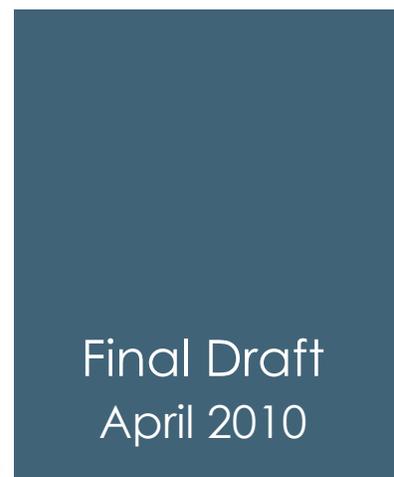
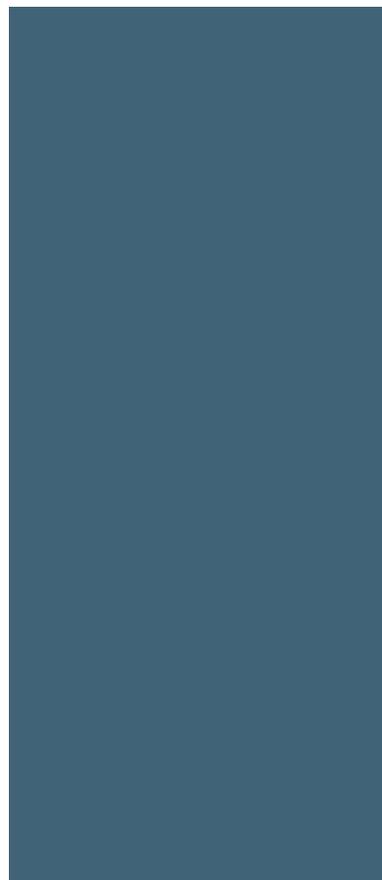
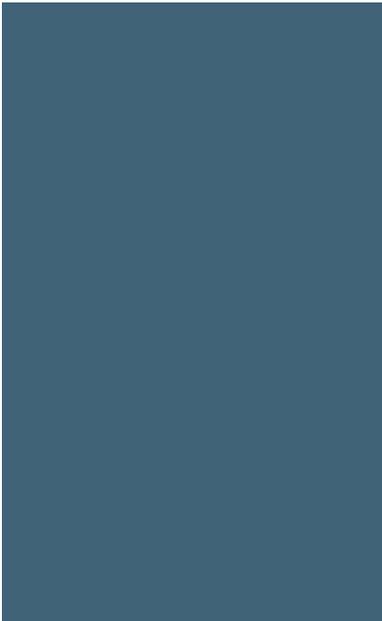


Port of San Diego

COMMERCIAL FISHERIES REVITALIZATION Preferred Alternative Implementation Plan



Final Draft
April 2010

lisa wise consulting, inc.
planning economics natural resources


**Coastal
Conservancy**


**Unified Port
of San Diego**

Project Design Consultants • Moffatt & Nichol Blaylock Engineering Group • TerraCosta Consulting Group
Linscott Law & Greenspan • Helix Environmental Planning • Merkel and Associates
KMA Architecture and Engineering

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April 2010

Funded by the California Coastal Conservancy

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Lisa Wise Consulting, Inc.
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Moffat & Nichol Blaylock Engineering Group
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Each of the Commercial Fishing slip holders at Tuna Harbor and Driscoll's Harbor and the entire San Diego commercial fishing community.

If anyone has been left from the list, it is due to our poor memory and not lack of gratitude.

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List of Acronyms

AAFA	American Albacore Fishing Association
APA	American Planning Association
ASMI	Alaska Seafood Marketing Institute
AWAF	Abandoned Watercraft Abatement Fund
BEC	Background and Existing Conditions Report
CCC	California Coastal Conservancy
CSLC	California State Lands Commission
CDBG	Community Development Block Grant
CDF&G	California Department of Fish & Game
CEQA	California Environmental Quality Act
CFP	Community Food Project
CSA	Community Supported Agriculture
CSF	Community Supported Fishery
CSREES	Cooperative State Research Extension Education Services
EDA	Economic Development Administration
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EVV	Ex-Vessel Value
FAM	Fishing Assessment Methodology
HACCP	Hazard Analysis & Critical Points
IRS	Internal Revenue Service
IS	Initial Study
LLC	Limited Liability Corporation
MLLW	Mean Lower Low Water
MND	Mitigated Negative Declaration
MSC	Marine Stewardship Council
ND	Negative Declaration
NGO	Non-Governmental Organization
NHD	North Harbor Drive
NMFS	National Marine Fisheries
NOAA	National Oceanic & Atmospheric Administration
OPC	Ocean Protection Council
OSHA	Occupational Safety & Health Administration
PACfin	Pacific Fisheries Information Network
PCB	Polychlorinated Biphenyl
PSF	Pounds per Square Foot
ROW	Right of Way
RWQCB	Regional Water Quality Control Board
SF	Square Feet
SFF	Sustainable Fisheries Fund
SPC	Seafood Producers Cooperative
SWPP	Storm Water Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture

PROJECT SUMMARY

Section 1

Overview

In May of 2007, the California Coastal Conservancy (Conservancy) authorized \$450,000 to the Port of San Diego (Port) for the preparation a Commercial Fisheries Revitalization and Coastal Public Access Plan aimed at Driscoll's Wharf and Tuna Harbor. The Port contributed \$50,000 in cash and \$50,000 of in-kind services such as management, administration, and facilitation of the project. The work was directed to address the economic, regulatory, market, environmental, and infrastructure opportunities and constraints facing the local commercial fishing industry, as well as public access and public awareness opportunities for the sites as part of a vibrant working waterfront in the city of San Diego.

The Conservancy is a California State agency that was founded in 1976 to provide the public access to the shore and purchase, protect, restore, and enhance coastal resources. The Conservancy works with local governments, public agencies, non-profit organizations, and private landowners with an annual budget of over \$50 million. The Conservancy's work has primarily been funded by several voter-approved State water and parks bonds.

In the case of the Commercial Fisheries Revitalization and Coastal Public Access Plan (Commercial Fisheries Revitalization Plan), the public agency and grant recipient is the Port of San Diego. The funds for the project emanated from Proposition 40, passed by voters on March 5, 2002, and known as the "California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002." The passage of Proposition 40 provided \$2.6 billion in funds for local assistance grants, as provided for in Sections 5096.600 through 5096.683 of the Public Resources Code.

The Conservancy's attention was drawn to the project by a group of local commercial fishermen and a local state senator, who felt that the commercial fishing industry's interests were not sufficiently addressed in the "Historic Waterfront Competition Sasaki - Quigley plan at Tuna Harbor. Commercial fishermen were concerned that land that had been zoned for commercial fishing was in jeopardy of being appropriated for other uses, inconsistent with provisions of the California Coastal Act, the Port Act, and Port Master Plan.

In June of 2007, the Conservancy and the Port of San Diego signed a contract confirming the cost and the scope of the project. Following the grant authorization, the Port of San Diego formed a stakeholder project advisory group, referred to as the Core Committee. The Core Committee is made up of representatives of the commercial fishing community, State elected official, Port staff,

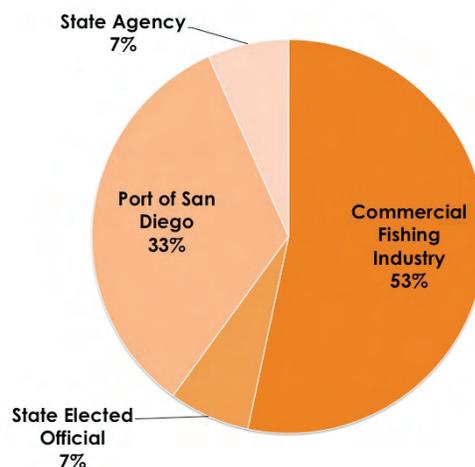


Figure 1.1 Core Committee Membership

and the California Coastal Conservancy. Refer to “Figure 1.1 Core Committee Membership” on page 1 for a description of the diversity of the Core Committee, refer to “Table 1.1 Core Committee Members” on page 2 for a detailed list of the Core Committee members and their affiliations.

Table 1.1 Core Committee Members

Deborah Ruddock	California Coastal Conservancy, Project Manager
Scott Breidenthal	Commercial Urchin Diver, San Diego Professional Fishermen's Association
August Felando	Maritime Attorney, Fishery Historian
Peter Flournoy	Maritime Attorney, Western Fishboat Owners Association
Jonathan Hardy	Senior District Consultant, Senator Denise Ducheny
Kelly Falk	Project Manager, Asset Manager, Real Estate, Port of San Diego
Matt Valerio	Redevelopment Planner, Port of San Diego
Bruce Cummings	Operations Manager, Port of San Diego
Eileen Maher	Director of Environmental Services, Port of San Diego
Cathy Driscoll	Lease Holder, Port of San Diego
Tom Driscoll	Lease Holder, Port of San Diego
Peter Halmay	Commercial Urchin Diver
Scott Hawkins	Commercial Fisherman, American Albacore Fishing Association
Steve Foltz	Seafood Buyer / Processor, Chesapeake Fish Company, President
Mitch Hobron	Commercial Urchin Diver, Alternate

The Port and the Core Committee worked many long hours to come to consensus on the details of the scope of work and objectives of the project. In the ensuing months, the Port and the commercial fishing community, through the Core Committee, developed a communication and relationship that had previously been lacking. The project would not have been possible and could not be successful without this relationship.

Table 1.2 Consultant Team

Lisa Wise Consulting, Inc	Project management, commercial fishing infrastructure, market and economic analysis, analysis of other ports, commercial fishing landings, earnings, and regulations, management entity analysis, marketing plan and financial feasibility
Project Design Consultants	Collaborative project management, landscape architecture, civil engineering, land use planning, site design and analysis
Moffat & Nichol Blaylock	Marine structural inspection and assessment, above deck/water and below water
Linscott, Law & Greenspan	Traffic and parking inventory and analysis
TerraCosta Consulting Group	Geotechnical analysis and reporting
Merkel & Associates	Marine environmental assessment and review
Helix Environmental Planning	Terrestrial environmental assessment and review
KMA Architecture & Engineering	Architectural renderings and 3D illustrations

On November 16, 2007, the Port of San Diego released a Request for Qualifications with a deadline of December 28. In April of 2008, a Consultant Team led by Lisa Wise Consulting, Inc. was hired. The Consultant Team of seven San Diego firms included experts in the fields of planning, civil engineering and landscape architecture, marine structural engineering, circulation and parking, geotechnical engineering, marine and terrestrial environmental assessment, and architectural services. Refer to "Table 1.2 Consultant Team" on page 2 for a complete list of the Consultant Team members.

The project was conducted in two Phases. The first phase produced a Background and Existing Conditions Report (BEC). The BEC provides a comprehensive view of the fishery and related infrastructure, markets, landing and earning trends, comparisons to State and national fisheries and other ports, existing projects, wet and dry utilities, geological and soil composition of the sites, environmental conditions and potential constraints, and a review of pertinent documents (Port Charter, Master Plan, Strategic Plan, 1980 & 1998 Commercial Fishing reports). The BEC is the product of nearly 150 hours of personal interviews, as well as site visits; physical inspections; analysis of Port, City and County archives; review and analysis of data and reports from the California Department of Fish & Game (CDF&G), Pacific Fisheries Information Network (PACfin), and National Marine Fisheries (NMFS), California Seafood Council (UC Davis), Bureau of Labor Statistics, US Department of Commerce, and pertinent USDA publications and Fish & Game Commission meeting notes. The BEC, as with all other reports produced by the Consultant Team for this project, was reviewed and approved by the Port and Core Committee prior to release to the public.

The final version of the BEC was submitted to the Core Committee in October 2009. The BEC and a description of the project is available on the Port website (www.portofsandiego.org/commercial-fisheries.html).

The second phase of the project, Preferred Alternative and Implementation Plan, is represented in this report. This phase also relied on extensive community input that included personal interviews, phone and e-mail exchanges, Core Committee meetings, design workshops, surveys, and extensive input from the Consultant Team in their areas of expertise.

BOX 1.1 FUNDING PROPOSALS

Key Funding Proposals Submitted During the Commercial Fisheries Revitalization Project

San Diego Commercial Fisheries Management Consortium

In May of 2009, local fishermen, the Port of San Diego and Cathy Driscoll (leaseholder at Driscoll's Wharf) submitted a grant application to the Ocean Protection Council, California Fisheries Challenge to facilitate the creation of the San Diego Commercial Fisheries Management Consortium (Consortium). The Consortium intends to address environmental, economic, marketing, distribution, and regulatory issues through a fishermen-representative management structure. An additional goal of the Consortium is to assist in the implementation of the recommendations brought forward in this Implementation Plan.

Current status: pending.

Commercial Ice Machine at Driscoll's Wharf

In October 2009, Lisa Wise Consulting, Inc., teamed with Cathy Driscoll and the Port of San Diego to submit a proposal to the California Coastal Conservancy for an ice machine at the Driscoll's facility to serve the commercial fishing fleet. The proposal focuses on the commercial fleet's contribution to employment and local businesses along with the critical need for ice, particularly for the swordfish, shark, white sea bass, and rockfish fisheries.

Current status: pending.

Continued on Page 4

Box 1.1 Continued...

Port of San Diego Commercial Fisheries Promotional Event

In November 2009, Lisa Wise Consulting, Inc. on behalf of San Diego commercial fishermen, submitted an application to the 2010 – 2011 San Diego Unified Port District Financial Assistance Program. This application was to fund an annual event near the working waterfront to promote the commercial fishing industry and locally caught seafood. The event goals are to: nurture a community that visits, appreciates, and supports the working waterfront; bolster economic stability of the local commercial fishing industry; promote and raise awareness of the cultural, historical, and economic significance of San Diego's commercial fisheries; and to encourage consumption of locally caught seafood.

Current status: pending.

The Consultant Team worked hand in hand with the Core Committee to prioritize site design alternatives and non-infrastructure alternatives that would take advantage of the opportunities while addressing the needs at Driscoll's Wharf and Tuna Harbor. Site alternatives include:

- Improvements to infrastructure and enhancements to increase public access,
- Facilitation of activities surrounding the offloading and transport of commercial fishing landings,
- Improved docking opportunities and storage and repair of commercial fishing gear, and
- Strategies to increase awareness of the commercial fishing fleet while educating consumers on the benefits of locally caught seafood.

In each instance, the Consultant Team analyzed the constraints associated with the alternatives (environmental, financial, physical) and worked with stakeholders to identify a Preferred Alternative that would accomplish the goals of the project with an eye on feasibility.

The Port, Consultant Team, and Core Committee have begun seeking funds for portions of the Implementation Plan (Refer to "Box 1.1 Funding Proposals" on page 3).

A central motivator common to the Consultant Team and the Core Committee is the understanding that the commercial fishing industry is part of the cultural and historical heritage of San Diego and that the industry generates employment and supports hundreds of businesses. Project stakeholders also agree that the U.S. fisherman, particularly in California, is one of the most heavily regulated and compliant in the world. San Diego fishermen face State and federal geographic closures, seasonal restrictions, gear limitations, catch limits, as well as stringent licensing and reporting. Global and domestic demand for seafood is on the rise; in 2008, the U.S. imported \$13.5 billion of seafood. Our top seafood trading partners are Canada, China, Indonesia, and Thailand. If we don't support our local fishermen, demand will shift to nations with little or no commercial fishery regulation (note, Canada is also considered a well regulated commercial fishing industry). Supporting San Diego commercial fishermen is in effect, supporting marine conservation with a focus on healthy fish stocks, as well as a tribute to the cultural heritage and

economic engine that the industry represents.

This project benefited from the support of and input from local and state elected officials, as well as support from the Port, commercial fishermen, commercial fishery related businesses, and the Conservancy, a State agency. State and local government support came from California Senator Denise Moreno Ducheny (40th State District) and Assembly Member Lori Saldana (76th District San Diego). Jonathan Hardy, Senator Ducheny's Senior District Consultant, played a key role on the Core Committee, assisting and facilitating meetings, communicating amongst the stakeholders, and promoting the project on a legislative level. Support from elected officials played a large role in helping guide a final product with broad appeal and momentum.

Public Participation

From the beginning of the project, the Core Committee and the Consultant Team were committed to multiple and varied opportunities for substantive community input and participation. Information gathered in this process allowed for the circulation of ideas, concerns, and opinions that informed and guided analysis of revitalization alternatives. Over the course of the project, frequent and ongoing conversation, both formal and informal, took place between the Consultant Team, Port officials, commercial fishermen, commercial fishing-related business owners, restaurants, and food retailers. Group meetings, workshops, individual interviews, and commercial fishing community outreach formed the basis of community input. Refer to Figures 1.2-1.4 for photographs of workshop sessions

The Implementation Plan process built on work conducted in the BEC that included nearly 150 hours of interviews with 138 individuals (Refer to "Box 1.2 Interview Methodology" on page 6 for a description of background research interview methodology. By December 2008, the Consultant



Figure 1.2 Core Committee Workshop



Figure 1.3 Core Committee Workshop



Figure 1.4 Core Committee Workshop

Box 1.2 INTERVIEW METHODOLOGY

Background Research Interview Methodology

The interview process, formal meetings, and subsequent analysis was based on a community consensus approach that seeks to elicit information in a bottom-up fashion. Cultural consensus approach and analysis comes from the field of anthropology and is theoretically based on an understanding that cultural knowledge is shared. The approach works to gain an understanding of shared ideas within a community and how those are prioritized. Understanding the consensus among the fishermen and fishery-related stakeholders is an essential component of this project and serves as a basis for forming viable revitalization alternatives.

Team attempted phone, e-mail, or personal contact with each of the 84 commercial fishing slip holders at Tuna Harbor and Driscoll's Wharf and completed one-on-one interviews with over 50 commercial fishermen. Four formal Core Committee meetings were held during this phase of the project where the Core Committee and the Consultant Team were able to share and discuss preliminary findings.

During the second half of the project, five formal meetings were held. Three of these meetings were workshops where the Core Committee and the Consultant Team had the opportunity to discuss, evaluate, and sketch their visions of project alternatives (Refer to Site Plans, "Figure 1.7 Driscoll's Wharf Preferred Alternative Site Plan" on page 17 and "Figure 1.8 Tuna Harbor Preferred Alternative Site Plan" on page 19). Dozens of one-on-one meetings, phone, and e-mail communications were also accomplished during this time to refine the alternatives and confirm the priorities of the commercial fishing community. For each alternative, the Consultant Team analyzed the constraints and opportunities (environmental, financial, physical, and social) and worked with stakeholders to identify a Preferred Alternative that would accomplish the goals of the project with an eye on feasibility. Dialogue at these meetings (formal and informal) also informed the Consultant Team on infrastructure and non-infrastructure improvements and expansions.

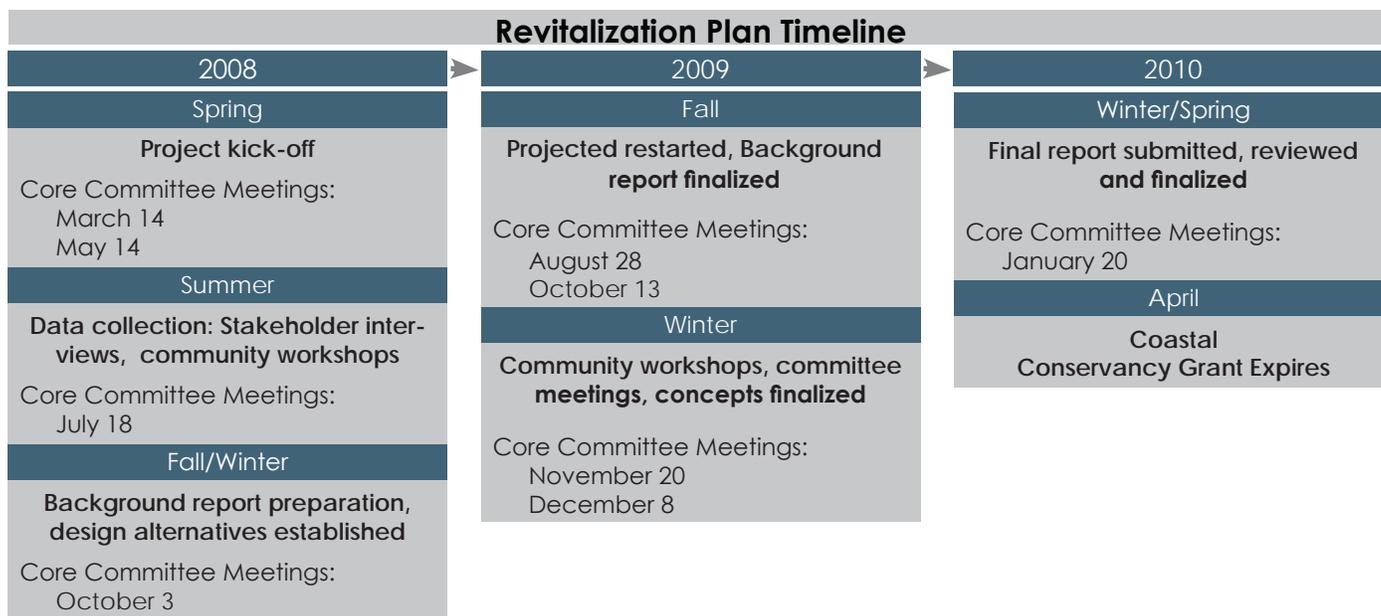


Figure 1.5 Project Timeline

The result was nine formal Core Committee meetings throughout the project (Refer to “Figure 1.5 Project Timeline” for project timeline).

Recent Investments by the Port of San Diego

The Port of San Diego has made considerable investments in infrastructure improvements at Tuna Harbor. The Port also provides subsidies in the form of discounted slip fees to commercial fishermen at Tuna Harbor and Driscoll's Wharf. Key infrastructure projects, and a more detailed description of the slip fee subsidies are summarized below (Refer to “Table 1.3 Recent investment by the Port at Tuna Harbor and Slip Fee Subsidies” on page 7):

Tuna Boat Basin and Seawall Revetment Repair project improved the rock revetment seawall along the Tuna Boat basin and replaced the existing sidewalk.

Tuna Harbor Restroom Facility included approximately \$65,000 in upgrades.

Tuna Boat Pier and Fleet Landing repairs project at Tuna Harbor project consisted mainly of repairs to cracks in piles, pile caps, and the deck soffit at Tuna Boat Pier, and repair to pile cracks and replacement of planter box supports at Fleet Landing. In addition, three expansion joints were repaired on the Tuna Boat Pier.

Commercial Fishing Slip Fee Subsidies are provided to commercial fishing slip holders at Driscoll's Wharf and Tuna Harbor. While non-commercial fishing slip holders pay a monthly fee of \$12 per foot of boat length, commercial fishing slip holders' fees are calculated as a daily rate of \$0.11 per foot of boat length (nearly \$0.30 per foot per day cost savings). In addition to the slip fee subsidies, the Port provides free utilities (water and electricity) and trash service for slip holders at Tuna Harbor.

Table 1.3 Recent investment by the Port at Tuna Harbor and Slip Fee Subsidies

Facility	Course of Action	Investment
Tuna Harbor	Tuna Boat Basin and Seawall Revetment Repair	\$1,200,000
Tuna Harbor	Restroom facility upgrades	\$65,000
Tuna Harbor	Tuna Boat Pier and Feet Landing repairs and improvements	\$440,000
Tuna Harbor & Driscoll's Wharf	Approximate annual commercial fishing slip fee subsidies	\$314,000

Background and Existing Conditions Report (BEC) Summary

The Implementation Plan is based on a Background and Existing Conditions Report submitted to the Port in October 2009. The BEC examined the historic and current state of the commercial fishing industry in the San Diego area, paying particular attention to issues that presently impact fishermen based out of Tuna Harbor and Driscoll's Wharf. Issues include regulatory restrictions, available infrastructure, and the market economy--all of which play a role in the viability of a continued commercial fishing industry in San Diego. Four broad areas of analysis combined to produce the Background and Existing Conditions Report. These areas are:

- Commercial Fishing Industry Analysis,
- Infrastructure Analysis,
- Public Access,

- Geo-Physical and Environmental Analysis, and
- Marketing Analysis & Management Entity Analysis.

The Consultant Team engaged in several months of face-to-face interviews with commercial fishermen, commercial fishing stakeholders, restaurant owners, and seafood wholesalers and distributors. To produce key findings detailed in the BEC, the Team also undertook site visits, inspections, field analysis, and review and analysis of existing and archival data.

The Commercial Fishing Industry Analysis, along with an analysis of landings data and regulatory vehicles, produced a comprehensive understanding of the past, present, and future of the San Diego fishing industry. San Diego was once characterized by its vibrant tuna fishery, but also contributed to the urchin, shark, lobster, and halibut fisheries. Since the mid-1980s, San Diego commercial fishing landings have declined, mirroring general state and national trends. These trends reflect the concerted efforts of State and Federal regulatory agencies to better manage resources.

The industry as it stands has contracted in terms of employment and landings; yet landings to the San Diego harbor continue to be important to the local and regional economy with national and international implications. San Diego commercial fishing earnings totaled nearly \$200 million from 1985 to 2008. In 2008 alone, commercial fishing brought in nearly \$7 million in ex-vessel value (EVV, money paid to fishermen at the dock). In 2008, EVV at Tuna Harbor was \$2.32 million and EVV at Driscoll's Wharf was \$703,000. The demand for seafood is rising and support for small, family-owned operations is strong. The trend speaks to the value of retaining and enhancing the San Diego commercial fishing fleets and harbors. Further, the presence of an active working waterfront where fishermen can offload their catch, repair their nets, and prepare gear is key to maintaining a vital component of the Port's diversified cultural and historical resource, and is integral to the San Diego tourism industry.

“San Diego commercial fishing earnings totaled nearly \$200 million from 1985 to 2008.”

Infrastructure, including offloading docks, ice facilities, and storage and work areas is critical to an efficient and capable operation and is key to revitalizing San Diego's commercial fishing industry. The Infrastructure Analysis of the Background and Existing Conditions study is based upon a dataset generated from hundreds of hours of face-to-face interviews with fishermen working out of Driscoll's Wharf and Tuna Harbor. The Consultant Team applied a “Needs Assessment” through a Cultural Consensus model in order to identify and prioritize needs.

Driscoll's Wharf is leased and managed by a private entity. It houses one offloading hoist but no ice facility. It is located on a long, narrow piece of land in the shallow America's Cup Harbor basin and has limited space for parking, storage, equipment repair, and truck access. While much of the wharf's infrastructure has been maintained and is in an operable condition, a number of components require repair and replacement.

Driscoll's Wharf commercial fishing occupancy rates are approximately 50%

Fishermen at Driscoll's identified the following areas as important to the fishing support effort and in need of improvement or expansion: offloading capacity and efficiency, gear storage and repair, continuing maintenance of dock and pier structures, channel depth, replacing finger docks with floating structures, consistent 220 volt power to key slips, improved truck access, connection to new and existing pedestrian paths, and a fishermen-owned or operated ice facility.

The infrastructure analysis highlighted potential improvements to be considered in the short-to-mid-term at Driscoll's: increased offloading capacity, ongoing maintenance, repair and beautification, deeper channel depth, enhanced and floating slips, and an ice facility.

Tuna Harbor commercial fishing occupancy rates are currently below 40%

Tuna Harbor is located at the G-Street Mole, south of Navy Pier and adjacent to Seaport Village. It is administered by the Port of San Diego, which provides an offloading facility. The offloading facility is managed by the privately owned processor onsite. Ice is made available to fishermen by the processor. Fishermen consistently identified the following areas as needing improvement or expansion: parking, waste disposal, security, wave and wake protection, consistent 220 volt power to key slips, improved pedestrian access, internet access, and gear storage. Tuna Harbor fishermen also stated that a fishermen-owned or operated ice and offloading facility would play a key role in their independence and hence, viability.

At Tuna Harbor, potential infrastructure improvements in the short-to-mid-term include: additional security, increased parking capacity for fishermen, and increased storage for nets, traps, and gear. Refrigerated and deep-cold storage are potential improvements at both harbors. Increasing electrical output, gear storage, and net and gear repair space at both harbors should also be considered for mid-term goals. Increased and improved offloading capacity for both gear and catch at Tuna Harbor may be appropriate goals to pursue over the next three to five years.

Public Access is integral to a vibrant and healthy working waterfront, as it raises awareness and understanding of a locally caught food source. Public access creates a physical connection between commercial fishing activities and participants. Infrastructure for pedestrians and bikes, parking, signage, and links to the surrounding area by train, trolley, and car are central to public access. The Site Specific Design and the Traffic and Circulation Analyses in the BEC address coastal public access opportunities and constraints.

“Coastal access is integral to a vibrant and healthy working waterfront, as it raises awareness and understanding of a locally caught food source.”

Access is varied between the Port's two commercial fishing harbors. Constraints to access at Driscoll's Wharf include: deficiencies in design and configuration at the intersection of North Harbor Drive and Torpedo Point forming the entrance to Driscoll's Wharf, insufficient public parking, an interrupted pedestrian walkway, and lack of direct links to busses, trains,

cruise ships, and tourism facilities. Constraints to access at Tuna Harbor are mitigated by the presence of two parking sites, consistent flow of traffic, proximity to tourism facilities and transportation, and sufficient pedestrian access.

Marine Structural Analysis is based upon key elements inspected. These include piers, guard railings, timber deck, stringers, pile caps, and piles at Driscoll's Wharf, and piers, the wharf, floating dock systems, revetment, and associated infrastructure at Tuna Harbor. Findings reveal that structures at Driscoll's Wharf are in fair to poor condition, with the revetment showing the most damage. Structures at Tuna Harbor are primarily in good condition with the exception of specific damage found at a few locations.

“Findings reveal that structures at Driscoll's Wharf are in fair to poor condition, with the revetment showing the most damage. Structures at Tuna Harbor are primarily in good condition with the exception of specific damage found at a few locations.”

Geo-physical and Environmental constraints and opportunities for

revitalization efforts were also investigated and addressed in the BEC according to four key survey areas: a geotechnical survey, a land based environmental survey, a marine based environmental survey, and a geotechnical marine structural survey. Findings were based upon above deck and below water inspections and an inspection of waterfront facilities.

The Geotechnical Analysis was completed to discern the suitability of near-surface soils for support of structures and the need for pile foundations and hydraulic fills for the revitalization of both Tuna Harbor and Driscoll's Wharf. Findings show that soil conditions are suitable for additional development; however, both active and non-active faulting should be addressed as part of the planning phase.

The Land Based Environmental Analysis locates important geological, environmental, and physical constraints to revitalization efforts. This portion of the BEC details the special care and attention to regulatory requirements needed to mitigate potential effects on: biological resources, geology and paleontological resources, aesthetics, cultural resources, air quality, noise, hazardous material, emergency services, and hydrology, water quality, and storm water runoff.

“Environmental Analysis identifies six considerations for potential design alternatives, including attention to eelgrass, which is important for water quality and present in both the Tuna Harbor and Driscoll's Wharf area.”

