishery and good Dungeness crab seasons were identified as "influences" on new and returning fishermen and vessels.

Lack of new entrants has been emphasized by fishing communities along the coast as the largest threat to the industry's survival.

As older fishermen retire, there is a growing need for new fishermen to enter the industry. Members of the community report concern over the transference of the fishing occupation to younger generations and attracting new members. Barriers to entry into commercial fishing include: specialized knowledge of fishing grounds, regulation and gear and the associated learning curve; physical risk; financial risk; cost of purchasing or leasing a vessel and gear; the cost of permits; limited entry into certain fisheries; increased regulations on catch levels, seasons, and fishing grounds; competing international markets; and opportunities for gainful employment in other fields. With the climate of heavy regulations and declining profit, many second and third generation fishermen emphasize higher education and pursuing employment outside of fishing to their children. "This life is very hard" one fisherman expresses about the work of the fisherman, remarking that younger generations have many more opportunities available to them [outside of fishing] than when he was younger. "The future of fishing looked different back then" he notes, reflecting on the rapidly shifting conditions fishermen face today. Nevertheless, considerable optimism prevails. Since 2007 or 2008, approximately 17 new and returning commercial fishermen have joined the Morro Bay fleet and 12 new and returning vessels have become active. With more boats and more fishermen come more earnings and opportunities. Increased activity on the dock is the financial backbone of the industry, and new entrants bring an increasingly brighter future.

LOCAL FOOD SECURITY

Several restaurants and retail establishments on the Embarcadero and in the City of Morro Bay offer locally caught fish. Access to local seafood reduces food miles travelled and spreads the benefit of fresh, sustainably caught seafood through the community where fishermen live and work.

Representatives from the City and the fishing community have been collaborating with the Food Bank Coalition of San Luis Obispo County to find ways to provide affordable seafood, particularly underutilized species with healthy populations.

Food security, defined as the ability of all people at all times to access sufficient and healthy food necessary to lead a healthy productive life (USAID, p1), and is a key component of social sustainability as addressed in article 6.2 of the FAO Code of Conduct for Responsible Fisheries.[19] Food security has particular relevance in discussions concerning fishing communities wherein a portion of the population may be living below poverty level. According to FAO, the eradication of poverty is dependent upon the elimination of hunger and malnutrition. Roughly 18% of Morro Bay residents live at or below the poverty level.

Food security entails having access to sufficient and healthy food and the means to properly utilize it. Access requires that an individual has the buying power to purchase food, prices are affordable, and that there are sufficient retail facilities in close proximity in the community. The basis of utilization - sanitation, education on how to prepare and consume food, and health care - are also deemed as important components to food security (Tweetan 1999).

Fishing communities face a unique dilemma in that, while they are key producers of seafood, their means of production is limited by externally imposed regulations that ultimately restrict catch levels, species and timing. To compensate for smaller levels of production, higher market prices are demanded, and these prices generally fall outside the range of affordability.

19 Article 6.2 reads "Fisheries management should promote the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations in the context of food security, poverty alleviation and sustainable development."

Morro Bay fishermen note that prices of fish have been on the rise. During WWII, fish was a common food used to feed a range of income households, and tinned fish was a staple in military rations. Over time, this situation has changed such that seafood is reserved for those who can afford the higher prices of locally-caught seafood.

Increased awareness of food security issues and heightened local, social responsibility in the food supply chain from fishing vessel to end consumer is required to address local food security issues. Community food projects and educational programs that involve fishing industry members and diverse income segments of the community may pose a key path to addressing local food security and affordability issues in Morro Bay and San Luis Obispo County.

The United Nations Development Assistance Framework is dedicated to food nutrition and security in vulnerable populations.

SOCIAL JUSTICE

Related to food security is social justice. The United Nations Development Assistance Framework (UNDAF) understands that the general livelihoods of those in fishing communities must be enhanced so that national food security can be maintained. Social justice in fisheries refers to the extent to which rights and responsibilities within a group or community are fairly distributed and relates, in part, to the protection of rights of fishers and fishworkers to a "secure and just livelihood" (FAO).[20] It is a concept that is largely considered and used in management roles as it relates to environmental and social sustainability. In this context, the concept may be applied to ensuring that all fishermen and related stakeholders in the Morro Bay fishing community retain access to fishing and infrastructure resources, and that opportunities to be employed in the industry are maintained.

As in all fishing communities, the ability to retain employment, and therefore a "secure and just livelihood", is largely dictated by regulations and restrictions seasonal, spatial or quota based on resources as well as local, regional, national, and global economic dynamics. To some degree, however, the extent to which some populations within a community may marginalize or restrict access to other members of a community also affects livelihoods. In fisheries, this may pertain to large scale operations competing with small-scale operations for access to fishing and on-shore resources. However, it may also refer to pressures from outside the fishing sector that compete for the same marine and waterfront resources, including coastal development, tourism, oil extraction, coastal industrial use, aquaculture, and agriculture (Johnson and Bavinck, 2004). For social sustainability to be maintained, there is a need to address competing claims for allocation of fishing and onshore resources among fishermen and between the fishing community and other groups.

Supporting and incentivizing small, owner-operated fishing businesses and related industries in Morro Bay adds to the number and options of job types in the community, particularly the middle class income sector. Strength in fishing related jobs and businesses also contributes to the character of the small fishing village.

20 Article 6.18 reads,"Recognizing the important contributions of artisanal and small- scale fisheries to employment, income and food security, States should appropriately protect the rights of fishers and fishworkers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under their national jurisdiction."

Table 5.1 Social Indicators and Metrics in the Fishing Community

Indicator	Metrics	Performance Evaluation
Social Cohesion	Presence of and membership levels in local fishing related organizations; number and quality of inter-professional groups formed/ Quality of intra-group relations	MBCFO and CCWF, over 100 members each. Harbor Advisory Board, 1 commercial fishing seat. Directorship post and "Supporting Association" in ACSF. Membership in WFOA. At least 4 Morro Bay boats in regional risk pool.
Sense of Identity	Number of programs and events related to creating awareness of a fishing heritage. Number of quality of expressions of having a sense of identity to a fishing heritage.	Morro Bay Oyster Festival, 4,000 attendees, Harbor Festival, 30,000 attendees, Blessing of the Fleet, Lost at Sea Ceremony and Memorial. MBCFO support of "Salmon Relief" program.
Self-Organization and Participation in Organizations	Number of organizations that grew from community initiative; number of individuals actively involved in organizations.	3 "directors" seats for Morro Bay commercial fishermen on CCJCFLC and $350,000 annual grant spending, 2 commercial fishing (board) seats on MBCQF. Newly formed CCSMA.
Leadership and Political Representation	Number of individuals in leadership roles; Formal support by governing bodies based on industry input and influence.	Past presidential posts with UTA, PCFFA, WFOA, close relationship with Mayor, City Council and Congresswoman Lois Capps. Participation on California Dungeness Crab Task Force
Education, Communication, and Presence in Media	Number of outreach programs such as "Fishermen in the Classroom"; Extension of such programs into community; Number and type of written information on fishing industry; frequency of publications in primary publications.	Consistent industry-related articles/posts in (monthly, web-based) SLO Coast Journal, less in Telegraph Tribune, even less in New Times. Mention of Morro Bay in Pacific Fisherman 3-4 times per year. Strong web presence in Faces of California Fishing, new MBCFO site and new MBCQF site. CCSMA site and blog and CCJCFLC website (slofiberfish.org).
Intergenerational Employment	Average age of fishermen and industry participants; number and quality of expressions of hope for future of industry based on employment.	Approximately 17 new and returning fishermen and 12 new and returning boats. Over half of the fishermen under 40.
Local Food Security	Number of families and individuals without access to fresh, locally caught fish; number of programs in place to address local food security issues.	Availability of locally-caught seafood in Morro Bay has increased in restaurants and retail in the last 5 years but prices remain relatively high ($9-$10/pound retail and $10 for local fish sandwiches and $15-$16 for local fish plates) compared to other protein options. More work is needed on strategies and the evaluation of this issue.
Social Justice	Number of fishermen disenfranchised from fishing due to rights of others.	Many Morro Bay fishermen were displaced as a result of increased regulation, competition from foreign imports and rising operational costs. Related businesses (processing, fuel, chandlery, diesel and electronics mechanic services) suffered as a direct result as well. This has been a painful process for the community. Work to retain access to traditional fishing privileges and to maintain and expand needed infrastructure and services are seen as positive.

