INITIAL STUDY AND NEGATIVE DECLARATION
FOR THE
FALL-RUN CHINOOK SALMON NET PEN ACCLIMATION
IN SANTA CRUZ HARBOR
IN
SANTA CRUZ COUNTY

The Project

The Monterey Bay Salmon and Trout Project (MBSTP) proposes to acclimate California Department of Fish and Wildlife (CDFW) hatchery-raised Central Valley juvenile fall-run Chinook Salmon at Santa Cruz Harbor (Santa Cruz County) for 1-3 hours and then release them into the Pacific Ocean. The project's objective is to enhance an existing commercial and recreational ocean fishery. The Commercial Salmon Trollers Advisory Committee recommends this project. The CDFW is partnering with MBSTP on this acclimation project.

The Findings

The project will have a less than significant impact on biological resources and greenhouse gas emissions. The project will have no impact to aesthetics, agriculture and forestry, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, 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 for the fall-run Chinook Salmon acclimation in Santa Cruz Harbor
- 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
FALL-RUN CHINOOK SALMON NET PEN ACCLIMATION
IN SANTA CRUZ HARBOR
IN
SANTA CRUZ COUNTY

Introduction

The MBSTP fall-run Chinook salmon acclimation project in Santa Cruz harbor, is subject to review under the California Environmental Quality Act (CEQA) (Public Resource Code, §21000-21178).

The Commercial Salmon Trollers Advisory Committee (Salmon Stamp Committee) supports this project. MBSTP did not request funds from the Salmon Stamp Committee for this project; however, they did request their support. The Salmon Stamp Committee fully supports this project and requested CDFW work with MBSTP to enable this project to occur. The Salmon Stamp Committee supports this project to augment the ocean commercial and recreational fishery.

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

Project goals and objectives

This project's goal is to successfully acclimate juvenile fall-run Chinook salmon at Santa Cruz Harbor and release them into the ocean to augment ocean commercial and recreational Chinook salmon fisheries.

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

California's five-year drought has impacted many aquatic species including fall-run Chinook salmon. Flow reductions and increased water temperatures have reduced Chinook salmon survival. Commercial and recreational anglers are also seeing fewer salmon. The Commercial Salmon Trollers Advisory Committee recommended this ocean net pen acclimation project to the California Department of Fish and Wildlife (CDFW). Net pen acclimation increases survival by bypassing hazard found on migratory. In addition, net pen acclimation allows salmon transported from the hatchery to acclimate to ocean water temperatures and salinities before being released into the sea.

Spawning returns of fall-run Chinook salmon in the Central Valley have fluctuated widely over the past 30 years. Record high returns occurred 2000 – 2003; in 2002, the

escapement was around 800,000 fish. From 2003 - 2009, returns declined significantly to record low levels. In 2007 the escapement fell to 88,000 fish and dropped even further in 2008 to 66,000 fish. Some recovery was evident in the 2010 and 2011 spawning returns; however, returns remained relatively low compared to the long-term record. Many factors such as loss of habitat, poor ocean conditions, drought, low river flows, water diversions, pollution, and predation contributed to the population declines. California's 5-year drought has only exacerbated problems contributing to the decline of Chinook salmon.

In an effort to improve survival to adulthood, CDFW hatcheries truck salmon to locations in San Pablo Bay and releasing fish into net pens to acclimate. Net pen acclimation of hatchery fish in the Bay has occurred for more than a decade. Net pen acclimation protects juvenile salmon from migration hazards such as water projects, diversions, and predation. In addition, net pens provide fish the opportunity to acclimation to bay water temperatures and salinities. Hatchery fish released into net pens have higher survival rates and higher recovery rates in ocean fisheries (Palmer-Zwahlen 2015, 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).

The MBSTP is a non-profit social and recreational organization dedicated to restoration and enhancement of salmon and steelhead populations in the greater Monterey Bay area.

Project Location

Santa Cruz Harbor is located in Santa Cruz County and supports recreational and commercial fishery activities. Anglers use Santa Cruz harbor as a base for commercial and recreational fish activities, whale watching, pleasure cruising, and sailing. The harbor provides 800 permanent slips.

MBSTP will use the south launch ramp for net pen activities. The south launch ramp is wide and can accommodate multiple boat launches at the same time. Two docks are associated with the launch ramp; one on each side. The net pens will be tied with lines to the east dock opposite the launch ramp. Permanent moorings are located near the east launch ramp, but there is ample space to allow moored vessels to move in and out of the slips while the net pen is tied to the dock.