The Marine Based Environmental Analysis identifies six considerations for potential design alternatives, including attention to eelgrass, which is important for water quality and present in both the Tuna Harbor and Driscoll's Wharf area. It also locates three protected or sensitive bird species and two protected or sensitive marine mammal species present from the Port's intertidal seawall to open water. Attention must also be given to algae, invertebrates, and fish in the area, all of which are listed in the BEC.

Fishery management and marketing are also integral to revitalizing the San Diego commercial fishing industry.

“Overall, each market channel had a positive view of San Diego seafood, although respondents' knowledge about what locally caught seafood is available, how to obtain it, and when it is in season varied.”

Marketing Analysis of the BEC was conducted to identify existing and potential relationships amongst San Diego fishermen (and their catch) and market channels by identifying the perceived advantages and obstacles facing sellers and buyers of San Diego-landed seafood. The analysis is based upon interviews conducted with 23 local restaurants, eight retailers, seven distributor/processors, and four ports where fishermen conduct direct-to-consumer sales. It serves as the basis for the Market Analysis here in the Implementation Plan.

Overall, each market channel had a positive view of San Diego seafood, although respondents' knowledge varied about what locally caught seafood is available, how to obtain it, and when it is in season. Demand exceeds current supply and opportunities exist to increase demand through marketing efforts at the restaurant and retail level. The most commonly cited obstacle preventing these market channels from carrying more locally landed

“A number of commercial fishermen and commercial fishing stakeholders indicated that a management entity is essential to implement needed changes to the industry.”

seafood was having intermittent and/or limited supply.

Management Entity Analysis showed that there is currently no entity or organization that represents the interests of commercial fishermen in San Diego. However, a number of commercial fishermen and commercial fishing stakeholders indicated that a management entity is essential to implement needed changes to the industry. The role of a management entity is of particular importance to attract funding, create an effective marketing and communication program, and maintain infrastructure improvements, such as an ice facility. The examination of various models, roles, responsibilities and structure of a potential management entity for San Diego is addressed in this Implementation Plan.

Findings from the BEC served as the wellspring for community input for discussion on site alternatives. The BEC is the foundation of the Implementation Plan and is available for review on the Port of San Diego website.

Implementation Plan Summary

The second part of the Commercial Fisheries Revitalization project also consisted of extensive collaboration and community outreach including personal interviews, group interviews, meetings, workshops, surveys, and e-mail and phone communication. The deliverable for this part of the project is an Implementation Plan that describes recommended Courses of Action or Preferred Alternative, and provides their cost. The Core Committee, and the Consultant Team worked closely to prioritize revitalization alternatives for the commercial fishing industry with a focus on Driscoll's Wharf and Tuna Harbor. Alternatives include infrastructure (offloading facility, events space, pier renovation and replacement, crane, improved pedestrian and vehicle access, demolition and reconstruction of buildings) and non-infrastructure (website, management entity analysis, marketing plan, food plan, fisherman's trust fund, etc.) improvements.

In the five months between August 2009, and January 2010, several formal meetings, and workshops (five) were held to give the Core Committee and the Consultant Team the opportunity to discuss, analyze, and prioritize potential alternatives for revitalization. Workshops enabled the team to put ideas on paper to visualize and refine site specific alternatives (Refer to Site Plans, "Figure 1.7 Driscoll's Wharf Preferred Alternative

BOX 1.3 PREFERRED ALTERNATIVE

Preferred Alternative Consensus and Components

The Preferred Alternative is a "final cut", or group of infrastructure and non infrastructure improvements that have been identified, analyzed, prioritized, and approved by the Core Committee and Consultant Team to be critical, feasible and appropriate for revitalization of the commercial fishing industry in San Diego. Some alternatives (wireless internet), or courses of action that were discussed in the early part of the project were not, in the end, chosen for the Preferred Alternative.

The Implementation Plan describes the components of the Preferred Alternative in detail, and lists their cost, caveats and what associated projects might be necessary to make them possible. The Implementation Plan includes construction, labor and material costs, permitting, and an estimate on the cost of potential biological assessments and mitigation. Cost estimates and recommendation on implementation are also included in the Marketing Plan, Management Entity Analysis, Food Plan and Fishermen's Trust analysis.

Site Plan” on page 17 and “Figure 1.8 Tuna Harbor Preferred Alternative Site Plan” on page 19). The October workshop focused on site plan alternatives at Driscoll’s Wharf, a second workshop in November focused on Tuna Harbor. The third workshop in January gave the project team the opportunity to review, comment, and confirm site plan alternatives for both sites, as well as discuss non-infrastructure alternatives.

While non-infrastructure alternatives were discussed, and analyzed throughout the project, the Core Committee agreed that the best method to finalize their choice was a web based survey with accompanying detailed descriptions of each opportunity. Survey results confirmed which options the Core Committee viewed as priorities and upon which the Consultant team should focus efforts.

The Implementation Plan relied heavily on the input and technical expertise of the entire Consultant Team. The compilation and reporting of cost data, Marketing Plan, Management Entity Analysis, and Funding Options as well as document management and formatting was provided by LWC; input with a civil engineering focus, and creation and revision of the site plans was conducted by Project Design Consultants; Linscott, Law, and Greenspan provided input on parking and circulation; Moffatt & Nichol Blaylock provided findings on piers, docks, pilings, dredging, wave attenuation, and cranes; TerraCosta Consulting Group provided input on the revetment, preliminary bathymetric findings, handrail and dredging; Helix Environmental Planning guided the work on terrestrial biological assessment, permitting, and studies as did Merkel and Associates for marine biology.

The Consultant Team also included KMA Architects and Engineers. The KMA team was tasked with providing a 3D schematic illustration, and a 3D model with Sketch-Up illustration of the Preferred Alternative. The Core Committee and the Consultant Team agreed that accompanying illustrations will make for a more powerful presentation of the proposed improvements and give potential funding sources, and supporters something to “get their arms around.” It is important to emphasize that the illustrations are graphic depictions of preferred components and ultimately appearance and preferences may change greatly through the evolution of implementation.

BOX 1.4 COST ESTIMATES

The cost figures in this document are based on the best opinions of the Consultant Team within the scope of this project, and as such, represent approximate amounts intended to give decision makers an idea of the magnitude of funds required for any particular action.

High and Low cost estimates: A range of costs is provided and are influenced by issues such as the types of materials used, extent of repairs or renovation required, type of environmental review deemed necessary, whether optional work is executed, size or capacity of a proposed improvement (crane capacity, ice machine capacity, live holding tank capacity and design), etc.

In the Implementation Plan, a Course of Action is described in detail, and an estimate of total cost is provided (Cost Description). Cost estimates are further broken down into components that include (where available) hard costs (construction, material), and soft costs (permitting, biological assessments, project management). Recommendations are divided into Phases based on their immediacy and preferences, and how extensive the capital investment needed to bring them about. Photos and drawings are provided to give the reader a more complete assessment of each recommendation.

The Implementation Plan is designed to provide a project manager, potential funding source, or elected official with a detailed description and cost estimate, and is intended to communicate the importance of the recommended action. The document is arranged so that a project manager can accomplish this regardless of the phase or sequence (where the Course of Action appears in the document). This inherent flexibility is intended to allow project managers to use the document for a variety of applications with little or no modification.

Implementation Plan Cost Summary

A summary of the Implementation Plan costs is presented below (Refer to “Figure 1.6 Commercial Fisheries Revitalization Implementation Plan Cost Summary”). Estimated costs to implement the Preferred Alternative at Driscoll’s Wharf are between \$18.1 million and \$23.8 million and estimated costs to implement the Preferred Alternative at Tuna Harbor are between \$2.5 million and \$8.5 million.

Summaries of the Courses of Action that make-up the Preferred Alternative, a low and high cost estimate for each, and a summary of anticipated environmental or biological surveys and permitting is presented below for Driscoll’s Wharf (refer to “Table 1.4 Driscoll’s Wharf Preferred Alternative Cost Estimate Summary” on page 14) and for Tuna Harbor (Refer to “Table 1.5 Tuna Harbor Preferred Alternative Cost Estimate Summary” on page 15).

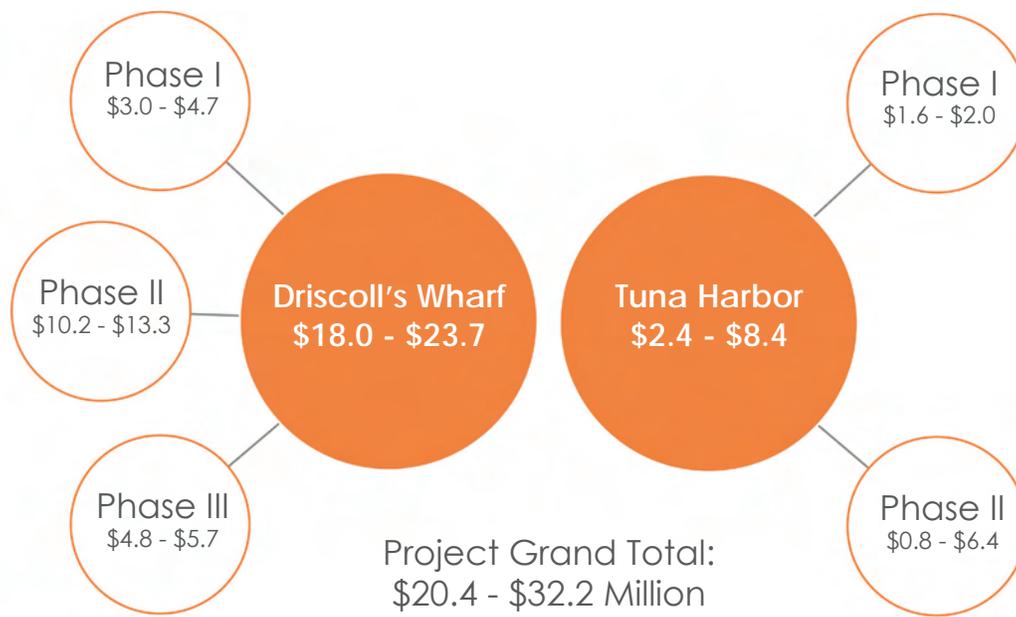


Figure 1.6 Commercial Fisheries Revitalization Implementation Plan Cost Summary (Note: costs in millions of dollars).

Table 1.4 Driscoll's Wharf Preferred Alternative Cost Estimate Summary

Driscoll's Wharf				
Phase	Course of Action	Low Cost Estimate	High Cost Estimate	Anticipated Level of Environmental Review / Permitting / Surveys
Phase I	Public Event Space	\$293,700	\$655,800	a or b (design dependent)
	Dinghy Dock Removal	\$35,000	\$35,000	b (possible c)
	Offloading Facility Repair / Renovation	\$330,000	\$430,000	b, c, d, e, f, g, h
	Floating Docks Between Piers	\$330,000	\$310,000	a, c, d, e, g, h, i
	Wave Study	\$30,000	\$30,000	-
	Handrail Upgrade and Extension	\$25,600	\$64,000	b, c
	Building #1 Demolition and Construction	\$1,812,900	\$2,852,400	a or j (design dependent), c
	Iconic Entrance Signage	\$14,000	\$42,000	b, c
	Ice Machine Purchase / Installation	\$59,400	\$150,000	b, c
	Live Holding Tank Purchase / Installation	\$35,400	\$38,100	a or b (design dependent), c
	Emergency Vehicle Access	\$27,500	\$80,900	a or b (design dependent), c
	Phase I Sub-total		\$2,993,500	\$4,688,200
Phase II	Promenade Renovation	\$642,200	\$993,000	a or b (design dependent), c
	New Offloading Facility	\$3,683,000	\$3,683,000	a, c, d, e, g, h, i, k, l
	Dredging	\$173,000	\$253,000	a, c, g, h, i, k, m, n
	Building #2 Demolition and Construction	\$4,545,300	\$7,165,500	a or j (design dependent), c
	Emergency Vehicle Access	\$27,500	\$80,900	a or b (design dependent), c
	Wave Attenuation	\$1,120,700	\$1,120,700	a, c, d, e, g, h, i
	Phase II Sub-total		\$10,191,700	\$13,296,100
Phase III	Existing Dock and Slip Replacement	\$3,043,700	\$3,043,700	a, c, d, e, g, h, i, l
	Building #3 Demolition and Construction	\$1,736,900	\$2,694,500	a or j (design dependent), c
	Phase III Sub-total		\$4,780,600	\$5,738,200
Driscoll's Wharf Total		\$17,965,800	\$23,722,500	

Key

- a Initial Study / Mitigated Negative Declaration
- b Categorical Exemption
- c Port Tenant Improvement Permit
- d Local Coastal Development Permit
- e Storm Water Pollution Prevention Plan
- f U.S. Army Corps of Engineers Nationwide Permit #3
- g Regional Water Quality Control Board 401 Certification
- h May require Caulerpa, eelgrass, and / or essential fish habitat studies, mitigation, and / or a biological assessment
- i U.S. Army Corps of Engineers Section 10 / 404 Individual Permit
- j Environmental Impact Report
- k Best Management Practices
- l City of San Diego Review
- m Sediment Testing (Green Book or Inland Manual Testing)
- n California State Lands Commission Permit
- o Initial Study / Negative Declaration

Table 1.5 Tuna Harbor Preferred Alternative Cost Estimate Summary

Tuna Harbor				
Phase	Course of Action	Low Cost Estimate	High Cost Estimate	Anticipated Level of Environmental Review / Permitting / Surveys
Phase I	Wave Study	\$30,000	\$30,000	-
	Event Space	\$229,000	\$265,400	a or b (design dependent)
	Security Measures	\$12,600	\$12,600	b
	Seafood Market	\$544,000	\$544,000	a or b (design dependent)
	New Hoist / Crane Purchase / Installation	\$230,700	\$330,700	a or b (design dependent), d, e, g, h, i
	New / Expanded Restroom & Laundry Facilities	\$550,300	\$865,300	a or b (design dependent)
	Phase I Sub-total	\$1,596,600	\$2,048,000	
Phase II	Wave Attenuation	\$383,700	\$4,583,700	a, j, or o (design dependent) d, e, g, h, i
	Tuna Harbor Piling Repair / Renovation	\$443,700	\$1,803,700	b, d, e, f, g, h
	Phase II Sub-total	\$827,400	\$6,387,400	
Tuna Harbor Total		\$2,424,000	\$8,435,400	

Key

- | | |
|---|---|
| a Initial Study / Mitigated Negative Declaration | i U.S. Army Corps of Engineers Section 10 / 404 Individual Permit |
| b Categorical Exemption | j Environmental Impact Report |
| c Port Tenant Improvement Permit | k Best Management Practices |
| d Local Coastal Development Permit | l City of San Diego Review |
| e Storm Water Pollution Prevention Plan | m Sediment Testing (Green Book or Inland Manual Testing) |
| f U.S. Army Corps of Engineers Nationwide Permit #3 | n California State Lands Commission Permit |
| g Regional Water Quality Control Board 401 Certification | o Initial Study / Negative Declaration |
| h May require Caulerpa, eelgrass, and / or essential fish habitat studies, mitigation, and / or a biological assessment | |

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Commercial Fisheries Revitalization Plan - Driscoll's Wharf

Preferred Concept Plan Improvements: All Phases

Port of San Diego

DATE: 1.14.20

FILE: P:\0001\Projects\PortofSanDiego_Consult\0001.dwg

PROJECT DESIGN CONSULTANTS

0 50 100 200'

Figure 1.7 Driscoll's Wharf Preferred Alternative Site Plan

Note: Illustrations are graphic depictions of preferred components and appearance. Preferences may change greatly through the evolution of implementation.

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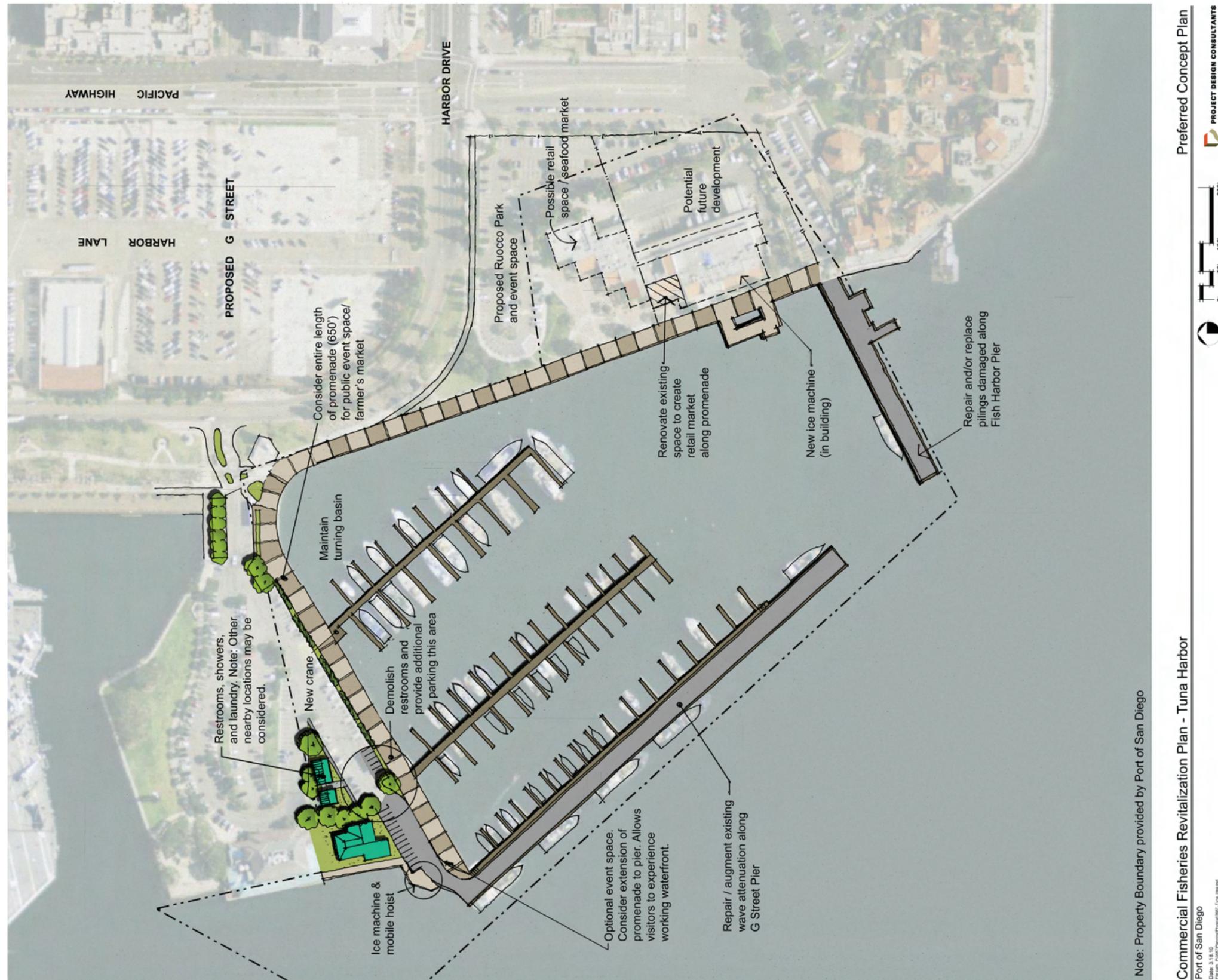


Figure 1.8 Tuna Harbor Preferred Alternative Site Plan

Note: Illustrations are graphic depictions of preferred components and appearance. Preferences may change greatly through the evolution of implementation.

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DESIGN PROPOSAL

Section 2

This Section includes a comprehensive analysis of the resources necessary to bring about the Preferred Alternative. One of the key themes of the project was a focus on feasibility. As such, recommendations are fashioned to make best use of limited resources and to provide the greatest long-term benefit to the commercial fishing industry in terms of stability and value.

Cost estimates include time and material estimates for infrastructure improvements, permitting, and biological assessments. In many cases, this Section also includes photos of existing conditions, photo examples from other sites in San Diego harbor, and technical drawings of proposed improvements. In each instance, the traffic engineers, marine structural engineers, civil engineers, land use planners, geotechnical experts, as well as the biological assessment firms contributed to the analysis in an attempt to create comprehensive cost and impact estimates.

The Courses of Action to bring about the Preferred Alternative are divided into phases by site (Driscoll's Wharf and Tuna Harbor) for organizational purposes and to set the stage for implementation as funding opportunities arise. The phases also suggest priorities, but are not meant to hinder project managers to act on a "later" phase if appropriate funding or other resources become available. The Section concludes with an overview of regulations and permitting that should be taken into consideration as improvements are made.

Overall, this Section gives project managers and potential funding sources a comprehensive view of development options so that critical improvements can be made in the most cost, time, and management-efficient manner.

Driscoll's Wharf

Below is a comprehensive analysis of each Course of Action for the Preferred Alternative at Driscoll's Wharf.

It is anticipated that multiple components of the Driscoll's Wharf Preferred Alternative may require California Environmental Quality Act (CEQA) analyses. As a first step, project managers should consider a single environmental review for Driscoll's Wharf, particularly if a program Environmental Impact Report (EIR) is not performed for both sites. A comprehensive environmental review will disclose potential impacts of all phases of the project and provide a strategy for mitigation as opposed to moving in a piecemeal fashion that will ultimately be more expensive and time consuming.

Phase I

Public Event Space

In an effort to increase public coastal access and to draw more visitors to the working waterfront at Driscoll's Wharf, the Core Committee and Consultant Team concluded that the northernmost portion of the wharf, near the entrance, would be the ideal location for a public event space. This improvement will create a connection to the Marina Green development and integrate the site into the existing harbor footpath/coastal access network. The event space will be ideal for a weekly fisherman's market and / or seafood and commercial fishing industry related festivals and events (see Section 5). Development of this space includes removal of an existing parking lot and construction of new parking spaces, landscaping and irrigation, asphalt concrete overlay (as needed), consideration of a 300 linear foot (ft.) screen wall at the U.S. Navy boundary, street furnishings, security and ornamental lighting, a public art installation (optional), landscaping and irrigation. Cost estimates for demolition and removal of the existing restroom facility are included.

Improvements to the revetment in this area (approximately 320 linear feet) should take place in Phase I only if sufficient resources are available. Based upon evaluations by the Consultant Team geotechnical engineer, the existing rock revetment appears to be functional, although unsightly. The revetment in its current state is estimated to serve its purpose for approximately the next 10 years.

Cost Description

The total estimated cost for the creation of Driscoll's Wharf event space, and connection to Marina Green is estimated to range from approximately \$293,700 to \$655,800 (the low estimate does not include improvements to the revetment). These cost estimates are made up of the following:

Permitting Costs: An Initial Study / Mitigated Negative Declaration (IS / MND) for this task is estimated to cost approximately \$40,000.

Event Space Construction: General costs for creation of the event space are estimated to range from approximately \$253,700 to approximately \$305,800. Note, this does not include demolition and removal of the existing restroom facilities as identified as an option in Phase III (approximately \$32,000).

Revetment Repair and Improvement: The revetment repair and improvement for the 320 linear foot Event Space can most economically be performed from onshore with large excavators and possibly a Gradall®. However, this can only be feasibly done after the buildings are demolished and scheduled to allow access to the water's edge with heavy construction equipment. Conversely, the entire revetment can be constructed from an offshore barge, either between the existing piers or can be more easily completed when the piers are removed.

Based on discussions with Marathon Construction staff, a reasonable construction cost for placing 1/4-ton rock assuming a terrestrial construction project with good access would be approximately \$150/cubic yard. Offshore construction from a barge would likely cost about \$300/cubic yard. We are currently estimating 3 cubic yards of rock required per linear foot of revetment, resulting in a construction cost of \$500/linear foot assuming on-land construction, and \$1,000/linear foot with offshore construction using a barge. Only minimal, if any, immediate revetment work is necessary in the near term. The completion of the revetment upgrade is recommended in Phase II.

This would lead to an approximate additional cost of \$160,000 using onshore construction or \$320,000 using offshore construction.

Demolition of Existing Restroom Facilities (Optional): The total estimated cost for the demolition and disposal of the existing public restroom facility at Driscoll's Wharf is estimated at approximately \$32,400

Dinghy Dock Removal

As noted in the BEC report, boats tied to the dinghy dock block the entry to the offloading dock. The Core Committee frequently addressed this topic. The dinghy dock (Refer to "Figure 2.1 Driscoll's Wharf, dinghy dock" on page 23) prevents loading and offloading efforts at Pier 4 (Refer to "Figure 2.2 Driscoll's Wharf, piers numbered" on page 23) and needs to be removed and relocated.

Cost Description

The total cost to remove and dispose of the existing dinghy dock is estimated at approximately \$35,000. This cost estimate includes:

Mobilization: To perform this work, a contractor with a barge and a crane must be mobilized and compensated for their labor. This is estimated to cost approximately \$30,000.

Disposal: Disposal is estimated to cost approximately \$110 per ton. Disposal of the dinghy dock is estimated to total approximately \$5,000.



Figure 2.1 Driscoll's Wharf, dinghy dock

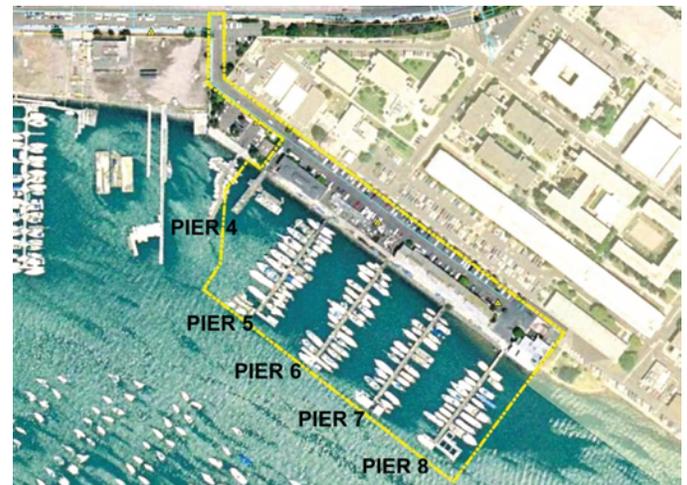


Figure 2.2 Driscoll's Wharf, piers numbered

Offloading Facility Repair / Renovation

Through technical inspection, field interviews, the collaboration of the Core Committee and the Consultant team, the current condition, size, and capacity of the current Driscoll's offloading dock (Pier 4) is considered inadequate. The dock can only hold up to 9,500 pounds (lbs) and offload only one large vessel or two small vessels at a time. Offloading is tide dependent due to the shallow depth of the basin. The dock is also unable to support a refrigerated truck which means catch must be loaded onto a forklift and then on to a waiting truck. The Core Committee and Consultant Team recommend that renovated offloading with better truck access would be an appropriate, attractive solution that would support and stimulate additional commercial offloading activity.



Figure 2.3 Driscoll's Wharf, offloading pier - steel plate protection



Figure 2.4 Driscoll's Wharf, offloading pier timber decking

The capacity and length of the hoist are also considered inadequate. The current maximum load is 1,500 pounds. It was concluded by the Core Committee and facility manager that a 6,000 to 10,000 pound model is more suitable and would support and stimulate additional commercial offloading activity.

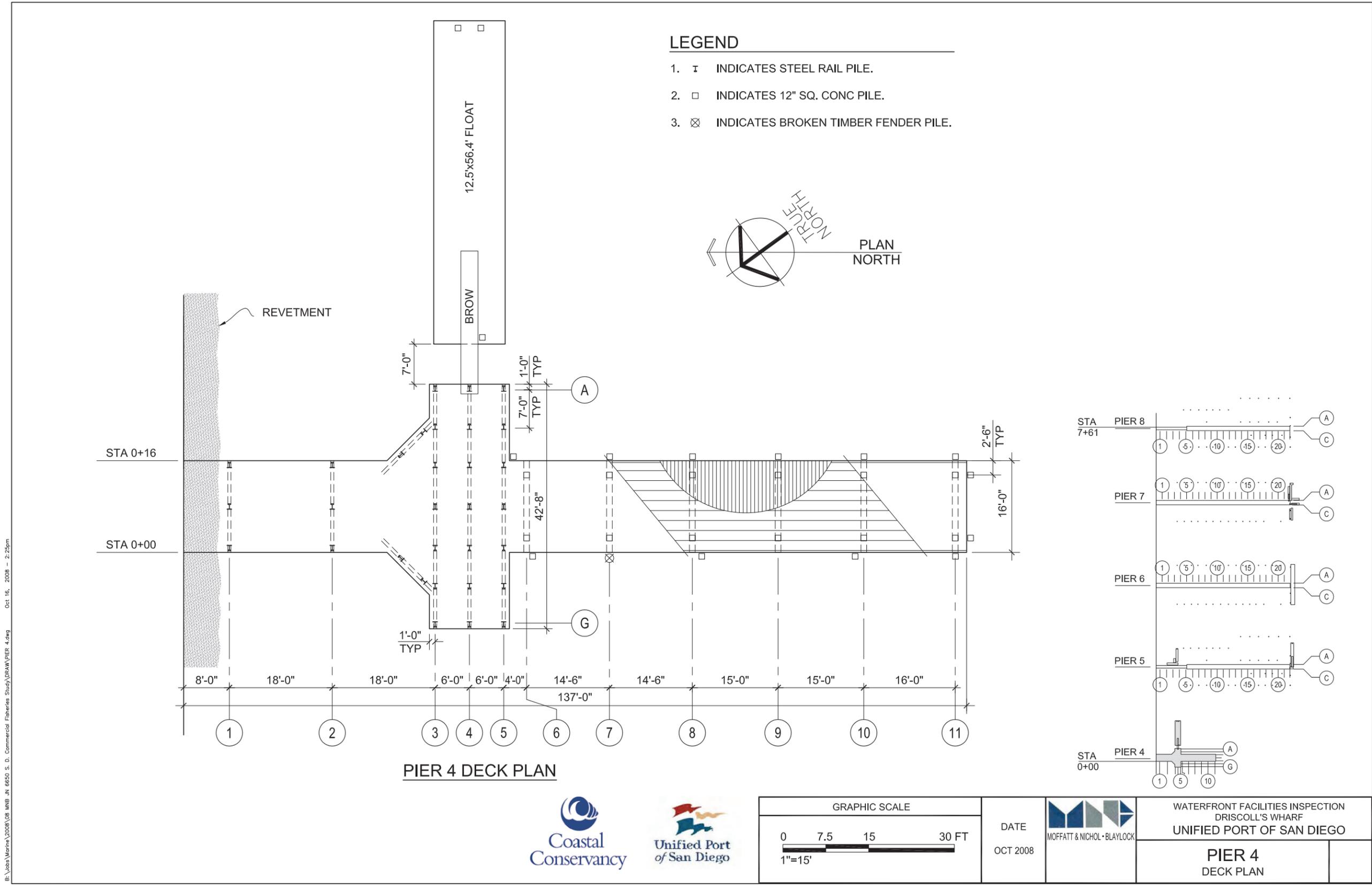
The offloading pier (Pier 4, Refer to "Figure 2.2 Driscoll's Wharf, piers numbered" on page 23 for pier nomenclature at Driscoll's Wharf) has overall dimensions of 137 ft. long by 16 ft. wide. The original portion of the pier was constructed in the early 1950s and extended in 1977 (Refer to "Figure 2.3 Driscoll's Wharf, offloading pier - steel plate protection" on page 24). Limited restoration of the pier is necessary to support current or increased levels of commercial fish and gear offloading operations (Refer to "Figure 2.5 Driscoll's Wharf, Pier 4 deck plan" on page 25 for a plan view of the existing pier).