6. RECOMMENDATIONS

Recommendations are a culmination of input from the fishing community, civic leaders and City Staff, and a comprehensive assessment of the economic, environmental, and social setting in which the fishing community operates. The recommendations are aimed at facilitating the sustainability of the fishing community and the working waterfront and perpetuating the economic, social and environmental returns that they generate in Morro Bay. At the behest of the fishing community and project managers, the Morro Bay CSP focuses on a short list of the highest priority issues, those with the greatest potential net return in the community. It is the intent of project managers and the fishing community that this approach best positions the community for implementation; to "build something" as one project interview respondent put it. It is important to note that many of the Recommendations in this section are already underway to one degree or another and require continued support to bring them to fruition; some will require additional technical or financial feasibility analysis, and many will provide compelling co-benefits such as increased tax revenue, increased visitor spending, and increased environmental performance.

The recommendations are ultimately intended as a strategy for the investment of limited resources and to help the community leverage outside support in key issue, high-return areas.

The commercial fishing industry and the City have accomplished many of the recommendations identified in the 2008, State-sponsored Commercial Fisheries Business Plan including developing more effective leadership, renovating and expanding offloading and live fish storage facilities and engaging in innovative approaches, such as the Community Quota Fund and Central Coast Seafood Marketing Association. Some items that have not yet been addressed include creation and promotion of the Morro Bay brand, refrigerated/freezer storage, and a strategy for the fuel facility.

Photo: 2,000 pound stainless steel offloading hoist at the 1099 Embarcadero facility.

RECOMMENDATION 1: BOATYARD/ HAULOUT FACILITY

The closest haulout and boatyard facilities are in Port San Luis, Ventura and Moss Landing. The Port San Luis facility, however, is seriously restricted by tide and swell.

The community of Morro Bay has been studying the feasibility of a haulout facility and boatyard since 1997. There is widespread support for the establishment of such a public benefit facility to service the commercial fishing fleet, recreational boaters and sailors, Coast Guard, Harbor Patrol, CPFV fleet as well as ensure that Morro Bay is able to protect the estuary, a nationally recognized bird and fish habitat, in the event of a leaking and/or sinking vessel. A haulout and boatyard in Morro Bay could also attract visiting vessels, adding to a diversity of potential patrons and set the stage for a more financially successful operation.

As PG&E divests the power plant property to the City, several sites may be available for a haulout and boatyard and potentially provide income to the City in the form of a ground lease or rent.

The City and the boating community should revisit an analysis of demand for such a facility, assess acquisition and management strategies and work to identify and confirm a site(s). Once a site has been confirmed for the haulout and boatyard, the community should consider entitlement or procuring a coastal development permit with grant funding. The project should include early communication with the California Coastal Commission. Once the site is entitled, it will put the City in a better position to attract a developer or management entity and generate a positive cash flow.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Potential revenue stream for the City and associated services (chandlery, hardware, mechanics, general supplies, services sought by visiting boat owners). Generation of employment across a range of job types, management, skilled and unskilled labor.	Greater security and safety for sensitive bay and estuarine habitat and wildlife in more rapid response to spills and leaks from derelict vessels and vessels in distress. Reduction of vessel miles traveled for Morro Bay boat owners to address regular bottom maintenance.	Greater control of outcomes and security for vessel owners. A unifying and universal service that addresses similar needs across a diverse user group: recreational and commercial fishermen, sailors/yacht owners, Coast Guard, and Harbor Patrol.

Photo: A travel lift moves the South Bay out of the water for maintenance repairs.

RECOMMENDATION 2: FUEL

There is currently only one fuel facility in Morro Bay and it is likely that the present level of activity can only support one facility. Fuel services are critical; without fuel services the fishing fleet cannot operate, nor could the Harbor Patrol, recreational vessels, CPFV fleet, aquaculture businesses or Coast Guard. At the same time, fuel services are dependent on a large population of customers to make the business viable. It is recommended that the City continue to support the presence of the fuel dock and find the best approach for reduced fuel prices to fishermen.

Marine operators could conceivably buy diesel or gasoline at service stations and transfer it to their vessels in containers but that poses greater risk for spills, introduces a time consuming and labor intensive additional step particularly for larger vessels and is technically not allowed.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Retention of spending on diesel and gas in the community and on the waterfront. Responsibility of compliance and maintenance with hazardous material regulations with lease holder.	Greater control of dispensing of hazardous materials over the water compared to boat owners fueling to their vessels from canisters.	Greater security of access to a critical need.

Seafood quality is almost exclusively dependent on the consistency and level of temperature, from the vessel and throughout the distribution chain.

RECOMMENDATION 3: REFRIGERATED STORAGE AND DEEP FREEZE

Fishermen interviewed for this project stressed the need for a public refrigerated and freezer storage in Morro Bay. Santa Monica Seafood has refurbished the two 20 foot refrigerated containers at the Municipal dock and currently uses one for bait storage and the other to allow partner fishermen to store bait and baited gear. The arrangement is seen as positive and productive but only serves a handful of fishermen. Increased access to refrigeration and freezer will allow fishermen to hold fish for longer periods, giving them the advantage of coordinating with market demand, pricing and distribution logistics as well as storing bait and baited gear. A site, demand and financial feasibility analysis for cold storage and freezers alternatives is recommended. Once a physical site is chosen and a preferred alternative is identified, the commercial fishing industry should work with the City to identify appropriate grants and loan to entitle the site and attract a developer to implement the project.

The freezer containers on the Municipal Wharf are maintained at approximately 20 degrees Fahrenheit.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Higher potential return as fishermen can hold seafood to meet higher market demand and prices. Faster trip turn around as storage of baited gear capacity is increased. Potentially higher prices and demand for better consistency and quality due to controlled cold storage near the offloading site.	Potentially less waste due to better storage options for seafood, a perishable food product.	Greater control of outcomes in the maintenance of quality, sale and distribution of seafood. More security in storing bait and baited gear.

RECOMMENDATION 4: PROMOTION AND MARKETING

Consider the efforts of the Central California Sustainable Seafood Marketing Association successful Facebook page: https://www.facebook.com/pages/Central-California-Seafood-Marketing-Association/516858421723188

...and blog http://wildcaliforniaseafood.org/blog-2/.

There was general agreement that the community of Morro Bay could better communicate its unique attractions, particularly a working waterfront, sustainable fishing industry and rich estuarine setting. It was generally agreed that increased awareness of fishing as a component of a living/working waterfront would contribute to the overall economy in Morro Bay. The City and the fishing community should continue to promote the fishing industry on their websites (City, MBCFO, CCFW, CCSMA) and through signage along the Embarcadero and throughout town. The City and the fishing industry should actively engage in the use of social media and on-line promotion as well as embracing web-based applications like FishLine. The City and the fishing industry should also work with the MBNEP to develop a concerted approach to educating visitors with educational and way-finding signage and innovative approaches such as iPod, IPad or cell phone based guided tours.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Increased sales of locally caught seafood. Higher return based on the awareness of higher quality.	Increase the consumption of locally caught seafood over imported. Reduction in "food miles traveled".	Greater awareness in the community of the contributions of local fishermen, greater cohesion and support.

Photo: Fresh seafood available on the Embarcadero

RECOMMENDATION 5: REGULATION AND COMMUNITY PARTICIPATION

The City and the fishing community should continue to participate in the fishery management process and work to anticipate new regulation, disseminate information and support regulation that benefits the community. This participation or co management is considered a hallmark of sustainability.

"Elinor Ostrom was right," says Omar Defeo, University of Uruguay professor, Scientific Coordinator of Uruguay's National Fishery Management Program and coauthor of the 2011 paper on co management and sustainable fisheries. "With community-based co-management, fishers are capable of self organizing, maintaining their resources and achieving sustainable fisheries."