The fish transportation trucks will back down one side of the launch ramp and release the fish via an 8" tube, resting on the dock, to the net pens.

Schedule

Acclimation at Santa Cruz harbor will be completed in one day between April 1st and June 15th. Specific dates will be scheduled in early 2017 and are dependent on fish size, growth rates and environmental conditions. It is most likely, fish deliveries will occur in early May. Delivery will not be scheduled on a Wednesday to avoid the weekly sail boat regatta.

Project Description

MBSTP proposes to use CDFW acclimation net pens to acclimate 120,000 fall-run Chinook salmon smolts for 1-3 hours. Mokelumne River Fish Hatchery will supply 120,000 juvenile fall-run Chinook salmon 45 to the pound. All fish will be 100% coded-wire tagged with a unique code specific to the Santa Cruz net pen project. Tag retention average 99.63% for fish from Mokelumne River Fish Hatchery (Buttars 2016). All fish slated for ocean net pen acclimation will be evaluated by a CDFW fish health specialist. Only disease-free fish can leave the hatchery.

MBSTP will use CDFW net pens for this project. Net pens are approximately 20' by 14' with weighted nets. Net pen acclimation pens will be delivered to Santa Cruz Harbor the day before the scheduled release. They will arrive on a modified Rotary Screw Trap Trailer. The pick-up truck and trailer will take up two truck/trailer parking spots to allow for net pen assembly. Once the net pens are assembled, they will be carried to the launch ramp, lowered into the water, and guided to the east side of the east launch ramp dock. Fish are released into the net pens and then covered with bird netting during acclimation. Once acclimation is completed, net pens will be dismantled, returned to the transport trailer, and transported back to CDFW facilities.

Two fish tanker trucks will bring 60,000 fish each from Mokelumne River Fish Hatchery to Santa Cruz Harbor. To reduce stress and improve trucking survival, tanker trucks will salt the transport water. A large, gravity-fed pipe will move fish from the truck to the net pens. All fish will be released into the net pen from this pipe.

Fish will be acclimated for approximately 1-3 hours. During this time, the salmon smolts will recover from truck transport and adjust to the new water temperature and salinities. As acclimation progresses, fish will begin to school. During the acclimation process, fish will not receive feed or medication. Once acclimation is complete, MBSTP will either release the fish from the dock on an out-going tide, or they will tow the net pens to the mouth of the harbor entrance and release the fish. Tide, timing, and environmental conditions will dictate which release process occurs.

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

CDFW staff reviewed this project. This project will have less than significant impact on biological resources at Santa Cruz 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). The CDFW has determined that this project does not pose a potential negative impact on the environment.

Buttars.B.(2016) *Central Valley Salmon and Steelhead Marking/Coded-wire Tagging Program Fall-run Chinook Salmon, Spring-run Chinook Salmon, and Steelhead, 2016 Marking Season*, Pacific States Marine Fisheries Commission Administrative Report.

Good, T.P., R.S. Waples, and P. Adams (editors). 2005. Updated status of federally listed ESUs of West Coast salmon and steelhead. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-66, 598 p

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.

Palmer-Zwahlen. M. and Kormos.B (2015) Recovery of Coded-Wire Tags from Chinook Salmon in California's Central Valley Escapement, Inland Harvest, and Ocean Harvest in 2012. California Department of Fish and Wildlife Fisheries Administrative Report 2015-4. November 2015.

U.S. Fish and Wildlife Service (2012), Endangered and Threatened Wildlife and Plants; 12-month Finding on a Petition of List the San Francisco Bay-Delta Population of the Longfin Smelt as Endangered or Threatened; Proposed Rule; Federal Register Vol. 77, No. 63, pp 19756-19797.

U.S. Fish and Wildlife Service (2005) Recovery Plan for the Tidewater Goby (*Eucyclogobius newberryi*). U.S. Fish and Wildlife Service, Portland, Oregon. vi + 199 pp.

ENVIRONMENTAL CHECKLIST FORM

1. Project Title:

   FALL-RUN CHINOOK SALMON NET PEN ACCLIMATION
   IN SANTA CRUZ HARBOR

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:

   Heather McIntire
   (916) 212-2158
   Fisheries Branch
   830 S Street
   Sacramento, CA 95811

4. Project Location: Santa Cruz 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:

   This project has a Coastal Commission " Coastal Zone Development Permit de minimis Waiver" permit number E-12-002-W.