Restoration work would allow the offloading pier to remain serviceable for approximately 10 more years. Restoration investments to extend the service life of this pier beyond 10 years are not recommended. The reason for minimal restoration work is the antiquated design, the limited load capacity, and the minimal fender system to resist berthing energy (forces exerted by a vessel's approach, wind, tide, and wave, while attached to a fixed structure).

The alternative to restoring the pier is replacing it with a new concrete pier. If funds are available to build a replacement pier, then restoration of this structure is not recommended.

A comprehensive above and below deck facility inspection was conducted in July of 2008. The restoration work outlined in this section is based on the reported condition at the time of the inspection and includes replacement of the timber deck and timber bull rail, replacement of a broken timber fender pile with a concrete pile, installation of a new reinforced plastic camel (collar like connector attached to a floating dock structure that wraps around a fixed piling), and replacement of the crane. Beyond the restoration activities described above, additional minor gains in load capacity could be accomplished with a detailed structural analysis of the pier and additional construction work.

Timber Deck Replacement – The existing timber decking is in fair-to-poor condition and needs replacement to allow vehicle access (Refer to "Figure 2.4 Driscoll's Wharf, offloading pier timber decking" on page 24). It



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Figure 2.5 Driscoll's Wharf, Pier 4 deck plan

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is recommended to use 4 inch (in.) thick Douglas Fir timber decking treated for salt water splash exposure. Approximately 20 ft. of the pier (close to shore) has new 4 in. thick decking. This replaced the existing 3 in. thick decking.

Timber Bull Rail Replacement – The existing timber bull rail (curb or wheel-stop) is located along the perimeter of the pier and is severely deteriorated (Refer to “Figure 2.6 Driscoll's Wharf, offloading pier timber bull rail” on page 27). It is recommended to provide a new timber bull rail around the perimeter of the pier to meet longshoring industry safety standards, which specify a minimum bull rail height of 10 in. The safety standards are specified in Occupational Safety and Health Administration (OSHA) document No. 2232, Section 1917.112.

Timber Railing Removal – The inboard half of the pier has a timber railing (Refer to “Figure 2.7 Driscoll's Wharf, offloading pier timber guard rail.” on page 27). The railing does not meet the code requirements for lateral capacity. A hand railing is not required at the edges of waterfront working areas. It is recommended to remove the hand railing. Replacement is optional with pier restoration.

Fender System – A quality fender system is designed to dissipate mooring and berthing energy for the design ship size, approach velocity, wind, and current conditions. The offloading pier has a non-engineered fender system comprised of 12 in. square concrete fender piles, one broken timber fender pile, and one reinforced plastic camel around the outboard half of the pier (Refer to “Figure 2.8 Driscoll's Wharf, offloading pier - fender system” on page 28). It is recommended to replace the broken timber fender pile on the west side of the pier with a concrete fender pile. To allow ship berthing on both sides of the pier, an additional reinforced plastic camel is recommended for the west side of the pier.



Figure 2.6 Driscoll's Wharf, offloading pier timber bull rail



Figure 2.7 Driscoll's Wharf, offloading pier timber guard rail.

Modernization of the fender system would consist of an engineered fender system to replace or significantly enhance the existing system. An upgrade would include increasing the total number of fender piles and the energy dissipation capacity of the system. To meet the goal of an additional 10 years of service life, upgrading the fender system is not recommended.

Pile-to-Pilecap Connections – At the time when a pier restoration project begins, an additional inspection is recommended to determine



Figure 2.8 Driscoll's Wharf, offloading pier - fender system



Figure 2.9 Driscoll's Wharf, offloading pier - jib crane

if the pile-to-pilecap connections need to be replaced. For this recommendation, it is anticipated that some of the pile-to-pilecap connections will need to be replaced to sustain the vertical load capacity of the pier.

Jib Crane – The existing crane has an approximate load limit of 2,000 lbs, and has two booms with a reach of 13 ft., one for each side of the pier (Refer to “Figure 2.9 Driscoll's Wharf, offloading pier - jib crane” on page 28). For restoration of this pier, it is necessary to repair the crane to last an additional 10 years.

To replace the crane for an increase in allowable load capacity, the pier would require retrofitting at the jib crane foundation to carry the additional loading. A detailed analysis of the existing pier is necessary to determine the feasible maximum crane size for the existing pier load capacity.

A freestanding single column crane is not suitable for anchorage to the existing pier because of the magnitude of the overturning movement at the base. A jib crane with a configuration similar to the existing crane is recommended. This would include multiple columns and diagonal braces to distribute the load to a wider area over the pier.

Pier Load Capacity Increase – A detailed structural analysis is necessary to determine if it is feasible to perform additional work to increase the concentrated load capacity (fork-lift type loads) of the pier as a part of the restoration project. The load capacity can only be increased as much as the weakest element in the load path. The load path is from the decking to the stringers (longitudinal support elements directly below the timber decking) to the pile caps to the piles to the soil. For example, if the stringers were the weakest link, then the 4 in. x 12 in. timber stringers could be doubled-up along a 10 ft. strip down the middle of the pier when the decking is removed, allowing access to the stringers.

Cost Description

The total cost for the proposed repair / renovation of the offloading facility is estimated to range from approximately \$330,000 to approximately \$430,000. This cost includes:

Design/Build Construction: The pier restoration work would be most efficiently accomplished using a design/build procurement method (design, permit, and construction contracted to a single entity). The estimated cost to restore the offloading pier at Driscoll's Wharf as described above is approximately

\$150,000. This would include removal and replacement of timber decking, timber bull rail, removal of the hand railing, replacement of the broken timber fender pile with a concrete pile, and the installation of a new reinforced plastic camel.

Replacement of the jib crane would cost approximately \$100,000. This would include the cost of the crane, the crane connection to the pier, and the structural engineering required to design the retrofit of the pier connection.

The soft costs of contractor overhead and profit would be approximately \$40,000 for a total restoration project construction cost of \$300,000.

Load Capacity Increase (optional): It is estimated that approximately \$100,000 should be reserved for pier load capacity increase activities. This would include structural inspection, analysis, design, and construction for the increase in concentrated load capacity of the pier. Structural analysis would determine what elements need to be retrofitted to justify a load capacity increase. The estimated cost for analysis and design drawings is \$50,000. A possible outcome of the analysis could be that it is worthwhile to double-up the stringers along a 10 ft. wide lane down the middle of the pier. If so, an approximate cost for doubling stringers is \$30,000 if coordinated with decking replacement activities.

Permitting & Consultant Fees: It is recommended that a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of approximately \$30,000 for time and materials is recommended. The 401 Certification from the Regional Water Quality Control Board (RWQCB) has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal.

Pedestrian and Vehicle Ingress and Egress Improvements

Findings from initial investigations (BEC) , and throughout the Core Committee/Consultant team collaboration found that vehicle and pedestrian access to the site was considered inadequate. The Core Committee guided the Consultant Team to investigate roadway improvements and enhancements along Harbor Drive to facilitate vehicle ingress and egress, as well as improvements to pedestrian mobility and safety.

The Port District is currently reviewing a minimum 424-space parking structure to replace the current surface lot on North Harbor Drive. As part of the project, a signalized mid-block pedestrian crossing is also being reviewed. This project's proposed pedestrian crossing would need to be removed and/or relocated when this parking structure project is realized.

Cost Description

The costs incurred for the above described work will be calculated and funded through the parking structure project.

Floating Dock Between Piers

Based on interviews and research for the BEC and discussions at workshops, the Core Committee suggested creation of floating docks that parallel the shoreline between piers. This could be accomplished with the addition of a new floating dock between existing Piers No. 4 and No. 5 at the west end of Driscoll's Wharf. Smaller boats will be able to utilize these for short-term tie-up and offloading. Research showed that the fastest growing sector of the commercial fishing fleet in California is the 25 foot and under trailerable boats. This is an effort to address that sector of the industry. To implement this suggestion, the existing floating

dock would need to be demolished and a new floating dock would need to be installed along with a new gangway.

The distance from the float to the shore depends on the bathymetry at the site. A minimum water depth of -6 ft. Mean Lower Low Water (MLLW) is recommended for tidal variations, draft, and waves. The floating dock would be positioned approximately 40 feet from the shore and have a gangway to the east side of the existing offloading pier. Retrofit of the offloading pier would be necessary to safely connect the new gangway.

The center-to-center distance between Pier 4 and Pier 5 is 200 ft. (Refer to "Figure 2.5 Driscoll's Wharf, Pier 4 deck plan" on page 25 for a plan view of the existing offloading pier and existing floating dock).

Loss of Boat Slips – The floating dock would limit access to approximately four slips on the existing Pier 5. The loss of slips is undertaken in exchange for new tie-up space for as many or more smaller craft.

Demolition of Existing Floating Dock – The existing floating dock (Refer to "Figure 2.5 Driscoll's Wharf, Pier 4 deck plan" on page 25) is in fair condition and the timber gangway is in poor condition. Both would be removed or relocated for this upgrade.

New Floating Dock – To provide a useful work area, a floating dock designed for an allowable live loading of 50 pounds per square foot (psf) is recommended. A minimum width of 8 ft. is recommended, and a wider dock is more stable for work related activities.

Gangway – The gangway will provide access to the floating dock from the east side of the offloading pier.

The pier requires structural reinforcement for safe connection at the top of the gangway.

A minimum design live load of 50 psf with a maximum deflection of the span length divided by 360 is recommended.

A maximum gangway slope of 6:1 (horizontal: vertical) is recommended at low tide to allow heavy carts to be safely rolled up and down the gangway (60 ft. minimum length).

A gangway width of 6 ft. is recommended to provide versatility of use.

Cost Description

The estimated cost for the addition of a floating dock is approximately \$330,000, not including any potential mitigation required for this addition. This cost estimate includes:

Demolition of Existing Floating Dock: The existing floating dock and gangway are to be removed and disposed, or relocated at the discretion of the leaseholder. The approximate cost is \$20,000.

Floating Dock: The fabrication and delivery cost of a new floating dock for additional short term tie-up and off-load space is approximately \$125 per square foot for a heavy duty timber dock with hot-dip-galvanized steel hardware and concrete guide piles. For a floating dock 10 ft. by 100 feet long, the approximate cost is \$125,000.

Gangway: The fabrication and delivery cost of a new aluminum gangway to provide access to the floating dock is approximately \$40,000.

Design / Build Construction: It is recommended to allow \$75,000 for the design and construction of the retrofit of the existing pier at the gangway connection. This would include the installation of the floating docks, guide piles, and gangway.

Permitting & Consultant Fees: It is recommended to have a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of \$30,000 for time and materials is recommended, which does not include the preparation of a CEQA document. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal.

Permitting Costs: An IS / MND for this task is estimated to cost approximately \$40,000.

Mitigation: Mitigation may be required if it is determined that a project will have significant environmental impacts. The type of mitigation will be dependent on the level of impact and is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (\$100,000 to \$500,000).

Wave Study

It was concluded by consensus that any work undertaken at Driscoll's Wharf should include steps to protect the facility from wind driven waves from San Diego Bay, boat wakes from passing vessels, and other sudden changes in ocean levels such as earthquake triggered events. As such, a structure is necessary to block or dampen the waves and protect the vessels, and infrastructure at Driscoll's Wharf. A wave study would determine the source of the nuisance waves, as well as the wave characteristics including amplitude, length, and forces to design the optimal breakwater structure for this location. This wave study will take approximately one month.

Cost Description

The estimated cost to complete a wave study for Driscoll's Wharf is approximately \$30,000. This does not include the design drawings and specifications for the construction of a breakwater structure.

Handrail Upgrade / Extension

In addition to the portion of the promenade that is being renovated for creation of the event space, the Core Committee and Consultant team concluded that improvements to the existing handrail (Refer to "Figure 2.10 Driscoll's Wharf, existing rail" on page 31) along the promenade / walkway should be implemented. The upgrade to the handrail is meant to prepare the facility aesthetically and from a safety perspective for increased public access, as well as improve the space fishermen currently use for gear repair and drying. The handrail upgrade can be modeled off the newly renovated Marina Green facility for visual continuity and aesthetics (Refer to "Figure 2.11 Marina Green handrail" on page 32 and



Figure 2.10 Driscoll's Wharf, existing rail



Figure 2.11 Marina Green handrail

“Figure 2.12 Driscoll’s Wharf, cable rail details” on page 33).

While the entire 960 foot handrail upgrade is ultimately addressed in the Implementation Plan, it is recommended that in Phase I handrail upgrades be made in the 320 feet from the new Event Space up to, approximately, the service court or southern edge of Building #1.

Prior to promenade upgrades, interim handrails, while still providing code compliant structural capacity, can utilize at-grade steel plates attached to the concrete slab or set in cored holes that would subsequently be grouted into the existing concrete slab. The

Consultant Team has provided industrial cable railing details for both an economical and code compliant interim handrail system that can accommodate draping fishnets and some relatively heavy use, along with a variety of incremental upgrades associated with an attendant incremental increase in cost. The Consultant Team anticipates that with any promenade construction / improvements, the foundations for a new handrail would be set into the new promenade sub-grade and the new promenade concrete surface poured around, and integral with, the handrail.

Cost Description

The total estimated cost of handrail improvements varies depending on the type and length of handrail chosen. The estimated costs range from approximately \$25,600 to approximately \$64,000.

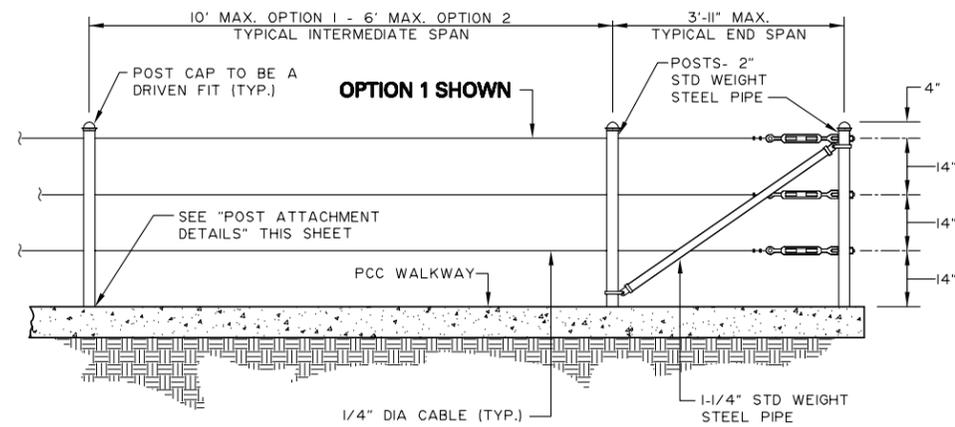
Note, cost estimates for a handrail upgrade along the entire revetment are included in Phase II. The cost estimate (range) includes:

Finished Grade Handrail Only in Front of Event Space: Assuming approximately 320 linear feet of handrail will be replaced only in front of the newly created event space described above, the total estimated cost is approximately \$25,600.

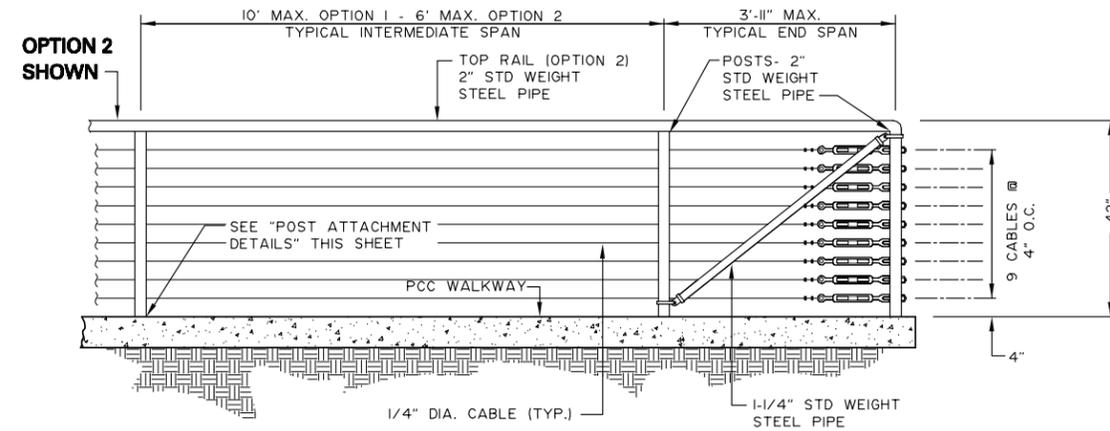
Interim Code Compliant Handrail: The total estimated costs of replacing the entire 960 linear feet of handrail ranges from approximately \$38,400 to approximately \$57,600.

Mix of Interim Finished Grade Handrail and Finalized Handrail: Assuming approximately 320 linear feet of handrail will be replaced with handrails similar to that at Marina Green, and the remaining 640 linear feet of the handrail will be replaced with the interim code compliant handrail, the total estimated costs range from approximately \$51,200 to approximately \$64,000.

Cost considerations by linear foot, material, and installation method: A finished grade handrail similar to that used at Marina Green, cast into a new concrete promenade slab, will cost about \$80/linear foot assuming galvanized pipe for the vertical post and top rail, with 1/4-inch stainless steel horizontal cables. Lower cost, code compliant alternatives have approximate costs ranging from \$40 to \$60/foot, depending upon design and architectural requirements.



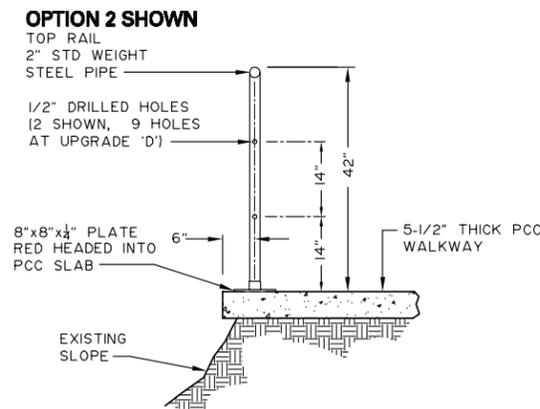
CABLE RAILING PROFILE-2/3 STRAND STANDARD
NOT TO SCALE



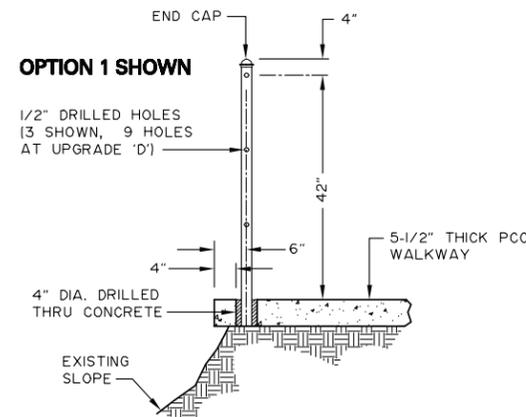
CABLE RAILING DETAIL- 9/10 STRAND UPGRADE 'D'
NOT TO SCALE

NOTES

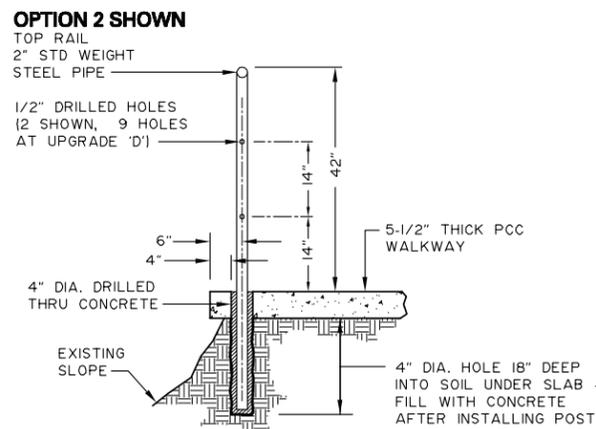
1. SEE CALTRANS STANDARD PLAN B11-47 "CABLE RAILING" FOR ADDITIONAL NOTES & DETAILS. WHERE DETAILS OVERLAP AND ARE DIFFERENT, DETAILS ON THIS DRAWING PREVAIL.
2. MAXIMUM DISTANCE BETWEEN TURNBUCKLES SHALL BE 200'±.
3. INTERMEDIATE TURNBUCKLES TO BE PLACED IN ADJACENT SPANS.
4. CABLE SHALL NOT BE SPLICED BETWEEN INTERMEDIATE TURNBUCKLES AND END POSTS.
5. ALL POSTS, CABLE AND HARDWARE TO BE GALVANIZED. CABLES CAN BE UPGRADED TO STAINLESS STEEL PER UPGRADES "C" & "E".
6. POSTS TO BE VERTICAL.
7. POST & HANDRAIL SHALL BE 2" MINIMUM, STANDARD WEIGHT STEEL PIPE.
8. ALIGNMENT OF HOLES IN POSTS MAY VARY TO CONFORM TO SLOPE OF WALKWAY.
9. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.
10. ALTERNATIVE DETAILS MAY BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.
11. LINE POSTS SHALL BE BRACED HORIZONTALLY AND TRUSSED DIAGONALLY IN BOTH DIRECTIONS AT INTERVALS NOT TO EXCEED 984 FEET.
12. TYPICAL END SPANS, BRACED IN BOTH DIRECTIONS, SHALL BE CONSTRUCTED AT CHANGES IN LINE WHERE THE ANGLE OF DEFLECTION IS 15 DEGREES OR MORE.
13. PROVIDE THIMBLES AT ALL CABLE LOOPS.



**POST ATTACHMENT DETAIL
STANDARD INSTALLATION**
NOT TO SCALE



**POST ATTACHMENT DETAIL
UPGRADE 'A'**
NOT TO SCALE



**POST ATTACHMENT DETAIL
UPGRADE 'B'**
NOT TO SCALE

	TERRACOSTA CONSULTING GROUP ENGINEERS AND GEOLOGISTS 3890 MURPHY CANYON ROAD, SUITE 200 SAN DIEGO, CA 92123 (658) 573-6900	FIGURE NUMBER
	PROJECT NAME COMMERCIAL FISHERIES REVITALIZATION	PROJECT NUMBER 2585
CABLE RAILING DETAILS		

Figure 2.12 Driscoll's Wharf, cable rail details

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Building #1 Demolition and Construction

The Core Committee, the Driscoll's Wharf leaseholder, and field inspections by the Consultant Team, identified a need to demolish and replace Building #1 due to: obsolescence of the structure, inefficiency in the design, and constraints to access caused by the current configuration. The building is considered to be significantly behind the market standard of available office space in San Diego, and improvements will help attract renters interested in office space on the waterfront. The proposed new building would accommodate a retail fish market, small processing plant, cold storage, ice machine, restrooms, and dry storage on the first floor, and modern office space with exceptional views of the America's Cup Harbor on the second story. The second story office space is proposed to cantilever over the promenade (similar to the buildings at Marina Green). The design of this building was developed to ensure minimal loss of parking, as well as assure that it is competitive with similar rental opportunities in the market.

Cost Description

The total estimated cost for the development of the new building is estimated to range from approximately \$1,812,900 to approximately \$2,852,400. Cost estimates are based on demolishing the existing approximately 10,000 square foot building and constructing a new 13,700 square foot building.

Permitting Costs: If this task requires an EIR, the permitting costs are estimated to be \$120,000. If an EIR is not triggered by significant impacts associated with the task under CEQA, an MND is estimated to cost \$40,000.

Demolition Costs: Assuming the building is 10,000 square feet, demolition and disposal costs are estimated to range from approximately \$92,200 to \$200,200.

Construction, Design, and Consultation Costs: Building #1's costs include new building construction (estimated to range from approximately \$1,485,800 to approximately \$2,337,300), upgraded twelve-inch diameter waterlines (approximately \$148,200), and gas and electricity lines (approximately \$46,700).

Iconic Entrance Signage

The Core Committee felt it was imperative to install iconic signage at the entryway on North Harbor Drive (NHD) to draw in the public and help provide a memory image of the site for locals and visitors. The sign will integrate logos or taglines developed by the commercial fishing fleet and serve to mark the site as a place where seafood is landed, processed, and/or sold.

Cost Description

The total estimated cost for the creation of NHD iconic entrance signage at Driscoll's Wharf is estimated to range from approximately \$14,000 to approximately \$42,000.

Ice Machine Purchase and Installation

A small scale, independently owned and operated ice machine will increase the value and stability of the commercial fleet docked at Driscoll's Harbor as it will increase the facility's attractiveness and service to commercial fishermen. There is currently no ice facility at Driscoll's Harbor. Consistent access to affordable ice in close proximity to the landing and shipping facilities is a critical need and will boost the efficiency of the small, family run fishing businesses and help attract new participants to the industry. An ice machine at Driscoll's will also bring value to the facility as it is one more critical service that is not available in close proximity.

Currently, fishermen typically purchase ice from one of two facilities: Chesapeake Fish Company, located at Tuna Harbor, or American Seafood. American Seafood produces a small amount of ice (up to two totes per week per fisherman utilizing this service), although mostly for its own operation. Chesapeake Seafood produces up to 10 tons of ice daily. However, Chesapeake is a 40-minute run each way from Driscoll's Wharf, making it inconvenient and expensive for fishermen harboring at Driscoll's.

An ice facility at Driscoll's Wharf could sell ice for approximately \$100 / ton (current price in Morro Bay). Ice produced by the Model 5SS Ice Machine (Refer to "Figure 2.13 North Star stainless steel ice flaker drum with control panel" on page 36) is estimated to cost approximately \$40 – \$50 per ton and may vary more widely depending on the cost of water, electricity and maintenance. This particular ice machine produces approximately 3 tons of ice per day and has the advantage of being easily turned off during periods it is not needed, with the ability to produce ice again within one day.



Figure 2.13 North Star stainless steel ice flaker drum with control panel

Cost Description

The total cost of purchasing and installing the above described ice machine is estimated to be approximately \$59,400. This includes estimates of labor, materials, and ice machine and condensing unit costs. Appropriate higher capacity systems could cost approximately \$150,000.

Live Holding Tank Purchase / Installation

As noted in the BEC, storage for live catch will benefit fishermen. Storage is currently considered inadequate at Driscoll's Wharf. Fishermen have cited the need for chilled, filtered, and recycled water (closed) holding tanks since the water temperatures in the harbor are much warmer than the depth at which most species are caught. A chilled, filtered system will assure that fish, urchin, spot prawn, and lobster will survive longer at the dock, in the possession of the buyer, and throughout the distribution chain. Fish that last longer will be worth more, and the care that is taken sends a message that seafood landed at Driscoll's Wharf is of the highest quality. Live fish holding tanks will bring more versatility and flexibility to the commercial fishermen and enable them to better adjust to fluctuations in market demand, as well as periodic drops in landings due to bad weather, vessel repair, or shifts in regulatory regimes. Live tanks will make Driscoll's Wharf more valuable by offering another service that is unavailable elsewhere. Fishermen most likely to benefit are engaged in the lobster, rockfish, spot prawn, and urchin fisheries.

This cost estimate below was obtained from the holding system designers at Aquatic Ecosystems, Inc. The estimate is based on the assumption of storing 300 pounds each of lobster, urchin, and live-fish (rockfish spp.). Because each of these species has different biological requirements, the holding system designers recommended they should be stored in separate tanks. Costs for storage systems for live fish vary depending on the capacity. Used salt water will be disposed of in a sewer line as part of the holding tank system. The system described here is considered to be an entry level set-up and is offered as an example.

Cost Description

The total cost estimated for the purchase and installation of the three tank live fish holding system is between \$35,400 and \$38,100. The price includes the purchase and installation of tanks, sand filters with crushed coral for media, pumps, chillers, biological filters, protein skimmers, and an estimate for saltwater creation costs.

Lobster System: The cost estimate to purchase and install the lobster system ranges from approximately \$9,000 to approximately \$9,600.

Urchin System: The cost estimate to purchase and install the urchin system ranges from approximately \$8,600 to approximately \$9,100.

Live Fish System: The cost estimate to purchase and install the live-fish system ranges from approximately \$17,200 to approximately \$18,800.

Seawater Creation: To create seawater, a saltwater holding system (including a tank for the water and pump) will cost approximately \$600 to purchase and install plus an estimated \$100 per month to purchase water from the local municipality and sea salt.

Emergency Vehicle Access

Functionality and feasibility dictate that Driscoll's Wharf emergency vehicle access remains "open for business" during and between any development scenarios in this implementation plan. To ensure this, the Core Committee felt that the traffic engineers should evaluate the emergency vehicle access needs and provide recommendations.

According to City of San Diego policy, all buildings shall be accessible to emergency vehicles via access roadways. These access roadways shall not be less than 20 feet of unobstructed width, have an adequate turning radius, and have a vertical clearance of 15 feet 6 inches.

It is important to note that provision of an emergency turnaround may be constrained under the existing building configurations. An alternative 150-foot hammerhead turnaround would provide an interim solution (Refer to "Figure 2.14 150-foot hammerhead turnaround" on page 37).

Cost Description

The total estimated cost to provide emergency vehicle access varies and is estimated to range from approximately \$27,500 to approximately \$80,900.

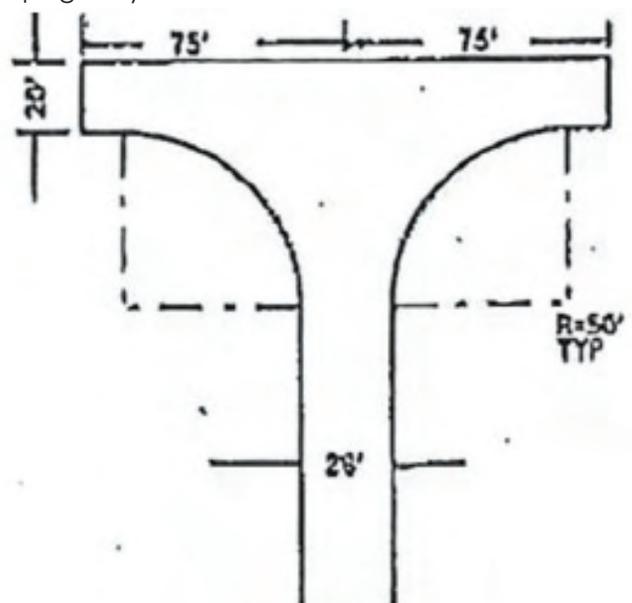


Figure 2.14 150-foot hammerhead turnaround

Phase II

Promenade Renovation

Expansion and renovation of portions of the promenade was deemed necessary through field research and interviews with the commercial fishing community and the Core Committee. Modifications to the revetment should follow those performed in Phase I during the creation of the event space. The new promenade should be approximately 20 feet wide and approximately 640 feet long.

Installation of the remainder of the handrail (approximately 640 linear feet) should also be performed during the promenade renovation and should follow those performed in Phase I during the creation of the event space.

New lighting along the promenade should be considered. Lighting should be attractive, energy efficient, and keep as close as possible to the design standards of Marina Green. Improved lighting should include street security lights, ornamental pedestrian pole lights, and bollards.