The City and the community should continue to develop approaches such as the Morro Bay Community Quota Fund (MBQF) to proactively support improved small boat fisheries economics and working waterfronts in California

The MBQF was formed to:

- Secure access to valuable groundfish quota for the community, and insure a level of local landings that will generate sufficient financial activity for the City to maintain working waterfront facilities.
  - Provide access to permits and quota to new entrants and those who might not be able to buy them outright, a more equitable distribution of resources and
  - Contribute to a more bottom up approach to fishery management by sharing control or management of the resource among fishermen, the City, conservation NGOs and academia.

The City and the community should also continue to work to reduce costs to fishermen associated with regulatory compliance by supporting electronic monitoring as an alternative to human observer coverage and refinancing the trawl buy back loan. Such costs can impact smaller operations, as is the Morro Bay profile, disproportionately.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Retention of traditional groundfish landings and earnings in Morro Bay, supporting jobs and critical infrastructure and services. Potential income stream for Quota Fund to reinvest in promotion and marketing, and/or the acquisition of more quota and permits or programs to attract new participants.	Co-management of marine resource, a hallmark of sustainability. Control at a more local level, leads to more targeted and appropriate oversight of the resource.	Greater control of outcomes and retention of traditional fishing privileges. Increased awareness of the value of fishing across a greater range of stakeholders (City, academia, conservation NGO, and fishing community). Better access for those who may not have received quota and those who may not be able to afford quota or permits.

RECOMMENDATION 6: BERTH AND SLIPS

To obtain a permanent slip, fishermen must meet a minimum value of commercial landings in a year through CDF&W Fish Tickets and pay a deposit to get on a waiting list. Slip holders must also show each year that they have attained this threshold in commercial earnings.

The number of slips available to the commercial fleet is limited and considered to be an area in need of improvement as is evidenced by a waiting list. While the City is restricted in the number of slips it can physically accommodate, it is imperative that slips continue to be made available to commercial fishermen and are not reduced in number.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Lower slip rates to commercial fishermen translates to more profitable fishing operations and greater landings, jobs and contributes to the tourism economy.	In the event of expansion, the City is compliant with regulations to avoid and mitigate impacts on eel grass and other sensitive habitat and species.	Fishing fleet better-accommodated, increased security and stability, incentivizes investment, and facilitates new entrants.

RECOMMENDATION 7: PROCESSING

Typically, the establishment of a business would be addressed by market forces, or the potential for profit over other businesses or investments.

Several respondents raised the issue of whether the net benefits of local seafood processing would keep more "net" dollars and jobs in the community and give fishermen and the fishing community better control over their businesses and future. Morro Bay is currently in a good position, with SMS presence on the dock and their processing plant 15 miles away as well as processing capacity, however limited, at the two retail locations on the Embarcadero (Giovanni's Fish Market and Tognazzini's). Giovanni's and Tognazzini process and provide seafood to a handful of local restaurants and several restaurants, like the Dutchman's Seafood House, are capable of some processing in house. A new smokehouse has also been established by the Tognazzini Restaurants at 1219 Embarcadero and represents a locally-owned, value added service, keeping more dollars in the community. A feasibility assessment of a local processing facility is a project that the fishing community and the City should support, possibly led by the Seafood Marketing Association.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Maintenance of processing jobs and income in the community. Greater profit in value added services that complements catching and landing of seafood.	Less vehicle miles travelled from dock to plant.	Greater control of outcomes and a closer source for a critical service.

RECOMMENDATION 8: VEHICLE ACCESS

Truck access to the four offloading facilities in Morro Bay is constrained but sufficient, largely due to the adaptability of managers overseeing those facilities. Any future growth in the industry may warrant improvements in turn-around space and ingress/egress for trucks. Importantly, any lessening of large trucks ability to access the four offloading facilities should be avoided.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
Potential to attract larger vehicles and reduce shipping and distribution costs. Deliveries and pickups are more efficient.	More convenient access means trucks spend less time picking up and delivering, producing less emissions.	Greater security of a viable fishing industry, incentivizes investment and new entrants.

RECOMMENDATION 9: MANAGING SEA LEVEL RISE

Nearly all of the facilities on which the commercial and recreational fisheries, aquaculture and marine-based eco tourism depend are at some level of risk due to changes in sea level. The City of Morro Bay is aware of these risks and the impacts they could have on the working waterfront and tourist economy and for the citizens of Morro Bay.

In November 2013, the City of Morro Bay was awarded a $250,000 Local Coastal Program (LCP) Sea Level Rise Adaptation Grant from the Ocean Protection Council (OPC) to update the LCP to address sea-level rise and climate change impacts.

The goal of the LCP update is to enhance the City's ability to adapt and thrive under a variety of sea-level rise conditions. Upon successful completion of the project, the City will have a 1) technical understanding of its shoreline under current conditions, 2) comprehensive understanding of its vulnerabilities to the impacts of likely SLR scenarios, 3) policy framework that provides strategies to increase adaptive capacity in the near-term and long-term strategies that are created for integration into the LCP and General Plan update, and 4) develop and/or enhance relationships with local, regional, and state sea-level rise adaptation stakeholders.

These four objectives will guide the City in enhancing their LCP and General Plan update with sea-level rise considerations and policies and better protect the citizens and valuable infrastructure. Milestones of the LCP update are presented below:

Table 6.1 Milestones of the Local Coastal Plan

Activity	Proposed Completion Date
Complete Shoreline Inventory (Objective 1)	April 11, 2014
Complete Inventory of Potentially Vulnerable Structures, Functions, and Populations (supports Objective 2)	June 6, 2014
Complete Memo Outlining Preferred Sea-Level Rise Scenarios (supports Objective 2)	September 26, 2014
Complete Sea-Level Rise Vulnerability Assessment (Objective 2)	January 23, 2015
Adopt SLR Action Plan (Objective 3)	May 1, 2015
Outreach (Objective 4)	Ongoing

It is recommended that the City aggressively pursue actions and strategies outlined in the LCP update to prepare for the inevitability of sea level rise and protect citizens and valuable infrastructure.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
The cost of doing nothing in the face of rising sea level is greater than the cost of strategic approaches (berms, raised foundations, 1st floor wash throughs, active retreat). Protecting waterfront infrastructure will better assure long term viability of industries that generate jobs, spending and tax revenue as well as Morro Bay's competitive edge to attract tourists and new businesses.	Moving future development and businesses with potentially polluting materials away from the shoreline and areas of flooding will protect the sensitive estuary.	Efforts to protect people and neighborhoods and educating citizens on the facts of SLR and the City's SLR strategies (as defined in the updated LCP) will create greater security, hope for the future and "wider" spread local support of SLR programs.

RECOMMENDATION 10: IMPLEMENT AND UPDATE

The Morro Bay Community Sustainability Plan was intended to provide practical strategies for a more sustainable fishing community. From the onset, Project managers and representatives from the fishing community stressed the importance of targeting five or six key projects so the community would have clear directives on implementation priorities and investment targets. As an implementation tool, the Plan should be utilized to broadcast the fishing community's valuable contributions and needs and inform political, economic and regulatory decision making on the waterfront. The Plan should be promoted and made available on the City and MBCFO websites, shared with the Chamber of Commerce, the MBNEP, local business Associations, academic partners and conservation NGOs. The creation of the document was the first step; promotion is a necessary and critical second step. The CSP is a living document in as much as it represents a vibrant, hard working and capable community.

As a living document, the Plan should be reviewed and updated periodically, every two or five years, whichever is more feasible. Ultimately, the CSP will provide a baseline against which to measure the changes in key variables and provide guidance on where to invest precious time and resources.

SUSTAINABILITY IMPLICATIONS

Economic	Environmental	Social
An updated CSP will enable the community to better measure progress, anticipate the future and be in position to take advantage of opportunities in the market.	On-going planning will give the community a yardstick against which to measure the efficacy of commercial fishing regulation and communicate measureable gains to the community and seafood consumers.	Solid and on-going planning and readily accessible information on the local fishing industry's performance will help empower the fishing community, drive confidence and attract new participants, a platform for growth and expansion.

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7. POTENTIAL FUNDING OPPORTUNITIES

The following are potential funding sources, grants and lending sources that the fishing industry and the City should consider to fund any of the recommendations.

