

**INITIAL STUDY AND NEGATIVE DECLARATION
FOR THE
COASTSIDE FISHING CLUB ACCLIMATION OF FALL-RUN CHINOOK SALMON IN
NET PENS AT PILLAR POINT HARBOR (PHASE 2)
IN
SAN MATEO COUNTY**

The Project

The Coastside Fishing Club (CFC) proposes to use funds from the Commercial Salmon Stamp Account, a Fish and Game Preservation Fund, to acclimate California Department of Fish and Wildlife (CDFW) hatchery raised Central Valley juvenile fall-run Chinook salmon at Pillar Point Harbor in San Mateo County to ocean water before being released into the Pacific Ocean. The project's objective is to enhance an existing Central Valley fall-run Chinook salmon ocean commercial and recreational fishery off the coast of California.

The Findings

The project will have a less than significant impact on the aesthetics, biological resources, greenhouse gas emissions, hydrology and water quality, recreation, and transportation/traffic. The project will have no impact to agriculture and forest resources, air quality, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, and utilities and service systems.

Basis of the Findings

Based on the initial study, the CDFW finds that implementing the proposed project will have less than a significant to no impact on the environment. Therefore, a negative declaration is filed pursuant to the California Environmental Quality Act, Public Resource Code Section 21080 (c2).

This proposed negative declaration consists of the following:

- Introduction – Project Description and Background Information of the Coastside Fishing Club Acclimation of Fall-Run Chinook Salmon in Net Pens at Pillar Point Harbor (Phase 2)
- Initial Study Environmental Checklist Form
- Explanation of the Response to the Initial Study Environmental Checklist Form
- Exhibit A: Statement of Work
- Exhibit B: Location Map
- Exhibit C: Species List

**PROJECT DESCRIPTION AND BACKGROUND INFORMATION
FOR
COASTSIDE FISHING CLUB ACCLIMATION OF FALL-RUN CHINOOK SALMON IN
NET PENS AT PILLAR POINT HARBOR (PHASE 2)
IN
SAN MATEO COUNTY**

Introduction

The Coastside Fishing Club Acclimation of fall-run Chinook Salmon in Net Pens at pillar point harbor (phase 2) project (acclimation project) in San Mateo County, is subject to review under the California Environmental Quality Act (CEQA) (Public Resource Code, §21000-21178). The Coastside Fishing Club (CFC) requested funds from the California Department of Fish and Wildlife's (CDFW) Commercial Salmon Stamp Account to acclimate hatchery raised juvenile fall-run Chinook salmon to augment ocean commercial and recreational fisheries off the coast of California.

This initial study and negative declaration (ND) analyzes the environmental impacts that may result from the implementation of the proposed acclimation project.

Project goals and objectives

The goal of this project is to successfully acclimate Central Valley juvenile fall-run Chinook salmon at Pillar Point Harbor and release the ocean water acclimated salmon into the Pacific Ocean to augment ocean commercial and recreational Chinook salmon fisheries off the coast of California.

It is CDFW's objective to implement this project as it will not cause a significant adverse effect on the environment, or reduce or restrict the range of an endangered, threatened or rare species.

Background

The CDFW is mandated by the California Legislature to administer the Commercial Salmon Stamp Account within the Fish and Game Preservation Fund to fund projects aimed to enhance ocean commercial and recreational salmon fisheries. The moneys in the account come from fishing permits and stamps required for commercial fishing.

Spawning returns of fall-run Chinook salmon in the Central Valley have fluctuated widely over the past 30 years. Record high returns were estimated from 2000 – 2003. In 2002 the escapement was around 800,000 fish. From 2003 - 2009, returns declined significantly to record low levels. Some recovery was evident in the 2010 and 2011 spawning returns; however, returns remained relatively low compared to the long-term record. In 2007 the escapement fell to 88,000 fish and dropped even further in 2008 to 66,000 fish. Many factors such as poor ocean conditions, drought, low river flows, water diversions, pollution, and predation contributed to the population crash. In addition, water conditions in the Sacramento-San Joaquin Delta system makes it difficult for the juvenile fall-run Chinook salmon to maneuver from streams to the ocean. Since the 2007-2008 crash, the population has been recovering. Projects that truck salmon to acclimation net pens in estuaries and release them into the estuary after the

acclimation period have shown to improve ocean harvest (Leet, W.S. et al. 1986). Furthermore, analysis completed by CDFW in 2007 indicates that acclimation in ocean net pens increases the fall-run Chinook salmon catch in local fisheries (Marine Region, December 2007). Although acclimation of juvenile salmon has been mainly done in estuaries, the juvenile salmon that are acclimated are smolts, which are able to osmoregulate in ocean water.

The CFC is a non-profit social and recreational corporation composed of 13,000 volunteers dedicated to improving fisheries off the coast of California. The CFC will provide the net pens and maintain the juvenile salmon in the outer harbor of Pillar Point Harbor. The CFC will also be responsible for obtaining any required permit.

Project Location

Pillar Point Harbor is located in San Mateo County, near Half Moon Bay, and supports considerable recreational and commercial fishery activities. Many anglers board open party, charter, and private boats during salmon fishing season. The harbor has an inner and outer breakwater. The inner harbor hosts fuel, slips, pump out, ice and other services. The outer harbor hosts permanent moorings, live bait receivers, and a mariculture project raising abalone. Johnson Pier, located within the inner harbor of Pillar Point Harbor, has a road running the length of the pier and a total of 369 berths along the side. Johnson Pier will be where the CDFW truck delivers the Central Valley juvenile fall-run Chinook salmon into the net pens.

Schedule

This acclimation project will begin in April 2014 and end in late June 2015. Two net pens will be assembled in April 2014. The first batch of fish that will be received for acclimation will occur in April 2014. The fish will be acclimated between 10 and 14 days and then released into the Pacific Ocean. Once the acclimated fish are released, another batch of fish will be received, acclimated, and released in the same manner. Because the acclimation period is at most 14 days long, the CFC will be able to acclimate as many fish as possible on a bi-weekly schedule until the end of June 2014; at which time, the net pens will be cleaned, disassembled, and stored at an offsite facility. This project will recommence in April 2015 and will maintain the same schedule as in 2014.