7. Zoning: Coastal

8. Description of Project:

   Monterey Bay Salmon and Trout Project (MBST) will acclimate 120,000 hatchery-raised Central Valley juvenile fall-run Chinook salmon for 1-3 hours and then release the fish on outgoing tides. Fish release will either be at the dock or at the mouth of the harbor depending on environmental conditions. This is a single, one day release. Scheduling will occur in February or March and the acclimation day will be sometime between April through June- most likely in May.

9. Surrounding Land Uses and Setting:

   Santa Cruz harbor is an active harbor. It includes 800 permanent slips for commercial, recreational, and research vessels. Fishing and whale watch day trips leave from the harbor. There is a weekly sailboat regatta. In addition, a large recreational vehicle park is adjacent to the harbor. Housing, restaurants, and small businesses also surround the harbor. The harbor is highly modified. Annual dredging is necessary to allow access.

   Acclimation and net pen assembly will occur at the south launch ramp in Santa Cruz Harbor.

10. Other Public Agencies Whose Approval Is Required: U.S Army Corps of Engineers (Covered NWP#4), 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.

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

This project will **not** have a "Potential Significant Impact" on any of the environmental factors listed above. Biological Resources and Greeenhouse Gas Emissions may have a less than significant impact. ☐

DETERMINATION:

On the basis of this initial evaluation:

☒	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	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.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	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.
☐	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.

Kevin Shaffer, Acting Chief, Fisheries Branch

12/19/2016
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	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒

	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)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
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:	☐	☐	☐	☒
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?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
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)?	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including,	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of	☐	☐	☐	☒

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

	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?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

EXPLANATION OF RESPONSES TO INITIAL STUDY ENVIRONMENTAL CHECKLIST

I. AESTHETICS

a) The project will not have an adverse effect on a scenic vista. The acclimation net pens will be tied to the dock for 2-8 hours on one day. Net pens will arrive the day before acclimation activities and be stored on a trailer parked in a truck/boat trailer slot in the parking lot adjacent to the south launch ramp. Once the net pen is assembled it will be tied to the eastern side of the east launch ramp dock. When acclimation is completed the net pen will dismantled and returned to the trailer for transportation. All activities will occur in one day.

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 fish transfer truck to the acclimation net pen.

c) The project will not substantially degrade the existing visual character or quality of the work sites and their surroundings. The acclimation net pens are not raised above sea level and will only be tied to the dock for 2-8 hours on the one fish delivery day.

d) The project will not create a new source of light or glare. These acclimation net pens do not have lighting.

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. The project is not located on FMMP-designated farmland and no impacts will occur with this project.

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 and no zoning conflict or impacts will occur.

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 and no impacts will occur.

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 Santa Cruz Harbor and no adverse impacts will occur.

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. Net pen acclimation is not a terrestrial activity and no adverse impacts will occur.

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. This is not an on-going project and it will not conflict or obstruct with implementation of applicable air quality plans.

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.

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

Santa Cruz Harbor includes two quadrants within Santa Cruz County: Santa Cruz and Soquel. CDFW used the California Natural Diversity Database (CNDDB) to determine presence, status, and locations of rare plants and animals within these two quadrants. Nearby quadrants were also included: Felton, Laurel, Loma Prieta, Moss Landing, and Watsonville west.

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 or U.S. Fish and Wildlife Service (USFWS).

   This project does not include any habitat modifications and will not have substantial impacts, either directly or indirectly, on any listed species. Neither plant nor terrestrial species will experience impacts associated with this project. This project's

footprint is limited to net pen assembly on the existing south boat launch parking lot and net pen acclimation in the water for a few hours.

This project will acclimate and release 120,000 juvenile Chinook salmon. Acclimation will occur for 1-3 hours and will not interfere with or impede any migrating fish or wild life in the harbor. Net pens, attached to the dock, will hold fish during acclimation. Once acclimated, a boat will tow net pens to the mouth of the harbor on an out-going tide and release the fish. If environmental conditions preclude towing the net pens to the mouth of the harbor, acclimated fish will be released at the dock on an out-going tide. Once release is complete, the net pens will be dismantled, and transported back to the Mokelumne River Fish Hatchery.