GRANT FUNDING SOURCES

NATIONAL FISH AND WILDLIFE FOUNDATION

The National Fish and Wildlife Federation's Fisheries Innovation Fund Grant provides funding for improving capacity in fishing communities, including promoting participation in community-supported fishing associations; reducing bycatch; and improving fishery-related data collection and quantity for use in science, management and business purposes.

http://www.nfwf.org/Pages/fisheriesfund/2012-fisheriesfund-rfp.aspx#.UR6cEEpVSrU

CALIFORNIA COASTAL CONSERVANCY

The Coastal Conservancy's Urban Waterfronts Program funds a wide range of projects that promote public access to the coast, natural resource management, and restoration of urban waterfronts. These grants can include funding construction of infrastructure.

http://scc.ca.gov/category/grants/

CALIFORNIA SEA GRANT

California Sea Grant programs are structured around healthy marine ecosystems, sustainable resource use, coastal community development, new technology, and education, training and public information. Strategic goals include working with stakeholders to resolve conflicts over resource-use, creating social and economic incentives to encourage the preservation and sustainable use of marine resources, and promoting vibrant coastal economies. Sea Grant has funded projects on fisheries habitat, marine reserves, and the groundfish trawl fishery.

www-csgc.ucsd.edu/FUNDING/IndxFunding.html

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

Operated by the California Department of Housing and Community Development, the purpose of the CDBG program is to create or retain jobs for low-income workers. This program provides funding for economic development projects, public infrastructure improvements, as well as housing and community related projects and activities. Two projects in Noyo Harbor are being funded by CDBG funds and administered by the County of Mendocino. One of those projects is directly aimed at economic revitalization of the harbor area and creating commercial fishing industry jobs.

www.hcd.ca.gov/fa

PACKARD FOUNDATION

The Packard Foundation, working with the Resources Legacy Fund, created the Sustainable Fisheries Fund to promote participation in the Marine Stewardship Council certification program. The Sustainable Fisheries Fund provides grants for pre-assessments, full assessments, stakeholder participation, and strategic planning and capacity building that may be required to demonstrate sustainability. http://www.resourceslegacyfund.org/pages/p_fish.html

COMMUNITY FOOD PROJECTS COMPETITIVE GRANTS PROGRAM

The U.S. Department of Agriculture's (USDA) Community Food Projects (CFP) Competitive Grants Program is a major funding source for community-based food and agriculture projects nationwide. The CFP program is administered by the Cooperative State Research Extension and Education Services (CSREES) of the USDA and receives $5 million per year in mandatory funding. Community Food Projects should be designed to: (A) meet the food needs of low-income people, (B) increase the self-reliance of communities in providing for their own food needs, and (C) promote comprehensive responses to local food, farm, and nutrition issues.

Projects may also be funded if they meet specific state, local, or neighborhood food and agriculture needs for: (A) infrastructure improvement and development, (B) planning for long-term solutions, or (C) the creation of innovative marketing activities that mutually benefit agricultural producers and low-income consumers. Private nonprofit organizations are eligible to receive funding directly, but collaborations with multiple stakeholders or with public and private for-profit entities are recommended.

www.csrees.usda.gov/fo/communityfoodprojects.cfm

ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

The EDA is part of the U.S. Department of Commerce. EDA investment programs include: Global Climate Change Mitigation Incentive Fund, Public Works and Economic Development Program, Economic Adjustment Assistance Program, Research and National Technical Assistance, Local Technical Assistance, Planning Program, University Center Economic Development, and Trade Adjustment Assistance for Firms. Applications for EDA programs are evaluated

based on the following guidelines: (1) market-based and results driven, (2) strong organizational leadership, (3) advance productivity, innovation, and entrepreneurship, (3) looking beyond the immediate economic horizon, anticipating economic changes, and diversifying the local and regional economy, and (4) high degree of commitment through local government matching funds, support by local officials, cooperation between business sector and local government. A recent economic revitalization plan in Moss Landing was funded by an EDA grant and administered through the County of Monterey and the City of Santa Cruz is funding a Wharf Master Plan with $850,000 of EDA money.

www.eda.gov/InvestmentsGrants/Investments.xml

MOORE FOUNDATION

While the Moore Foundation typically works with conservation NGOs, they are dedicated to advancing environmental conservation and cutting-edge scientific research. The Marine Conservation Initiative focuses on area-based management and fisheries management reform. The Foundation has made significant contributions to the California Fisheries Fund, Cape Cod Commercial Hook Fisherman's Association, The Nature Conservancy and the Environmental Defense Fund with programs aimed at commercial fishery reform.

www.moore.org

NATURE EDUCATION FACILITIES PROGRAM

The Nature Education Facilities Program was created with the overall goal of increasing the public's understanding of California's natural resources and inspiring environmental stewardship. The funds will be given to projects that enhance development of nature education facilities and galleries that inspire and educate the public, as well as, equipment and facilities for marine wildlife conservation research. Grant funded projects must be open to the public or support facilities that are open to the public. The program accepts applications from cities, counties, California state agencies, districts, and 501(c)(3) non-profit organizations. The California State Parks department oversees the program.

www.parks.ca.gov/?Page_id=26026

THE NATURE CONSERVANCY AND THE ENVIRONMENTAL DEFENSE FUND

These conservation NGOs are currently working with local fishermen and on sustainable fishing issues in the State and on the Central Coast and should be considered potential partners, particularly on projects associated with the Limited Entry Trawl ITQ fishery.

www.edf.org/oceans/catch-shares

www.nature.org/ourinitiatives/regions/northamerica/unitedstates/california/howwework/central-coast-groundfish-project.xml

CENTRAL COAST JOINT CABLE / FISHERIES LIAISON COMMITTEE (CCJCFLC)

The CCJCFLC was formed to work directly with the fishing community to mitigate for loss and disruption of fishing grounds due to the installation and presence of communication cable(s) on the seafloor in local waters. The Committee is made up of representatives from the communication companies and the local fishing industry. While focused on fisheries in the Morro Bay and Port San Luis area, it has funded projects that benefit regional fishermen, particularly the trawl industry as they were impacted the most heavily.

http://www.slofiberfish.org/index.html

SALTONSTALL-KENNEDY GRANT

The Saltonstall-Kennedy (S-K) Grant Program is a competitive program administered by the National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Administration (NOAA). Through grants and cooperative agreements, the program provides funding assistance for research and development projects that benefit the U.S. fishing industry. Program priorities vary from year to year and projects that primarily involve business start-up or infrastructure development are not eligible.

http://www.nmfs.noaa.gov/mb/financial_services/skhome.htm

WATER RESOURCES REFORM AND DEVELOPMENT ACT AND THE HARBOR MAINTENANCE TRUST FUND

With the recent passing of the Water Resources Reform and Development Act (WRRDA) (H.R. 3080), $8.2 billion has been authorized for port, dam, and flood protection and environmental projects throughout the country, largely to be administered by the Army Corps of Engineers. Within this bill are provisions for the expanded use of the Harbor Maintenance Trust Fund, intended for the operation and maintenance of harbors and ports. The Trust Fund can be used for maintenance dredging, dredged material disposal areas, jetties and breakwaters.

SEA PACT

Sea Pact is a coalition of seafood industry leaders who strive to advance environmentally sustainable fisheries and aquaculture practices and provide the building blocks of a long term and sustainable seafood industry by financially contributing to improve the fishing and fish farming systems from which they procure.

With periodic grants, Sea Pact aims to select a project in line with their goals, including fishery and aquaculture improvement projects, habitat restoration efforts, scientific research and other related work.

http://www.seapact.org/projects.html.

DEBT FUNDING

CALIFORNIA FISHERIES FUND

The California Fisheries Fund is a small loan fund for fishermen, processors, distributors, ports, communities and non-profits that provides funding for a variety of projects, including dockside infrastructure and marketing.

http://www.californiafisheriesfund.org/

CALIFORNIA MARITIME INFRASTRUCTURE BANK AND AUTHORITY

The California Maritime Infrastructure Bank and Authority services financing for ports and harbors, and provides lease financing for infrastructure used by ports and port tenants. The Bank and Authority is not a commercial bank, and only member authorities may participate in financing programs. Thus to seek funding from the Bank and Authority, the Port of Monterey must become a member of the organization.

http://www.californiamaritimeinfrastructureauthority.org

NEW RESOURCES BANK (NRB)

New Resources Bank funds businesses and organizations that contribute to environmental and social sustainability. NRB is working with Ilwaco Fish Company and Wild Planet to facilitate their growth and capacity.

https://www.newresourcebank.com/

COMMUNITY LENDING

Under the federal Community Reinvestment Act (1977), depository institutions are required to help meet the credits needs of the community in which they operate. Many banks have community-lending programs. For example, Wells Fargo has a Community Lending division that provides interim construction financing for community development commercial real estate projects. Wells Fargo offers construction loans, permanent loans, bond financing, and letters of credit to developers and public agencies.