Project Description

The CFC proposes to acclimate to sea water approximately 120,000 Central Valley juvenile fall-run Chinook salmon on a bi-weekly basis using two net pens, each capable of holding 60,000 juvenile salmon at 60 salmon per pound. CDFW will decide which hatchery will provide the Central Valley juvenile fall-run Chinook salmon. The possible hatcheries are the Mokelumne River Fish Hatchery, Feather River Fish Hatchery, or the Nimbus Fish Hatchery. All salmon will be adipose fin clipped and coded wire tagged. Fish tagged for the acclimation pens receive a unique code linked specifically to the project.

The net pens will be assembled at Johnson Pier. Once assembled, the net pens will be towed to the outer harbor where they will be moored using an existing mooring location. When the delivery of the fish is scheduled, the net pens will be towed back to Johnson Pier to receive the fish. The net pens containing the fish will then be towed back to the outer harbor where they will be moored for the duration of the acclimation period. The net pens will be equipped with an automated fish feeder with a solar battery to ensure the fish are fed daily. CFC volunteers will monitor the net pens daily. Once the fish are acclimated (between day 10 and 14), the net pens will be towed outside the harbor and the fish will be released into the ocean. If weather does not permit the towing of the net pens outside the harbor for release, the fish will be released in the outer harbor on an outgoing tide in order to facilitate their rapid exit to the ocean and to minimize in-harbor predation.

The CFC is scheduled to receive, on a bi-weekly basis, deliveries of 120,000 fish from a CDFW hatchery in 2014 and in 2015. On or before September 30, 2014, the CFC will provide the CDFW with a progress report. A final report will be submitted on or before September 30, 2015.

The complete plans for this project may be viewed in the CDFW office at 830 S Street, Sacramento CA, 95811; Monday through Friday between 8 AM and 4 PM.

Environmental Assessment

This project was reviewed by a CDFW technical team composed of fisheries and marine biologists and hatchery specialists. Based on their recommendation, this project will have less than significant impact on biological resources at Pillar Point Harbor and its surrounding areas. Furthermore, the implementation of this acclimation project conforms to the standard method of acclimating fish in net pens prior to their release into ocean waters and complies with CDFW policies. The CDFW's California Natural Diversity Database was reviewed to identify threatened, endangered, or rare species found in the area (see Exhibit C). Steelhead were documented in Denniston Creek in 1992 (Nelson and McIver, 1992); however, net pen acclimation does not interfere with steelhead migration. The CDFW has determined that this project does not pose a potential negative impact on the environment.

Reference:

Leet, S.L., Green, R.E., and Ralph, D. (1986) Pen Rearing Pacific Salmon, *Oncorhynchus* spp., in San Francisco Bay. *Marine Fisheries Review*, 48(1), 24-31.

Nelson, J. and McIver, D. (1992) *The Resource Agency of California, Department of Fish and Game Stream Survey*. California Department of Fish and Wildlife, internal report.

California Department of Fish and Wildlife's Marine Region. (2007) *Review of Coastside Fishing Club's Salmon Net Pen Proposal*. California Department of Fish and Wildlife, internal report.

ENVIRONMENTAL CHECKLIST FORM

1. Project Title: **Coastside Fishing Club Acclimation of Fall-Run Chinook salmon in net pens at Pillar Point Harbor (phase 2).**

2. Lead Agency Name and Address:

California Department of Fish and Wildlife
Fisheries Branch
830 S Street
Sacramento, CA 95811

3. Contact Person and Phone Number:

Karen Carpio
(916) 327-8658
Fisheries Branch
830 S Street
Sacramento, CA 95811

4. Project Location: San Mateo County

5. Project Sponsor's Name and Address:

California Department of Fish and Wildlife
Fisheries Branch
830 S Street
Sacramento, CA 95811

6. General Plan Designation: Plans are consistent with coastal zone designation.

7. Zoning: Coastal

8. Description of Project: Acclimation of hatchery raised Central Valley juvenile fall-run Chinook salmon through pen rearing at Pillar Point Harbor by the Coastside Fishing Club from April through June in 2014 and 2015 to improve off shore and ocean salmon fishing.

9. Surrounding Land Uses and Setting: Briefly describe the project's surroundings: Pillar Point harbor is located in Half Moon Bay next to the town of El Granada. The net pens used for rearing will be moored in the outer harbor during the acclimation period. The net pens will be towed to Johnson Pier to be loaded and installed. Johnson Pier has a road running the length of the pier and boat docking stations perpendicular to the road. Once in the outer harbor, the net pens will be located near an abalone mariculture facility.

10. Other Public Agencies Whose Approval Is Required: U.S Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board, Central Coast Regional Water Quality Control Board, and California Coastal Commission.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

This project will not have a “Potential Significant Impact” on any of the environmental factors listed above; therefore, no boxes are checked.

DETERMINATION:

On the basis of this initial evaluation:

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the

environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Stafford Lehr, Chief, Fisheries Branch

~~11~~ 11/22/2013

Date

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII. POPULATION AND HOUSING:				
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. TRANSPORTATION/TRAFFIC:				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
such facilities?				
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION OF RESPONSES TO INITIAL STUDY ENVIRONMENTAL CHECKLIST

I. AESTHETICS

- a) The project will not have an adverse effect on a scenic vista. Such an impact will not occur because the project will consist of net pens located in the outer harbor which is located between the inner breakwater where fuel, slips, pump out, and other services are located and the outer breakwater. The pens are floating far from the pier during the acclimation process and are only brought to the pier for fish loading and installation; thus the net pens will not affect the natural appearance of the pier. Furthermore, the net pens will only be in the outer harbor from April through May and will be stored in an existing off-site facility during the remainder of the year.
- b) The project will not damage scenic resources such as trees, rock outcroppings, and historic buildings. Such an impact will not occur because the project will not disturb large trees or other scenic features in the process of transferring the fish from the hatchery to Johnson Pier.
- c) The project will not substantially degrade the existing visual character or quality of the work sites and their surroundings. Such an impact will not occur because the net pens are not raised above the sea level and will be kept in the outer harbor during the acclimation period.
- d) The project will create a new source of light or glare; however, it will not adversely affect day or nighttime views in the harbor. Battery operated lights and a small solar panel will be attached to the net pens. The lighting design will be deferred to the Harbormaster to ensure there is no substantial source of lighting and that the lighting will not interfere with harbor procedures.