CDFW fish health specialists will evaluate all fish prior to transport to ensure fish are disease-free.

The purpose of this release is to enhance and not create a new ocean fisheries for fall-run Chinook salmon. The release site is within the existing range of fall-run Chinook salmon.

1. **Fish:**
   The project fish are anadromous and some adults may return to Santa Cruz Harbor and the surrounding areas. However, short acclimation time will reduce imprinting to the release site. This is a small, short-term project with a short acclimation time. All listed aquatic species found within Santa Cruz and Soquel quads are consider extant. Potential impacts with listed species are unlikely. Project impacts to aquatic species are less than significant.

   Coho Salmon *(Oncorhynchus kisutch)***:**

   Coho Salmon are anadromous. They are federally and state-listed Endangered. The Central California Coast ESU extends from Punta Gorda, California (Humboldt County) to and including Aptos Creek (Santa Cruz County) which is approximately 7 miles from Santa Cruz Harbor. Coho Salmon from three hatchery programs are also included in this ESU.

   The net pen acclimation process will not adversely affect Coho Salmon. Potential interactions between adult strays returning from this project and Coho Salmon are unlikely; however, some strays may return to Santa Cruz Harbor. Impacts from this project will be less than significant.

   Green Sturgeon Critical Habitat: Green sturgeon are not included in the listed species list provided by CNDDB. However, green sturgeon critical habitat is from Monterey Bay to the US-Canada border. This project is based in Santa Cruz Harbor, is temporary, and will not impact green sturgeon critical habitat.

Steelhead *Onchorhynchus mykiss irideus)***:**

Central California Coast and South-Central California Coast steelhead are federally listed as Threatened. The South-Central California Coast northern boundary is the Carmel River watershed which is south of the Soquel quad. The Central California Coast Evolutionary Significant Unites (ESU) southern boundary is Soquel Creek. Santa Cruz Harbor is just north of Soquel Creek (Map 1.). Steelhead are migratory and spawn in coastal rivers and creeks. The last documented sighting of a Central California Coast Steelhead was in 2003 and they are presumed extant.

The net pen acclimation process will not adversely affect Steelhead. Potential interactions between adult strays returning from this project and steelhead are unlikely; however, some strays may return to Santa Cruz Harbor. Impacts from this project will be less than significant.

Tidewater Gobies (*Eucyclogobius newbereyi)*: Federally-listed (Endangered) tidewater gobies may be present within the project area or surrounding areas. Designated critical habitat for tidewater gobies include: Moore Creek, Corcoran Creek, and Aptos Creek. Santa Cruz Harbor does not have a critical habitat designation.

Tidewater gobies are bottom-dwelling fish and seldom found in the water column. They prefer the "…uppermost brackish zone of larger estuaries, rarely invading marine or freshwater habitats" and they are typically found in waters with salinities less than 12ppt (USFWS 2005).

In areas where fall-run Chinook and tidewater gobies coexist, interactions are very unlikely due to the benthic nature of tidewater gobies. It is unlikely, project fall-run Chinook salmon will interact with tidewater gobies during net pen acclimation in the harbor, upon release, or if adults return to the harbor. Impacts from this project will be less than significant.

Longfin Smelt *(Spirinchus thaleichthys)*: Longfin Smelt is a federally-designated candidate species and a state threatened species. They can be found in bays, estuaries and nearshore coastal areas. Santa Cruz is outside of their known southern-most range, San Francisco Bay-Delta, however, a single fish was captured in Moss Landing in 1980 (USFWS 2012). Longfin smelt are typically collected in waters with salinities ranging from 14-28 ppt. They seek lower salinities of the mixing zone for spawning. It is hypothesized that movement of longfin into the ocean is a behavioral response to water temperatures in the bay (USFWS 2012).

This short-term project in Santa Cruz Harbor is unlikely to encounter a longfin smelt and impacts from this project will be less than significant.

Eulachon *(Thaleichthys pacificus):*

Eulachon are a small, anadromous forage fish. They are federally listed as Threatened. They range from Northern California to Alaska and out to the Bering Sea. They typically spawn in the lower portion of the river in December through June. Eulachon have not been seen in Santa Cruz Harbor, no sightings are in the CNDDB database and they are presumed extant.

This project is unlikely to encounter eulachon and impacts from this project will be less than significant.