Street furnishings, including trash receptacles and benches, should be considered along the improved promenade.

Cost Description

The total estimated cost for the prescribed promenade and revetment renovation is estimated to range from approximately \$642,200 to \$993,000. These cost estimates include:

Permitting Costs: An MND for this task is estimated to cost approximately \$40,000. It is assumed that an EIR would not be necessary for this course of action.

Promenade Construction: To renovate this portion of the promenade, costs are estimated to be approximately \$141,300.

Improved Lighting and Street Promenades: Material and installation cost estimates for improved lighting and street furnishings along the promenade range from \$89,700 to approximately \$120,500.

Handrail: A permanent handrail along the lines of that used at Marina Green, cast into a new concrete promenade slab, will cost about \$80/linear foot assuming galvanized pipe for the vertical post and top rail with 1/4-inch stainless steel horizontal cables. The total approximate cost for installing the handrail along the 640 linear feet of promenade is \$51,200.

Revetment Repair and Improvement: The revetment construction can most economically be performed from on land with large excavators and possibly a Gradall®. However, this can only be feasibly done after the buildings are demolished and scheduled to allow access to the water's edge with heavy construction equipment. Conversely, the entire revetment can be constructed from an offshore barge, either between the existing piers or more easily completed when the piers are removed.

Based on discussions with Marathon Construction staff, a reasonable construction cost for placing 1/4-ton rock assuming a terrestrial construction project with good access would be approximately \$150/cubic yard. Offshore construction from a barge would likely cost about \$300/cubic yard. We are currently estimating 3 cubic yards of rock per linear foot of revetment, resulting in a construction cost of \$500/linear foot assuming on-land construction, and \$1,000/linear foot with offshore construction using a barge.

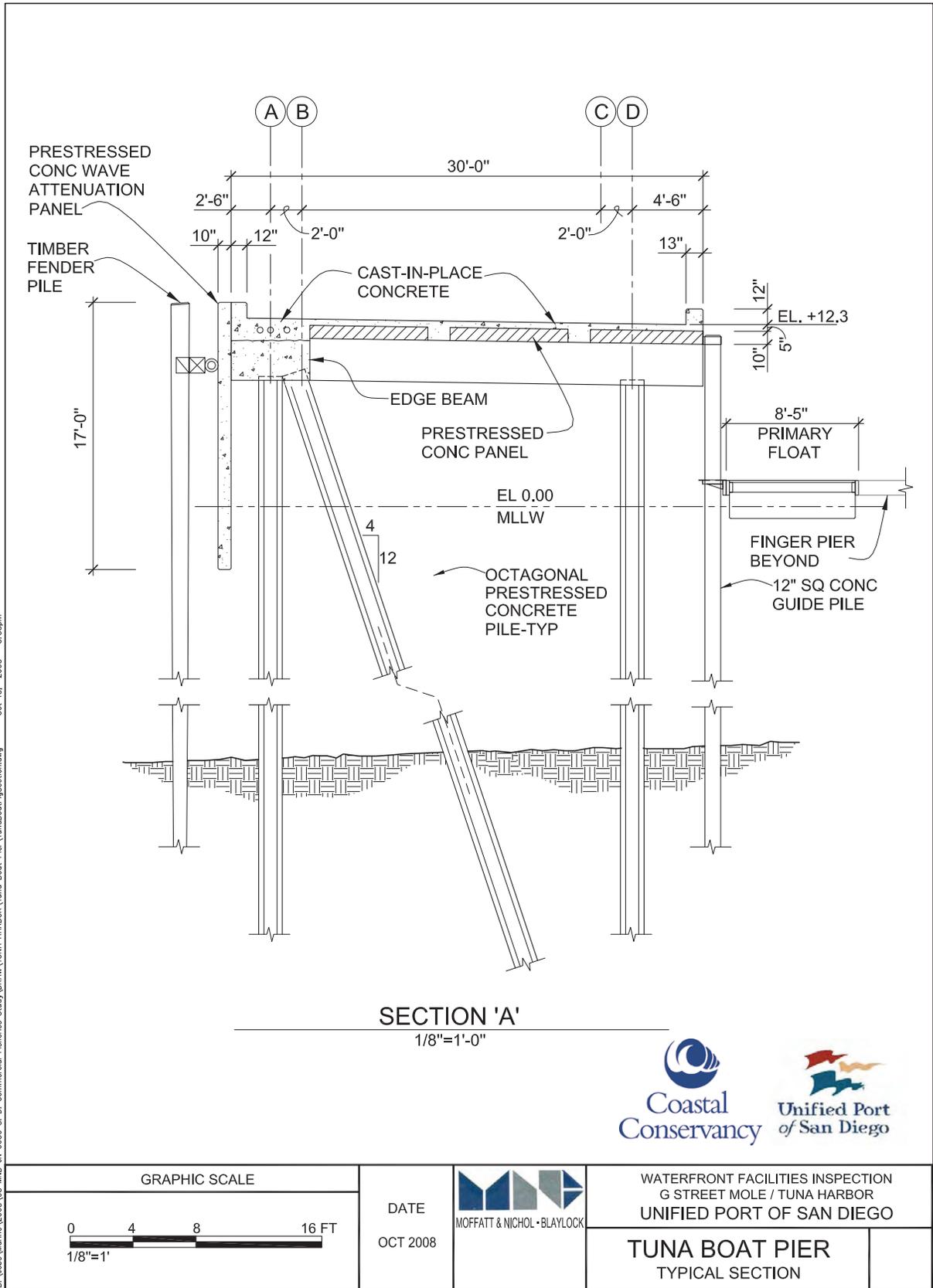


Figure 2.15 Tuna Boat Pier Typical Section

This would lead to an approximate cost of \$320,000 using onshore construction or \$640,000 using offshore construction.

New Offloading Facility Creation

Improvements described at Driscoll's existing offloading facility (Pier 4) in Phase I are intended as interim improvements in light of this Course of Action in Phase II, creation of a new offloading facility at Pier 5 (Refer to "Figure 2.2 Driscoll's Wharf, piers numbered" on page 23). The pier structures at Driscoll's Wharf were constructed in the early 1950s and are reaching the end of their service life. In order to increase the offloading capacity, attract more vessels, and secure offloading services into the future, modernization has been deemed necessary by the project team. A new pier similar to Tuna Boat Pier at the G Street Mole is recommended (Refer to "Figure 2.15 Tuna Boat Pier Typical Section" on page 39 for a plan view and section of Tuna Boat Pier and "Figure 2.16 Tuna Harbor, Tuna Boat Pier partial deck plan (front section)" on page 41).

The recommended construction method for the new pier is pre-stressed concrete piles with cast-in-place concrete pile caps, supporting pre-stressed concrete deck panels with cast-in-place concrete deck.

Live Load Criteria – The following is the minimum recommended live load criteria.

- Uniform Live Load – 500 psf
- Mobile Crane – 50 ton capacity
- Lift Truck – 10 ton
- Truck – HS20-44 (3 axle truck with 32,000 lb capacity)

Utility Service – It will be desirable to have utility services at the pier including potable water, electricity, and sanitary sewer.

Fender System - An engineered fender system is recommended for the pier. It is desirable to minimize the standoff distance from the edge of the pier for offloading operations. Knowledge of the maximum design vessel size and weight is necessary to design the fender system.

Mobile Hoist & Jib Crane – A mobile jib crane is desirable for offloading fish from both the bow and stern fish storage areas. The required capacity for offloading fish is 2 tons. A higher capacity jib crane is necessary for loading equipment and net reels. Net reels and the associated hydraulics can weigh 5 to 10 tons. A stationary jib crane may be required for heavy equipment such as net reels, whereas a mobile hoist with a lower capacity could be used for offloading catch.

Demolition of Existing Pier 5 – The existing Pier 5 will be demolished to facilitate the construction of a new offloading pier.

Revetment Repair - The revetment will need to be rebuilt to support the same live load criteria as the new offloading pier. Revetment repair is addressed under Promenade Renovation.

Cost Description

The total estimated cost to create the new offloading facility (at Pier 5) is approximately \$3,683,000 excluding potential mitigation costs. The total cost estimate consists of:

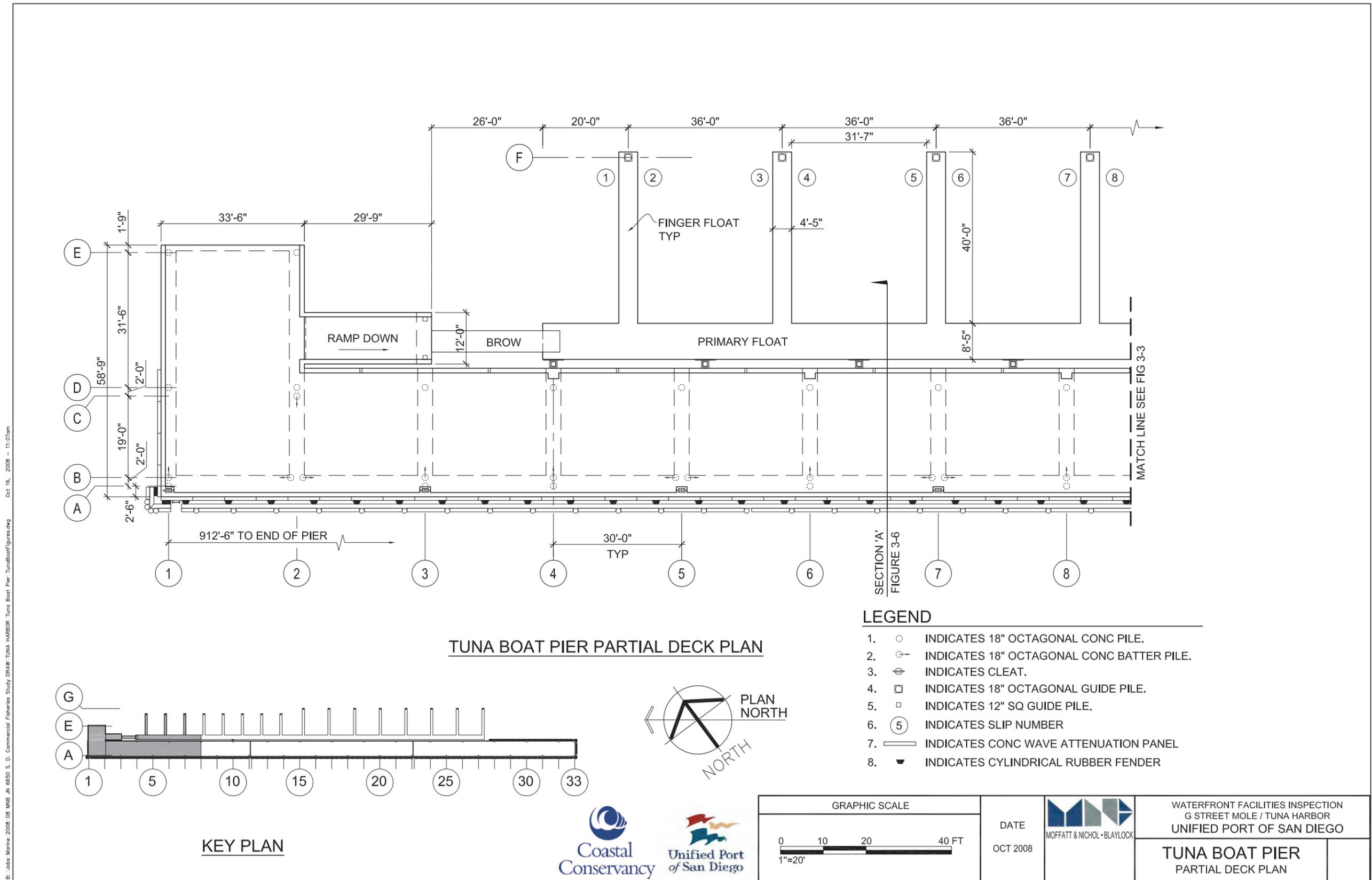


Figure 2.16 Tuna Harbor, Tuna Boat Pier partial deck plan (front section)

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A new concrete pier costs approximately \$300 per square foot. For a pier 30 feet wide by 300 feet long, the estimated cost is \$2,700,000. The items that will increase the cost of the pier are the utility services, fender system, mobile hoist, and jib crane.

Engineering Design: The design of a concrete pier for fish offloading operations is approximately \$200,000.

Utility Service: Utility service at the pier is optional. If water and electricity are needed, it is recommended to allow approximately \$100,000.

Fender System: A fender system for the pier would cost approximately \$500,000.

Mobile Hoist & Jib Crane: A mobile hoist with a capacity of two tons would cost approximately \$40,000. A stationary jib crane with a 10-ton capacity would cost approximately \$60,000.

Demolition of Existing Pier 5: The existing Pier 5 could be demolished for approximately \$50,000.

Revetment Repair: The revetment repair is addressed under Promenade Renovation.

Permitting & Consultant Fees: It is recommended that a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of \$30,000 for time and materials is recommended, which does not include the preparation of a CEQA document. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal. An IS / MND for this task is estimated to cost approximately \$40,000.

Biological Survey Fees: The total estimated cost for the baseline, pre-construction, and post-construction surveys is approximately \$13,000.

Mitigation: Mitigation may be required if it is determined that a project will have significant environmental impacts. The type of mitigation will be dependent on the level of impact and is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (\$100,000 to \$500,000).

Dredging

Interviews and research from the BEC as well as discussions with the Core Committee revealed that issues exist with certain deep draft vessels breasting up to Pier 4. Dredging an operational turning basin between Piers 4 and 5 to better accommodate both existing and contemplated deep draft vessels accessing Pier 4 is necessary.

Cost Description

Total dredging costs are estimated to range from approximately \$173,000 to approximately \$253,000. Dredging costs rely heavily on the disposal method employed. Depending on the results of dredging soil tests, the spoils can be disposed of either offshore or upland.

Dredging: In the absence of detailed bathymetry, the Consultant Team conducted a very limited lead line survey adjacent to Pier 4, along with the northern portion of Pier 5, and have assumed an average of 4 feet of additional overdredge across an area of approximately 120 feet by 180 feet (3,200 cubic yards). Marathon Construction personnel suggested that, for budgeting purposes, we use \$50/cubic yard assuming offshore disposal and \$75/cubic yard assuming required upland disposal with no contaminant restrictions.

Biological Survey Fees: The total estimated cost for the baseline, pre-construction, and post-construction surveys is approximately \$13,000.

Building #2 Demolition and Construction

The Core Committee and Driscoll's Wharf leaseholder expressed as a priority, a need to demolish and replace Building #2 due to: obsolescence of the structure, inefficiency in the design, and constraints in access caused by the current configuration. The building is considered to be significantly behind the market standard of available office space in San Diego, and improvements will help attract renters with a focus on marine uses, and those interested in office space on the waterfront. The proposed new building would accommodate indoor storage of fishing gear (including nets, traps, and other equipment), modern office and meeting room space with exceptional views of the America's Cup Harbor, and restrooms, showers, and laundry facilities for fishermen's use. The second story is proposed to cantilever over vehicular parking with little or no loss of parking spaces while creating premium shaded parking spaces for office users, as well as assure it is competitive with similar rental opportunities in the San Diego office rental market.

Cost Description

The total estimated cost for the development of the new building is estimated to range from approximately \$4,545,300 to approximately \$7,165,500. Cost estimates are based on demolishing the existing approximately 22,000 square foot building and constructing a new 37,500 square foot building.

Permitting Costs: An IS / MND for this task is estimated to cost approximately \$40,000.

Demolition Costs: Assuming the building is 22,000 square feet, demolition and disposal costs are estimated to range from approximately \$202,900 to approximately \$440,600.

Construction, Design, and Consultation Costs: Building #2's costs include new building construction (estimated to range from approximately \$4,095,000 to approximately \$6,477,500), upgraded twelve-inch diameter waterlines (approximately \$160,700), and gas and electricity lines (approximately \$46,700).

Emergency Vehicle Access

It is important to make sure Driscoll's Wharf emergency vehicle access remains functional during and between any of the phases of this implementation plan. To this end, the Core Committee felt it was necessary to have the Consultant Team traffic consultant evaluate the emergency vehicle access needs and provide recommendations.

According to City of San Diego policy, all buildings shall be accessible to emergency vehicles via access roadways. These access roadways shall not be less than 20 feet of unobstructed width, have an adequate turning radius, and a vertical clearance of 15 feet 6 inches.

It is important to note that provision of an emergency turnaround may be constrained under the existing building configurations. An alternative 150-foot hammerhead turnaround would provide an interim solution (Refer to "Figure 2.14 150-foot hammerhead turnaround" on page 37).

Cost Description

The total cost to provide emergency vehicle access varies and is estimated to range from approximately \$27,500 to approximately \$80,900.

Wave Attenuation

If deemed necessary by the wave study from Phase I, wave attenuation measures should be installed at Driscoll's Wharf. There are three main types of wave attenuators that the Consultant Team identified as potentially appropriate for Driscoll's Wharf: sheet pile wall breakwater, rubble mound breakwater, or floating dock breakwater.

Sheet Pile Wall Breakwater: A sheet pile wall breakwater is constructed of concrete sheet piles with pre-stressed concrete batter piles for resisting lateral wave forces. The cast-in-place concrete pile cap ties the system together. This is the most cost effective breakwater system and would have less environmental impact than the rubble mound breakwater (Refer to "Figure 2.17 Sun Road Marina, concrete sheet pile wall breakwater (aerial)" on page 45 and "Figure 2.18 Sun Road Marina, concrete sheet pile breakwater" on page 45).

Floating Dock Breakwater: A floating dock breakwater is an extra-heavy-duty floating dock with a wave fence that extends below the water (Refer to "Figure 2.20 Floating dock with wave fence on each side" on page 46). This system reduces the wave but does not block it completely. This system would be attached to the berthing pier at the southeast end of Driscoll's Wharf. The results of the wave attenuation study will determine if this system is suitable for the wave conditions.

Rubble Mound Breakwater: A rubble mound breakwater (Refer to "Figure 2.19 Shelter Island boat ramp & rubble mound breakwater (aerial)" on page 45 for an example) would not be suitable for Driscoll's Wharf because of the large footprint of the structure, the environmental impacts, the high cost, and the permitting requirements. A rubble mound



Figure 2.17 Sun Road Marina, concrete sheet pile wall breakwater (aerial)



Figure 2.18 Sun Road Marina, concrete sheet pile breakwater



Figure 2.19 Shelter Island boat ramp & rubble mound breakwater (aerial)

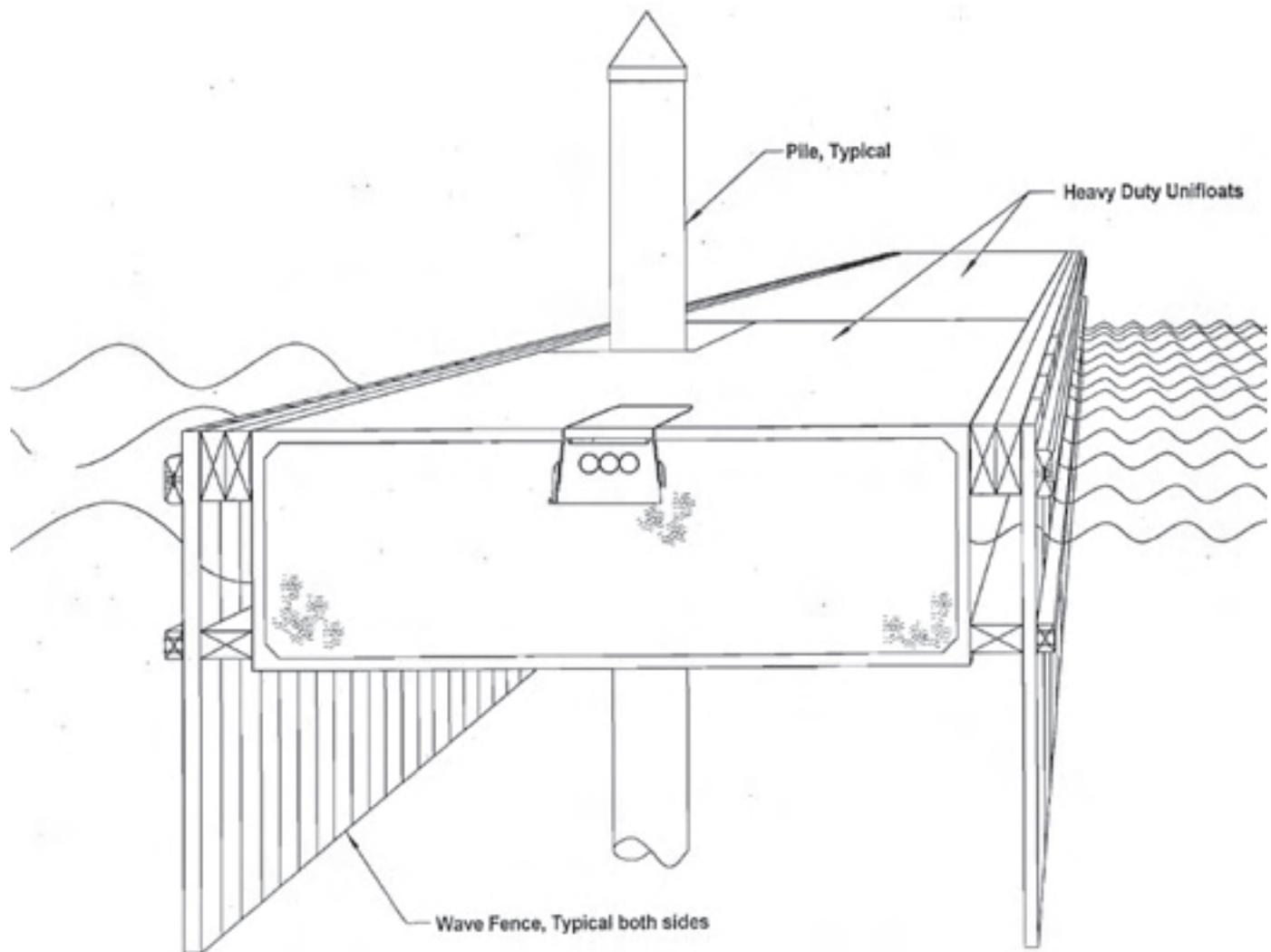


Figure 2.20 Floating dock with wave fence on each side

Source: Bellingham Marine

breakwater will have a 2:1 (horizontal: vertical) slope. If the water is 20 ft. deep, the footprint will be a minimum of 80 ft. wide. This type of breakwater is best suited for shore protection or areas subject to ocean waves.

Cost Description

The total cost estimate for the wave attenuation project is estimated to be approximately \$1,120,650 excluding any potential mitigation costs.

Permitting and Consultant Fees: It is recommended that a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of \$30,000 for time and materials is recommended, which does not include the preparation of a CEQA document. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal. The IS / MND is estimated to cost \$40,000 if a program EIR is not performed.

Mitigation: Mitigation may be required if it is determined that a project will have significant environmental impacts. The type of mitigation will be dependent on the level of impact and is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (\$100,000 to \$500,000).

Sheet Pile Wall Breakwater: The approximate cost of a sheet pile wall breakwater is \$3,000 per linear foot of wall with batter piles. The estimated length of wall is 350 ft., for a total cost of \$1,050,000.

Phase III

Existing Dock and Slip Replacement

Interviews and research for the BEC showed a lack of slips large enough to accommodate 65-foot vessels and a need for slips large enough to accommodate vessels that are 70 – 90 feet in length. In addition to the need for larger slips, the number of floating docks available at Driscoll's Wharf and the pilings onto which boats are tied were considered inadequate.

The piers were constructed in the early 1950s and have exceeded their design life. Replacement of the damaged and hazardous deck is an ongoing maintenance project at Driscoll's Wharf.

The typical mooring system used at the berthing piers consists of a bow-out "Mediterranean Mooring" system. In most cases the bowlines are tied to concrete spud piles and the stern lines are anchored to two counter-balance moorings supported by the pier. Access on and off the boats is facilitated by use of a steel ladder at each berth – located between the two counter-balance systems. This fixed elevation design is the last of its kind in San Diego Bay. A heavy-duty floating dock system similar to Tuna Harbor is recommended to replace the berthing piers.

Marina Design: This task is essentially the design of a new marina. The layout is critical to the wharf's success as a commercial marina for boats up to 100 ft. long.

Demolition of Existing Piers 6, 7 & 8: The existing berthing piers will be demolished to facilitate the construction of the new floating docks.

Floating Dock: It is desirable to have a floating docks system that can accommodate vessels up to 100 ft. length overall. The minimum criteria for floating docks are set forth in the Layout & Design Guidelines for Marina Berthing Facilities, July 2005, available for download at www.dbw.ca.gov/PDF/MarinaGuide/Guide05.pdf. To provide a useful work area, a floating dock designed for an allowable live loading of 50 pounds per square foot (psf) is recommended. The size of the floating dock will depend on the funds available.

Gangway: The gangway will provide access to the floating dock from the revetment/ promenade.

A minimum design live load of 50 psf with a maximum deflection of the span length divided by 360 is recommended.

A maximum gangway slope of 6:1 (horizontal: vertical) is recommended at low tide to allow heavy carts to be safely rolled up and down the gangway (60 ft. minimum length).

A gangway width of 6 ft. is recommended to provide versatility of use.

Revetment Repair: The revetment will need to be rebuilt and the optimal time is when the existing piers have been demolished. Revetment repair is addressed under Promenade Renovation.

Cost Description

The total cost estimate for replacement of docks and slips is approximately \$3,043,650 not including potential mitigation costs. The cost estimate is based on:

Demolition of Existing Piers 6, 7, & 8: To demolish these existing piers, a contractor with a barge and a crane must be mobilized and compensated for their labor, and the old piers must be disposed of. This is estimated to cost approximately \$220,000.

Disposal: Disposal is estimated to cost approximately \$110 per ton. Disposal of the dinghy dock is estimated to total approximately \$5,000.

Marina Design: This task would be best accomplished using a design, bid, and build procurement method. It is recommended to allow for a design fee of approximately \$200,000.

Floating Docks: The fabrication and delivery cost of a new floating dock for berthing large and small vessels is approximately \$125 per square foot for a heavy duty timber dock with hot-dip-galvanized steel hardware and concrete guide piles. Based on preliminary sketches, the new floating docks will have a total area of approximately 20,000 sq. ft. for an approximate cost of \$2,500,000.

Gangway: The fabrication and delivery cost of a new aluminum gangway to provide access to the floating dock is approximately \$40,000 each. For a commercial marina of this size, two gangways are recommended.

Permitting & Consultant Fees: It is recommended that a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of \$30,000 for time and materials is recommended, which does not include the preparation of a CEQA document. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal. An IS / MND for this task is estimated to cost approximately \$50,000.

Biological Survey Fees: The total estimated cost for the baseline, pre-construction, and post-construction surveys is approximately \$13,000.

Mitigation: Mitigation may be required if it is determined that a project will have significant environmental impacts. The type of mitigation will be dependent on the level of impact and is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (\$100,000 to \$500,000).

Building #3 Demolition and Construction

The Core Committee and Driscoll's Wharf leaseholder expressed as a priority, a need to demolish and replace Building #3 due to: obsolescence of the structure, inefficiency in the design, and constraints in access caused by the current configuration. The building is considered to be significantly behind the market standard of available office space in San Diego. Improvements will help attract renters with a focus

on marine related businesses and those interested in office space on the waterfront. This building is at the southeastern corner of the site and has the advantage of views to the open waters of the bay and America's Cup Harbor. The proposed new building would provide approximately 12,600 square feet of premium office and meeting room space. To better service the building users, a new service drive will also be constructed on the north side of the building.

Cost Description

The total estimated cost for the development of the new building is estimated to range from approximately \$1,736,900 to approximately \$2,694,500. Cost estimates are based on demolishing the existing approximately 7,000 square foot building and constructing a new 12,600 square foot building.

Permitting Costs: An MND for this task is estimated to cost approximately \$40,000.

Demolition Costs: Assuming the building is 7,000 square feet, demolition and disposal costs are estimated to range from approximately \$70,600 to approximately \$146,200.

Construction, Design, and Consultation Costs: Building #3's costs include new building construction (estimated to range from approximately \$1,499,400 to approximately \$2,381,400), upgraded twelve-inch diameter waterlines (approximately \$70,100), and gas and electricity lines (approximately \$46,700).

New Service Drive Costs: Construction of a new service drive for Building #3 is estimated to cost approximately \$10,100.

Tuna Harbor

The Core Committee outlined nine Courses of Action to implement the improvements at Tuna Harbor to bring long term stability and value to the commercial fishermen who dock and offload there. These Courses of Action were divided into two phases to allow development to continue in a logical manner as funding becomes available.

Based on the findings in this report, it is recommended that project managers consider one environmental review for the entire Tuna Harbor site for all phases of construction if a program EIR is not performed for the entire Revitalization plan. This represents a systematic disclosure of proposed actions and subsequent request for permits, and would allow project managers to anticipate and plan for mitigation. Typically, permits have a set time frame to allow the work to be completed and generally do not extend beyond a five-year duration. However, USACE and RWQCB permits can be extended if necessary.

In the case of Tuna Harbor, recommendations on infrastructure improvements will augment the \$1.7 million in work the Port has completed on seawall revetment repair and repairs to piles, pile caps, expansion joints, and deck soffit."

Phase I

Wave Study

The project team concluded early in the alternative analysis process that a wave study should be undertaken as a first priority at Tuna Harbor.

Tuna Harbor is located in the downtown San Diego area adjacent to the G Street Mole. Tuna Harbor facilities consist of Tuna Boat Pier, Fish Harbor Pier, Fish Market Wharf, and three floating docks (Refer to "Figure 2.21 Tuna Harbor General Plan" on page 51). Tuna Boat Pier and Fish Harbor pier have wave attenuation panels on the sides that extend down to an elevation of -3.7 ft. Mean Lower Low Water (MLLW) to reduce the wave exposure to boats inside the harbor.

Tuna Harbor is exposed to wind driven waves from San Diego Bay and boat wakes from passing vessels. There are two different ways that waves enter the harbor. The first is through the 200 ft. wide harbor opening. When vessels head west pass the harbor, their boat wake travels into the harbor, disturbing the floating docks. The second is during low tidal elevations, when the existing wave attenuation panels are not effective because the waves can pass below the panels.

A wave study is recommended to determine the characteristics and sources of the nuisance waves, for example, amplitude, length, and resulting forces. The results of the study will help determine the optimal solution to reduce waves entering the harbor and the resulting destruction of fixed and floating property.

Cost Description

A wave study will determine the types of waves impacting the site and the wave characteristics and forces. This information is necessary to design an appropriate breakwater structure to protect Tuna Harbor. The estimated cost to complete a wave study for Tuna Harbor is approximately \$30,000. This does not include the design drawings and specifications for the construction of a breakwater structure.