II. AGRICULTURE RESOURCES

- a) The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use. Such an impact will not occur because the project is located away from FMMP designated farmland.
- b) The project will not conflict with existing zoning for agricultural use or a Williamson Act contract. The net pens will not change existing land use.
- c) The project will not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timber zoned Timberland Production. The net pens will not change existing land use.

- d) There will be no loss of forest land and the project will not result in the conversion of forest land to non-forest use. The project is located in the outer harbor waters of Pillar Point Harbor.
- e) The project will not involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use. The net pens are not on a terrestrial facility.

III. AIR QUALITY

- a) The project will not conflict with or obstruct implementation of the applicable air quality plan. Such an impact will not occur because implementation of the project does not create any features that would be a source of air pollution. The net pens will be retrieved from the off-site storage facility and will be assembled on-site at Pillar Point Harbor.
- b) The project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Such an impact will not occur because of the limited scope of the net pen rearing activity and the fact that the net pens will be assembled on-site at Pillar Point Harbor.
- c) The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). Such an impact will not occur because the project involves no ongoing sources of air pollution.
- d) The project will not expose sensitive receptors to substantial pollutant concentrations. Such an impact will not occur because the project will not increase pollutant concentrations.
- e) The project will not create objectionable odors affecting a substantial number of people.

IV. BIOLOGICAL RESOURCES

- a) The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the CDFW, National Marine Fisheries Service (NMFS) or U. S. Fish and Wildlife Service (USFWS). Such an impact will not occur because the project is located in the outer Pillar Point Harbor where the fish will be contained in net pens. The Central Valley juvenile fall-run Chinook salmon will be delivered to the net pens at Johnson Pier from a hatchery designated by the CDFW. The fish will be disease free as certified by a CDFW fish pathologist. If disease outbreak occurs, the fish will be released from the net pens into the harbor. The source of the disease would not be from the hatchery since the fish will be disease free when they are placed in the net pens. The CFC

will monitor the net pens on a daily basis and will keep daily mortality observation of the salmon. When mortality exceeds more than 0.05% per day for three consecutive days, the CFC will contact a CDFW pathologist. CFC will also make observations and be conscious of red tide outbreaks. If the red tides have a reasonable chance of occurring in the area near the net pens, CFC will release the salmon. With regards to marine mammal interactions with net pens, the CFC is responsible for contacting the NMFS. The NMFS has the authority and responsibility over marine mammals. The NMFS has developed several protocols for minimizing interactions and injuries to marine mammals.

- b) The project will not have an adverse effect on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies and regulations, or by the CDFW or the USFWS. Such an impact will not occur because the project is not located on land. The net pens will be moored in the outer harbor during the acclimation period. The harbor itself is highly modified by dredging and other human activities and is not itself a sensitive, natural community.
- c) The project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. The project is consistent with coastal zone uses and will have no impact to wetlands or hydrological function.
- d) The project will not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The fall-run Chinook salmon will be contained in net pens and will not interfere with any migrating fish or wild life in the harbor. The juvenile fall-run Chinook salmon will be contained in the net pens until they are released into the ocean. If the weather permits, the net pens will be towed outside harbor to release the fall-run Chinook salmon into the ocean. If the net pens cannot be towed outside the harbor, then the fall-run Chinook salmon will be released in the outer harbor when the tide is outgoing to facilitate their rapid escape to the ocean. This will also help prevent predation of the juvenile fall-run Chinook salmon in the harbor. The juvenile fall-run Chinook salmon will not impede native wildlife nursery sites. Furthermore, the release site is within the existing range of fall-run Chinook salmon.
- e) The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Such an impact will not occur because project is located in the harbor and is consistent with coastal zone activities.
- f) The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Project actions are designed to enhance an existing ocean salmon fishery.

V. CULTURAL RESOURCES

- a) The project will not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. There is no ground disturbing work and thus no potential to affect historical resources.
- b) The project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. There is no ground disturbing work and thus no potential to affect archaeological resources.
- c) The project will not directly or indirectly destroy any unique paleontological resources or sites, or unique geologic features. There is no ground disturbing work and thus no potential to affect paleontological resources.
- d) The project will not disturb any human remains, including those interred outside of formal cemeteries. There is no ground disturbing work and thus no potential to affect human remains.

VI. GEOLOGY AND SOILS

- a i) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault. Such an impact will not occur because the net pens will use existing mooring location and will not require placing permanent mooring devices or anchors to the seafloor. There is no ground disturbing work.
- a ii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Such an impact will not occur because the net pens will use existing mooring devices/anchors. There is no ground disturbing work.
- a iii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Such an impact will not occur because the net pens will use existing mooring devices/anchors. There is no ground disturbing work.
- a iv) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Such an impact will not occur because the net pens will use existing mooring devices/anchors. There is no ground disturbing work.
- b) The project will not result in substantial soil erosion or the loss of topsoil. Such an impact will not occur because the project does not involve ground disturbing work.

- c) The project will not be located on a geologic unit or soil that unstable, or that would become unstable and potentially result in on- or off- site landslides, lateral spreading, subsidence, liquefaction, or collapse. Such an impact will not occur because the project does not involve ground disturbing work.
- d) The project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. Such an impact will not occur because the project does involve ground disturbing work.
- e) The project will not create any sources of waste water requiring a septic system

VII. GREENHOUSE GAS EMISSIONS

- a. The project will emit greenhouse gases (GHG) through the use of fuel to transport the juvenile fall-run Chinook salmon from the hatchery to the net pens at Johnson Pier. The total volume of fuel (diesel) is not available for this project; however, the distance from the farthest hatchery (Feather River Hatchery) will be used to calculate the GHG emission. The calculations to convert distance the truck will travel from the hatchery to Pillar Point Harbor and back to the hatchery to metric tons of CO₂ are as follows:
 - i. The transportation truck consumes diesel and the fuel consumption is 10 miles per gallon. There will be four deliveries of fish in 2014 and four more in 2015.
 - ii. The conversion of gallons of fuel to metric tons of CO₂ is (C=carbon; CO₂=carbon dioxide):
 - Diesel:
2778 grams C/gallon x 99 % oxidation factor x 44 grams CO₂/12 grams C = 10,084 grams of CO₂ emission per gallon of diesel. Then divide by 1000 to obtain 10.1 kilograms CO₂/gallon. One kilogram is equal to 0.001 metric tons.