2. Marine Mammals

Potential marine mammal interactions are not anticipated; however, if marine mammal interactions do occur, MBSTP is responsible for contacting the NMFS. NMFS has the authority and responsibility over marine mammals. The NMFS has developed several protocols for minimizing interactions and injuries to marine mammals.

3. Amphibians

The net pen acclimation project will not have adverse impacts to the Santa Cruz Long-toed salamander. Net pen assembly will occur in the parking lot at the South Launch Ramp. Net pen acclimation and release will occur in the harbor and all activities take place in the water. Salamanders are not present at the assembly, acclimation, or release locations.

Santa Cruz Long-toed Salmander *(Ambystoma macrodactylum croceum)*
This project will not have an adverse impact on Santa Cruz Long-toed Salamander.

4. Birds

The net pen acclimation project will not have adverse impacts to avian species. This project is temporary. Net pen assembly will occur in the parking lot at the South Launch Ramp.Net pen acclimation and release will occur in the harbor and all activities take place in the water. Existing human activities in the area and the location of the project preclude interactions with listed bird species.

Bald Eagles *(Haliaeetus leucocephalus)*
This project will not have an adverse impact on bald eagles.

Bank Swallow *(Riparia riparia)*
This project will not have an adverse impact on bank swallows.

Tricolor Blackbird *(Agelaius tricolor)*
This project will not have an adverse impact on tricolored blackbirds.

Western Snowy Plover *(Charadrius alexandrines nivosus)*

This project will not have an adverse impact on Western Snowy Plover.

5. Bats

The net pen acclimation project will not have adverse impacts to bats. Net pen assembly will occur in the parking lot at the South Launch Ramp. Net pen acclimation and release will occur in the harbor and all activities take place in the water. This project occurs during daylight. Human activities in the area, the location of the project preclude interactions with listed bats.

Townsend's Big-eared Bat *(Corynorhinus townsendii)*
This project will not have an adverse impact on the Townsend's Big-eared Bat.

6. Insects

The net pen acclimation project will not have adverse impacts to listed insect species. Net pen assembly will occur in the parking lot at the South Launch Ramp. The net pens will be trailered down the boat ramp and released into the water. Net pen acclimation and release will occur in the harbor and all activities take place in the water. This project will not adversely impact listed insect species as their preferred habitat is not asphalt or sea water.

Ohlone Tiger Beetle *(cicindela ohlone)*
This project will not have an adverse impact on the Ohlone Tiger Beetle.

Zayante Band-winged Grasshopper *(Trimerotropis infantillis)*
This project will not have an adverse impact on Zayante band-winged grasshopper.

7. Plants

The net pen acclimation project will not have adverse impacts to listed plan species. Net pen assembly will occur in the parking lot at the South Launch Ramp. The net pens will be trailered down the boat ramp and released into the water. Net pen acclimation and release will occur in the harbor and all activities take place in the water. This project will not adversely impact listed plant species.

Marsh Sandwort *(Arenaria paludicola)*
This project will not have an adverse impact on the Marsh Sandwort.

Robust Spineflower *(Chorizanthe robusta var. robusta)*
This project will not have an adverse impact on the Robust Spineflower.

San Francisco Popcorn Flower *(Plagiobothrys diffuses)*
This project will not have an adverse impact on the San Francisco Popcorn Flower.

Santa Cruz Tarplant *(Holocarpha macreadenia)*
This project will not have an adverse impact on the Santa Cruz Tarplant.

White-rayed Pentachaeta *(Pentachaeta bellidiflora)*
This project will not have an adverse impact on White-rayed Pentachaeta.

b) The project will not 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.

This project will not cause adverse impacts on riparian habitats or other sensitive natural communities. This is a one-day project that will use the existing parking lot to assemble the net pens and the existing boat launch dock to secure the net pens during acclimation.

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 hydrologic function.

d) The project will not 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.

This project will not impact fish or wildlife movement or migratory patterns.

e) The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

This project is short-term, temporary, and occurs in a highly modified harbor. Conflicts with local policies and ordinances are not anticipated.

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 and will not conflict with adopted conservation plans.

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 be tied to an existing dock and will not require placement of any permanent structures 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 dock. 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 the existing dock. 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 the existing dock. 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 Santa Cruz Harbor. This project will consist of one pick-up truck and trailer hauling the net pens to and from Santa Cruz Harbor and two fish transport trucks hailing fish to and from Santa Cruz. The project will be completed in 24 hours and each vehicle will only make one round trip drive. This project will not have significant impacts to the environment.