GENERAL OBLIGATION BONDS

General Obligation Bonds may be sold by a public entity that has the authority to impose ad valorem taxes. Ad valorem taxes are based on an assessed value of real property and must be approved by a two-thirds majority vote of the people. Primary use of this tax is to acquire and improve public property.

NOAA FISHERIES FINANCE PROGRAM

The NOAA Fisheries Finance Program is a direct government loan program funded by Congress to provide long-term loans to aquaculture, mariculture, and commercial fisheries industries. There is no minimum or maximum loan amount, but it cannot exceed 80 percent of the eligible project's cost. The loan interest rate is fixed at two percent over the U.S. Treasury's cost of funds with loan maturities up to 25 years and

no early pay-off penalties. A one-time filing/commitment fee equal to half of one percent of the proposed loan amount is required at the time the application is filed.

www.nmfs.noaa.gov/mb/financial_services/ffp.htm

COMMUNITY FACILITIES DISTRICT (CFD)

A CFD or Mello-Roos District is an area where a special property tax on real estate, in addition to the normal property tax, is imposed on those real property owners within a Community Facilities District. These districts seek public financing through the sale of bonds for the purpose of financing public improvements and services. The property tax paid is used to make the payments of principal and interest on the bonds. The services and improvements that CFDs can finance include streets, sewer systems and other basic infrastructure, police protection, fire protection, ambulance services, schools, parks, libraries, museums and other cultural facilities. By law, the CFD is also entitled to recover expenses needed to form the CFD and administer the annual special taxes and bonded debt.

U.S. SMALL BUSINESS ADMINISTRATION (SBA) LOAN PROGRAMS

The 7(a) Loan Program includes financial help for businesses with special requirements. For example, funds are available for loans to businesses that handle exports to foreign countries, and for other very specific purposes. Qualifying businesses may use proceeds to purchase land or buildings, and/or to cover new construction as well as expansion or conversion of existing facilities. Commercial fishing vessels are eligible to receive loans under this program.

The 504 Loan Program provides approved small businesses with long-term, fixed-rate financing used to acquire fixed assets for expansion or modernization. 504 Loans are typically structured with SBA providing 40% of the total project costs, a participating lender covering up to 50% of the total project costs, and the borrower contributing 10% of the project costs. Under certain circumstances, a borrower may be required to contribute up to 20% of the total project costs. To be eligible for a 504 Loan, businesses must be operated for profit and fall within the size standards set by the SBA. Under the 504 Program, a business qualifies if it has a tangible net worth not more than $15 million, and an average net income of $5 million or less after federal income taxes for the preceding two years prior to application.

APPENDIX

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APPENDIX A. PROPOSED CITY OWNED BOAT STORAGE AND REPAIR FACILITY

INTRODUCTION

Facilities and services that support the fishing fleet are critical to sustainability and to synergies with the greater community. Civic leaders and stakeholders on Morro Bay's waterfront have identified the need for a boatyard, and in 1997, the City initiated formal engineering, financial and design alternative studies for a facility capable of hauling out, repairing, maintaining and storing vessels.

Key objectives of a boatyard are: protecting the City from environmental and legal impacts associated with derelict and/or incapacitated vessels, meeting current fishing and boating industry needs, and positioning the community for new opportunities and future expansion. The majority of boatyard activity is expected to be generated by local vessels but visiting vessels are also expected to take advantage of a haul out and repair facility.

The existing boatyard in Morro Bay at 261 Main Street (Morro Bay Boatyard) is limited by its capacity to accommodate approximately one 30-foot boat at a time. The boatyard's water lease expires in 2016. The renegotiation of the lease would optimally include advancing environmental best management practices and compliance. However, constraints in the physical size of the current boatyard may render alterations to meet environmental compliance upgrades infeasible.

HISTORY

In 1997, the Morro Bay City Council appointed a four member Boating Access Facilities Committee to review existing launch, boat storage and repair facilities to determine if additional facilities were needed, and if so, where they should be located. The Committee ultimately recommended that a new boat storage and repair facility was needed.

The City engaged a marine engineering firm, Concept Marine Associates, Inc., to conduct a feasibility engineering study and concluded that the best location was a vacant site west of the power plant, adjacent to the Embarcadero and Coleman Drive and to include the Den-Dulk Property. The City purchased the Den-Dulk Property based on the findings with intentions of developing a boatyard.

The objective of the facility was to combine a number of compatible operations that would serve a wide spectrum of users and provide a sufficient capital base. The four revenue producing operations include:

- Jib crane to launch and retrieve mainly recreational boats,
- Dry storage lot, boat haul-out and repair yard,
- Commercial/retail center, and
- 60 to 70 ton travel lift

Two alternatives for the facility were also proposed based on the Committee's conceptual plan.

The first alternative proposed a full build-out with extensive facilities at the launch area. Estimated cost for the development of the project site, boat launch, boat repair, public and day parking, commercial parking, and boat storage was close to $3 million (Concept Marine Assoc. Inc., 1997, Exhibit B).

The second alternative proposed the minimum improvements with the ability for future expansion. The aim of this alternative was to keep initial investment low until project viability was established. The estimated cost for the second alternative was approximately $2.1 million (Concept Marine Assoc. Inc., 1997, Exhibit C).

In 1998, the City of Morro Bay engaged Marshall & Associates in an economic and operational analysis of the proposed boating access facility. Marshall and Associates reported that the two conceptual plans prepared by Concept Marine Associates Inc. were appropriately laid out for ease of operation and vehicle traffic.

However, Marshall & Associates concluded that there were no feasible prospects in Morro Bay to justify supporting haul out and repair facility in addition to the one in Port San Luis. Furthermore, the analysis pointed out that there has been a decrease of vessels in the harbor due to the decline of the fishing industry (Marshall & Assoc., 1998, p. 45). A financial analysis was done assuming the proposed boatyard would be operated in conjunction with the existing facilities currently in Morro Bay and Port San Luis. Under the first alternative, assuming efficient yard operations and a 50% capture rate of the local market and stable market demand, the proposed facility would likely operate at a loss of 45.8% (Marshall & Assoc., 1998, p. 28). Alternative two, under the same conditions, would operate at a loss of 41.3% (Marshall & Assoc., 1998, p. 34).

In 2006, the California Coastal Commission designated the future boating access facility/environmentally-sound boat repair yard site, north of the Morro Bay Power Plant (MBPP) intake structure as Environmentally Sensitive Habitat Area (ESHA). The City did not agree with this designation (Harbor Department Staff Report, 7/26/07).

A memo from the Harbor Director to the Capital Projects Manager stated that, it is critical to the future of the Harbor that the area north of the intake structure and east of the Embarcadero remains the designated site for the future boating access facility/environmentally sound boat repair yard (Interoffice Memorandum, 2/16/06).

Mayor Janice Peters, wrote a letter to the district manager of the California Coastal Commission stating that the land designated ESHA has long been identified as the best location for a boat haul-out and repair facility needed to support the commercial fishing industry and to reconsider the designation and retract this area as an impact zone (Letter from the Mayor to the California Coastal Commission, 2/17/06).

ADDITIONAL CONCERNS

In 2006, it had been determined that the City did not acquire all of the Den-Dulk Property when the overall settlement agreement with the Morro Bay Power Plant (MBPP) was reached (Interoffice Memorandum, 2/16/06). The power plant retained ownership of the middle section of the project area creating a challenge to developing the site (Harbor Advisory Board meeting, 9/6/07).

The City was able to remedy the issue shortly after finding out a portion remained under the ownership of MBPP, and it was approved that all of the Den-Dulk Property west of the power plant wall was available to develop (Harbor Advisory Board meeting, 8/2/07).