Given the distance of the Feather River Hatchery to Johnson Pier at Pillar Point Harbor is 175.49 miles and the transportation trucks fuel consumption is 10 miles per gallon, the total CO₂ emission from the project is estimated to be 2.83 metric tons CO₂. **Table 1** below illustrates the CO₂ emission calculations for one trip from the Feather River Hatchery to Johnson Pier at Pillar Point Harbor. Equations to calculate CO₂ emissions from gallons of fuel can be found in the Environmental Protection Agency (EPA) website: <http://www.epa.gov/oms/climate/420f05001.htm>.

Table 1: CO₂ emission calculation for one way trip from hatchery to harbor.

Distance	Fuel consumption	Conversion of gallons to kg CO ₂	Conversion of kg of CO ₂ to metric tons	Total (in metric tons of CO ₂)
175.49 miles	X <u>gallons</u> 10 miles	X <u>10.1 kg CO₂</u> gallon	X <u>metric ton CO₂</u> 1000 kg	= 0.177

The transportation truck will travel from the hatchery to the harbor four times in 2014 and four more times in 2015. Thus there will be four round trips in 2014 and 2015, or sixteen one way trips for the duration of the project. Therefore, the total amount of the metric tons of CO₂ emission is 0.177 multiplied by 16 one way trips (which is the same as eight round trips). Thus, the total is 2.83 metric tons of CO₂ emission.

While there will be GHG emissions, the impacts will not be significant. The threshold by which project-related greenhouse gas impacts would be considered significant is whether project-related impacts will impair California’s ability to achieve the reduction goals established by Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006. AB 32 establishes a statewide greenhouse gas emissions cap for 2020, based on the 1990 emissions (California Climate Change Portal). In 1990, California’s CO₂ emissions were estimated to be 364.32 million metric tons of CO₂ (http://www.epa.gov/statelocalclimate/resources/state_energyco2inv.html). The project will emit roughly 7.77×10^{-9} % of the 1990 California CO₂ emissions. In 2007, the California CO₂ emissions were estimated to be 4002.77 million metric tons, the project’s CO₂ emissions are roughly 7.07×10^{-10} % of the 2007 California estimates. The difference between the percent of emissions from 2007 to 1990 is 7.06×10^{-9} %, thus, the emissions from the project will have less than a significant effect on California’s ability to achieve the reduction goals.

- b. The project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG because the CO₂ emissions are minimal. The impacts to the GHG levels are less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS

- a) The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. There will be no construction using equipment that requires hazardous material. The net pens are transported to Johnson Pier from an offsite location and will be manually assembled at Johnson Pier. The automatic feeder is not a source of hazardous materials.
- b) The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Hazardous materials will not be used to assemble the net pens and the automatic feeder.

- c) The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Hazardous materials will not be used to assemble the net pens and the automatic feeder.
- d) The project is not located on any site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The net pens will be in the outer harbor.
- e) The project is not located within an airport land use plan, but is within two miles of the Half Moon Bay Airport which is owned by San Mateo County. However, the project does not conflict with a land use plan because the net pens will be located in the coastal zone. The project will not result in a safety hazard for people residing or working in the project area because the project is located in the outer harbor.
- f) The project is not located within the vicinity of a private airstrip.
- g) The project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The project is not located on land and does not impact roads.
- h) The project will not expose people or structures to a significant risk of loss, injury, or death involving wild land fires. The project is not located on land.

IX. HYDROLOGY AND WATER QUALITY

- a) The project will not violate any water quality standards or waste discharge requirements. The uneaten food and fecal matter will not pose significant water quality standard issues given the short duration of the project. Water quality reports from an abalone aquaculture project located in the outer harbor indicate no water quality problems. Furthermore, the project is dependent on the natural tidal flows and current of the outer harbor which will help refresh the water at the net pen site.
- b) The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge because the net pens will be located in the outer harbor.
- c) The project will not substantially alter the existing drainage pattern of the work sites in a manner that would result in substantial erosion or siltation on- or off-site because the net pens will not be located on land.
- d) The project will not substantially alter the existing drainage pattern of the work sites, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site because the net pens will not be located on land.

- e) The project will not create or contribute runoff water that would exceed the capacity of existing or planned storm-water drainage systems, or provide substantial additional sources of polluted runoff because the net pens will not be located on land. The project will not substantially degrade water quality. There is a natural tidal and current flow in the outer harbor that will help refresh the water at the net pen site. The acclimation of juvenile fall-run Chinook salmon will likely occur between April and June of 2014 and 2015. Due to the short acclimation time, the accumulation of uneaten food and fecal matter is not anticipated to adversely affect water quality. There is no constant supply of uneaten food and fecal matter from the juvenile fall-run Chinook salmon in the net pens due to the short duration of the project. The amount of food will be dependent on the amount of fish in each net pen. Four times daily, the salmon will be fed 3-mm fish food sourced from Silver Cup Brand in Salt Lake City at a rate of 1.3% of the biomass per day. Furthermore, the CFC has received approval from the San Mateo County Harbor District for this project. It is the responsibility of CFC to comply with any water quality requirements of the State Water Resource Control Board.
- f) The project will not substantially degrade water quality. There is no constant supply of fecal matter and uneaten food from the juvenile fall-run Chinook salmon in the net pens due to the short duration of the project; the acclimation of the juvenile fall-run Chinook salmon will occur from April through late June of 2014 and 2015. Furthermore, the project is dependent on the natural tidal flows and current of the outer harbor which will help refresh the water at the net pen site. Due to the location of the net pens, where the tidal flows refresh the outer harbor, and to the short acclimation time, the accumulation of fecal matter and uneaten food is not anticipated to adversely affect water quality; thus the effects of the project on water quality is determined to be less than significant. It is the responsibility of the CFC to comply with any water quality requirements of the State Water Resource Control Board.
- g) The project will not place housing within a 100-year flood hazard area as mapped on any flood hazard delineation map. No housing will be created as part of this project.
- h) The project will not place within a 100-year flood hazard area structures which would significantly impede or redirect flood flows. The net pens will be located in the outer harbor and there will be no impact on land.
- i) The project will not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. The net pens will be moored in the outer harbor and there is no foreseeable risk of substantial sea level rise within the timeframe of the project.
- j) The project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or mudflow. The net pens are floating structures that will be moored between the inner breakwater and the outer breakwater. CFC personnel will not be stationed there permanently, but will check the net pens structure, the status

of the fish, and automated feeder on a daily basis. The exposure to a significant risk of inundation by natural event is minimal.