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 CO_2 emissions are minimal.

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. This project does not use 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. This project does not use hazardous materials.

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. This project does not use hazardous materials.

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.

e) The project is not located within an airport land use plan, however, San Jose International airport is 35 miles from the harbor and Monterey airport is 42 miles from Santa Cruz Harbor. The project does not conflict with a land use plan because the net pens are temporary and 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 temporary.

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 pick-up truck hauling the trailer with the net pen will fit into existing marked parking spots for trucks and trailers and will not block access to the harbor, parking lot, or launch ramp. The project is temporary, 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 fecal matter will not pose significant water quality standard issues since fish will only be in the net pens for 1-3 hours during acclimation.

b) The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. This project does not use groundwater for any aspect of the project.

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. This project does not change any physical structures at the project site.

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. This project does not alter drainage patterns on the project site.

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. This project does not create runoff water. This project will not substantially degrade water quality. MBSTP has received approval from the Santa Cruz Harbor Commission for this project. It is the responsibility of MBSTP to comply with any water quality requirements of the State Water Resource Control Board.

f) The project will not substantially degrade water quality. Due to the net pen location, tidal flows, and to the short acclimation time (1-3 hours), the accumulation of fecal matter is not anticipated to adversely affect water quality. No adverse impacts are anticipated from this project. It is the responsibility of the MBSTP 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. Structures will not be constructed as part of this project. The net pens will be temporarily located on the dock and use nets to hold fish which allow water flow. This project will not significantly impede or redirect flows.

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 temporarily tied to the east dock and there is no foreseeable risk of substantial sea level rise within the one day timeframe of the project.

j) The project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or mudflow. Santa Cruz Harbor is in a potential tsunami evacuation zone; however, this one-day project with floating structures attached to the dock for one day is temporary. No personnel will be stationed here permanently. The exposure to significant risk of inundation by natural event in minimal.

X. LAND USE AND PLANNING

a) The project will not physically divide an established community. The net pens will be temporarily located on the dock 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 Santa Cruz 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 temporarily located in the 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 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 limited to hand tools. The tools 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 the south launch ramp parking lot before the delivery of the juvenile fall-run Chinook salmon. The net pens will be disassembled on the same day fish are delivered.

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 this project is temporary, net pen assembly will not use heavy equipment, acclimation will occur will tied to the dock without and mechanical noise, and the net pens will be dismantled using the same tools and personnel.

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.

e) The project will not expose people residing or working near the project area to excessive noise levels. The only source of ambient noise will only be during net pen assembly and dismantling.

f) The project site is not located within the vicinity of a private airstrip and will not expose people residing in the project area to excessive noise levels.

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. This project is temporary and does not require new or additional services of fire protection, police protection, schools, parks or other public facilities.

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.

   Use of the launch ramp to load fish into the net pens will not interfere with normal launch ramp use. The fish delivery trucks will back down the east end of the launch ramp for approximately 20 minutes while fish are off-loaded into the net pens. Ample space will be available for recreational boaters to launch their boats during this process.

b) The project is located at Santa Cruz 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 fishing opportunities.

XVI. TRANSPORTATION/TRAFFIC

a) The project may increase the traffic to Santa Cruz Harbor due to the enhancement of Chinook salmon fishing; however, fishing regulations will not change and the number of anglers are not anticipated to change. The short acclimation time will minimize imprinting to the release site. 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.

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 alter emergency access. The project does not involve construction not will it block access to roads or the boat launch.

f) The project will not significantly affect parking capacity or demand for parking. The project is not expected to increase transportation to Santa Cruz Harbor. The parking facilities at Santa Cruz 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. The project will not produce wastewater.

c) The project will not construct new storm water drainage facilities or expansion of existing facilities.

d) The project will not use existing water supplies.

e) The project will not produce wastewater.

f) The project will not generate solid waste requiring disposal in a landfill.

g) This project will comply with federal, state, and local statutes regarding solid waste. Accumulation of Chinook salmon fecal matter below the net pens is expected to be minimal because of short acclimation times. There will be no other source of solid waste. No adverse impacts are anticipated from this project.