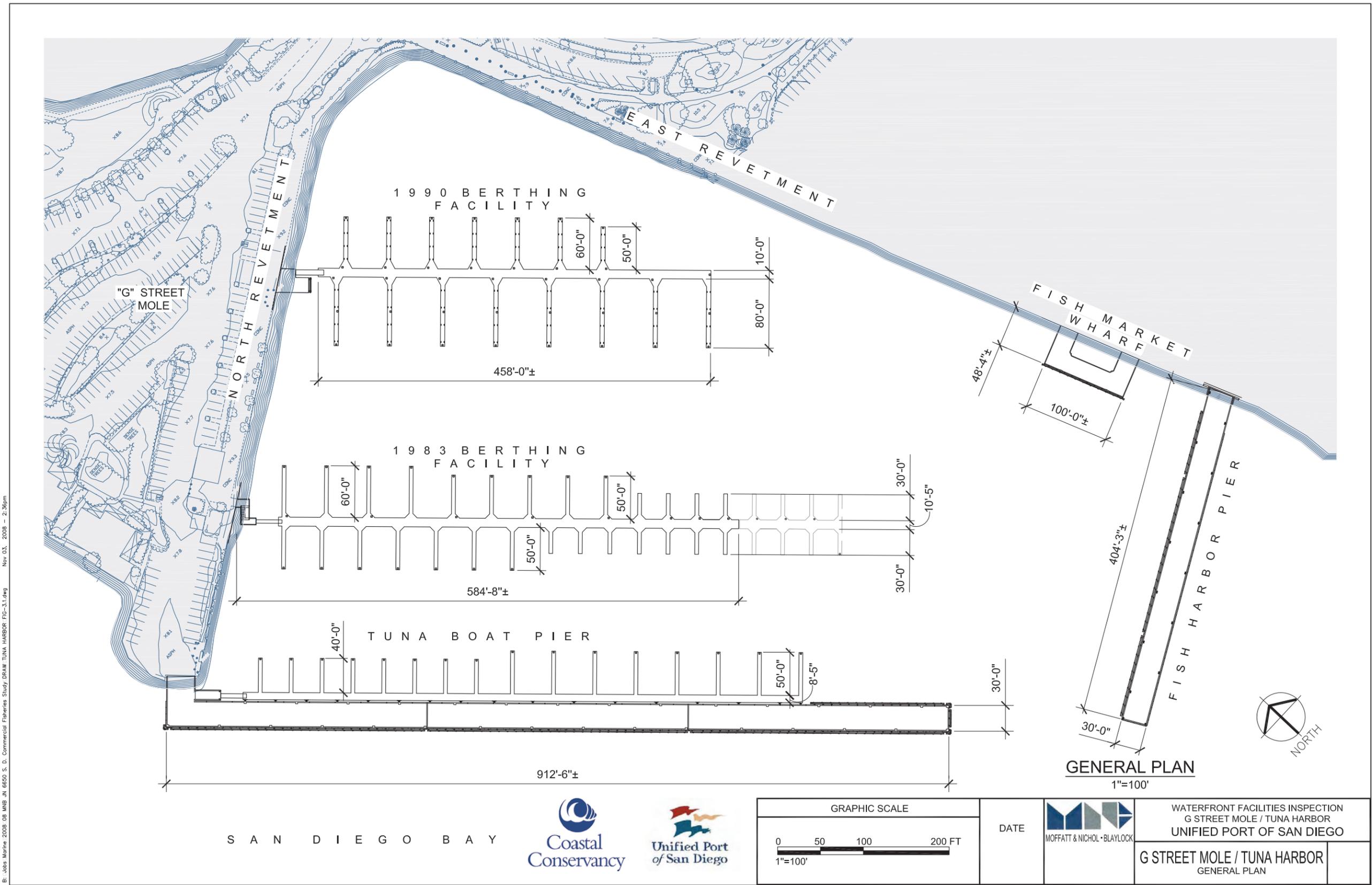
Event Space

There was a strong consensus amongst the Core Committee and stakeholders to create public events space to draw the public to the working waterfront. The Core Committee concluded that the northeastern corner of Tuna Harbor would be an ideal location for an event space with the potential to expand and enhance the promenade all the way to G-Street pier. They also suggested considering utilizing the entire promenade for public events and a potential fisherman's market. This event space development includes creation of retail space in the northwestern corner of Tuna Harbor, extending the promenade to G-Street Pier, street furnishings, security and ornamental lighting, a public art installation, interpretive and wayfinding signage, landscaping, and irrigation.

Cost Description

The total estimated cost for the creation of Tuna Harbor's event space is estimated to range from approximately \$229,000 to approximately \$265,400.

Permitting Costs: Two IS / MNDs could be required for creation of the event space and expansion of the promenade. This task is estimated to cost approximately \$40,000 each for a total of \$80,000 for CEQA costs.



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Figure 2.21 Tuna Harbor General Plan

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Biological Survey Fees: The total estimated cost for the baseline, pre-construction, and post-construction surveys is approximately \$13,000.

Event Space Construction: Creation of the event space general costs are estimated to range from approximately \$136,000 to approximately \$172,400.

Security Measures

The interviews and research for the BEC show that security of vessels, equipment, and gear is considered inadequate at Tuna Harbor, which is often attributed to the harbor's proximity to downtown and the high transient population in San Diego. The previous installation of the lighting system along the pier has reduced, but not eliminated the incidences of vandalism, theft, and vagrancy. Using this information, the Core Committee aims to increase security at Tuna Harbor through the installation of a gate and fence with a key card entry system.

Cost Description

The purchase and installation of new fencing and three gates with key card entry systems is estimated to be approximately \$12,600.

Seafood Market

The interviews and research for the BEC discuss Tuna Harbor's unique tourism potential due to its proximity to Seaport Village and being situated adjacent to the Fish Market Restaurant and the USS Midway. Chesapeake Fish Company, an active offloading and processing facility located on the southeastern corner of Tuna Harbor, handles more than 12 million pounds of fish per year. The Core Committee felt this revitalization process was a good opportunity to introduce a local seafood market and retail space to the west of the existing Chesapeake Fish Company facility.

Cost Description

The total cost to complete the new retail space (seafood market) is estimated to be approximately \$544,000.

Permitting Costs: An IS / MND could be required for the modification of the parking lot and would cost approximately \$40,000 if necessary.

Retail Space Construction: Construction of a new retail space (seafood market) is estimated to cost approximately \$504,000. Cost estimates were based on an approximately 1,800 square foot retail facility.

New Hoist / Crane Purchase / Installation

There is presently one offloading facility at Tuna Harbor, at Fish Market Wharf (Refer to "Figure 2.21 Tuna Harbor General Plan" on page 51). The facility is owned by the Port of San Diego but managed and operated through a short-term agreement between the Port and Chesapeake Fish Company (Refer to "Box 2.1 Hoist Short-term Lease Agreement" on page 54). The facility has three cranes, one with a two ton capacity (yellow), and two (orange) with 800 pound capacity (Refer to "Figure 2.22 Tuna Harbor, existing cranes at Fish Market Wharf" on page 54). Because of the management agreement, these cranes are considered unattractive for many of those who wish to sell product anywhere besides Chesapeake Fish Company. The interviews and research for the BEC showed that commercial fishermen at Tuna Harbor identified an independently owned and operated offloading facility that can offload fishing gear as well as catch to be a high priority.



Figure 2.22 Tuna Harbor, existing cranes at Fish Market Wharf

Fishing gear such as including net reels can weigh up to 7 tons. The current method of offloading fishing nets and reels is to rent a mobile truck crane. A high capacity jib crane with substantial reach (up to 20 feet) at Tuna Harbor would make the facility more valuable and attractive to more commercial fishermen.

Based on the research for this plan, a freestanding jib crane with a 360-degree range of motion, 7-ton

capacity at 20-foot span, and a 12-foot vertical height would be ideal. A freestanding jib crane of this size typically requires an independent foundation designed specifically for the crane loads. A detailed analysis of the existing structure is required to determine the maximum size of jib crane that can be supported from the existing pier and, if necessary, the type of structural retrofit required. If the existing pier cannot be retrofitted to support the necessary crane, a pile supported foundation installed adjacent to the pier could be an effective solution.

There are three preferred locations for a new jib crane at Tuna Harbor.

- The existing Fish Market Wharf (Refer to “Figure 2.21 Tuna Harbor General Plan” on page 51): This facility is a suitable place for a crane of this size and capacity to offload net reels due to the large area and operational fender system, and already has functioning cranes for offloading catch. A structural analysis would be necessary, and it is not likely that a 7-ton crane could be installed without a major structural retrofit. Operational responsibility will need to be negotiated between the Port, the commercial fishermen at Tuna Harbor, and Chesapeake Fish Company.
- Concrete landing of the eastern floating dock: This concrete landing has a fender system (although the piles require replacement) and may be able to accommodate a small jib crane (Refer to “Figure 2.23 Tuna Harbor, concrete landing structure at eastern floating docks”

Box 2.1 HOIST SHORT-TERM LEASE AGREEMENT

The Port and Chesapeake Fish Company have a short term lease agreement at this facility. If this lease were terminated, the Port could operate the facility independently or in partnership with a representative group from the commercial fishing community in Tuna Harbor. A representative group has not yet been formed. Management of this facility will take time and attention, and require trained personnel to be on site when offloading services are needed.



Figure 2.23 Tuna Harbor, concrete landing structure at eastern floating docks



Figure 2.24 Tuna Harbor, Tuna Boat Pier

on page 55 and “Figure 2.25 Tuna Harbor, 1990 Berthing facility” on page 57). The loading capacity of this dock is unknown, a structural analysis is necessary. Operational responsibility would need to be negotiated between the Port and commercial fishermen at Tuna Harbor.

- Tuna Boat Pier. The crane could be placed just beyond the end of the floating docks on the east side of the pier near bent number 30 (Refer to “Figure 2.24 Tuna Harbor, Tuna Boat Pier” on page 55 and “Figure 2.26 Tuna Harbor, Tuna Boat Pier partial deck plan” on page 59). This location would provide more deck area than at the eastern floating dock, however it is farther from shore. A structural analysis at this location is necessary as well. Operational responsibility would need to be negotiated between the Port and commercial fishermen at Tuna Harbor.

Cost Description

The total cost for this work varies depending upon the hoist and foundation requirements and is estimated to cost approximately \$230,650 to approximately \$330,650 excluding any potential mitigation required.

Jib Crane & Hoist: The estimated cost for a freestanding 7-ton capacity jib crane is approximately \$60,000. This would include the steel frame with a motorized rotation, a motorized hoist, and the marine grade epoxy coating. If motorized rotation were not necessary, it would reduce the cost by about \$10,000.

Structural Analysis and Foundation Design: The foundation design and analysis for the jib crane would cost approximately \$50,000.

Construction and Installation: The jib crane installation and foundation construction cost could vary from \$50,000 to \$150,000 depending on the type of foundation required.

Permitting & Consultant Fees: It is recommended that a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of \$30,000 for time and materials is recommended, which does not include the preparation of a CEQA document. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal. An IS / MND for this task would cost approximately \$40,000 if a program EIR is not performed. Environmental permits may not be required if the jib crane is placed at Fish Market Wharf.

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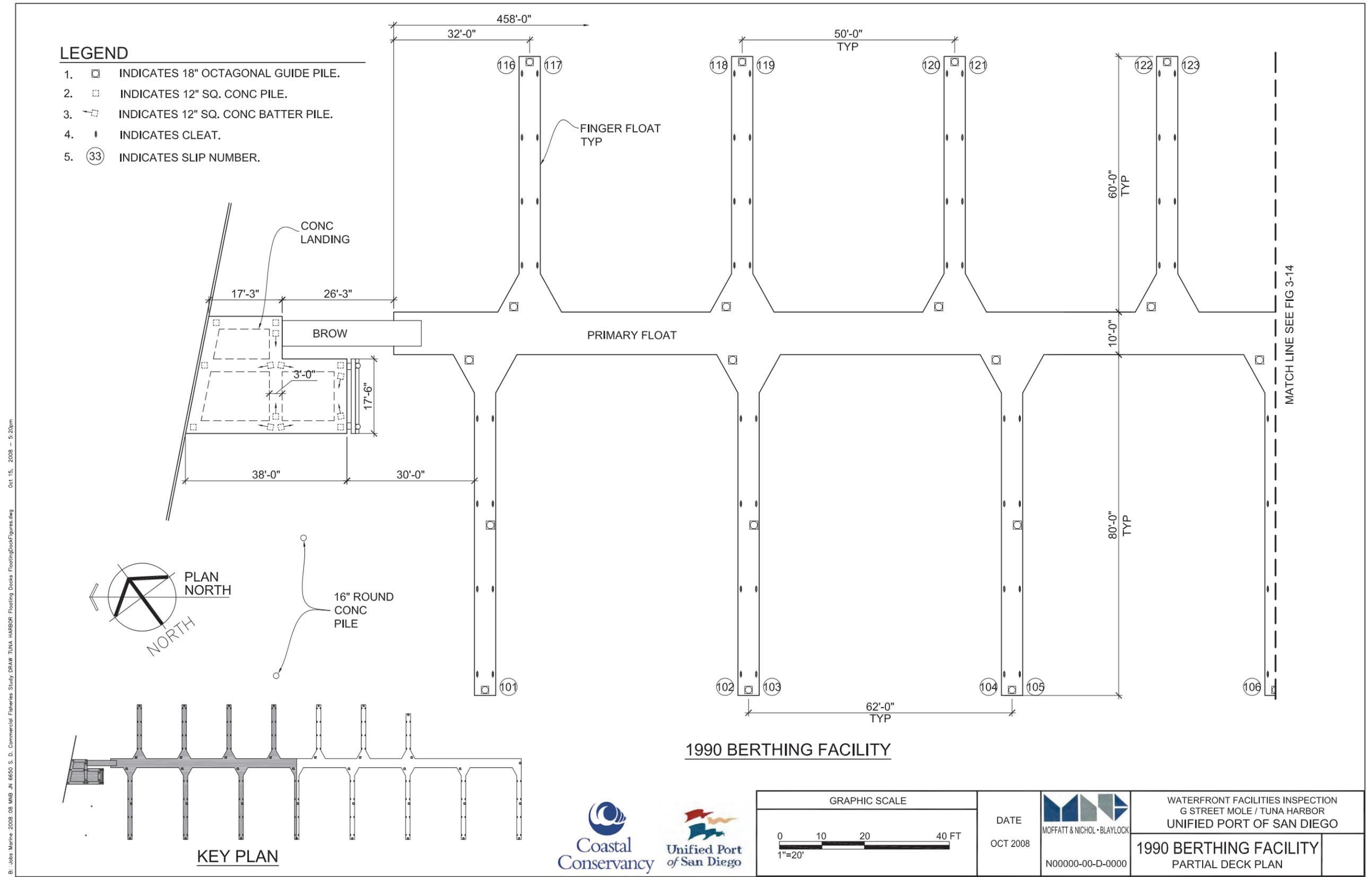
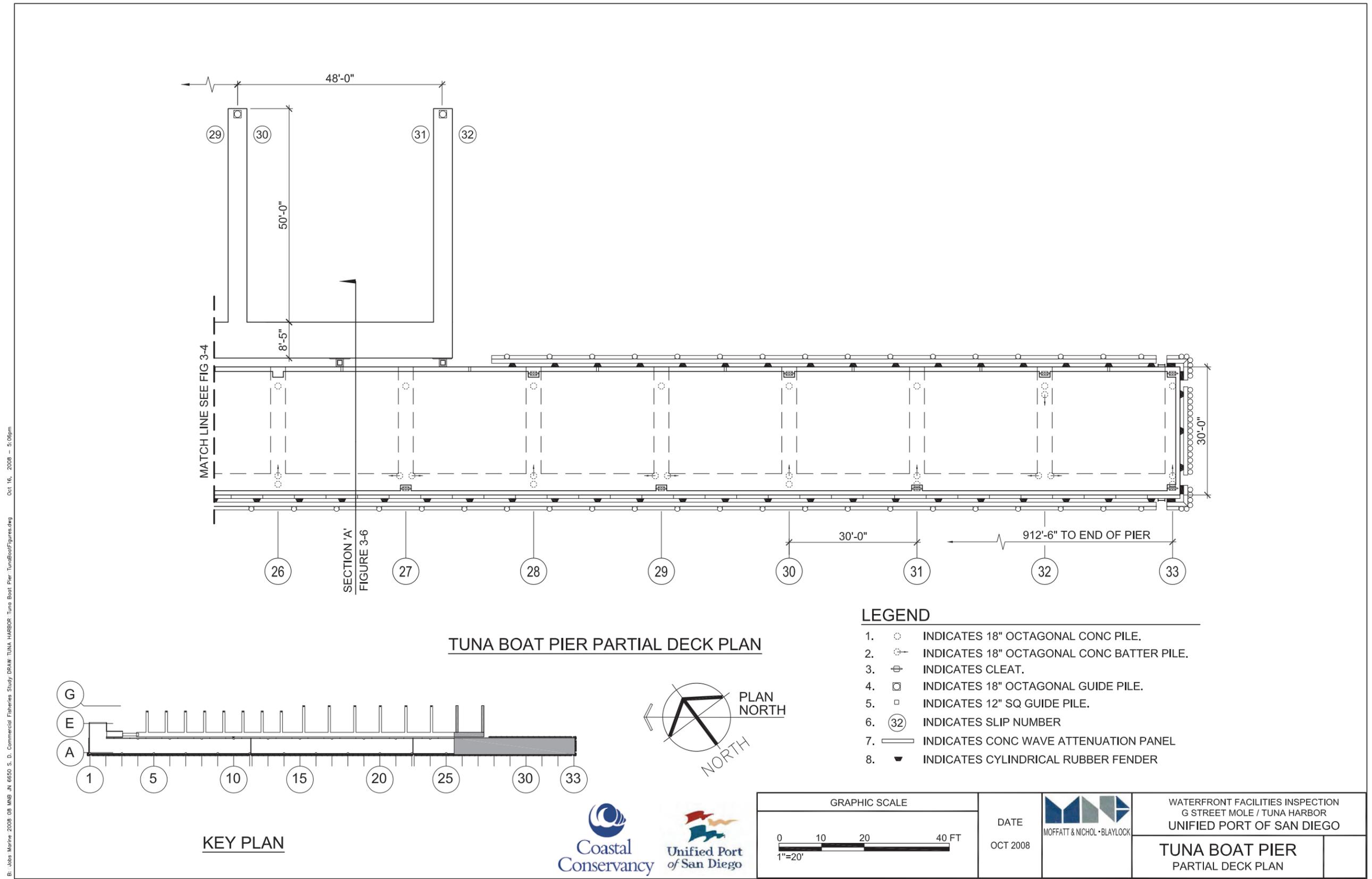


Figure 2.25 Tuna Harbor, 1990 Berthing facility

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Figure 2.26 Tuna Harbor, Tuna Boat Pier partial deck plan

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Mitigation: Mitigation may be required if it is determined that a project will have significant environmental impacts. The type of mitigation will be dependent on the level of impact and is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (\$100,000 to \$500,000).

Comparison to Mobile Truck Crane: A mobile truck crane with a 10-ton capacity may be acquired for approximately \$260,000. This does not include the costs associated with operating, parking, and maintaining the mobile truck crane.

New / Expanded Restroom & Laundry Facilities

While the Port recently spent \$65,000 in upgrades, interviews and research for the BEC showed that a dedicated laundry, shower, and restroom facility near the boat slips was a high priority. Additionally, since the existing restroom facilities are planned to be demolished in Phase I to increase fisherman parking, new restrooms will be required. The Core Committee has preliminarily identified space at the triangular-shaped island within the parking lot, north of the piers as a good location for these new facilities.

Cost Description

The total cost to build the new shower, restroom, and laundry facilities is estimated to range from approximately \$550,300 to approximately \$865,300.

Permitting Costs: An IS / MND could be required for the modification of the parking lot and would cost approximately \$40,000 if necessary.

Facility Construction: The costs to construct the new shower, restroom, and laundry facilities is estimated to range from approximately \$510,300 to approximately \$825,300. This includes installation of new sidewalks to the facilities.

Phase II

Wave Attenuation

If deemed necessary by the wave study from Phase I, wave attenuation measures should be installed at Tuna Harbor.

Wave Attenuation Panels: The piers were designed for the wave forces acting on the existing 17 ft. long wave panels. A detailed structural analysis of the pier is necessary to determine if it has adequate capacity to support longer wave attenuation panels. The wave study will determine the required minimum length of panels necessary to block the waves and the resulting forces on the wave panels. If the pier cannot support the lateral forces from longer panels without significant structural retrofitting, then an alternative solution will be necessary. One alternative is to install steel H-piles equally spaced along the outside of the pier supporting vertical precast concrete panels within the H-pile webs. The precast panels would be approximately 20 ft. long and not touch the bottom. A second alternative is to install a vertical precast concrete sheet pile wall outside of the wave attenuation panels.

Harbor Entrance: The orientation of the 200 ft. wide harbor entrance relative to the main shipping channel allows passing vessels boat wakes to enter the harbor. A vertical sheet pile wall breakwater could be installed to block waves propagating from the southwesterly direction. It is not feasible to extend the breakwater

outside of the harbor because it will extend beyond the U.S. Pierhead Line (Refer to “Figure 2.27 Tuna Harbor, Fish Harbor Pier” on page 63). It is difficult to get permission from the State Lands Commission, U.S. Army Corps of Engineers, and U.S. Coastguard to extend structures into navigable waterways. The alternative is to extend a breakwater in the northeast direction from the end of Tuna Boat Pier. The wave study would determine the optimal direction and length for the sheet pile wall breakwater or other configuration.

Cost Description

The total estimated cost for wave attenuation is estimated to range from approximately \$383,650 to approximately \$4,583,650, excluding any potential mitigation costs.

Permitting & Consultant Fees: It is recommended to have a company experienced with permitting complete the environmental assessment and submit the permit applications for the project. A consultant fee of \$30,000 for time and materials is recommended, which does not include the preparation of a CEQA document. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal. An MND for this work is estimated to cost approximately \$40,000.

Mitigation: Mitigation may be required if it is determined that a project will have significant environmental impacts. The type of mitigation will be dependent on the level of impact and is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (\$100,000 to \$500,000).

Biological Survey Fees: The total estimated cost for the baseline, pre-construction, and post-construction surveys is approximately \$13,000.

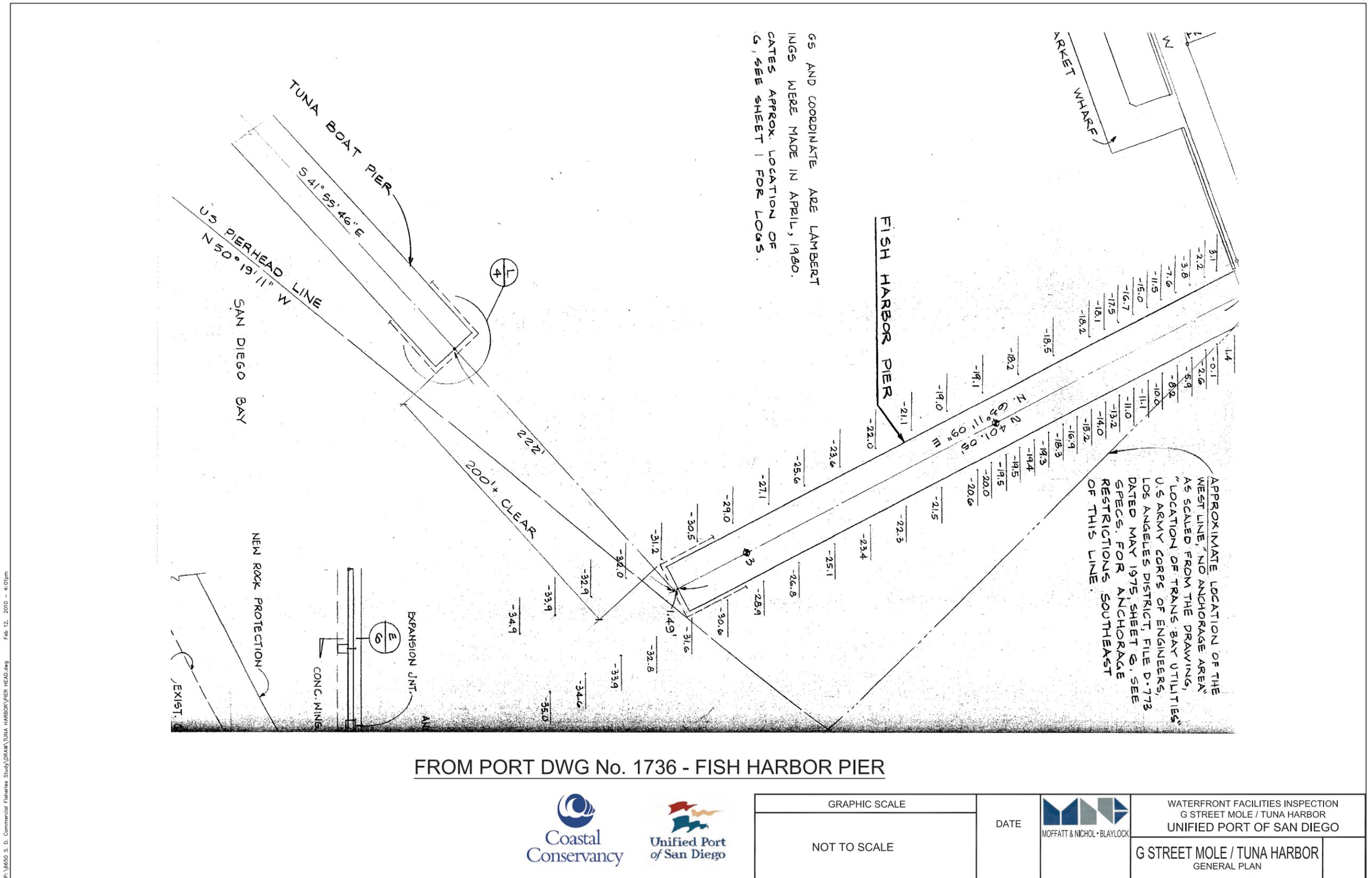
Sheet Pile Wall Breakwater: The approximate cost of a sheet pile wall breakwater is \$3,000 per linear foot of wall with batter piles.

- To protect the harbor opening, the estimated length of wall is 100 ft., for a total cost of \$300,000.
- To protect the harbor during low tides when the wave attenuation panels are less effective, the estimated length of wall along the harbor perimeter is 1500 ft., for a total cost of \$4,500,000.

Tuna Harbor Piling Repair / Renovation

Tuna Harbor is located in the downtown San Diego area adjacent to the G Street Mole. Tuna Harbor facilities consist of Tuna Boat Pier, Fish Harbor Pier, Fish Market Wharf, and three floating docks (Refer to “Figure 2.21 Tuna Harbor General Plan” on page 51 for a plan view of the existing piers at Tuna Harbor). Tuna Boat Pier and Fish Harbor pier have wave attenuation panels on the side of the piers that reduce the wave exposure to boats inside the harbor. The following is a discussion on the condition of the pilings and fender systems, and estimated cost for repair or replacement at Tuna Harbor Pier, Fish Harbor Pier, and the concrete landing at the 1990 Floating Dock.

The piles were inspected in August of 2008 below water for marine borer and abrasion damage and classified by the approximate percentage of section loss as indicated (Refer to “Table 2.1 Fender pile condition at Tuna Boat Pier” on page 65). Approximately 18 months have passed since the inspection, so it is anticipated that the damage has increased.



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Table 2.1 Fender pile condition at Tuna Boat Pier

Pile Condition	Estimated Section Loss Percentage	Number of Piles	Percentage of Total Piles
Good	0 - 5%	35	25%
Fair	6 - 20%	52	37%
Poor	21 - 35%	15	11%
Bad	36 - 70%	20	14%
Broken	Loss > 70%	19	13%
Total		141	100%

It is recommended that a wave attenuation study is conducted before, and coordinated with any of the work described in this section. A wave attenuation study is a relatively short duration project (one month), and repairs to, and replacement of the fender piles could be coordinated with a (potential) breakwater at the harbor entrance breakwater, and or repair/replacement/expansion of the wave attenuation panels at the perimeter of the harbor. The result will be a more logical progression of the project, and savings in time, and money.

Timber Fender System: The timber fender system consists of 14-inch butt diameter timber piles backed by timber wales and chocks and cylindrical rubber fenders. The timber fender piles are spaced at 10 feet on center. For corner protection of the pier, a steel wale is used with multiple fender piles.

There are two options for maintenance of the pier fender system. The first option is to replace only the fender piles with greater than 35 percent section loss. The second option is to replace all timber fender piles at the pier.

Tuna Boat Pier: Approximately three-quarters of the timber piles at Tuna Boat Pier show signs of marine borer damage and have a reduced structural capacity (Refer to "Table 2.1 Fender pile condition at Tuna Boat Pier" on page 65). The steel wales at the corner fender clusters are also recommended for repair.

Fish Harbor Pier: Approximately one-quarter of the timber piles at Fish Harbor Pier show signs of marine borer damage and have a reduced capacity (Refer to "Table 2.2 Fender pile condition at Fish Harbor Pier" on page 65). The steel wales at the corner fender clusters are also recommended for repair. During the inspection, it was observed that approximately 20 feet of timber wale is broken and hanging from the pier. The best time to replace the broken wale section is during pile replacement.

Table 2.2 Fender pile condition at Fish Harbor Pier

Pile Condition	Estimated Section Loss Percentage	Number of Piles	Percentage of Total Piles
Good	0 - 5%	51	71%
Fair	6 - 20%	4	6%
Poor	21 - 35%	2	3%
Bad	36 - 70%	4	6%
Broken	Loss > 70%	5	6%
Plastic Piles	0%	6	8%
Total		72	100%

New Fender Piles: It is recommended to replace the piles with new composite or pre-stressed concrete piles with an equivalent diameter and stiffness. There are many options for composite fender piles. For example, plastic reinforced with steel, plastic reinforced with fiberglass, or cylindrical fiberglass pipes filled with concrete. An ultra-high molecular weight poly-ethylene (UHMWPE) rubbing surface is recommended for the top 20 feet of the pile.

1990 Floating Dock Landing: The concrete landing at the 1990 Floating Dock has two broken timber fender piles. If this landing is going to be utilized, the fender piles need to be replaced.

Cost Description

The total cost estimate varies depending upon the choice for partial replacement or complete replacement and is estimated to range from approximately \$443,650 to approximately \$1,803,650.

Option 1 – Partial Replacement – This is the less expensive option. It would include a minimum of 50 piles at Tuna Harbor and would cost approximately \$400,000.

Option 2 – Complete Replacement – This is the more expensive option for short term, but will be more cost effective for the long-term sustainment of the facility. Complete replacement would cost approximately \$1.8 million.

Pre-stressed concrete fender piles cost approximately \$150 per linear foot of pile for materials and installation. Fender piles for Tuna Harbor would have lengths ranging from 45 feet to 60 feet, for water depths of 20 feet to 35 feet respectively. There are a total of 141 piles at Tuna Boat Pier and the estimated cost of pile replacement is \$1,200,000. There are 72 piles at Fish Harbor Pier and the estimated cost of pile replacement is \$560,000.

Permitting & Consultant Fees: It is recommended that a firm experienced with permitting conduct the environmental assessment and submit the permit applications for the project. A consultant fee of approximately \$30,000 for time and materials is recommended. The 401 Certification from the RWQCB has a minimum application fee of \$650. The actual application fee will be determined at the time of the submittal.