X. LAND USE AND PLANNING

- a) The project will not physically divide an established community. The net pens will be located in the outer harbor and not on land.
- b) The project does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The acclimation of juvenile fall-run Chinook salmon with the use of net pens is consistent with the coastal zone practices.
- c) The release of juvenile fall-run Chinook salmon from Pillar Point Harbor is within existing range of fall-run Chinook salmon. There is no anticipated conflict with any Habitat Conservation or Natural Community Conservation plan.

XI. MINERAL RESOURCES

- a) The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The net pens will be located in the outer harbor and there will be no impact to mineral resources.
- b) The project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Such an impact will not occur because no mineral resource recovery sites occur in the outer harbor.

XII. NOISE

- a) The project will not result in exposure of persons to, or generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The tools required to assemble the net pens are not expected to exceed noise level standards. Furthermore, heavy equipment will not be used to implement the project. The net pens will be assembled at Johnson Pier before the delivery of the juvenile fall-run Chinook salmon. The net pens will be disassembled after the last batch of juvenile fall-run Chinook salmon are acclimated and released and stored in an off-site facility in July of each year.
- b) The project will not result in exposure of persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels. Such an impact will not occur because there will be no ground work required to assemble the net pens.

- c) The project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Such an impact will not occur because the net pens will be moored in the outer harbor during the acclimation process and will only be towed back to Johnson Pier to receive more fish to acclimate or to be disassembled. The automated belt-operated fish feeder will not substantially increase ambient noise levels as it will only be operated while the net pens are moored in the outer harbor.
- d) The project will not result in a substantial temporary, or periodic, increase in ambient noise levels in the project vicinity above levels existing without the project. Such an impact will not occur because only minor amounts of noise will be generated temporarily while the net pens are assembled and disassembled. The net pens will be assembled in April and disassemble in July for each year this project will take place (2014 and 2015). The automated belt-operated fish feeder will not be a source of substantial ambient noise because it will only be operated while the net pens are moored in the outer harbor.
- e) The project will not expose people residing or working near the project area to excessive noise levels. The net pens with automatic fish feeders will be located in the outer harbor and will not be a source of ambient noise and will only be assembled and disassembled at Johnson Pier.
- f) The project site is not located within the vicinity of a private airstrip.

XIII. POPULATION AND HOUSING

- a) The project will not induce substantial population growth in an area, either directly or indirectly. Such an impact will not occur because the project will not construct any new homes, businesses, roads, or other human infrastructure.
- b) The project will not displace any existing housing and will not necessitate the construction of replacement housing elsewhere.
- c) The project will not displace any people and will not necessitate the construction of replacement housing elsewhere.

XIV. PUBLIC SERVICES

- a) The project will not have any significant environmental impacts associated with new or physically altered governmental facilities. Issuance of Salmon Stamp Account funds to non-profit organizations could, in some cases, lead to minor increases in staffing to complete projects. Such increases will not lead to any significant adverse impacts, because the increases are short term, and construction will not be required to accommodate additional volunteer staff.

XV. RECREATION

- a) The increase of the use of existing neighborhood and regional parks, or other recreational facilities will be less than significant due to project implementation. The project will enhance an existing ocean commercial and recreational fishery. Fishing regulations and hatchery production will not change as a result of this project, thus, the project will not produce more anglers, but will enhance the fishing experience by providing better chances of catching fish.
- b) The project is located at Pillar Point Harbor and may increase the use of the harbor for angling purposes. However, the increase is not expected to be significant as the project does not change fishing regulations. There will be no construction or expansion of recreational facilities. The project is designed to enhance, not create, Chinook salmon commercial and recreational fishing.

XVI. TRANSPORTATION/TRAFFIC

- a) The project may increase the transportation to Pillar Point Harbor due to the enhancement of Chinook salmon fishing; however, the project will have a less than significant impact on any applicable plans, ordinances or policies that establish measures of effectiveness for the performance of the circulation systems. The Chinook salmon are expected to reach harvest and spawning size as early as 2016 and 2017 for the fish released in 2014 and 2015, respectively. Thus, the minimal effects of this project will not be immediate.
- b) The project will not conflict, either individually or cumulatively, with any applicable congestion program established by the county congestion management agency for designated roads or highways. Such an impact will not occur because the commercial and recreational fishing enhancement project will not produce a significant amount of traffic.
- c) The project will not result in any change in air traffic patterns.
- d) The project will not alter terrestrial features or is incompatible with uses of equipment.
- e) The project will not result in inadequate emergency access. The project does not involve construction.
- f) The project will not significantly affect parking capacity or demand for parking. The project is not expected to increase transportation to Pillar Point Harbor. The parking facilities at Pillar Point Harbor are sufficient for recreational and commercial fishing.

XVII. UTILITIES AND SERVICE SYSTEMS

- a) The project will not produce wastewater.

- b) The project will not require, or result in the construction of, new water or wastewater treatment facilities or expansion of existing facilities. Such an impact will not occur because the project will not produce wastewater.
- c) The project will not constructed new storm water drainage facilities or expansion of existing facilities.
- d) The project will have sufficient water supplies available to serve the project from existing entitlements and resources.
- e) The project will not produce wastewater.
- f) The project will not generate solid waste requiring disposal in a landfill.
- g) Accumulation of Chinook salmon fecal matter and uneaten food below the net pens is expected to be minimal. There will be no other source of solid waste. The effects of this project on the water quality of Pillar Point Harbor are expected to be less than significant.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

- a) The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. There are no impacts to the habitat of fish and wildlife species because the project is designed to enhance an existing ocean commercial and recreational fall-run Chinook salmon fishery. Other fish species will not be displaced from streams south of the San Francisco Bay because the streams are inadequate for Chinook salmon spawning. Furthermore, the release site is within the existing range of fall-run Chinook salmon.
- b) The project does not have adverse impacts that are individually limited, but cumulatively considerable. Cumulative adverse impacts will not occur because there are no potential adverse impacts due to project implementation.
- c) The project does not have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly. The project is designed to enhance an existing commercial and recreational fishery and will not change fishing regulations.