The City of Morro Bay budgeted $40,000 to do additional preliminary engineering, design and feasibility work on the proposed boatyard concept with the intent to engage a planning consultant to commence the work in fall of 2007 (Harbor Advisory Board staff report, 7/26/07).

In 2007, the City of Morro Bay hired RRM Design Group to work with the Recreation and Parks and the Harbor Departments to investigate property boundaries, land use/zoning and conceptual uses for the North Embarcadero area relative to the development of a boatyard (Harbor Department Staff Report, 5/29/12).

ADDITIONAL ENVIRONMENTAL FACTORS

The analysis pointed out that the project area may contain eelgrass, which is a protected species of marine habitat (Marshall & Assoc., 1998, p. 9), and recommended that an eelgrass restoration plan shall be prepared in accordance with Southern California Eelgrass Mitigation Policy (Rincon Consultants, Inc., 2009, p. 3-30).
Other impacts include:

- Increased boat traffic impacting local waterfront restaurants and businesses (Marshall & Assoc., 1998, p. 21)
- It has been debated that the dune habitat is “sensitive” as it was created by fill and is mostly non-native plants (Harbor Advisory Board meeting, 3/2/06). Two site-specific analyses referred to the existing plant life in the project area as “roadside vegetation” (Letter from the Mayor to the California Coastal Commission, 2/17/06).

Ways the boatyard can benefit the environment include:

- Enabling the City to mitigate the chances of vessels sinking in the harbor (Harbor Advisory Board meeting, 8/2/07).
- Reduce in-water repair of boats that pollute the bay, a National Estuary (Rincon Consultants, Inc., 2009, 2-2).

In 2008, RRM Design Group prepared three conceptual plans that incorporated a small boat repair facility on the property owned by the City just north of the Morro Bay Power Plant (MBPP) intake structure, and a dry storage yard on the City-owned property adjacent to Morro Creek into a greater Northern Waterfront Implementation Plan (NWIP). The Recreation and Parks Commission (RPC), and the Harbor Advisory Board (HAB) recommended the City Council move forward with Concept C. Concept C was approved by City Council (Harbor Advisory Board meeting, 6/7/12).

In 2009, the City of Morro Bay engaged RRM Design Group once more to complete a revised conceptual plan based on Concept C, focusing on a low impact development boat haul-out and large vessel service yard within a greater NWIP Concept Plan (Rincon Consultants, Inc., 2009, p. 2-2).

In 2009, Action HMT-3 of the Comprehensive Conservation and Management Plan (CCMP) for the Morro Bay National Estuary Program (MBNEP) recommends implementation "of the City of Morro Bay's development and design of a new environmentally-friendly boat haul-out and maintenance facility for large vessels (generally over 30 feet) (Rincon Consultants, Inc., 2009, p. 2-2).

In 2009, Rincon Consultants, Inc. prepared an Initial Study (IS) and Mitigated Negative Declaration (MND) and concluded that the impacts of the revised conceptual plan would be less than significant with proposed mitigation measures. The conceptual plan included mitigations such as constructing a bicycle and pedestrian connection to a future boardwalk and bike path extension with interpretive educational areas, benches and bike parking (Rincon Consultants, Inc., 2009, p. 2-3).

Although the plan addressed commercial fishing needs, it did not include a commercial/retail center. To date, there has been no economic and operational analysis on the costs and feasibility of the low impact development boat haul-out and large vessel service yard.

The project was anticipated to begin in February of 2010 and expected to take eight months to complete (Rincon Consultant, Inc., 2009, 2-9). However the project was halted when the California Coastal Commission (CCC) concluded that the target location was in ESHA. (Harbor Advisory Board meeting, 10/26/09). In addition, RRM Design Group provided City staff with a scope of services for using the NWIP Concept Plan as a guide and navigating the City through a comprehensive public input process to develop a site specific plan, but there was no available City funding or resources at the time (Harbor Advisory Board meeting, 6/7/12).

CURRENT

In 2013, a Boatyard/Haulout Ad-Hoc Committee was assembled, made up of Dana McClish, Gene Doughty and Brett Cunningham (Harbor Advisory Board meeting, 03/07/13).

Current discussions focus on three alternative travel-lift haulout location plans by RRM Design Group, and two boatyard locations. One of the travel-lift haulout locations is on the Morro Bay Power Plant property that the City does not currently own. Other potential sites include the City-owned parking lot at the

south end of the power plant (Harbor Advisory Board meeting, 03/07/13).

The City has secured funding for the Morro Creek Multi-Use Trail and Bridge Project to improve connectivity from Morro Bay Rock and downtown Morro Bay up to the edge of Cayucos (City of Morro Bay, 2013). This project was a recommended mitigation measure proposed by Rincon Consultants, Inc. in 2009 for the RRM Design Group low-impact development boat haul-out and large vessel service yard conceptual plan.

Despite declines in the commercial fishing industry over recent decades, it is on the rebound, particularly in Morro Bay. Between 2007 and 2011, earnings generated by commercial fishermen have increased from $1.7 to $7.4, a 400% increase. During the same period, the number of fishing trips jumped from 3,102 to 4,789 (California Department of Fish & Wildlife). The 50 dedicated commercial fishing slips in Morro Bay have been full and there has been a waiting list for the last 4 years (personal communication, 2011). From a national perspective, the National Marine Fisheries Service estimated in 2011 that rebuilding U.S. fish stocks will ultimately increase commercial fishermen's dockside revenues by $2.2 billion a year. This is a 50% increase from 2010 revenues. The total estimated economic benefits would amount to as much as $31 billion and 500,000 new jobs (Bringing Back the Fish, 2013, p. 13).

Stakeholders speculate that due to the time that has lapsed since the last feasibility engineering study in 1997 and economic and operational analysis in 1998, additional studies should be conducted to take into account increased market opportunities due to the vibrancy of the commercial fishing fleet as well as update development costs and more efficient technology to address environmental compliance.

FUNDING

Most proponents agree that, a modern boat haul-out and support facility is expected to require public grant funds.

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Interoffice Memorandum from Harbor Director to Capital Projects Manager 02/16/06

Letter from the Mayor to the California Coastal Commission, 2/17/06

Harbor Department Staff Report 7/26/07

Harbor Advisory Board Meeting minutes 8/2/2007

Harbor Advisory Board Meeting minutes 9/6/2007

Harbor Advisory Board Meeting minutes 10/26/2009

Harbor Advisory Board Meeting minutes on 6/7/2012

Harbor Department Staff Report 5/29/2012

Harbor Advisory Board meeting minutes3/7/2013

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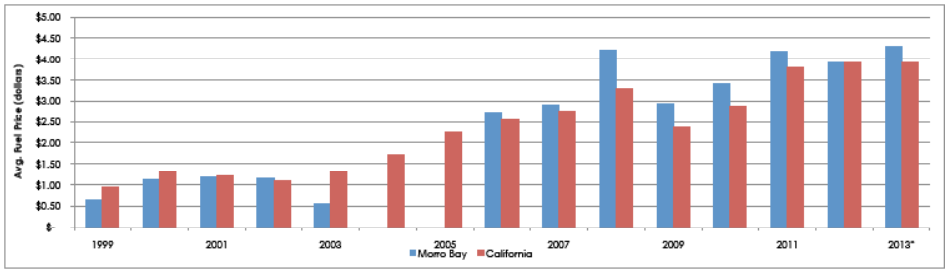
APPENDIX B. FUEL

Fuel is universally described as one of the most expensive overhead costs for commercial fishermen. Statewide, the price of fuel has increased from an average of $0.92/gallon in 1999 to an average of $3.91/gallon in 2013 (Source: PMFC), an increase of 325% in 15 years.

The following explores options intended to provide a sustainable business model for a fuel facility that can meet the demands of the fishing industry, while minimizing operational costs and maximizing efficiency in order to pass savings along to commercial fishermen.

Prior to 2006, the average fuel price in Morro Bay was generally lower than the state average, while prices have exceeded the state average from 2006 to 2013.