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. This project does not impact the habitat of fish and wildlife species.

b) The project does not have adverse impacts that are individually limited, but cumulatively considerable. This is a small short-term acclimation project. Another more extensive acclimation project exists at Pillar Point in Half Moon Bay. The Pillar Point Project also operates under a negative declaration. Cumulatively, impacts associated with these projects are less than significant. Individual and cumulative assessments would be necessary for any future projects.

c) The project does not have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly.

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, Monterey Bay Salmon and Trout Project (MBSTP) will fulfill the following:

1. MBSTP is responsible for acclimating 120,000 fall-run Chinook salmon smolts from Mokelumne River Fish Hatchery. The Department will deliver fish to the receiving site at Santa Cruz Harbor. The Contractor will be required to receive the fish into the acclimation net pens, acclimate or release the fish at the dock depending on environmental conditions, and tow the acclimation net pens to the release site. MBSTP is responsible to acclimate the fish until they begin schooling, not to exceed three hours.
2. MBSTP will assist CDFW as needed to assemble and disassemble the net pens. The net pens are composed of rigid buoyant frames constructed to support the nets and provide a walkway. Nets are made of ¼" mesh and built to a depth of 8'. Nets are weighted in the bottom corners and at the center with 25 pound weights in each location. 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. A bird exclusion net will also be available to use if needed.
3. MBSTP understands the availability of salmon for this project may be reduced based on fish availability at the hatchery. CDFW will mark and tag the fish with a coded-wire tag and adipose fin clip. Salmon will be healthy and free of disease when delivered to the net pens.
4. All fish will be delivered, acclimated, and released in one day. CDFW will work with MBSTP to coordinate the delivery day. The day will be scheduled sometime between April 1 and May 30th.
5. MBSTP must provide a final report which is due by August 15th and must include the following information:

    - Number of fish acclimated
    - Condition of fish upon release
    - Environmental conditions; water temperature, air temperature, estimated wind speed and direction, rain, overcast etc.
    - Estimates of dead fish received into the nets

- Estimates of birds foraging on acclimated fish and other predation.
- Estimate number of anglers in the area during release
- Location of release
- Time of release
- Total acclimation time for each release

MBSTP will provide a hard copy and an electronic copy of the final report in WORD or in a PDF format. The Final report shall not be considered final until approved and accepted by CDFW's Contract Manager.

6. MBSTP 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.
7. MBSTP will acknowledge the participation of the CDFW and Commercial Salmon Stamp on any signs, flyers, or other types of written communication or notice to advertise or explain the MBSTP Salmon Acclimation Pens at Santa Cruz Harbor.