Exhibit A Statement of Work

Under the direction of the Grantor, The California Department of Fish and Wildlife (CDFW), and under the following conditions and terms, the Grantee (Coastside Fishing Club (CFC)) will fulfill the following:

1. The CFC will provide and maintain two net pens in the outer harbor at Pillar Point Harbor in San Mateo County, California. The project is located in the Township 5 south, Range 6 west of the Half Moon Bay 7.5 Minute United States Geological Survey (USGS) Quadrangle. The location of the project boundaries are approximately 37.50° north latitude, 122.49° west longitudes as depicted in Exhibit B Project Location Map.
2. Each net pen will be capable of holding 60,000 juvenile fall-run Chinook salmon at 60 per pound. The net pens will be moored in the outer harbor at a predetermined mooring site. Once delivery of fall-run Chinook salmon has been scheduled, the net pens will be towed to Johnson Pier to receive the salmon. After the salmon have been loaded into the net pens, the net pens will be towed to the outer harbor and moored for the duration of the acclimation period. Acclimation period will be between 10 to 14 days. At the end of the acclimation period, the net pens will be towed outside the harbor and the salmon will be released into the Pacific Ocean. If weather does not permit the towing of the net pens outside the harbor, the fish will be released in the outer harbor on an outgoing tide in order to facilitate their rapid exit and to minimize in-harbor predation.
3. Construction of the net pens:
 - a. The net pens will be assembled, launched and tested well in advance of the juvenile fall-run Chinook salmon delivery date. The pens are rigid buoyant frames constructed to support net barriers, provide walkways for workers, and support feeders. The pens will have three sets of barriers. A ¼-inch mesh net lines the inside to a depth of 8 feet to hold the salmon. Outside that net, there will be a heavy “predator” net used to exclude sea lions. Over the top of the net pen will be a net to exclude birds.
 - b. The outer anti-predator net will extend 12 feet below the net pen deck and a further three feet above the deck. The net will be weighted in the bottom corners and center, with about 25 lbs. in each location. The anti-predator net will be secured to vertical stanchions on the outer perimeter of the net pen and also serves to help keep personnel from making unplanned

departures into the harbor. To allow access for feeding and other tasks, the above-deck net will be interrupted with a gate. The anti-predator net will be made from durable nylon netting.

- c. The inner net will extend 8 feet below the net pen deck and will secure the salmon. It will be attached to the inner perimeter of the net pen and will be weighted in the bottom corners. A stainless steel ring will be secured to the bottom center of the net. During the loading and holding phases, the net will hang from the deck. To unload the salmon, the net will be separated from the deck and the sides will be allowed to collapse. The center of the net will be raised, effectively turning the net inside out and flushing out the salmon; at which point, the salmon will freely pass through the anti-predator net.
 - d. To protect from winged predators, a third net will be erected over the entire structure.
 - e. Each net pen will have a dedicated, automated belt-operated fish feeder to ensure regular feeding of the correct amount of food. CFC volunteers will tend to the feeders daily. There will also be battery operated lights and a small solar panel. CFC will defer to the Harbormaster on the lighting design.
 - f. Four times daily, the salmon will be fed 3 mm fish food sourced from Silver Cup Brand in Salt Lake City at a rate of 1.3% of the biomass per day.
4. Juvenile fall-run Chinook salmon: The CDFW will determine the source of the hatchery raised salmon that will be provided for this project. Each delivery of salmon will contain approximately 120,000 salmon. Hatchery production will not be increased for this project. CFC understands the availability of salmon for this project may decrease as the year progresses. The salmon will be adipose fin clipped and coded wire tagged by the CDFW. The salmon will be in healthy condition and free of disease when delivered to the net pens.
 5. Time frame: The project will start between April and May of 2014 and will receive two deliveries of juvenile fall-run Chinook salmon in 2014. In late July of 2014, the net pens will be cleaned, disassembled, and stored at an off site facility. The project will recommence between April and May of 2015. In 2015, the CFC will acclimate fish on a bi-weekly basis until late July 2015. In late July of 2015, the net pens will be cleaned, disassembled, and stored at an off-site facility.

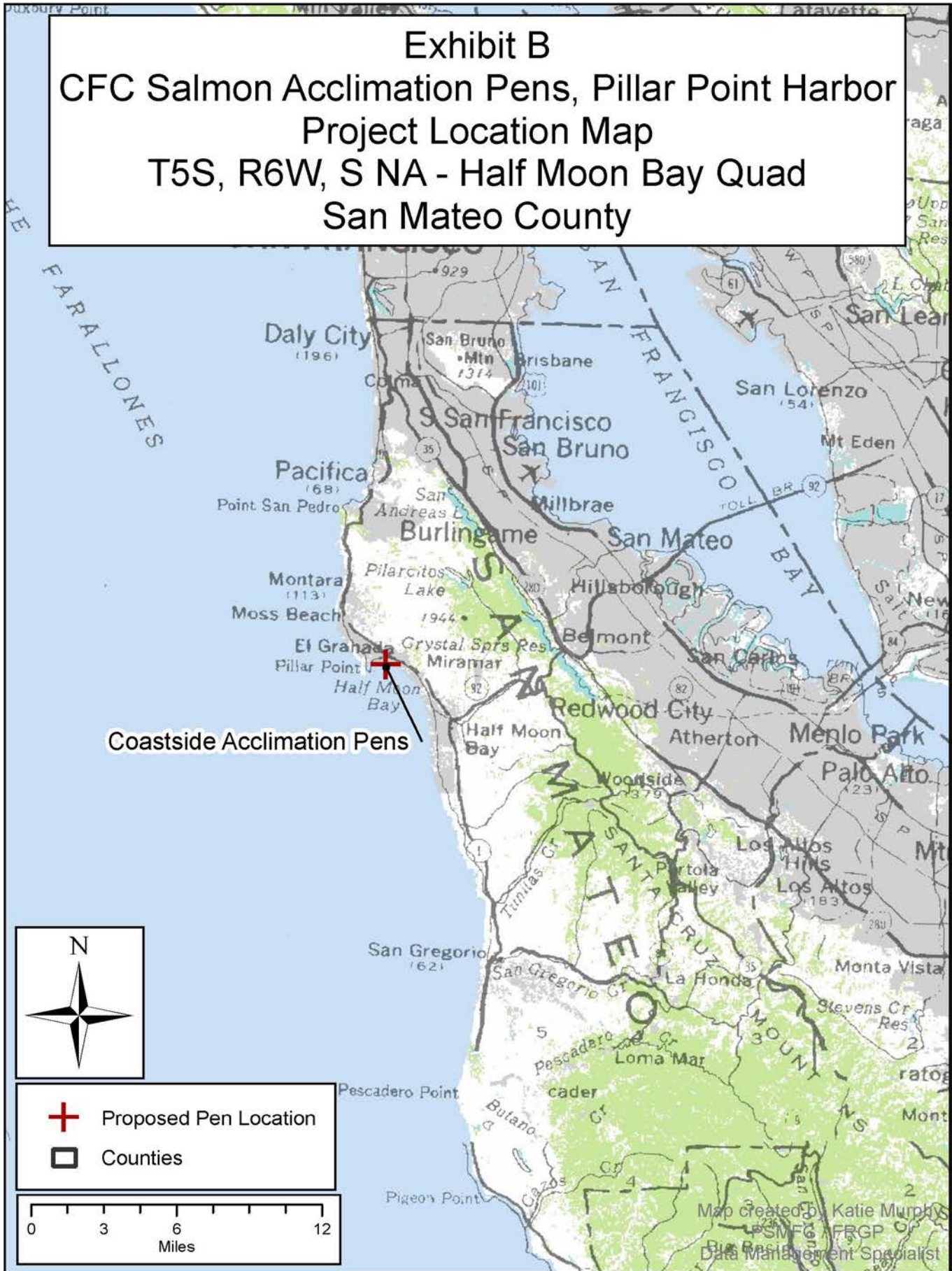
6. The CFC will monitor the net pens on a daily basis and will keep daily mortality observation of the salmon. When mortality exceeds more than 0.05% per day for three consecutive days, the CFC will contact a CDFW pathologist. CFC will also make observations and be conscious of red tide outbreaks. If the red tides have a reasonable chance of occurring in the area near the net pens, CFC will release the salmon.
7. CFC will provide a written progress report to the CDFW in September 2014 summarizing the results of the Project in its first year. A final report will be provided in September 2015. The reports will identify the number of salmon received and released and set forth any problems and challenges encountered along with their solutions. To the extent that success is measured by subsequent harvest or escapement of these fish, data will not be available until the fish released in the project's first year reach harvest and spawning size in 2016. Coded wire tag data will be compiled by the CDFW and National Marine Fisheries Service and made available in 2017.
8. CFC will obtain permits required by the Coastal Commission, State Water Resource Control Board, and any other permits that may be needed to implement this project.
9. CFC will acknowledge the participation of the CDFW, Commercial Salmon Stamp on any signs, flyers, or other types of written communication or notice to advertise or explain the CFC Salmon Acclimation Pens at Pillar Point Harbor.