Figure Appendix B. 1 Morro Bay vs. California Average Marine Fuel Price, 1999 - 2013



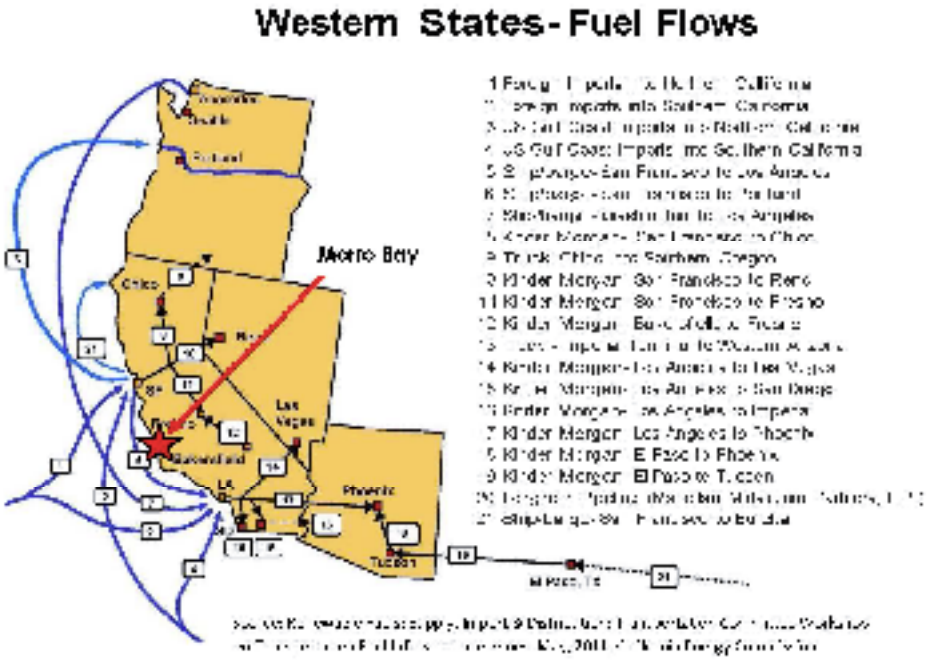
Source: PMFC, NOTE: Not all years had reported numbers due to no contact, or lack of reporting.

Location has a large influence on the price of fuel.

Although DeGarimore's prices are typically higher than state averages, SLO County is often reported to have some of the highest prices in the nation (AAA Daily Fuel Gauge Report). Due to distance from any major pipelines and fuel processing facilities, SLO County fuel providers must often pay additional transportation costs. Further adding to the increased cost, California has some of the strictest air quality laws in the nation, and levies some of the highest fuel taxes, approximately 43% higher than other states. Further, California is known as a "fuel island" and has no pipelines linking it to petroleum sources outside of the State.[21] According to a 2003 Energy Information Administration study, "California is an isolated market, both geographically and because it uses a unique gasoline that most refineries outside of the State cannot produce."

Below is a map illustrating the fuel distribution routes in California. Note that Morro Bay is relatively isolated from major distribution centers in northern and southern California.

Figure Appedix B. 2 Western States Fuel Flows



21 Fueling California Consumer Alliance for Responsible Fuel Policies: What Makes the California Fuel Environment Different in Terms of Policy, Cost, and Vulnerability? 2009

OPTIONS

The following options are aimed at reducing fuel costs for commercial fishermen are intended as alternatives, and require further research. Options include: a bio-diesel operation, operating under a 501(c)3 non-profit business model, establishing a fuel co-op, and establishing a City operated fuel facility.

BIO-DIESEL

At least one fisherman in Morro Bay is using diesel in his hook & line vessel.

An alternative to traditional, crude oil based diesel (petrodiesel), bio-diesel is derived from numerous sources including peanut oil, vegetable oils, and other plant products such as soybeans and, most recently, algae. Typically used in land-based vehicles, such as personal vehicles and farming equipment, bio-diesel has been introduced in marine applications, such as ferries and recreational vessels. Since biodiesel can be obtained from waste oils generated by the restaurant industry it can be obtained at little cost, and mixing the two could reduce costs for fishermen at the pump, e.g., a 12.5% biofuel mixture would represent a cost reduction of about 12.5% over pure petro-diesel. Combustion of biodiesel is considered "cleaner" than petrodiesel as it reduces ozone formation, sulfur emissions, and release of unburned hydrocarbons, carbon monoxide, and particulate matter.[22]

Beside environmental advantages and cheaper price per gallon, biodiesel poses issues such as increased maintenance costs, greater frequency in required maintenance, and establishment of supply, mixing, and production infrastructure. In addition, bio-diesel typically has high startup costs because of modifications needed to blend biodiesel and modifications to vessels, which can include filtration, monitoring equipment and increased frequency of required tank cleaning. Reliability in supply and quality of waste oil are additional factors to consider relative to investment and increased maintenance.

501 (C) 3 NON-PROFIT

Operating the fuel facility as a 501 (c) 3 non-profit entity could provide tax benefits and exemptions not afforded to for-profit business models, and would also allow for pursuit of grant opportunities. The potential savings accrued from tax exemptions, and the potential for grant subsidies may translate to lower prices for the end user.

Non-profit status may also help improve the overall sentiment towards the fuel facility, positioning it as a service to the community as opposed to a for-profit business. It may also help to alleviate concerns over unfair pricing present under a for-profit business model. Operating as a non-profit fuel facility will increase transparency of real fuel costs and increase accountability regarding financing operations. As such, peace of mind knowing that fuel is being sold at a rate that is fair, only high enough to sustain operations and not profit, could improve community perception.

Operating the facility as a non-profit does not necessarily guarantee lower fuel costs because the non-profit would still have to honor lease obligations, compliance and maintenance costs, in addition to paying a staff attendant, which is essentially an arrangement identical to the current one.

22 "Benefits | Region 9: Biodiesel | US EPA." United States Environmental Protection Agency. 17 Sept. 2012. Web. 16 Jul. 2013.

Though prices at the DeGarimore facility are slightly higher than the state average, it appears as though much of this is a result of higher state and county fuel prices, factors that continue to affect pricing under non-profit management.

COOPERATIVES

Cooperatives are non-profit, membership-centric organizations that pool individual needs of consumers to make large purchase commitments to wholesalers. Recognizing the volatility of petroleum derived products, committing to large and steady amounts of fuel enables the members of a co-op to secure access at a reasonable, consistent, and often cheaper price than retail.

A typical fuel co-op may engage in "hedging," buying a commodity today for future use, allowing members to accurately budget for otherwise volatile fuel costs and potentially save money long term should fuel costs substantially increase. Members can "invest" their resources to seek out fuel wholesalers and commit to purchasing a predetermined amount of fuel at a predetermined rate for a specified period of time. Once terms are set, prices can be controlled through indexing which sets consistency in price based on daily, weekly, or monthly frequencies.

A co-op may be a feasible option, however startup and management would take time and resources, and establishing of partnerships with neighboring ports (if quantities are above what Morro Bay can commit). It is likely that at 8,000 gallons, the DeGarimore facility does not have the capacity to store enough fuel to negotiate a deal with a distributor. Co-ops require commitments of tens of thousands of gallons of fuel per month.

CITY OPERATED

A City operated fuel facility may be an option but will face the same pricing and supply pressures that the facility is struggling with now without the advantage of a successful restaurant and offloading facility to augment income. Some scenarios suggest that a City run facility would be less efficient than the current operation as it would require the hiring of additional staff or deploying current staff to attend the pumps. The current attendant performs several duties and is said to be as efficient as possible. One of the few advantages of a City controlled fuel facility would be more transparent in pricing as the "books" would be accessible to the public. If rent was waved in this scenario, it would reduce City income, a potentially undesirable outcome.

CONCLUSION

With fuel prices on the rise, and the commercial fishing industry facing increased regulations, rising costs and competition from inexpensive foreign imports, it is important that City officials, civic leaders and fishermen explore ways to increase efficiencies and lower overhead costs whenever possible. As an industry that contributes millions of dollars annually and almost 200 jobs to the local economy, lower costs are intended to spur activity and growth and should be looked at as an investment.

Each fuel management option comes with pros and cons and should be further explored to understand financial and social feasibility. Ultimately, fuel prices may not be drastically influenced by the ownership and/or business model, but rather the location and proximity to fuel processers and the intrinsic constraints of low margin, high volume business. As such, the net costs and volatility of fuel pricing will likely remain the same or similar regardless of which option is chosen.