Biological Survey Fees: The total estimated cost for the baseline, pre-construction, and post-construction surveys is approximately \$13,000.

Potential Permitting and Regulations

Due to the work proposed in the preferred alternatives, there are a range of probable regulatory and permitting requirements for the plan to be implemented. The following discusses the regulations and permitting issues that the Consultant Team identified upon initial review of the preferred alternatives. Project managers should consider the following regulatory requirements when planning for implementation of any Course of Action described in this Report.

California Environmental Quality Act (CEQA)

Many of the projects proposed as part of the Commercial Fisheries Revitalization Plan Preferred Alternative would be subject to the California Environmental Quality Act (CEQA). This would include those actions that are:

- a. Deemed "projects" according to State (and Port) CEQA guidelines; and
- b. Considered "discretionary" projects (i.e., requiring an exercise of judgment in the decision to approve or disapprove), as opposed to "ministerial" projects (i.e., in which the law requires a set action).

For those projects within the proposed program that are subject to CEQA, the degree of environmental analysis required would be determined by the expected level of significance of environmental impacts. Minor projects considered unlikely to result in significant environmental impacts could be addressed through a CEQA exemption (in this case, usually a Categorical Exemption [CE]), which are generally handled directly and expeditiously by the Port. Projects more likely to result in significant impacts (expansion of a use or an existing site) would require an Initial Study (IS) and associated Negative Declaration (ND) or Mitigated Negative Declaration (MND). Where there is the potential for significant unmitigable impact(s), an Environmental Impact Report (EIR) would be required. An EIR may also be required for projects associated with substantial public controversy.

Mitigation

A major construction project with environmental impacts will require mitigation. The type of mitigation is typically negotiated with the resource agencies during the permitting process and can include habitat restoration or funds placed in a mitigation bank. Mitigation costs can be several hundreds of thousands of dollars (potentially \$100,000 to \$500,000 for full implementation of the plan).

Some of the projects in the preferred alternative may impact the bay environment by potentially reducing bird foraging areas, blocking sunlight to vegetated submarine or subtidal areas (i.e., eel grass beds), and/or reducing the area of fish habitat. Projects that have a net increase in either bay acreage or fill volume typically require extensive environmental review and lengthier permit processing. If a project can incorporate areas of removal such that there is a net-zero increase in acreage or fill, then the permitting process may be eased. One option available to minimize environmental and permitting review is to have a net zero increase in surface area at the site by removing other elements that shade the bay in the project area.

By identifying impacts early, any potential mitigation that may be required can be negotiated all at once during the permitting process. If the project area as a whole is considered, smaller amounts of mitigation

could be required as the amount of net change over the project site may be smaller than if each task was evaluated individually.

Biological Concerns

Any in-water work may require biological surveys to determine “baseline conditions.” This should be conducted prior to the CEQA analysis. In addition, an invasive species (Caulerpa) and eelgrass survey may be required prior to and possibly after construction. Further, an essential fish habitat analysis could be required for some of the required permits. Pre-construction surveys need to be conducted 30 to 60 days prior to commencement of construction and post-construction surveys must be conducted within 30 days following construction.

In addition to requisite surveys, any in-water construction work should be directed outside of the Least Tern nesting season (April 1st to September 15th) to avoid impacts to the birds.

Other Permits and Regulations

- Board of Port Commissioners Policy Number 610 - Signs placed in the District tidelands are subject to the review process set forth in this policy document. The permitting process includes an initial feasibility consultation, written proposal, proposal review by the District's public art coordinator, and conceptual approval, modification, or disapproval.
- California State Lands Commission (CSLC) - For work in harbors and waterways, dredging permits are issued to both public and private parties by the California State Lands Commission. If the dredged material is to be used for a commercial purpose, a royalty is charged by the CSLC.
- City of San Diego – The City may need to review plans for some tasks in the preferred alternative. This will be determined with the onset of the Port review process.
- Port of San Diego Port Tenant Improvement and Local Coastal Development Permit – To perform the repairs and upgrades at Driscoll's Wharf and Tuna Harbor, these permits may be required.
- Storm Water Pollution Prevention Plan (SWPPP) – A storm water pollution prevention plan will be required. This will outline their plan to prevent pollution from entering the environment. The plan must be submitted by the Contractor to the Port. The SWPPP must be approved by the Port prior to beginning construction-related activities.
- Regional Water Quality Control Board – To meet the requirements of Section 401 of the Clean Water Act, a 401 Certification from the Regional Water Quality Control Board (RWQCB) will be required for construction activities occurring in the water, to confirm that the activity will not result in any discharge to navigable waters or violate water quality standards.
- US Army Corps of Engineers – Some of the tasks in the preferred alternative may be covered under the USACE nationwide permit #3 (NW3), which allows for replacement “in-kind” maintenance related activities of decking, bull rails, and fender piles (if same quantity and diameter) and / or require a Section 10/404 Individual permit.

MANAGEMENT ENTITY ALTERNATIVES

Section 3

Commercial fishermen have traditionally lacked a concerted voice in the regulatory process and in negotiations with fish buyers and owners of commercial fishing infrastructure. Throughout the project, it was consistently agreed that fishermen would benefit from pooling their collective resources under a formal legal framework to assist in advancing their goals. An association, cooperative, or corporation comprised of fishermen that has the capacity to apply for grants, represent the fleet in the regulatory arena, and interface with the community, commercial fishery stakeholders, leaseholders, and directly with the Port, will bring more stability and value to the fleet. Refer to "Figure 3.1 Potential benefits of formalizing a management entity" for a description of the potential role of a formalized management entity. Several ad hoc associations have been formed in San Diego and have successfully addressed specific projects (e.g. San Diego Waterman's Association). Such associations may continue to play a role and work concurrently with other entities. Information herein is aimed at a group or groups that hope to bring about long-term strategic growth and stabilization, and continue to empower fishermen in San Diego.

The goal of the management entity alternative analysis is to investigate and describe legal and business structures for representative and oversight options for the local commercial fishery. The management entity will be responsible for facilitating cooperation among stakeholders, increasing the visibility and value of the fishery, and procuring and overseeing the administration of grants and loans. Once formed, a management entity could also benefit the fishermen by pooling resources and facilitating communication with the Port, seafood buyers, civic leaders, and consumers. A formal entity will put the local industry in a position to access group plans for health care and business insurance and retirement benefits. This Section investigates the types and structures of such an entity and discusses the universal functions that it will need to perform.

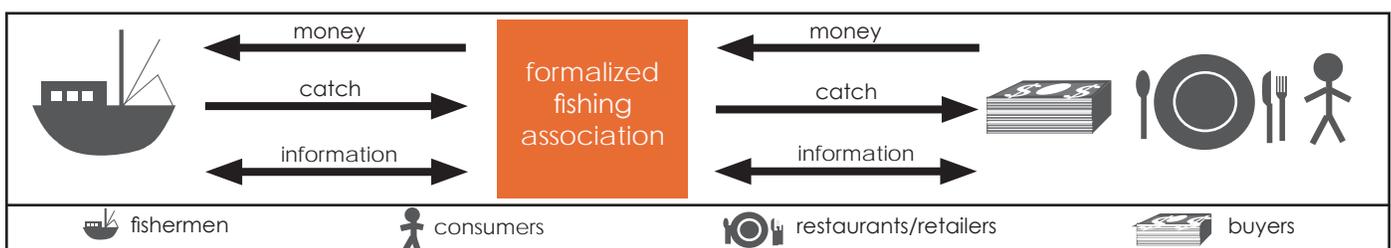


Figure 3.1 Potential benefits of formalizing a management entity

The four following management entities alternatives were considered:

Public Agency – A public agency takes the lead role in overseeing ongoing operations and management.

Cooperative – A "group of owners" operate democratically to oversee operations and management.

S Corporation – A board of directors and a management team oversee ongoing operations and management with special tax provisions.

Non-Profit Corporation – A board of directors and a management team oversee ongoing operations and management without profit to qualify for special tax provisions.

Public Agency

Considering that both commercial fishing facilities have provided millions of dollars in landings and employment, and working waterfronts are key tourists attractions, it may be appropriate for the Port of San Diego to create a fisheries manager position or assist with funding or the development of a funding instrument (e.g. capacity building grant/loan) for a fisheries manager or management team. The manager would be charged with promoting locally-caught seafood, communicating with buyers and distributors, representing the local industry at key meetings and conferences, attracting support from state, local, and national elected officials, and identifying and seeking appropriate loans and grants. Under this configuration, fishermen can sell their catch to the buyer of their choice or work with the fisheries manager to consider additional options. All local fishermen will benefit from promotional efforts aimed at increasing awareness of the local fleet's sustainable fishing methods and improved access to information on regulatory, and research issues, and infrastructure improvements.

The manager's responsibility should include seeking and procuring grants to fund the position. Responsibilities should also include creating heightened demand for and access to locally caught fish, increasing awareness of the importance of the local working waterfronts, increasing tourism, improving public coastal access, improving food security, and adding value throughout the distribution chain (fishermen, buyer, processor).

A critical advantage of forming a port supported management position is the potential to assist and bring value to a cooperative, an individual fisherman, group of fishermen, or commercial fishing related business in either facility. The fishing community must be convinced that the agency is creating value and that future investment will bring greater value. The Port must also be convinced that this management entity is creating greater profit for portside services, increasing employment opportunities, and strengthening the concept of a working waterfront.

Advantages

- Could work in conjunction with multiple commercial fishing organizational strategies
- Port advocacy will continue to build relationship with commercial fishermen
- Retained autonomy and independence for commercial fishermen
- Increased economic benefit for Port and commercial fishermen
- Self funded or partially self funded position

Disadvantages

- No formal organizational structure, or financial input required from fishermen
- Port may be unable or unwilling to create or fund such a position

Next Steps/Requirements

- Explore the feasibility of creating the position of Port Commercial Fishery Liaison
 - Determine ability of Port to create or support such a position
 - Ensure financial support in Port operating budget
 - Identify (immediate and ongoing) external funding sources
- Conduct outreach to gather fishermen feedback

Cooperative (Co-op)

A cooperative is a participant-owned, democratically controlled business where members pay a fee to take advantage of cooperative services and participate in governance through a vote. The geographic area may be focused or aimed at attracting fishermen from geographically disparate ports to maintain a more steady supply, more consistent income, and greater opportunity for profit.

Membership fees and earnings are used to support staff for management, sales, and administration of receivables and payables. Fees can also be used for the acquisition of equipment and real estate, if necessary. A cooperative may own assets and act as a buying and sales entity.

Typically, the cooperative purchases seafood at the dock at market value and, in the best case scenario, provides a dividend (patronage fund) for its members from profit generated through value-added services and/or sales.

Cooperatives, because of the nature of their membership structure, benefit from the same federal tax structure as Sub Chapter S Corporations, whereby the cooperative is not responsible for federal taxes.

Co-ops are a known entity in the fishing industry. Seafood Producers Co-op (SPC) is an example of a particularly successful operation (Refer to “Box 3.1 Co-op” on page 71 for additional information). An organization such as SPC could include fishermen from other ports who come to San Diego to target swordfish. The option of including a wide range of members could be an effective strategy for a San Diego based co-op.

Co-ops have a high degree of control and can define and restrict the profile of their memberships. For example, potential members may be required to earn a certain percentage of their income from commercial fishing or a commercial fishing related industry.

Again, there may be a role for a cooperative to work concurrently or collaboratively with other management entities or entity in San Diego.

Box 3.1 Co-op

Seafood Producers Co-op

www.spcsales.com

2875 Roeder Avenue, Suite 2

Bellingham, WA 98225

Phone: (360) 733-0120

Seafood Producers Co-op (SPC) harvests, processes, and markets hook and line caught halibut, sablefish, salmon, and rockfish. Headquartered in Bellingham, Washington, the Co-op has more than 500 members.

SPC also offers a familiar and reliable buying and pickup service for Co-op members landing in other ports. SPC Alaska-caught salmon, sablefish, and halibut have been recognized by the Marine Stewardship Council (MSC) as sustainable fisheries. Fishermen that travel to Alaska to participate in the salmon fishery rely on the SPC to purchase, pick-up, and distribute their catch.



Advantages

- Fishermen-centric (fishermen owned, operated, and benefited)
- Increased economic benefits for members (versus sole operator)
- Increased bargaining power
- Expanded market
- Avoids double taxation (no corporate taxes)
- Diffuses operating risk for fishermen
- High autonomy and independence for fishermen
- High commercial fishing community familiarity
- Democratic structure
- Limited liability

Disadvantages

- Cost of membership
- Democratic structure (potentially slow and inefficient)
- Earnings distributed based on level of input

Next Steps/Requirements

- Define goals and objectives, and business plan
- Conduct membership drive
- Acquire capital
- Incorporate and develop articles of incorporation
- Pass bylaws
- Sign marketing agreements
- Elect a board of directors
- Vote to implement the project

S Corporation

Corporations are attractive because they offer limited liability for their officers. A corporation's life is not dependent upon its owners, but rather, a corporation possesses the feature of unlimited life. If an owner dies or wishes to sell their interest, the corporation can continue to exist and do business. The primary goal of a for-profit corporation (i.e. an investor owned firm) is to maximize shareholder value. An S Corporation is a specific type of corporation.

S Corporations were created by a federal tax provision that benefits small corporations (Sub Chapter S of the Internal Revenue Code). The tax code allows S Corporations to be taxed in the same way partnerships are, so the corporation itself pays no federal income tax. The stockholders as individuals pay the business-related income taxes on their personal tax returns.

As an S Corp., a small business can also take advantage of the limited liability without permitting free trading of shares of stock. Ownership can be limited to the few people directly involved in the business operations.

An “industry focused” corporation will be in a good position to interface with elected officials on behalf of the local fishery, create and fund public awareness and advertising programs, and represent the local industry at fishery management and other public meetings.

Advantages

- Avoids double taxation (tax obligations are passed on to the owners of the corporation).
- Provides limited liability for shareholders
- Ensures longevity and stability for the organization
- Increased bargaining power
- Expanded market
- Diffuses operating risk for fishermen
- High autonomy and independence for fishermen

Disadvantages

- California S Corporations required to pay a franchise tax of 1.5 percent of net income
- Corporations with over 100 shareholders are not eligible

Next Steps/Requirements

- Define goals and objectives of organization, develop business plan
- Incorporate and develop articles of incorporation; organization must be eligible for S Corporation tax status (i.e. an existing corporation or LLC)
- Pass bylaws
- Elect a board of directors
- File appropriate forms with IRS and California Attorney General
- Acquire capital
- Shareholder screening
 - Including individuals, certain trusts, and estates
 - May not include partnerships, corporations or non-resident alien shareholders
- Have no more than 100 shareholders
- Have one class of stock

BOX 3.2 NON-PROFIT ENTITY

Non-Profit 501(c)(3) Corporation

If a nonprofit is granted tax-exempt status under 501(c)(3) of the federal tax code, the corporation will be exempt from payment of federal corporate income taxes.

With federal income tax rates ranging from 15% to 34% this can amount to significant tax savings.

A 501(c)(3) nonprofit is also eligible to receive both public and private grants. Individual donors can claim a federal income tax deduction of up to 50% of income for donations made to 501(c)(3) groups.

To qualify for federal tax-exempt status under 501(c)(3) of the federal tax code, the nonprofit corporation must be organized and operate for some religious, charitable, educational, literary, or scientific purpose permitted under this section of the code. Charitable purpose is defined in section 501(c)(3) as providing services beneficial to the public interest.

Non-Profit Corporation

California defines a non-profit corporation as one that will not distribute gains, profits, or dividends to its members during the life of the corporation. The California Secretary of State must officially recognize all California non-profit corporations. Articles of Incorporation must be filed with the Secretary of State's office, indicating that the organization is entitled to receive non-profit corporate status.

Non-Profit corporations receive the same limited liability protection as for-profit corporations. This means that directors or trustees, officers, and members are typically not personally responsible for the debts and liabilities of the corporation.

Not-for-profit status would put a management entity in a position to receive grant funding that for-profit enterprises are unable to consider. This type of organizational structure also shields the organizations from tax burdens. Nonetheless, a nonprofit requires heightened attention to the precepts set forth by the Secretary of State. For example, they may not support a political candidate and require unanimous vote to change bylaws. Refer to "Box 3.2 Non-Profit Entity" on page 74 for additional information regarding non-profit 501(c)(3) status.

Advantages

- Eligible for grant funding
- May be eligible for tax breaks and credits
- Possibility for tax-exempt status
- Profits re-invested to serve corporation's mission
- Organizational mission is priority over profit
- Provides limited liability for shareholders
- Ensures longevity and stability for the organization
- May also organize as a cooperative

Disadvantages

- Limited profit potential for shareholders
- No opportunity for shareholder dividends
- Tax exempt non-profit corporations may be required to file annual financial reports to State and Federal government

Next Steps/Requirements

- Define goals and objectives of organization, develop business plan
- Acquire capital
- Incorporate and develop articles of incorporation
- Pass bylaws
- Elect a board of directors
- Determine profit status (for-profit vs. non-profit)
- File appropriate forms

Required IRS forms for 501(c)(3) not for profit organizations

- Form 1023, Application for Recognition of Exemption Under Section 501(c)(3) of the Internal Revenue Code
- Form SS-4, Application for Employer Identification Number

Required IRS forms for Non-501(c)(3) for-profit organizations

- Form 1024, Application for Recognition of Exemption Under Section 501(a) of the Internal Revenue Code
- Form SS-4, Application for Employer Identification Number
- Form 8718, User Fee for Exempt Organization Determination Letter Request

Universal Functions

Regardless of the management entity or entities that are chosen in the commercial fisheries in the Port of San Diego, there are three positions or responsibilities that should be considered: management, sales and marketing, and operations. Each position is listed below together with the potential functions of each position.

Fisheries Manager (\$60,000 – \$80,000/year)

The fisheries management position will oversee sales/marketing, operations, and fishing. The role will require the following:

- Oversee all financial transactions and assure all regulatory/accounting requirements, such as audits and other filings, are complete and on time.
- Seek appropriate loans after determining repayment feasibility and assure that the stipulations of the loans are being met and payments are being made on time.
- Seek appropriate grants and assure that the stipulations of those grants are met in a timely manner.
- Maintain relationships with local, State, and National policymakers; and prepare a plan of action on any regulation changes that may affect the local (and nearby) fishing industry.
- Keep abreast of all fisheries management requirements, permits, closures, gear restrictions, limits, and assist/represent the fishing fleet to assure compliance is being met. The manager will also make

regulatory information available to state and local elected officials and consumers to further illustrate the pressures that the local fishery faces and accentuate the fleet's compliance.

- Assist and/or interface with local fishing associations, cooperatives, and/or non-profits.
- Maintain familiarity of all current and future collaborative research opportunities and make them available to the fleet in a timely manner.
- Improve and maintain community awareness through various media, advertising, and outreach programs.
- Educate and work closely with elected officials (county, state, national) on the value of the fisheries. Show that support of the local fishery and working waterfront rings true with constituents and will strengthen platform. Call on their support when necessary.
- Hire appropriate staff after concluding that sufficient funds are available.

Sales/Marketing (\$50,000-\$70,000/year)

A strong sales entity is needed to help drive the business. The sales function will require the following:

- Willingness to spend entire days on the phone and multiple days on the road visiting potential buyers is required.
- Must possess an unshakable understanding of the brand, as well as, the state, national and global fishing industry.
- Maintain constant contact with current and potential buyers while considering supply (landings, seasons, closures, fishing schedules).
- Attempt to close as many sales as possible at the highest price based on available supply. Incentives can be made available based on the sales.
- Marketing entity (may be one and the same) will identify new/potential markets, and buyers.
- Reinvigorate existing markets.
- Find most efficient method for broadcasting message.
- Help set pricing based on market conditions.
- Possess tacit understanding of "product" and how best to take advantage of the unique nature of San Diego fleet (small boats, small crew, small, community-run port facilities, history of compliance, participation in scientific research, cutting edge of science/conservation/fisheries, healthy stocks, and global implications of supporting local fishermen).
- Provide training and education for restaurant wait-staff, retail fish counter staff, and retail/restaurant buyers and managers through print media, site visits, seminars, digital media, and portside conferences.

Operations (Negotiable)

Considering that there is a harbor manager at Driscoll's Wharf and offloading at Tuna Harbor is currently facilitated by Chesapeake Fish Company, the duties of this position may not (initially) represent a significant employment responsibility. However, the individual in the Fisheries Manager or Sales & Marketing Manager position should be aware of the following:

- Value, species, and quantity of landings, status of the ice facilities, hoists, forklifts, cold storage, and gear storage facilities.
- Anticipate and communicate future landings to management entity in order to take greatest advantage of species and timing.
- Anticipate needs and communicate to management issues regarding storage, offloading, and infrastructure maintenance and expansion needs, costs, and opportunities.
- Continually assess the needs of the fishing fleet and report to manager when needs exceed infrastructure capabilities.

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The intent of the marketing plan is to describe strategies to expand and strengthen the connection between the San Diego fishermen and the local community, differentiate San Diego seafood in the marketplace, and increase the awareness of, and demand for San Diego seafood products. The plan makes recommendations on marketing opportunities that aim to capitalize on existing assets, form new ones, and maximize profits over the long term. Opportunities and constraints to achieving marketing goals are drawn from the Background and Existing Conditions report (BEC). The BEC summarized the findings of extensive stakeholder interviews and targeted market research. Refer to “Box 4.1 Opinion Poll” on page 80 for an additional market research opportunity. The marketing plan draws on this information and calls on marketing industry best practices.

Several recommendations herein correspond to improvements in infrastructure and the surrounding environments at Tuna Harbor and Driscoll's Wharf. Key recommendations include the promotion of both harbors as vibrant, accessible public spaces. The opportunities also aim to leverage the popular market movement toward fresh, sustainable, local food, and reduction of food miles. Recommendations are not mutually exclusive, nor do they necessarily need to be executed in concert with one another. Several strategies may be employed to supplement local fishing's marketing needs during the physical re-development of both harbors.

The plan addresses options for initial and ongoing marketing management, branding, direct public interactions, web-based communications, local seafood events and activities, restaurant and retailer messaging, new and expanded distributor relationships, and sustainable seafood product differentiation. Also, several targeted case studies are offered as examples of how other individuals or organizations achieved marketing objectives.

Marketing Management

Successful marketing efforts require ongoing attention and oversight. Management of the marketing programs will be most effective as a collaboration among key stakeholders, fishermen's associations, the Port, and the commercial fishing community. Refer to “Box 4.2 Marketing Association” on page 80 for an example of a marketing entity. The individual or group responsible for implementing the marketing plan or any portion of it should identify the desired ends and establish an appropriate budget. The marketing plan is designed so that marketing managers can go to potential funding sources with an estimate for one (or several) recommendation(s), and have sufficient information to communicate the goals, motivation, and benefits of a potential project. In this document, a marketing manager(s) is defined

“In this document, a marketing manager(s) is defined as any representative of a commercial fishing organization, an individual fisherman, group of fishermen, or commercial fishery related business who is tasked with or seeks to promote locally caught seafood or the local commercial fishing industry.”

Box 4.1 OPINION POLL

Opinions Matter

The San Diego commercial fishing industry would benefit from an understanding of the opinions of city and/or county residents toward the commercial fishing industry and locally caught seafood. The results of an opinion poll would help quantify and qualify support of family-run commercial fishing businesses. Polls or surveys conducted in a scientific manner would help solidify support from elected officials, community leaders, and potential funding sources while providing insight for branding and marketing strategies.

as any representative of a commercial fishing organization, an individual fisherman, group of fishermen or commercial fishery related business who is tasked with or seeks to promote locally caught seafood or the local commercial fishing industry.

Based on the skills of the managing individual or group, the implementation strategy should identify which elements can be managed internally and which will require contracting with an outside partner such as a graphic artist, website designer, advertising firm, or communications/public relations firm. Marketing efforts should be regularly reviewed, assessed, and refined to ensure that they are reaching desired audiences and producing desired results.

Recommendation 1: Consider establishing a unique San Diego Seafood Brand

Marketing managers should consider branding San Diego-caught seafood with a name and logo that consumers will easily recognize at restaurants, and retail outlets, in print (magazines, newspapers, flyers), and in web-based media. The brand and corresponding collateral material should emphasize San Diego caught seafood as a fresh product, sustainably caught by family-run fishing businesses, and emphasize a connection to the local community (freshness and locally caught were deemed the most important characteristics of seafood by retailers and restaurateurs in the Background and Existing Conditions Report [BEC] market analysis). Refer to “Box 4.3 Branding” on page 81 and “Box 4.4 Branding” on page 82 for examples of successful fishery branding campaigns.

In initiating brand development, marketing managers should define a target audience, a geographic area, or target businesses (at the most focused level), and explore the preferences and desires of those targets. The “market” that was addressed in the BEC was the City of San Diego, and may be an appropriate target for the initial steps of the marketing effort. Marketing managers should develop a logo and catchphrase representative of San Diego seafood and directed at the stated audience. The brand should then be copyrighted and consistently integrated into collateral materials and marketing initiatives. Marketing managers should investigate purchasing

Box 4.2 MARKETING ASSOCIATION

Copper River Salmon, Alaska www.copperrivermarketing.org

Copper River Salmon is known throughout the country for its quality and flavor. The Copper River/Prince William Sound Marketing Association is largely responsible for creating and broadcasting this message. The Association is run by a board of directors composed of local fishermen. By uniting under a common marketing message, the member fishermen, processors, and distributors are able to enjoy the mutual benefits of pooled resources including the ability to reach a wider audience and produce highly professional collateral materials. The local fishing community has effectively leveraged the product's unique qualities to establish a brand and tell the story of the salmon. The brand results in consumer trust, consistent demand for the product, and premium prices.

available web domain names associated with the logo and catchphrase.

Following is a list of potential media outlets in which brand advertising can be placed. Note that the list is meant to be used as a guide and should be augmented with publications that are specific to the target audience. There are countless blogs and websites (e.g., those belonging to restaurants, retailers, wholesalers, etc.) that would be appropriate and effective venues to broadcast the message of fresh, sustainably caught San Diego seafood. Note, once a message or ad is posted, it should be revisited frequently and consistently to be updated or modified as necessary. One of the advantages of a focused (initial) target market is that it is manageable enough for marketing managers to develop a relationship with, or at least speak with an editor, or website or blog author before posting information.

Examples of Potential Advertising Venues

- San Diego Union-Tribune (www.signonsandiego.com)
- San Diego Metro Weekly (www.sandiegometroweekly.com)
- San Diego Reader (www.sandiegoreader.com)
- San Diego Magazine (www.sandiegomagazine.com)
- San Diego City Beat (www.sdcitybeat.com)
- San Diego Metropolitan Magazine (sandiegometro.com)
- San Diego Family (www.sandiegofamily.com)
- Dining San Diego (www.diningsandiego.com)
- SDSU Daily Aztec (www.thedailyaztec.com)
- UCSD Guardian (www.ucsdguardian.org)
- Edible San Diego (www.ediblecommunities.com/sandiego)
- Port of San Diego website (www.portofsandiego.org)
- Sea Rocket Bistro Blog (searocketbistro.com/category/blog)
- San Diego Roots, Sustainable Food Project (www.sandiegoroots.org)
- San Diego Food Not Lawns (www.sdfoodnotlawns.com)
- Local Harvest (www.localharvest.org)
- The Log: California's Fishing and Boating News (www.thelog.com)

Box 4.3 BRANDING

Alaska Seafood: "Wild, Natural, and Sustainable"

www.alaskaseafood.org

Alaska provides a unique fishery/seafood model where sustainability is built-in to the State's political fundamentals. Alaska's constitution requires that all State renewable resources "shall be utilized, developed, and maintained on the sustained yield principle." In an effort to capitalize on their sustainability as well as differentiate their catch from farm-raised seafood, Alaska seafood branded itself as "wild" marketing their products based on their lack of chemical additives and artificial coloring.

Established in 1981, the Alaska Seafood Marketing Institute (ASMI) promotes wild Alaska seafood products. ASMI is a public corporation that is a cooperative partnership between the Alaska seafood industry and the State of Alaska. It is funded by taxes paid by Alaska seafood processors and harvesters as well as federal support from the U.S. Department of Agriculture. ASMI markets wild Alaska seafood by organizing seafood events, creating and selling recipe books and CDs, providing point of sale materials, and via their website, all of which prominently feature their logo and brand name.

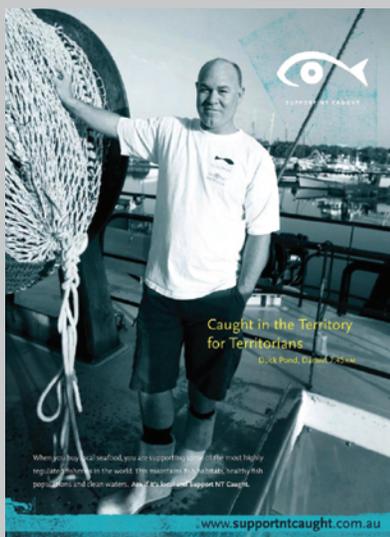
To assess the efficacy of their marketing, ASMI hired conducted a national consumer preference and brand recognition survey. The survey found that consumers are increasingly aware of their brand and inquiring more about where and how their seafood was caught.

Box 4.4 BRANDING

Northern Territory Caught

www.supportntcaught.com.au

The Northern Territory Seafood Council launched the "Support NT Caught" campaign in November 2009. The campaign was designed to raise awareness about the quality of local seafood, promote the men and women of the fishing community, and make consumers aware of the availability of local seafood products. The campaign includes a distinctive NT Seafood logo, website, print ads, posters, display materials, and radio spots.



Marketing efforts, such as the creation of a logo, have successfully been undertaken by graphics arts classes as competitions or team projects. Both UCSD and SDSU have excellent graphic art programs. Working with students may be less costly, but will require more oversight on the part of marketing managers than working with a professional firm or individual.

The logo and tagline(s) should be displayed at Driscoll's Wharf and Tuna Harbor on signs, buildings, containers, totes, and other shipping packages. Business cards that sport the logo, and supporting website address should be provided to local fishermen for distribution.

One of the first steps will be to define who gets to use the logo, and benefit from the advertising effort. A non-proprietary or "blanket" program would be available for anyone who lands at a San Diego offloading facility, and would be aimed at raising awareness of the commercial fishing landings in general. In a more focused program, only participants that adhere to pre-described protocols in harvest, handling, processing, and/or distribution would have access to the logo, and the benefits of advertising. A focused program generally requires dues or fees from participating fishermen. Concurrent programs could be effective. For example, one general campaign raising the awareness of the industry and benefits of small-scale fisheries and the other showcasing the efforts of a fisherman or group of fishermen that are committed to pre-defined levels of quality and consistency.

Costs

Approximately \$30,000 – \$50,000 Upfront costs for logo design; costs for ad placement, ad management, and definition of program in the first year. This dollar amount reflects 2 – 3 months of a marketing manager's full time salary as well as estimates to design a logo and create an appropriate tagline. An effective logo/tagline should be created and ready in 2 – 3 months of project inception and distributed widely (100 percent target market coverage) in one year.