Exhibit B

CFC Salmon Acclimation Pens, Pillar Point Harbor Project Location Map

T5S, R6W, S NA - Half Moon Bay Quad

San Mateo County



California Department of Fish and Game

Natural Diversity Database

Selected Elements by Common Name - Portrait

Coastside Fishing Club acclimation of fall-run Chinook salmon in net pens at Pillar Point Harbor (phase 2)

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Alameda song sparrow <i>Melospiza melodia pusillula</i>	ABPBXA301S			G5T2?	S2?	SC
2 American badger <i>Taxidea taxus</i>	AMAJF04010			G5	S4	SC
3 American peregrine falcon <i>Falco peregrinus anatum</i>	ABNKD06071	Delisted	Delisted	G4T4	S2	
4 Anderson's manzanita <i>Arctostaphylos andersonii</i>	PDERI04030			G2	S2?	1B.2
5 Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	IILEPK4055	Threatened		G5T1	S1	
6 California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041		Threatened	G4T1	S1	
7 California clapper rail <i>Rallus longirostris obsoletus</i>	ABNME05016	Endangered	Endangered	G5T1	S1	
8 California red-legged frog <i>Rana draytonii</i>	AAABH01022	Threatened		G2G3	S2S3	SC
9 California tiger salamander <i>Ambystoma californiense</i>	AAAAA01180	Threatened	Threatened	G2G3	S2S3	SC
10 Choris' popcornflower <i>Plagiobothrys chorisianus var. chorisianus</i>	PDBOR0V061			G3T2Q	S2.2	1B.2
11 Crystal Springs lessingia <i>Lessingia arachnoidea</i>	PDAST5S0C0			G1	S1	1B.2
12 Davidson's bush-mallow <i>Malacothamnus davidsonii</i>	PDMAL0Q040			G2	S2	1B.2
13 Edgewood Park micro-blind harvestman <i>Microcina edgewoodensis</i>	ILARA47010			G1	S1	
14 Edgewood blind harvestman <i>Calicina minor</i>	ILARA13020			G1	S1	
15 Franciscan onion <i>Allium peninsulare var. franciscanum</i>	PMLIL021R1			G5T2	S2.2	1B.2
16 Franciscan thistle <i>Cirsium andrewsii</i>	PDAST2E050			G2	S2.2	1B.2
17 Hall's bush-mallow <i>Malacothamnus hallii</i>	PDMAL0Q0F0			G2Q	S2	1B.2
18 Hickman's cinquefoil <i>Potentilla hickmanii</i>	PDROS1B0U0	Endangered	Endangered	G1	S1	1B.1
19 Hillsborough chocolate lily <i>Fritillaria biflora var. ineziana</i>	PMLIL0V031			G1QT1Q	S1	1B.1
20 Indian Valley bush-mallow <i>Malacothamnus aboriginum</i>	PDMAL0Q020			G2	S2	1B.2
21 Kellogg's horkelia <i>Horkelia cuneata var. sericea</i>	PDROS0W043			G4T2	S2?	1B.1
22 Kings Mountain manzanita <i>Arctostaphylos regismontana</i>	PDERI041C0			G2	S2.2	1B.2
23 Marin western flax <i>Hesperolinon congestum</i>	PDLIN01060	Threatened	Threatened	G2	S2	1B.1