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APPENDIX C. CITY COUNCIL MEETING MINUTES

On April 8th 2014 the Morro Bay City Council held a public meeting to consider the final draft of the Morro Bay Community Sustainability Plan (item D-2 page 9 of the attached minutes) and passed the following motion:

Mayor Irons moved to accept the plan as presented with recommended changes as discussed in the aquaculture comments and the language to identify the potential expansion and include the specific sites that might be a potential: wastewater treatment plan or power plant; and direct staff to review this document annually with the Harbor Advisory Board for suggestion to update the plan and for implementation, and forward any recommendation on to Council on an annual basis. Seconded by Councilmember Smuckler Passed 5-0

The project team notes that the City Council desired to highlight the potential opportunity for mariculture/aquaculture development in Morro Bay, especially potential expansion or supplement facility development to the Abalone Farm in Cayucos, and specifically mentioned potential sites to consider in reuse of the MB power Plant or reuse of the existing wastewater treatment Plant.

The project team further notes the following references in the plan to abalone mariculture in Morro Bay and Monterey.

1. Reference the Cayucos Abalone Company, the harvest of kelp and the Ocean Rose on page 52 (Economic Setting, Chapter 3) of the report:

Additionally, landings of kelp harvested for use by the Cayucos Abalone Company are also 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. 14 The City collects a landing fee on this renewable resource, which is another source of income and employment on the Morro Bay waterfront.

2. Reference the fact that the City does collect wharfage on the kelp that comes across the dock, page 47 (Economic Setting, Chapter 3):

The exception to wharfage is an arrangement with the seaweed harvesters primarily associated with the Cayucos Abalone farm, who pay an annual wharfage fee.

3. On page 47 (Economic Setting, Chapter 3), there is also a discussion (case study) on how the City of Monterey addresses the wharfage for abalone. Monterey charges wharfage at a rate of $1.30 per ton, set in 1999, with annual increases between 2% and 4%. The current wharfage is approximately $1.74 per ton on all species and a truckage fee of 0.05% of gross receipts. Monterey also levies a fee on the number of abalone sold by the one aquaculture business on Municipal Wharf II of: $0.01 each up to 50,000, $0.02 each for 50,000 to 100,000 and $0.04 each for sales over 100,000.

AGENDA NO: A-1

MEETING DATE: 4/22/2014

MINUTES - MORRO BAY CITY COUNCIL
REGULAR MEETING – APRIL 8, 2014
VETERAN'S MEMORIAL HALL – 6:00P.M.

PRESENT:	Jamie Irons	Mayor
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	George Leage	Councilmember
	Noah Smukler	Councilmember
STAFF:	Edward Kreins	Interim City Manager
	Joe Pannone	City Attorney
	Jamie Boucher	City Clerk
	Susan Slayton	Administrative Services Director
	Rob Livick	Public Services Director
	Amy Christey	Police Chief
	Eric Endersby	Harbor Director

D-2 MORRO BAY FISHING COMMUNITY SUSTAINABILITY PLAN REVIEW, ACCEPTANCE, AND DIRECTION ON PLAN RECOMMENDATIONS; (HARBOR)

Harbor Director Eric Endersby presented the staff report.

Henry Ponterelly, the City's Plan consultant, also made a presentation. The grant directed them to take a very comprehensive approach to assessing the commercial fishing industry and how it fits into the working waterfront and the implications for the greater community. They also looked at the economic, social and environmental settings that the commercial fishermen operate and based the plan on that approach. Take aways from the plan include the fact that the community is capable of planning strategically, forming alliances and raising funds to achieve goals; taking an active and substantive role in decisions that impact their industry; and, the industry plays a major role in the economics of the City. Methods for the project relied heavily on input received from commercial fishermen; stakeholders; councilmembers; business owners; state, federal and local regulatory archives; anthropologists; economists; etc… Key findings surrounded critical infrastructure and services (Morro Bay maintains much of the critical infrastructure that a vibrant fishing industry relies); economics (the importance to tourism of having a working waterfront and commercial fishing generates 192 jobs on the waterfront); social (the Morro Bay fishing community maintains a strong sense of social cohesion, self-organization and leadership; they are one of the most capable of all fishing communities up and down the coast); and environmental (management measures in California are successful in increasing fishing abundance). Recommendations, many of which are ongoing and just require continued civic backing, include support for a boatyard, fuel dock, refrigerated deep freeze

storage, continued participation in the management process, berths and slips, commercial fish processing, vehicle access, and sea level rise. He stressed that this is a living, working document which can and should be reviewed and updated on a regular basis. It can also be used as a benchmark to compare performance from year to year.

Mayor Irons opened the public comment period for Item D-2.

Alan Alward stated that the fishermen were totally in support of this; are pleased to have a community sustainability plan; it has also been a huge boost for them. He feels the ideas are well thought out. The Morro Bay Commercial Fishermen organization is taking an ongoing survey to try and prioritize those things that require new infrastructure so that we can spend the money wisely.

The public comment period for Item D-2 was closed.

Mayor Irons feels it's prudent to include language regarding abalone into the plan.

Councilmember Smukler agrees with the inclusion of abalone farm references; it's important to keep track of the potential need for hosting an expansion of the farm.

Councilmember Christine Johnson would also be supportive of including the abalone reference. This report gives you a great understanding of what the fishing industry is doing in Morro Bay. She is fully ready to support the report.

> MOTION: Mayor Irons moved to accept the plan as presented with recommended changes as discussed in the aquaculture comments and the language to identify the potential expansion and include the specific sites that might be a potential: wastewater treatment plant or power plant; and, direct staff to review this document annually with the Harbor Advisory Board for suggestions to update the plan and for implementation, and forward any recommendations on to Council on an annual basis. The motion was seconded by Councilmember Smukler and carried unanimously, 5-0.
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> Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler
> No's: None

There was continued discussion specifically about the boat haul-out facility. Harbor Director Eric Endersby stated that a first phase of a feasibility study would be more of a market analysis and financial analysis of the project. The second phase would be more of a siting study. The Commercial Fishermen are looking for City's participation as a funding partner with the Commercial Fishermen for these studies, splitting the costs half and half.

Councilmember Nancy Johnson stated that before we talk about whether or not it's profitable or not; we need to talk about the environmental impacts of building a boat haul out. The permitting process and the possibility of even getting permits concern her as well.

Councilmember Christine Johnson feels it would be best to accommodate the financial share of the City's side to decide in phase one, through the market and financial analysis, if we even need

to go any further and need to put on goals ever again; or, if we can explain thru the analysis to the fishing and waterfront community that for Morro Bay, it's just not feasible. We aren't ready for closure on this recommendation yet. The plan gives a nice historical overview of the steps the community has taken which at one point just stopped. She would like to see this resolved.

Councilmember Leage loves the fishermen and wants the best for them. He also stated he has been around the fishing business his whole life. He can't imagine why we are going down this road. We need an expert up here to tell us what this is all about before get involved in this and throw money away. Why not join up with Avila and try to help them. This is a project studied many times and it has always come up short.

Mayor Irons stated the feasibility study should include competitive market and identify if this project is feasible.

Councilmember Smukler stated that in terms of the message we are hearing from the Harbor Advisory Board, the fishing community is really interested in pursuing this and requested that we follow up with this. We have funds earmarked for this sort of effort that are being matched; he's in support of this being addressed and either moving on or closing it.

> MOTION: Mayor Irons moved the City Council recognize the Harbor Advisory Board and the Boat Haul-out Ad hoc Committee recommended to partner and fund 50% of the boat haul out feasibility study as proposed by Lisa Wise Consultant and the City Council and direct staff to come back with an agreement to approve the feasibility study and contract. The motion was seconded by Councilmember Christine Johnson and carried unanimously, 5-0.
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> Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler
> No's: None

E. COUNCIL DECLARATION OF FUTURE AGENDA ITEMS - NONE

ADJOURNMENT

The meeting adjourned at 9:36pm.

Recorded by:

Jamie Boucher
City Clerk

lisa wise consulting, inc.
planning economics natural resources

983 Osos Street | San Luis Obispo, CA 93401 | 805.595.1345 | lisawiseconsulting.com