Recommendation 2: Consider selling directly to the public

Fishermen selling directly to consumers would reduce or eliminate intermediary roles, and take advantage of vertical integration, keeping fish sales, processing, and distribution money in the immediate community. Direct-to-consumer sales stress the local nature of the fishery and could also benefit from incidental sales. However, direct selling requires fishermen's or marketing managers' attention in the processing, sales, distribution, and promotion of the product. Direct-to-consumer sales scenarios may also provide the opportunity to engage fishing families and retired fishermen to assist in operations, and management.

Selling directly to the public could require that fishermen hold permits in addition to their commercial fisherman's license. At a minimum, fishermen selling directly to consumers need a Fisherman's Retail License from the California Department of Fish and Game, which permits fishermen to sell only to ultimate consumers. As of January 2010, Fisherman's Retail Licenses cost \$87.25 per year. The license does not allow fishermen to receive or sell fish from other fishermen for commercial purposes, engage in any processing activities, nor does it allow fishermen to receive or sell fish that was landed outside California. For Department of Fish and Game fee updates and descriptions visit: www.dfg.ca.gov/licensing/commfishbus/cfb_fees.html.

There are a number of specific methods for establishing direct-to-consumer sales including off the boat fish sales, sales at a retail facility, a community supported fishery program, a regular fisherman's market, and sales at annual events and festivals, at the harbors and at established events throughout San Diego.

Off the boat fish sales

In this scenario, consumers not only look for seafood, but also the experience of being on the waterfront and interacting with fishermen. Off the boat sales will require a strong marketing and advertising effort by the fishermen or management entity to inform customers of the logistics, availability, and advantages of buying directly from fishermen. Refer to "Box 4.5 Communication System" on page 83 for an example of a successful communication strategy employed by Pillar Point Harbor in San Mateo County. Off the boat sales could yield the highest price per pound

Box 4.5 COMMUNICATION SYSTEM

FishFone

Pillar Point Harbor, San Mateo County

The FishFone line serves to facilitate off-the-boat sales between fishermen and consumers. Pillar Point Harbor provides a dedicated telephone line where members of the public can call in to find out what fish is available off the boat that day. The line is a consistent, easy to use resource connecting fishermen with consumers. The overhead is kept very low with the County Harbor District staff updating the phone line as needed and no additional marketing. The line has been quite successful, largely due to word of mouth marketing among customers.

to fishermen, but will limit quantity and may be unwieldy when fishermen are focused on being at sea or working on their vessels.

Off the boat sales could be an effective component of an “overall” promotional campaign. It is one of the most intimate retail transactions, where the buyer and the fisherman shake hands after money and fish are exchanged. In this transaction the consumer will most likely receive the freshest product, and thus have a positive local seafood experience. But off the boat sales requires the harvester to provide the venue, maintain the means of the sale (cash, check, credit card), establish pricing, maintain consistency of supply and quality, develop the market, and attract the client. While conducting this business, the fisherman is unable to fish, build or repair gear, or conduct upkeep to the boat. A harvester is unable to process or cut fish on the boat unless they obtain a Fish Processor’s License or Multifunction Fish Business license from the Department of Fish and Game and comply with HACCP requirements. Weather, moving fish stocks, and regulation will limit an individual fisherman in a bid to maintain consistency (a major issue identified by respondents of the Market Analysis of the BEC). A successful off the boat business will have developed a loyal and attentive market that can be alerted to landings via internet.

Costs

Fisherman’s Retail License from the California Department of Fish and Game - \$87.25 per fisherman. Most of the costs associated with off the boats sales will be borne by the individual fisherman (licensing, advertising the time, location, species, via web, print, radio, public access TV). To facilitate this activity, and contribute to more locally-caught fish reaching more local plates, and more awareness of the benefits of the local commercial fishery, marketing managers may consider a funding mechanism for these standalone harvest/sales operations. Posting off-the-boat sales opportunities on a website (Refer to Informational Website, Section VII), may only require fisherman to provide information to the website manager. Marketing managers may consider assisting fishermen in sourcing and applying for grants of \$200 – \$1000 per season for off the boat sales or make money available from the fisherman’s operating foundation (Refer to Section 6). Again, an individual or group of fishermen selling off of their boats complement the overall marketing plan.

Retail Facility

The Preferred (Development) Alternative for Driscoll’s Wharf and Tuna Harbor calls for permanent onsite seafood retail outlets. Shifting the responsibility of the sales, advertising, money management, license requirements, and processing to another entity (whether it is wholly fisherman owned, or a partnership), frees the fishermen from those tasks, gets more local fish on local plates, provides a venue to exchange information, and brings more money to the fishermen through vertical integration. Locating the retail facilities at the site(s) of commercial fishing activity will strengthen, and promote the connection between

“Actual costs will be substantially influenced by the amount and types of materials and equipment used. Prior to securing funding, it is necessary to calculate costs for the facility based on actual desired specifications.”

the community / consumer and the commercial fleet. A partnership between fishermen and an experienced retail facility owner/manager could be positive and assure success of the operation.

The days and hours of operation should be synchronized with the availability of fresh seafood landings as well as possible. This will require close coordination with the commercial fishermen. When it is established that the market will be open, the facility should be well stocked, well lit, appropriately staffed, and open and close on time, as

advertised. A market that is open, for example, Thursday through Sunday, will require a part time manager and part time cutter. It would be advantageous to find an individual that can do both, if possible. A partner that has management experience and access to skilled labor could provide a great advantage. The entity that manages the market(s) will also have to identify an acceptable alternative when San Diego caught seafood is not available. In those cases, California caught, or West coast caught may be appropriate. Building a market takes time, and requires consistency and elbowing out the chatter of all the other options that seafood consumers have. Whether it is San Diego urchin, or rockfish fillets from Fort Bragg, the market should be stocked with fish and open when advertised. Catch methods, names of boats and skippers, and a brief description of the regulatory constraints that the species/fishery faces should be included in the display counter (without much additional cost).

Again, partnering with a firm or person that has experience in operating a retail food facility will increase the odds of success. This type of partnership will however, be more costly. The entity that manages the retail market(s) must weigh the costs of a professional partner and increased chances of success against striking out on their own. Since fishermen do not own a facility, they will be required to rent or lease. A partnership with an experienced retailer will make a lease more attractive to the proprietor of the property.

Costs

The estimated cost figures provided are based on a generic 1,000 sq. ft. retail facility model and, as such, represent approximate amounts intended to give decision makers a general idea of the magnitude of funds required to establish a retail facility. A range of costs is provided. Actual costs will be substantially influenced by the amount and types of materials and equipment used. Prior to securing funding, it is necessary to calculate costs for the facility based on actual desired specifications.

Start-up costs are estimated at \$25,000 to \$40,000 and include tenant improvements: floors, drains, walls, lighting, display counter, shelving, sinks, refrigeration units, freezer, ice makers, equipment (knives, cutting boards, fish scalers, packaging machines, scales, etc.), and computer hardware and software. Many of these improvements can be made or planned for during the construction phase, thus reducing costs. Start-up costs also include financial obligations related to starting a business such as legal and filing fees, insurance, licensing, cost of money, and business planning.

Monthly costs are estimated at: \$5,900 to \$6,100, and include lease (1,000 ft.² x \$2.50/ft.²), electricity (\$300/mo.), water (\$400/mo.), two employees (one at \$25/hr. plus wage expenses that include an additional \$18/hr. for payroll taxes, payroll administration costs, liability and business insurance, health care benefits as applicable, computer hardware, software, networking, maintenance, and upgrades; and one at \$15/hr. which is doubled to accommodate for the above administrative costs for 30 hours per week). Note: No benefits are required for employees that work less than 32 hours per week.

Fisherman's Market

A regular fisherman's market at Driscoll's Wharf and/or Tuna Harbor would provide a venue for fishermen to sell fresh seafood directly to the public, further promote commercial fishing, and strengthen the bond with the community. A fisherman / farmer's market at Driscoll's on one day, and another at Tuna Harbor again during the same week would attract visitors, locals, and regular seafood consumers. As with a retail facility, coordination with the fleet and their landings is a must. Also, as stressed in the retail option, if local fish is

BOX 4.6 FISHERMAN'S MARKET

Santa Barbara Fisherman's Market

Santa Barbara, California

The Harbor Fishermen's Market in Santa Barbara has been operating for over ten years on Saturday mornings from 7:30 AM to 11:30 AM. Fish are sold directly off the boats to customers who may then have their fish cut at "The Fish Market" (a stand operating daily that sells local and imported seafood) located adjacent to the dock in Santa Barbara Harbor. "The Fish Market" and Harbor Fishermen's Market are associated but separate entities. The fishermen give 10% of their Saturday profit to "The Fish Market" who in turn funds the permitting and taxes for the Saturday market. "The Fish Market" leases its space from the City's Waterfront Department, and the City Harbor Commission regulates the dock.

BOX 4.7 FISHERMAN'S MARKET

Ventura Fish Market

Ventura, California

The Ventura Fish Market was proposed by the local fisherman's association and has been running every Saturday from 8:00 to 11:00 AM for several years. The fishermen, typically five to 20, work at tables and tents at Andria's Pier behind Andria's Seafood Restaurant and Fish Market, which holds the City use permit. Andria's Fish Market will also fillet fish purchased from the fishermen for \$0.50 per pound. Ventura requires that you must be a fisherperson to participate in the market and that the fish products must come from a boat. According to the Ventura Port District, the District spends \$2,000 annually on marketing costs.

not available market managers must have an option to bring in outside seafood products (such as fish from Santa Barbara, San Pedro, Pillar Point, or Morro Bay). Marketing managers and/or the individual that is hired to run the market would be responsible for sourcing seafood from elsewhere as needed. Refer to "Box 4.6 Fisherman's Market" on page 86 and "Box 4.7 Fisherman's Market" on page 86 for examples of active markets in Santa Barbara and Ventura.

To develop a following and ensure financial success, the market must be open when advertised and be stocked with fish. As the market(s) are established, they will rely less on other ports, but availability of seafood must be seen as consistent. It is assumed that the quality of seafood from other ports will be on par with the San Diego fresh offering. Inviting a handful of providers of fresh vegetables, fruits, or other locally produced food or condiments could improve visibility, popularity, and foot traffic associated with these local seafood focused markets.

Marketing managers should utilize web-based communications, word-of-mouth, and paid advertising (local newspapers, magazines, radio) to promote the event. A larger advertising investment will be required initially to inform the community of the event. The budget can then be reduced as a regular following is established. Marketing managers should consider enhancing the event by establishing seafood cooking demonstrations, classes, and lectures.

Events spaces are being considered for both Driscoll's Wharf and Tuna Harbor and would be perfect locations for the seafood-focused farmer's market. In the meantime, a market could be held in the parking lot at Driscoll's and the promenade in front of Chesapeake Fish Company at Tuna Harbor.

While it does not invite the same level of attention, marketing managers may consider establishing a booth or booths at any of the numerous established weekly farmer's markets throughout San Diego County. These established markets already draw consumers looking to purchase fresh, local goods, and would require less time and resources than establishing a new market at either of the commercial fishing facilities. The option of a booth at established markets could be run in conjunction with the efforts to bring markets to Driscoll's and Tuna, and may complement each other. The following is a sample of farmers' markets located in close proximity:

- East Village Farmers' Market (Saturdays)
- Gaslamp District Farmers' Market and Asian Bazaar (Sundays)
- Horton Square Market (Thursdays, March through October)
- Little Italy Mercato (Saturdays)
- Mission Valley Farmers' Market (Fridays)
- Old Town Certified Farmers' Market (Fridays)
- Hillcrest Certified Farmers' Market (Sundays)
- City Heights Market (Saturdays)
- North Park Farmer's Market (Thursdays)

Note that a regular fisherman's market will require ongoing logistical coordination and advertising. Proper insurance and permits must be obtained and maintained. The following permits/licenses apply:

County of San Diego Certified Farmers' Market: A certified farmers' market (CFM) is a location approved by the County Agricultural Commissioner where certified farmers offer for sale only those agricultural products they grow themselves or products from another certified farmer. Farmers Markets are certified by the County Agricultural Commissioner, ensuring that the produce is being sold by the grower, is grown in California and meets all California quality standards. The annual cost for a Certified Farmers Market Certificate issued by the County of San Diego Department of Agriculture Weights and Measures is \$150. Bi-annual inspections that can range in fees from \$200 – \$400 per inspection are additional costs associated with the Department of Agriculture.

Department of Fish and Game Permits: Selling fish directly to the public could require that fishermen hold permits in addition to their commercial fisherman's license. At a minimum, fishermen selling directly to consumers need a Fisherman's Retail License from the California Department of Fish and Game which permits fishermen to sell only to ultimate consumers. As of January 2010, Fisherman's Retail Licenses cost \$87.25 per year. The license does not allow fishermen to receive or sell fish from other fishermen for commercial purposes, engage in any processing activities, nor does it allow fishermen to receive or sell fish that was landed outside California. For an ongoing fisherman's market, the fishermen may consider purchasing a Multifunction Fish Business License which would cover additional activities including processing, wholesaling, and retailing. As of January 2010, Multifunction Fish Business Licenses cost \$1,742.25. For Department of Fish and Game fee updates and descriptions visit www.dfg.ca.gov/licensing/commfishbus/cfb_fees.html.

San Diego County Health Department: San Diego County Department of Health requires two permits: a) \$450 for special events and b) \$150 for operation of food handling facilities. Each vendor is required to take a training course in food handling and is expected to obtain a 'food handlers' permit (the food handling permit fee is paid for by the vendor).

Fire Department: The City's Fire Department needs to determine that the site for a market has adequate access, sufficient water supply, and other requirements before the market is permitted.

San Diego Farm Bureau: For greater exposure, a market that depends on farmers as suppliers is advised to become a Business Supporting member of the San Diego Farm Bureau. Business Supporting members receive Farm Bureau membership, have a listing in the annual Source Book, are named on the Business

and fish caught seasonally off local shores. Fishermen benefit from steady demand, the flexibility to fish for whatever fish type is most readily available, and a high price per pound. Consumers enjoy a steady but diverse supply of fresh fish and the knowledge that a local expert has caught their food sustainably.

There are a number of active CSAs in the San Diego area and it may be wise to partner with one, adding seafood to their offering, rather than launching a unique program.

We are aware of no working models of community-supported fisheries on the west coast. Logistics can be difficult to coordinate, however, CSFs can serve to create a loyal customer base for the harbor.

Costs

Startup cost will vary depending on how the CSF is structured. Partnership with an existing CSA could dramatically reduce costs.

Signage

The Core Committee determined that a network of 4 – 10 interpretive, educational, and historic signage would enhance the public's experience at and understanding of the history and significance of San Diego commercial fisheries. A network of interpretive signs placed at Driscoll's Wharf can serve to increase awareness about Port history, the history of the San Diego Commercial Fishing Industry, and environmental issues affecting commercial fishing. Signs can also educate visitors about local species and sustainable fishing practices. Refer to "Box 4.9 Signage" on page 89 for an example of the use of informational signage to convey historic facts of cultural relevance in Richmond, California.

Marketing managers must ensure that social and cultural references are inclusive, equitable, and accurate. The signs will require upkeep and maintenance, and should not interfere with storage, construction or repair of commercial fishing gear, or offloading activities.

High-pressure laminate signs are the most appropriate material for withstanding saltwater; however, this type of sign is less resistant to graffiti, scratching and sun damage. High-pressure laminate signs also have a shorter lifespan than other options, and generally need to be replaced every ten years.

BOX 4.9 SIGNAGE

Richmond Bay Trail World War II Home Front National Historical Park

www.rosietheriveter.org/baytrail-markers.htm

Eight sculptural markers along the Richmond Bay Trail describe Richmond's history and growth during World War II. They tell the story of the Kaiser Shipyards, the incarceration of Richmond's Japanese-American community, and describe advancements in civil rights and the City's lively wartime nightlife.

The signs educate visitors about the area's social and natural history through vivid colors and historic images. The signs are designed to resemble the prow of a wartime ship, and link several of Richmond's parks and memorials.



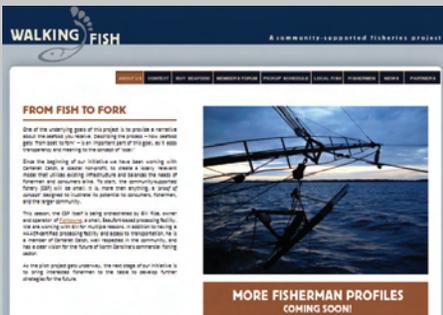
Box 4.10 WEBSITE

Walking Fish

www.walking-fish.org

The Walking Fish program (through Duke University) has developed a comprehensive, user-friendly website. The site is clean, simple, and easy to navigate.

The site includes several key features – a schedule of what fish is in season at various times of the year, a description of the fish themselves, and descriptions and photos of the participating fishermen, their vessels, and the fish they catch – reinforcing the connection between the fishermen and consumers.



An interpretive signage project would likely be developed by the District. Because of this, the permitting process may be somewhat streamlined, however, the District will have to present the project to the Board of Port Commissioners and the Public Art Committee for approval.

Costs

Graphic design and layout will take approximately 10 – 20 hours at a rate of \$60 – \$120 per hour, placing concept development costs at \$600 – \$2,400. Costs for the signs will vary depending on the materials, stands, and level of detail. The estimated cost (including production) for five signs is \$6,400 – \$20,600.

Recommendation 3: Consider establishing a website to provide the community with timely information about fishing activities

During the background research, several restaurateurs and retailers cited a desire to better understand the types of fish available, seasonality of fresh products, and the fishing practices used to bring in the catch. A website is an effective way to make this information available to a broad audience. A website is a tool that marketing managers can control, calibrate, update, and expand upon to link consumers, restaurants, and retailers with locally caught seafood. Key data should include: descriptions of seafood caught along the San Diego coast and their seasonal availability, description of sustainable fishing practices at the port, and history of the commercial fisheries in San Diego. The site should feature frequent updates about which local seafood product is available at which retailer, restaurant, farmers' market, or directly off the boat, as well as information on harbor events and preparation tips and recipes for freshly purchased items.

The information on the website must be current, consistent, complete, and correct to be effective. A great amount of time and attention, including contacting restaurants, retailers, and verifying information will be part of the responsibilities of marketing managers on this task. Before launching, there should be a clear objective for the site, a plan for ongoing updates and development, a plan for daily / weekly updates, and a plan for site maintenance. For example, the goal may be, initially, to

provide contact information on restaurants that serve local fish as opposed to “this particular restaurant has this particular fish today.”

The website should be listed and linked on the Port of San Diego website, on all harbor collateral materials, included on e-mail signatures, and listed in all print and web advertising. Marketing managers should establish a tracking system such as Google Analytics and regularly review site traffic to understand how site visits are being generated and where visitors are spending the most time.

Examples of successful fisheries related websites include Northern Territory (Refer to “Box 4.4 Branding” on page 82), Walking Fish (Refer to “Box 4.10 Website” on page 90), and Faces of California Fishing (Refer to “Box 4.11 Website” on page 91).

Additional potential web, and social networking strategies include a page on Facebook (www.facebook.com), a Ning (www.ning.com) or similar social networking site, and a Twitter (www.twitter.com) account. A Facebook page may be appropriate for enabling the public to become more familiar with San Diego fishing operations and personalities. The site is structured so that individuals can become “fans” of the organization and thus receive notifications of new posts and updates, making Facebook a useful tool for promoting events and making announcements. Ning offers website templates for social networking sites. Unlike Facebook, which connects users with an endless variety of interests, Ning allows the user to create a site and invite members who share a unique common interest. Posts on the site are related to the common theme, creating more synergy among users. A Ning site would allow marketing managers to establish a social networking group centered on commercial fishing in San Diego. It could serve to facilitate open dialogue among community members, allowing for exchange of ideas, recipes, and experiences. A Twitter (essentially, a mini-blog) account may be an effective tool for alerting customers of fresh catches and events at the harbors. Members of the public can subscribe to the Twitter feed from the Port and are then notified as new announcements are posted.

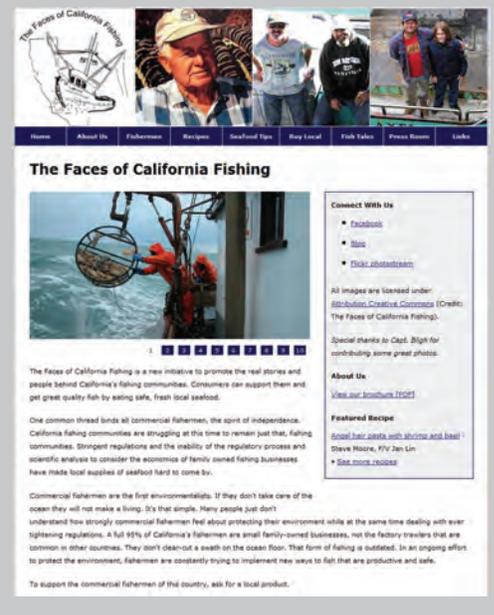
Costs

Startup costs for a website can vary depending on the design and need for content development. Costs can be kept as

Box 4.11 WEBSITE

Faces of California Fishing www.thefacesofcaliforniafishing.com

The Faces of California Fishing website was developed by Lori French, the wife of a Morro Bay fisherman and is funded through grants from the Joint Cable/Fisheries Liaison Committee. The site aims to connect consumers with the local fishing community by offering fishermen profiles, recipes for preparing local fish, seafood tips, and fish stories.



Box 4.12 EVENT

**Fishermen’s Fall Festival
Rockland, Maine**

www.maine lobster festival.com

The Fishermen’s Fall Festival is an annual event sponsored by the Fishermen’s Terminal Tenant’s Association. All proceeds go directly to the Seattle Fishermen’s Memorial and their efforts to honor the local fishing community. The event gives visitors an opportunity to learn about the commercial fishing industry and the local fishing community.

The festival hosts a number of events, including miniature boat building for kids, wild salmon fillet challenge, barbecue competition, Seafood Association exhibits, and an oyster “shuck ‘n shoot.”



low as \$150 – \$1,000 by using a template site and existing staff resources. They can be as high as \$5,000 – \$30,000 if the site is custom designed by a professional. The ongoing costs will range from \$50 – \$500 per month, depending on the amount of dynamic content and the methods of content upload (i.e., whether or not it can be updated by existing internal staff). The estimated monthly fee also includes web hosting services. Marketing managers should also consider funding for the site, and if accepting money from restaurants and retailers (to advertise) is appropriate. Restaurants and retailers may find that they benefit from exposure on the site and be willing to support the effort financially. Facebook pages, Ning sites, and Twitter feeds are free of charge.

Recommendation 4: Promote the working waterfront and San Diego Seafood within the local community through events and activities

Background research (BEC) revealed that an understanding of what fish is in season, how they are caught, and who they were caught by would be beneficial in promoting and selling San Diego seafood. Education and outreach can be achieved through establishing a presence at existing community events, maximizing opportunities at current Port events, and establishing new events to connect with the public. A targeted event to reach out to the restaurant and retail community could be mutually beneficial in promoting San Diego seafood and offering a service to local proprietors.

Annual Festivals and Events

Annual festivals and events will draw locals and visitors to the Port and increase knowledge and awareness about the local fishing industry. There are a number of existing events held at the Port that bring considerable traffic flow to local businesses and tourist attractions. Fishery groups could explore marketing opportunities at these existing festivals, as well as consider new festivals focused solely on the local fishing industry.

Existing Port Festivals

Existing events held at the Port include the Big Bay Whale Days Festival and the San Diego Bay Parade of Lights. These events draw visitors to the Port, offering coupons and discounts to local shops, restaurants, and tourist attractions.

The Big Bay Whale Days Festival is an annual festival held along the Embarcadero in late January. The waterfront event celebrates the migration of thousands of grey whales past the San Diego Coast. The event offers discounts for whale watching tours, trips aboard the USS Midway Museum, and admissions to the Maritime Museum. Businesses along the Embarcadero offer coupons and giveaways, and the event features live music, vendor booths, and face painting for kids.

Vendor booths present a good opportunity for marketing at the event. There is no fee to get a booth; vendors simply fill out the appropriate application. The booths are set up at Broadway and Harbor Drive (MarketPlace Group, Whalefest Exhibitor Registration Information, Big Bay Whale Days Vendor Application Form).

San Diego Bay Parade of Lights takes place in mid-December, occurring on two consecutive Sundays. Fireworks mark the beginning of the event, and the lighted boats parade on the water for approximately one hour, starting at the west end of the Port and ending at buoy 22.

The parade passes by Tuna Harbor and Driscoll's Wharf. Both sites could be recognized as viewing locations for the parade and could offer local food to visitors and include live music and entertainment for kids.

The parade offers sponsoring opportunities for local businesses. The parade is viewed by over 80,000 people every year. Sponsorship opportunities range from contributions of \$15,000 to contributions of just \$250. Parade sponsors are mentioned in all parade literature and on the parade website, as well as on other related material, depending on the level of sponsorship.

BOX 4.13 EVENT

Maine Lobster Festival Rockland, Maine

www.maine lobster festival.com

The Maine Lobster Festival is held in August in Rockland, Maine. The five-day event features a lobster dinner, lobster crate race, cooking contest, parade, fine art tent selling local arts and crafts, and a number of events for kids. Visitors can also tour US Navy ships and the US Coast Guard Station.

Sponsors fund the event, and the Festival gives back a significant amount of money to the local community.



Potential Commercial Fishery Related Events

The Port of San Diego, with input from the fishing community, could facilitate new festivals held at Tuna Harbor or Driscoll's Wharf, celebrating specific commercial fishery events. These festivals should promote awareness of seasonality and educate visitors about the local fishing community and sustainable fishing practices. Possible festivals include a Rockfish season opener, lobster week, celebration of the urchin or white seabass fishery, or swordfish days. Refer to "Box 4.13 Event" on page 93 and "Box 4.12 Event" on page 92 for examples of successful fishery-sponsored events in Rockland, Maine.

The festivals could feature cooking demonstrations, tours of fishing boats, cook-offs, live entertainment, activities for kids, and information booths educating visitors about sources for locally caught seafood.

LWC, Inc. has submitted a proposal to receive a grant of \$20,000 for a joint Port and commercial fisheries promotional event for the 2010 – 2011 calendar year. The event would take place over a weekend between October and December. The event is intended to promote and raise awareness of the cultural, historical, and economic significance of San Diego's commercial fisheries to the region, state, and nation. It will also encourage consumption of locally caught seafood through education and outreach to the community and local schools.

Ideally, the event would be held in close proximity to the active commercial fishing boats, offloading dock, gear repair, and construction to provide visitors with a look into the experience of a working waterfront defined by commercial fishing.

Note, festivals and large-scale events require strong coordination and attention to detail. Proper permits, insurance, and logistics planning are essential for ensuring a successful event. The permitting process may take a considerable amount of time, depending on the volume of material needed for the permit and the amount of time required for processing and decision-making by the permitting agency.

Costs

The cost of a festival can vary dramatically depending on scope, length or complexity of the event. Costs can be offset by sponsors from the business community or costs can be offset or covered by event vendors. A two-day event is estimated to cost \$25,000 – \$55,000, including administration, marketing, promotions, operational expenses, supplies (including fish), and permits.

Fisherman-Restaurant Roundtable and Pilot Promotion Project

It was established in the BEC that local restaurants are interested in locally-caught fish, and see the benefit of locally caught seafood, but need to learn more. Several of the market analysis interview participants expressed interest in a fisherman's roundtable, where restaurateurs, buyers, chefs, and waitstaff could meet local fisherman, learn more about the industry, and enhance their businesses.

As a pilot project, marketing managers should consider this roundtable for a group of 6 – 10 local restaurants (three roundtables in three months), initiate a marketing and advertising campaign that identified these restaurants as carrying locally-caught fish, and work to assure/provide local seafood for this predetermined period. One of the roundtables could be dedicated to "training" for waitstaff, buyers, and other restaurant personnel on how to sell and promote the local product. Managers should consider locally caught frozen

swordfish or frozen rockfish when fresh is not available. When handled properly, frozen fish is an excellent option and maintains its “local” status.

Advertisements could be placed in newspapers, radio advertising, and associated signage identifying those particular venues as (approved) providers of local product. This type of program will give marketing managers and restaurant owners the ability to measure the increase in traffic and earnings. Once the value of the program is established, the participating restaurants would contribute to a continued and expanded campaign that included other restaurants that contribute from the onset. This is a program that aims to create a positive cash flow as restaurants pay to be part of the pool with access to local fish, supporting promotion, and advertising.

Costs

Marketing manager, four months, half-time, approximately \$30,000, this includes preparation, facilitation, and follow-up after the three roundtables, and the management of the movement of locally-caught fish to the participating restaurants, placement of ads, creation of promotional material, fliers, window signs, print, and radio ads. Approximately \$10,000 for advertising costs, creation of training materials, and training program for restaurant employees.

Recommendation 5: Consider developing direct to retailer and direct to restaurant sales channels

San Diego restaurants and retail outlets typically purchase the bulk of their seafood from local processors/distributors, however, several restaurant owners expressed interest in buying directly from local fishermen (refer to BEC). Restaurateurs and retailers require intensive account management, frequent delivery, frequent contact, and assistance with point-of-purchase material and marketing efforts. Fishermen who sell directly to restaurants or retailers typically manage all aspects of the sales functions including developing relationships, storing, transport, collections, billing, communication, and often, processing. This reduces the attention that fishermen are able to pay to their primary tasks: fishing, maintaining boat and gear, managing permits, insurance, and crew. A fisherman's ability to serve this market is limited by time and expenses incurred from these requirements and lost fishing hours.

Taking advantage of the direct to restaurant and direct to retailer sales channel will require a relatively high investment in infrastructure, processing, cold storage, transportation, inventory management, accounts receivable, computer equipment, and well-managed and well-trained staff. This strategy may only be appropriate for some fishermen and for the sale of certain seafood products.

Costs

Costs are primarily those of marketing managers and/or commercial fishing industry association representatives to identify and communicate with current buyers and potential buyers of local seafood. Managers would do best to focus on a local market (City of San Diego) to begin, with the goal of increasing market coverage. Coupling web based and other marketing and promotional efforts with this task will be most effective (see Fisherman's Roundtable).

Recommendation 6: Consider enhancing and expanding relationships with distributors and processors

Partnering with existing distributors and processors to achieve the goals of more local fish on local plates, and a closer relationship with the community holds significant advantages, particularly in the establishment of a farmer's market, seafood retail business, and roundtable pilot promotional project. Marketing managers may consider leveraging these relationships to facilitate producing fillets for the markets, recording sales transactions, amassing necessary permits, and seafood at the retail facility and sourcing and distributing locally-caught seafood to participating restaurants in a pilot promotional program.

Many local seafood processors interviewed for the Background and Existing Conditions Report (BEC) process seafood at their facilities and deliver products directly to retail and restaurant customers. Additionally, some run retail stores onsite as well as in other locations. The distributors bought and sold a wide variety of fresh, frozen, wild, farmed, and imported products all at various price points. They strive for consistency and source seafood from multiple suppliers to maintain a steady supply of target species at competitive prices.