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24 Mission blue butterfly <i>Plebejus icarioides missionensis</i>	IILEPG801A	Endangered		G5T1	S1	
25 Montara manzanita <i>Arctostaphylos montaraensis</i>	PDERI042W0			G2	S2.2	1B.2
26 Myrtle's silverspot butterfly <i>Speyeria zerene myrtleae</i>	IILEPJ608C	Endangered		G5T1	S1	
27 N. Central Coast Calif. Roach/Stickleback/Steelhead Stream	CARA2633CA			GNR	SNR	
28 North Central Coast Steelhead/Sculpin Stream	CARA2637CA			GNR	SNR	
29 Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2	
30 Northern Maritime Chaparral	CTT37C10CA			G1	S1.2	
31 Oregon polemonium <i>Polemonium carneum</i>	PDPLM0E050			G4	S1	2B.2
32 Point Reyes bird's-beak <i>Chloropyron maritimum ssp. palustre</i>	PDSCR0J0C3			G4?T2	S2	1B.2
33 Point Reyes horkelia <i>Horkelia marinensis</i>	PDROS0W0B0			G2	S2.2	1B.2
34 Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	IICOL5V010			G1G2	S1S2	
35 Sacramento-San Joaquin Coastal Lagoon	CALA1360CA			GNR	SNR	
36 San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	IILEPE2202	Endangered		G4T1	S1	
37 San Francisco Bay spineflower <i>Chorizanthe cuspidata var. cuspidata</i>	PDPGN04081			G2T2	S2.2	1B.2
38 San Francisco champion <i>Silene verecunda ssp. verecunda</i>	PDCAR0U213			G5T2	S2.2	1B.2
39 San Francisco collinsia <i>Collinsia multicolor</i>	PDSCR0H0B0			G2	S2.2	1B.2
40 San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	AMAFF08082			G5T2T3	S2S3	SC
41 San Francisco forktail damselfly <i>Ischnura gemina</i>	IIODO72010			G2	S2	
42 San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	ARADB3613B	Endangered	Endangered	G5T2	S2	
43 San Francisco gumplant <i>Grindelia hirsutula var. maritima</i>	PDAST470D3			G5T1Q	S1	3.2
44 San Francisco owl's-clover <i>Triphysaria floribunda</i>	PDSCR2T010			G2	S2.2	1B.2
45 San Mateo thorn-mint <i>Acanthomintha duttonii</i>	PDLAM01040	Endangered	Endangered	G1	S1	1B.1
46 San Mateo woolly sunflower <i>Eriophyllum latilobum</i>	PDAST3N060	Endangered	Endangered	G1	S1	1B.1
47 Santa Cruz kangaroo rat <i>Dipodomys venustus venustus</i>	AMAFD03042			G4T1	S1	

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Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
48 Serpentine Bunchgrass	CTT42130CA			G2	S2.2	
49 Valley Needlegrass Grassland	CTT42110CA			G3	S3.1	
50 arcuate bush-mallow <i>Malacothamnus arcuatus</i>	PDMAL0Q0E0			G2Q	S2.2	1B.2
51 bank swallow <i>Riparia riparia</i>	ABPAU08010		Threatened	G5	S2S3	
52 bent-flowered fiddleneck <i>Amsinckia lunaris</i>	PDBOR01070			G2?	S2?	1B.2
53 big free-tailed bat <i>Nyctinomops macrotis</i>	AMACD04020			G5	S2	SC
54 bumblebee scarab beetle <i>Lichnanthe ursina</i>	IICOL67020			G2	S2	
55 burrowing owl <i>Athene cunicularia</i>	ABNSB10010			G4	S2	SC
56 coast yellow leptosiphon <i>Leptosiphon croceus</i>	PDPLM09170			G1	S1	1B.1
57 coastal marsh milk-vetch <i>Astragalus pycnostachyus var. pycnostachyus</i>	PDFAB0F7B2			G2T2	S2.2	1B.2
58 coastal triquetrella <i>Triquetrella californica</i>	NBMUS7S010			G1	S1	1B.2
59 double-crested cormorant <i>Phalacrocorax auritus</i>	ABNFD01020			G5	S3	
60 foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050			G3	S2S3	SC
61 fountain thistle <i>Cirsium fontinale var. fontinale</i>	PDAST2E161	Endangered	Endangered	G2T1	S1	1B.1
62 fragrant fritillary <i>Fritillaria liliacea</i>	PMLILOV0C0			G2	S2	1B.2
63 fringed myotis <i>Myotis thysanodes</i>	AMACC01090			G4	S4	
64 great blue heron <i>Ardea herodias</i>	ABNGA04010			G5	S4	
65 hoary bat <i>Lasiurus cinereus</i>	AMACC05030			G5	S4?	
66 long-beard lichen <i>Usnea longissima</i>	NLLEC5P420			G4	S4.2	
67 longfin smelt <i>Spirinchus thaleichthys</i>	AFCHB03010		Threatened	G5	S1	SC
68 marsh microseris <i>Microseris paludosa</i>	PDAST6E0D0			G2	S2.2	1B.2
69 merlin <i>Falco columbarius</i>	ABNKD06030			G5	S3	
70 mimic tryonia (=California brackishwater snail) <i>Tryonia imitator</i>	IMGASJ7040			G2G3	S2S3	
71 monarch butterfly <i>Danaus plexippus</i>	IILEPP2010			G5	S3	

California Department of Fish and Game

Natural Diversity Database

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Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
72 pallid bat <i>Antrozous pallidus</i>	AMACC10010			G5	S3	SC
73 pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	PDAST4R0P2			G3T1	S1	1B.2
74 perennial goldfields <i>Lasthenia californica</i> ssp. <i>macrantha</i>	PDAST5L0C5			G3T2	S2.2	1B.2
75 rose leptosiphon <i>Leptosiphon rosaceus</i>	PDPLM09180			G1	S1	1B.1
76 round-leaved filaree <i>California macrophylla</i>	PDGER01070			G2	S2	1B.1
77 saline clover <i>Trifolium hydrophilum</i>	PDFAB400R5			G2	S2	1B.2
78 salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	AMAFF02040	Endangered	Endangered	G1G2	S1S2	
79 saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	ABPBX1201A			G5T2	S2	SC
80 short-leaved evax <i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>	PDASTE5011			G4T2T3	S2S3	1B.2
81 steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209G	Threatened		G5T2Q	S2	
82 tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered		G3	S2S3	SC
83 western leatherwood <i>Dirca occidentalis</i>	PDTHY03010			G2G3	S2S3	1B.2
84 western pond turtle <i>Emys marmorata</i>	ARAAD02030			G3G4	S3	SC
85 western snowy plover <i>Charadrius alexandrinus nivosus</i>	ABNNB03031	Threatened		G3T3	S2	SC
86 white-rayed pentachaeta <i>Pentachaeta bellidiflora</i>	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
87 woodland woollythreads <i>Monolopia gracilens</i>	PDAST6G010			G2G3	S2S3	1B.2