Universally, lack of consistent supply and commitment from the fishing community fueled by regulatory uncertainty undermines distributors' efforts to showcase locally caught seafood. Many buyers stated that fishermen's propensity to switch buyers was a constraint to the local processors and distributors making a commitment to local seafood. Further, competition from consistent, high volume, low value sources (largely obtained from overseas) exacerbated supply difficulties.

Wholesalers, processors, and distributors represented in the survey had strong existing customer relationships and regular access to retail and restaurant decision-makers. They also exhibited a growing capacity and interest to develop and communicate the message about local seafood. For more details regarding interview results, please see the BEC (refer to Section 8.3).

Many opportunities exist in this channel for collaborative marketing, outreach, and educational efforts. Distributors are in a position to take advantage of and promote branding and certifications. This channel may also be more receptive to formal relationships with local and regional co-ops and associations.

Delivering consistently high-quality products, regardless of its origin, is of the utmost importance to local distributors. When interviewed, processors agreed that they were able to charge more for a premium product and that local caught seafood offers an added value because of its freshness, lower amount of handling, and shorter transport. Keeping this in mind, local fishermen may approach this channel from a quality of product perspective.

Costs

Costs are primarily time from the marketing manager and / or commercial fishing association representative to negotiate better relationships with the current and new buyers, processors, and distributors. This task will require more attention initially, perhaps two days per week at 40 percent of the marketing managers' time (working very closely with the fishermen) for the first two to three months, and taper off to 20 percent afterwards. Note: an association will provide a more powerful platform for the fishermen, enable them to consolidate their catch, and make the steps of increasing price paid to fishermen at the dock.

Recommendation 7: Consider differentiation and marketing based on product sustainability

While there are many seafood-branding opportunities, the following is a list of potential branding, certification, and promotional partners that local fishermen could consider partnering with to promote their products.

Sustainability Certification

Marine Stewardship Council – “Certified Sustainable Seafood”

In 1997, Unilever PLC, one of the world's largest frozen seafood purchasers, and the World Wildlife Fund (WWF), an international conservation organization, jointly formed the Marine Stewardship Council (MSC) to secure the long-term productivity and health of the oceans. The MSC is an independent non-governmental organization that rewards sustainable fishing practices and management. This reward is a certificate stating that the fishery meets a global sustainability standard, the Marine Stewardship Council Sustainability Certification. This sustainability certification allows the producers of seafood to apply to use the MSC's blue eco-label (right) that contains the following statement: “This product comes from a fishery which has been certified to the Marine Stewardship Council's environmental standard for a well-managed and sustainable fishery (www.msc.org)”.

MSC Certification can lead to increased recognition and profits for the fishery. Refer to “Box 4.14 MSC Certification” on page 97 for an example of a fishery that experienced positive results from obtaining the certification. While many fisheries would like to obtain certification, the certification to prove the fishery is sustainable is costly, time-consuming, and extremely rigorous. MSC Certification has become the largest and most recognizable sustainability certification of fisheries worldwide. The MSC label allows consumers who are concerned about sustainable fisheries, to make informed choices. This provides a market incentive for fisheries to certify their fishery in order to capture the market segment that prefers sustainable seafood. The general benefits of MSC Certification to fishermen are a price per pound premium, use of a highly recognizable promotional

Box 4.14 MSC CERTIFICATION

American Albacore Fishing Association

www.americanalbacore.com

A local example of an MSC Certified fishery successfully leveraging their certification to realize concrete benefits is the American Albacore Fishing Association (AAFA). In 2007, the AAFA was granted MSC Certification. The AAFA represents fishermen who troll for Albacore tuna using individual hook and lines. After certification, the fishery was oversold for 2008, resulting in a price increase for fishermen from \$1700 per ton to \$2260 per ton (a 33% increase). Attributing this increase mainly to substantial marketing efforts, the fishery was able to enter many new markets and increase the demand for sustainably harvested Albacore Tuna. A secondary benefit was a reduction in the volatility of prices paid to fishermen (N. Webster pers. comm.).



tool, and an enhanced ability to penetrate new markets, as well as social benefits and appeal to local, state, and elected officials.

In response to large amounts of criticism concerning inconsistent scoring across fisheries prior to 2008, the MSC developed a new Fishing Assessment Methodology (FAM). The new FAM has standardized the assessment tree to include 31 performance indicators that are used for every fishery. The new FAM has explicit instructions regarding what each indicator means, which principle it refers to in the MSC Standard, and suggestions for scoring. As of July 2008, all fisheries entering assessment will use the new Default Assessment Tree and new FAM. There is also a new Risk-based Framework (RBF) that was introduced in February 2009 to allow data-poor fisheries to be assessed under the new FAM. It allows for a more qualitative approach to fill the gap for data-limited components of a fishery.

In short, the MSC standards require that: (1) the long-term sustainability of the fishery's stock is not being sacrificed for short term gains; (2) the fishery is managed in a way that protects and maintains not just its stock but the ecosystem in which its stock resides and on which it depends; and (3) there is an effective management system in place that is in line with both international and national laws and standards that implements (1) and (2) appropriate to the fishery's scale.

When a fishery enters assessment, an independent certification body conducts a pre-assessment, the results of which remain completely confidential. This pre-assessment is a brief evaluation of the fishery and the likelihood of its meeting the MSC Standard. There are often considerable changes made to the fishery to improve areas where needed prior to proceeding to the full assessment. A fishery can also decide after the pre-assessment not to enter the full assessment at all and abandon the MSC Certification process. Once a fishery decides to enter full assessment, the process becomes completely transparent and input is solicited from all relevant stakeholders including government agencies, academia, and members of the fishing industry. The certification body uses the MSC's Fishery Certification Methodology to assess the fishery against the MSC Standard. Once the assessment against the standard is complete, a draft assessment report is published on the MSC website and opened for stakeholder and public comment. A final report and determination is made based on this external input and the draft assessment report. An objections period is allowed followed by the final decision on certification.

Costs

The costs of MSC assessment, carried out by an independent certification body, usually include initial assessment, research, audits, and reassessment, if taken as an option. The costs associated with the certification process vary by fishery depending on the complexity of the fishery, the availability of information, and the level of stakeholder involvement. From certifications that have been made thus far, the MSC sets the cost range of certification from \$25,000 – \$500,000. The certification costs do not need to be paid for explicitly by the fishery. The costs of certification can be paid for through grants from organizations (like the Sustainable Fisheries Fund and Sea Change Investment Fund), State government, fisheries groups / industry councils, and even members of the seafood industry. At the end of 2009, California legislators passed AB1217 giving the Ocean Protection Council authority to develop a grant program to fund fisheries certifications and help market MSC Certified fisheries. Refer to Section 6 for more information on funding sources. Note, the San Diego based American Albacore Fishing Association (AAFA) is MSC certified and may be able to answer questions on the certification process and benefits.

Specialized sustainable seafood partners

There is currently no shortage of seafood branding companies jostling to differentiate one species, or catch method from another. The following is a brief description of three such companies that have gained recognition in the US marketplace. The three employ distinct strategies of differentiation. The following assessment is offered so the San Diego commercial fisheries may consider partnerships with these, or other like firms, or imitate the most appropriate promotion strategies that they employ. FishWise is included as an example of a non-profit firm that partners with retailers, restaurants, and wholesalers to label seafood using a red, yellow, and green system. FishWise also provides educational support, and assistance with point of purchase material.

CleanFish – “Fish you can trust”

CleanFish, based in San Francisco, sources and markets sustainably farmed and wild-caught seafood from small, artisanal producers. With over 400 distributor-partners and over 1000 restaurants and retailers across the US, the CleanFish Alliance is a group of seafood producers, processors, distributors, restaurants and retailers that collaborate to move the seafood industry towards a more sustainable future. CleanFish's primary mission is to connect consumers with artisanal seafood producers and financially support the sustainable choices their producers are making. CleanFish sources and sells seafood, and brands their suppliers' unique stories to their customers. CleanFish also brings together experts in the seafood industry to drive sustainable change throughout the supply chain.

To become an approved CleanFish producer, fishery groups must provide samples of their product(s) and complete two questionnaires. One questionnaire focuses on the producers' practices and products and asks questions regarding catch methods, product traceability standards, contaminate testing, fishery management and government compliance, environmental conservation efforts, and innovations they have brought to the industry. The second questionnaire helps CleanFish market “The Story Behind The Seafood” to their consumers, obtains details of the story of the producer and their community, and asks about any branding the organization's products already bear, a description of what type of consumer typically buys their seafood, and other characteristics of their products that would assist the CleanFish Presents team marketing their product. The focus of these questionnaires is transparency and openness about who the producer is, and marks the beginning of a dialogue between the producer and CleanFish. Once the questionnaires and samples have been submitted to CleanFish, a high-level internal vetting team begins the evaluation of the producer. This develops into a deeper conversation between the producer and vetting team, which evaluates the environmental and social sustainability aspects of the product along with the financial merits of adding it to CleanFish's portfolio. Once CleanFish decides to move forward with a product, the producer begins working with the marketing team to develop product-specific marketing materials.

Costs

CleanFish absorbs marketing and branding costs. Costs of becoming a CleanFish producer are the time spent by marketing managers and/or fishermen developing their story with the CleanFish marketing team, including any actions to improve practices where those are mutually felt to be possible and worthwhile. Additional “costs” would involve a commitment to not actively build a competing brand in the marketplace.

EcoFish – “Environmentally Responsible Seafood”

Based out of New Hampshire, EcoFish is a sustainable seafood procurement and distribution company that sells both wild caught and farmed seafood products and aims to direct consumers away from unsustainable choices. Also marketed to grocery stores under the Henry & Lisa's Natural Seafood brand, EcoFish's products can be ordered online and found at over 1,000 grocery and natural food stores and more than 150 restaurants across the country. Their mission is to promote high quality, sustainably harvested, healthy, delicious seafood while working towards the triple bottom line (profitable business with a commitment to the community and the environment. In addition to environmental sustainability, EcoFish is currently developing a new program called Seafood Safe. Seafood Safe is a comprehensive testing program that uses independent labs to test EcoFish's retail products for the two most prevalent seafood contaminants: mercury and polychlorinated biphenyl (PCBs). The label uses the EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories to protect high-risk adult seafood consumers (women of childbearing age) and displays safe consumption levels for this sub-population.

EcoFish relies heavily on an advisory board to oversee products and assistance with guiding procurement, evaluation, and sourcing. This board is made up of conservation and environmental non-governmental organization (NGO) leaders including the Monterey Bay Aquarium's Center for the Future of the Oceans, Blue Ocean Institute, Sea Change Management, LLC, Pew Charitable Trusts Environment Group, Ocean Conservancy, and the New England Aquarium. The board uses different criteria for wild caught and aquacultured species. Wild species are evaluated on biological characteristics, population status, management of the fishery, bycatch rates, and the impact the harvesting method has on the environment. Farmed species are evaluated on environmental and social characteristics including amount and frequency of escapes, habitat impacts of the farming method, dependence on wild fisheries, pollution and use of chemicals, as well as impacts on the local community. EcoFish's underlying philosophy is the Precautionary Principle. This principle was formally adopted by the United Nations Conference on the Environment and Development in 1992 and states, “In order to protect the environment, a precautionary approach should be widely applied, meaning that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation”.

FishWise - “Advancing Leadership in Sustainable Seafood”

Positioned between marine conservation organizations and the seafood industry, FishWise is a non-profit organization based in Santa Cruz, California. They are working to enable seafood producers, distributors, retailers, and restaurants to sell more sustainable seafood. They are also helping their partners build trust with their customers by providing them with credibility through transparency and product labeling. FishWise encourages seafood purchases by working to bring transparency to retailers so concerned consumers, who would otherwise simply avoid purchasing seafood, can make informed decisions about seafood purchases regarding environmental sustainability and human health concerns. On average, FishWise's retail partners see a 12 percent increase in seafood sales in its first year.

FishWise uses seafood recommendations from sustainability reports from the Monterey Bay Aquarium's Seafood Watch Program. If Seafood Watch has not ranked a species, FishWise defers to the ranking of other organizations within the Conservation Alliance for Seafood Solutions (www.solutionsforseafood.org/). If a

ranking is not currently available for a species, FishWise accepts requests from its clients and passes these requests to Seafood Watch to help the program prioritize creation of new species reports. Participating retailers must agree to have every seafood item evaluated and labeled for its consumers. FishWise's point-of-sale labels include color-coding (red for "unsustainable," yellow for "some concerns," and green for "best choice"), iconography to represent the seafood's wild-catch method, type of fish, and where it was captured. FishWise also provides its customers with on-line training on how to implement the program, strategic sustainability planning, publicity within the seafood business and environmental communities, and sourcing support.

Additional Consideration: Participate in creating a San Diego Food Plan

Background research revealed that San Diego consumers are interested in local food and eager to participate in a sustainable food system, a fact which influenced a number of the marketing recommendations including localized branding, direct to consumer seafood sales strategies, fishermen-restaurant roundtables, web-based product information, and sustainability certifications. Members of the Core Committee agreed that in addition to these fishery marketing strategies, taking an active role in establishing a city-wide or regional San Diego food plan will promote the local commercial fishing industry and provide a strategic advantage in future legislative (code policy) considerations.

Cities and regional planning organizations throughout California are utilizing food plans to address all elements of the area food system including food production, distribution, processing, consumption, and waste disposal. See "Figure 4.1 Example of local food source distance descriptive graphic" on page 102 for a depiction of the type of information a food plan can convey. A food plan may also identify the methods, infrastructure, and techniques needed to facilitate revitalization efforts.

Per the American Planning Association's (APA) Policy Guide on Community and Regional Food Planning, food plans have gained in prominence as they can:

- Be important tools in the fight against obesity and diabetes;
- Reduce the considerable amount of fossil fuel energy used to produce, process, and transport food products;
- Help maintain the geographic area available for agricultural activities which helps to protect the capacity to produce food for local and regional markets;
- Aid in the recognition that multiple benefits emerge from stronger community and regional food systems; and
- Suggest methods and techniques that the fisheries and farms may use to interact with the community to enhance economic vitality, public health, ecological sustainability, social equity, and cultural diversity.

A San Diego Food Plan should examine the overall system and its components; the methods of production associated with fisheries and other agricultural activities; how the products are processed and distributed; the various aspects of consumption; food security issues; and provide a menu of recommendations and implementation measures to enhance the viability and profitability of commercial fishing and local agriculture.

Costs

The cost to research and prepare a Food Plan is estimated to be in the range of \$50,000 – \$150,000 depending upon the depth and scale of the plan. Grants are a major source of funding for food plans. The U.S. Department of Agriculture's (USDA) Community Food Projects (CFP) Competitive Grants Program is a potential funding source for the project. The CFP is the major funding source for community-based food and agriculture projects nationwide. More information is available at www.csrees.usda.gov/nea/food/sri/hunger_sri_awards.html.



Source: "Towns of the Future," Sunset Magazine, March 2010

Figure 4.1 Example of local food source distance descriptive graphic

FUNDING SOURCES

Section 5

One of the most important components of the project is to identify funding that will enable recommended improvements. Project stakeholders are committed to actions that are feasible, serve the needs of the commercial fishing industry, and have associated funding. The following is a list of potential capital and operating funding sources, including debt, grants, and private equity. These funding options are intended for infrastructure improvements and expansion, as well as non-infrastructure improvements such as marketing, a management entity, and other value-added operations.

Debt

Debt is a primary source of funds for real estate and development related projects. Banks and private lenders will require a stable revenue stream to service the debt and will typically provide permanent financing of 60 to 75 percent of project costs. The following list documents several other sources of debt available to nonprofit organizations and local governments.

California Fisheries Fund

www.californiafisheriesfund.org/loan.html

The California Fisheries Fund is a revolving loan tool committed to financing sustainable fisheries and provides low interest, long-term loans, including Fishery Foundation Loans, Infrastructure Loans, and Business Loans. Fishing Association Loans can be used to support development of detailed reform plans for a fishery, including fishery research, business planning, and implementation planning. Infrastructure Loans are available to ports, communities, and other organizations and can be used for port improvements, such as off-loading capacity, cold storage, or processing. Business loans are available to individual businesses for business development activities, such as equipment, market development, or product innovations. Loans could be repaid with landing fees or other sources of local revenue.

California Infrastructure and Economic Development Bank

ibank.ca.gov

The California Infrastructure and Economic Development Bank (I-Bank) is a State financing authority that promotes economic growth and revitalization of California communities through low-cost financing of infrastructure and economic development projects. The I-Bank requires a defined public benefit before it is willing to act as a conduit for tax-exempt or taxable bonds. The I-Bank does not require leveraging or matching.

The I-Bank has several financing programs. However, the 501(c)(3) Revenue Bond Program and the Governmental Bond Program are available for projects that promote additional community services, social

or cultural resources, or the creation or retention of jobs and may be the most appropriate for working waterfront improvements.

The I-Bank accepts several sources of financing repayment, including general fund revenues, tax increment revenues, enterprise revenues, and property assessments. While rental income is not one of their preferred repayment options, other recurring revenues, such as landing fees, may be acceptable.

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

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

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.

Grants

Below is a list of grant funding that may be available for infrastructure and other value-added improvements.

California Coastal Conservancy (CCC)

www.scc.ca.gov/index.php?cat=20

The Coastal Conservancy programs focus on public access, resource enhancement, working waterfronts, land acquisition, nonprofit assistance, and agricultural enhancement. The CCC oversees the Ocean Program and provides staff to the Ocean Protection Council (OPC; see OPC discussion below).

California Department of Boating and Waterways

www.dbw.ca.gov/Funding

The mission of the Department of Boating and Waterways is to improve access to the water for recreational boating and to make sure that it is as safe as possible. The Department offers the following grants and loans:

Abandoned Watercraft Abatement Fund Grant Program, Aquatic Center Grants, Boating Law Enforcement Subvention Program, Boating Safety and Enforcement Equipment Grant Program, Coastal Beach Erosion Control Grant Program, Vessel Pump-out Grant Program, Boat Launching Facilities Grant Program, Public and Private Marina Loan Program, and National Boating Infrastructure Grant Program. The following is a selection of loans that may be applicable to portions of the preferred alternatives and implementation actions.

Boat Launching Facilities Grant

The Boat Launching Facilities Grant is given to public agencies (Cities, counties, or districts having power to acquire, construct, and operate small craft harbors). It provides funding for boat launching facilities, vehicle parking, restrooms, boarding floats, and other boating related facilities in exchange for maintenance and operation for a minimum of 20 years. Further details and applications are available online at www.dbw.ca.gov/Funding/Facilities.aspx#SCHDL.

National Boating Infrastructure Grant Program

The federal government established the National Boating Infrastructure Grant Program to give states funding to construct, renovate, and maintain public and private boating infrastructure and tie-up facilities for publicly available transient boating tie-ups for vessels at least 26 feet in length (e.g., non-trailerable boats) that will be staying for less than 10 days. Infrastructure construction and renovation included in this grant include mooring buoys, day-docks, transient slips, dinghy docks, restrooms, and navigational aids. Applicants can apply for Tier 1 grants (up to \$100,000) and Tier 2 grants (greater than \$100,000) providing they can demonstrate at least a 25 percent funding match. Further details and applications are available online at www.dbw.ca.gov/Funding/BIG.aspx.

Clean Vessel Act of 1992 Pumpout Grant Program

The U.S. Congress established the Clean Vessel Act Pumpout Grant Program with the creation of the Clean Vessel Act of 1992. Funds from this grant are available to all local governmental entities and private businesses that own and operate boating facilities that are open to the general public. The grant is meant to fund construction, renovation, operation, and maintenance of pleasure craft pumpout and dump stations. This grant will reimburse for up to 75 percent of the installed cost of pumpout and dump stations including costs of new equipment, renovation of existing equipment, and necessary pumps, piping, lift stations, on-site holding tanks, pier or dock modifications, signs, permits, and other equipment necessary to create a complete and efficient station. The grant does not cover construction or renovation of onshore restroom facilities or sewage treatment plants and services. Further details and applications are available online at www.dbw.ca.gov/Funding/Pumpout.aspx.

Abandoned Watercraft Abatement Fund (AWAF) Grant

The Abandoned Watercraft Abatement Fund was created to fund removal, storage, and disposal of abandoned, wrecked, or dismantled vessels (or any other partially submerged objects which pose a substantial hazard to navigation) from navigable waterways or adjacent public property or private property with the landowner's consent. Grants are available to public agencies that have jurisdiction over navigable waterways in California. Prior to receiving reimbursement from the AWAF grant, the grantee must expend

a matching 10 percent contribution. Further details and applications are available online at www.dbw.ca.gov/Funding/AWAF.aspx.

California Sea Grant

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

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.

Community Development Block Grant (CDBG)

www.hcd.ca.gov/fa

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.

Community Food Projects Competitive Grants Program

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

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 (1): (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; and/or (2) 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 non-profit organizations are eligible to receive funding directly, but collaborations with multiple stakeholders or with public and private for-profit entities are recommended.

Economic Development Administration (EDA)

www.eda.gov/InvestmentsGrants/Investments.xml

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.

Moore Foundation

www.moore.org

The Moore Foundation is 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, and the Tides Foundation for strategic planning, capacity building, and regulatory reform, among other objectives.

Nature Education Facilities Program

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

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, research 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 (for marine research facilities and equipment). 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 Nature Education Facilities.

Ocean Protection Council (OPC)

www.opc.ca.gov/category/funding-opportunities

The California Ocean Protection Act recommends State funding to foster sustainable fisheries, including the development of more selective fishing gear, promotion of value-added wild fisheries to offset economic losses attributable to reduced fishing opportunities, and the creation of revolving loan programs for the purpose of implementing sustainable fishery projects. The OPC Five-Year Strategic Plan recommends that funding be directed to support market-based approaches to fishery management and fishing activities that provide new economic opportunities that can be conducted in a sustainable manner. The OPC has adopted a resolution calling for State funding for innovative approaches to sustainable fisheries management, including expansion of direct-to-consumer seafood markets, local fishing harbor revitalization, funding mechanisms such as the California Fisheries Fund, quota systems and limited entry programs, vessel and permit buybacks, and other projects.

Resources Legacy Fund

www.resourceslegacyfund.org/pages/p_fish.html

The Resources Legacy Fund operates several programs aimed at protecting marine resources. The Sustainable Fisheries Fund (SFF) provides financial support to fishing interests, government agencies, and non-government conservation organizations that are committed to ecologically sustainable seafood. The SFF draws upon the Marine Stewardship Council certification program to harness the power of the marketplace and consumer demand. The SFF makes grants in several categories: pre-assessment, full assessment, stakeholder participation, and strategic planning and capacity building. Another Resources Legacy program, the California Coastal and Marine Initiative, seeks ecosystem-based conservation of coastal and marine resources. This program provides grants and low interest loans for research, monitoring, advocacy, education, and capacity building.

Private Equity

Private equity firms can provide capital, as investment, for other organizations. Many equity firms seek out start-up companies or small firms that are aligned with their particular mission and potentially economically viable. Recently, many private equity firms are investigating the profit-making potential of infrastructure investing. They believe that limitations on government funding will open the door for more public/private partnerships. The Port may choose to establish agreements with these private equity firms for the private operation of certain Port facilities.

Arthur P. Gould & Co.

www.gouldco.com/Home.html

Arthur P. Gould & Co. (A.P. Gould) invests in different sectors of the commercial fishing industry, including aquaculture, wild-harvesting, processing and marketing. They have partnered with Encore Consumer Capital to enhance their investment capability. In addition to direct investment, A.P. Gould can also provide “surrogate management” services by creating a full-service sales team that the client may eventually take over after it becomes established. Proposals may be submitted to company President, Andrew Gould: andrew@gouldco.com.

Encore Consumer Capital

www.encoreconsumercapital.com/strategy_seafood.html

Encore Consumer Capital (Encore) is a direct-investment firm specializing in food and consumer products. In an effort to enter the seafood industry, Encore has teamed up with Arthur P. Gould & Co., a New York-based merchant bank heavily invested in the seafood industry. Encore seeks private consumer product companies with annual revenue exceeding \$10 million. They are capable of providing equity in the \$5 to \$20 million-dollar range.

Paine & Partners

www.painepartners.com/firm.php

Paine and Partners is a private equity firm with a diverse portfolio that includes a seafood buyer and processor. Their expertise in food production positions them to capitalize on other investments in commercial fishing and ancillary seafood-industry services. To inquire about securing financing, contact: newbusiness@painepartners.com.

Sea Change Management

www.seachangemanagement.com/fund

Private equity firm Sea Change Management, LLC, has managed the Sea Change Investment Fund, LLC, since 2005. This fund blends philanthropic capital from the Packard Foundation with private capital to invest in environmentally-preferable seafood sources. Capital investment strategies are formulated in a way that is intended to advance both the conservation and financial goals of the fund. Business plans may be submitted to Sea Change Management at: info@seachangefund.com.

Fisherman's Funds and Foundations

The intent of a fisherman's trust or operating foundation is to create a financial instrument that leverages a sum of money to provide a consistent, reliable source of funds to address ongoing needs in the commercial fishing industry. Seed money would be invested in interest or divided bearing instruments and require oversight and management. Initiators of the fund or foundation would choose an acceptable level of risk, where the money should be invested, and the criteria that must be met for a project to be funded. Potential projects include infrastructure improvements, marketing activity, and events. Funds could be available to a fisherman, group, or business.

Trust Fund

A trust fund can include a wide range of assets. In addition to cash, a trust fund may include resources such as property, stocks, bonds, or any other type of financial instrument. The trust fund may be managed by a single trustee or structured to allow for more than one trustee. It is the responsibility of the trustee to see that the resources included in the trust fund are used in the best interests of the recipient(s) of the trust. A trust fund normally

BOX 5.1 TRUST FUND

Cape Cod Fisheries Trust

Fishermen in Cape Cod, Massachusetts are raising \$10 million to create a trust to buy and manage quota and to assure that access to the resource is anchored in the community. The Cape Cod Fisheries Trust also aims to buy permits and vessels from retiring fishermen and to lease them back to other fishermen in the community. This could facilitate the entry of new participants to the industry by making vessels and permits more affordable.

Chris Davis, New Bedford, MA, skipper of the *Coming Home* and a permit holder, said he's more interested in selling "to the captain who's running the boat now, who's a young man who can't afford a quarter of a million dollars." So Davis is selling his scallop permit to the trust, which will then lease it out to the current skipper, Josh Neal of Chatham, MA, who has two children and a third on the way. (New Trust Fund Aims To Keep Small-scale Fishing On Cape Cod, *The Cape Cod Chronicle*, by Alan Pollock)

Box 5.2 FOUNDATION

The San Diego Foundation

www.sdfoundation.org

The San Diego Foundation was founded in 1975. The Foundation's includes maintaining and growing assets entrusted to them and managing portfolios for long-term viability and growth.

The Foundation may prove to be an appropriate partner for the commercial fishing community operating foundation. Sue Raccanelli from the San Diego Foundation has offered insight on the Foundation's interest and capabilities. She can be reached at sue@sdfoundation.org.



has some limitations imposed on how the assets contained in the trust may be utilized. Refer to "Box 5.1 Trust Fund" on page 109 for an example of a operating Fisheries Trust in Cape Cod.

The main idea behind a trust fund is to allow grantor or donor who established the fund to rest assured that a particular organization receives the benefit of the estate. The trust is aimed at providing sustained support in some manner.

Operating Foundation

An operating foundation is a private foundation that spends at least 85 percent of its adjusted net income or its minimum investment return on its exempt activities (as defined by the IRS).

Often this type of foundation engages in fundraising as a means of generating capital for an endowment. The foundation uses interest earned on the endowment to support tax-exempt activities that have been deemed appropriate.

Setting up an operating foundation would entail a significant amount of coordination and outreach among potential stakeholders. Refer to "Box 5.2 Foundation" on page 110 for a description of a potential partner in establishing an operating foundation. However, the following is a summary of the basic steps that would be required.

Basic Steps to Set Up an Operating Foundation

1. Establish a non-profit entity that included representatives from the Port, the commercial fishing community, and, perhaps, the business or education community. The group would adopt a non-profit tax structure appropriate with their focus and how they wish to disburse funds. Three examples are offered below:
 - 501(c)3 - Religious, Educational, Charitable, Scientific, Literary, Testing for Public Safety, to Foster National or International Amateur Sports Competition, or Prevention of Cruelty to Children or Animals Organizations
 - 501(c)4 - Civic Leagues, Social Welfare Organizations, and Local Associations of Employees
 - 501(c)6 - Business Leagues, Chambers of Commerce, Real Estate Boards, etc.

The nonprofit entity could be a trade association. This type of business organization makes it possible for

companies, or in this case, individual fishermen, involved in the same industry to work together on issues of common concern. A trade organization can help to protect the integrity of an industry, in that it normally sets standards that all members must abide by in order to be considered in good standing. Failure to comply on the standards set and maintained by the peer group who operate the trade association can lead to exclusion from the association. While a trade association often provides the mechanism necessary to make the voice of the industry known in the regulatory process, it could also provide the structure to make a foundation possible.

The nonprofit entity would work with the fund manager, promote the opportunity, and oversee administration of the foundation.

2. Choose a fund manager or fund partner that would oversee the investment of the money.

The commercial fishery in San Diego may consider creating a committee of volunteers to manage the fund. Committee members would need to bring legal, financial, and accounting expertise, meet on a regular basis, and make decisions on investments and disbursements. This structure would allow the fund to avoid paying a third party fund manager fee. Fees for fund managers average around 7.5 percent. The crucial point of this type of structure is to attract competent and dedicated volunteers to the committee who are willing to invest considerable time and attention. (Some local chapters of Habitat for Humanity function under this committee structure.)

3. Promote the opportunity and approach potential donors.
4. Hire or partner with someone or some entity with grant writing experience, as grants (particularly matching grants) will be an important component of the foundation.
5. Create a procedure by which fishermen or commercial fishing related groups would make proposals to access the available money.

The administration of the foundation needs to be transparent. To that end, the trust may create a partnership with a Community Development Corporation or Community Foundation, which would oversee the disbursement process and act as an unbiased third party. (Note: The research suggests that commercial banks are not the appropriate partner for administration.)

An operating foundation could serve the San Diego commercial fishing industry. A foundation amount of \$2 million could generate \$160,000 – \$180,000 per year at an eight to nine percent interest rate (industry average). Fund managers and the associated non-profit should be aware that the costs of managing the foundation need to be paid from the interest/dividends and could include filings, licenses, annual audit (for foundations over \$2 million), and transaction and management fees. Therefore, it is generally recommended that foundations of this sort limit disbursements to between 3.9 and 5 percent of the fund balance in order to be sustainable.

It may take several years to reach \$2 million or \$3 million, but it seems attainable for a large sophisticated metropolitan area with a rich commercial fishing history. It has been suggested that several of the groups such as the Portuguese or Chinese historical societies, and other groups that have ties to the commercial fishing industry (Italians) would be interested in supporting this type of opportunity, perhaps for some recognition.

Ultimately, it is up to commercial fishery industry stakeholders, fishery managers, and participating fishermen to choose the legal and organizational structure of an investment instrument. However, an operating foundation or trust fund could give commercial fishermen access to consistent and stable financial support for infrastructure, marketing, and management projects and could reduce the need for them to seek grants from multiple sources.

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