Exhibit B
Project Location Map

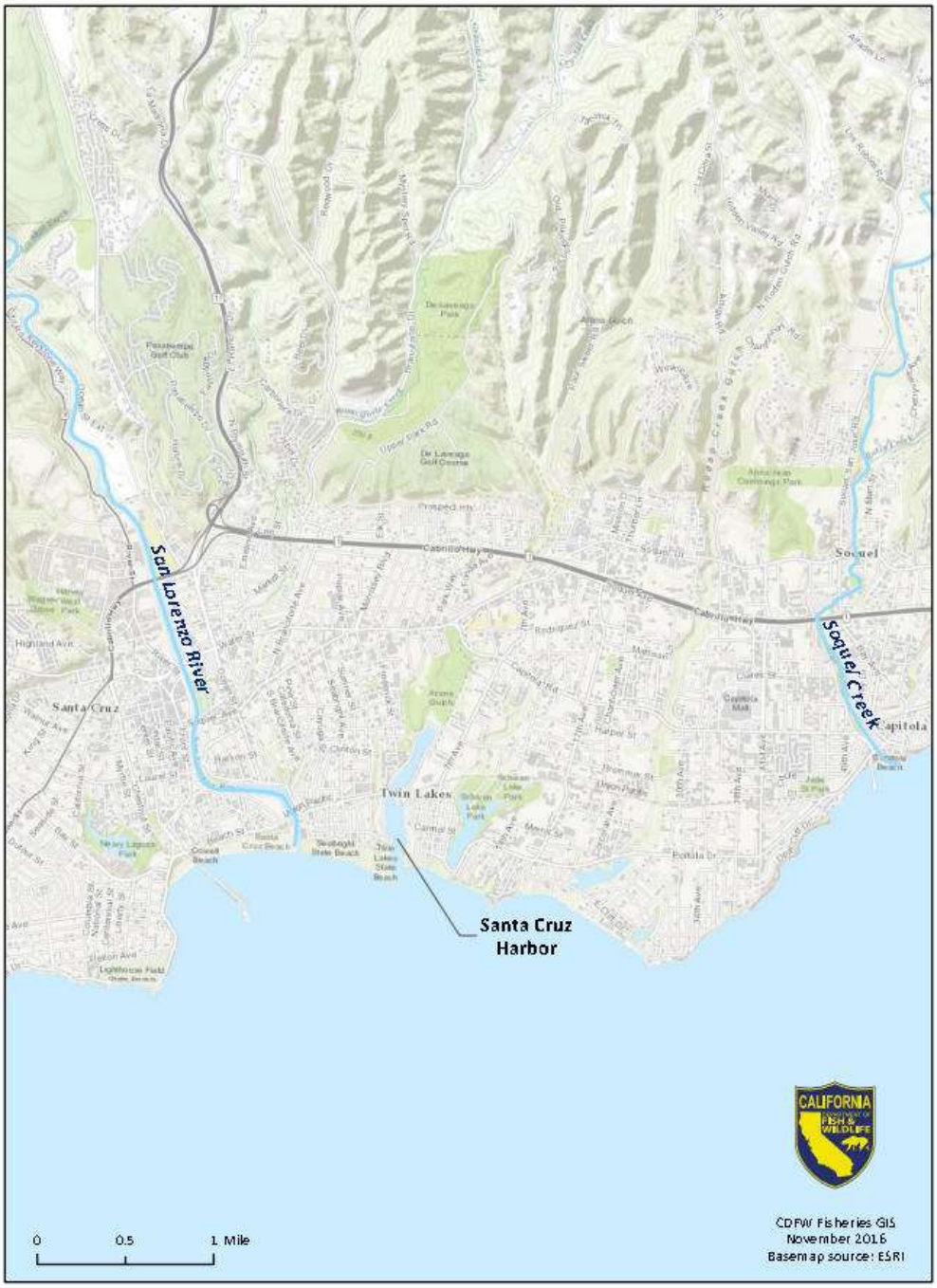

Exhibit C
Species List for Santa Cruz and Soquel Quadrants within Santa Cruz County

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Santa Cruz (3612281) OR Soquel (3612188))

Fall-run Chinook Salmon Net Pen Acclimation in Santa Cruz Harbor

County: Santa Cruz
Quads: Santa Cruz and Soquel

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
Anderson's manzanita *Arctostaphylos andersonii*	PDERI04030	None	None	G2	S2	1B.2
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
black swift *Cypseloides niger*	ABNUA01010	None	None	G4	S2	SSC
Blasdale's bent grass *Agrostis blasdalei*	PMPOA04060	None	None	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California giant salamander *Dicamptodon ensatus*	AAAAL01020	None	None	G3	S2S3	SSC
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California red-legged frog *Rana draytonii*	AAABH01022	Threatened	None	G2G3	S2S3	SSC
coho salmon - central California coast ESU *Oncorhynchus kisutch*	AFCHA02034	Endangered	Endangered	G4	S2?	
Dolloff Cave spider *Meta dolloff*	ILARA17010	None	None	G1	S1	
Dudley's lousewort *Pedicularis dudleyi*	PDSCR1K0D0	None	Rare	G2	S2	1B.2
Empire Cave pseudoscorpion *Fissiticreagris imperialis*	ILARAC5010	None	None	G1	S1	
Empire Cave pseudoscorpion *Neochthonius imperialis*	ILARAD1010	None	None	G1	S1	
eulachon *Thaleichthys pacificus*	AFCHB04010	Threatened	None	G5	S3	
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	None	G3	S3	SSC
globose dune beetle *Coelus globosus*	IICOL4A010	None	None	G1G2	S1S2	
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Mackenzie's Cave amphipod *Stygobromus mackenziei*	ICMAL05530	None	None	G1	S1	
maple-leaved checkerbloom *Sidalcea malachroides*	PDMAL110E0	None	None	G3	S3	4.2
marsh sandwort *Arenaria paludicola*	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
mimic tryonia (=California brackishwater snail) *Tryonia imitator*	IMGASJ7040	None	None	G2	S2	
moestan blister beetle *Lytta moesta*	IICOL4C020	None	None	G2	S2	
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	None	None	G4T2T3	S2S3	
North Central Coast Drainage Sacramento Sucker/Roach River *North Central Coast Drainage Sacramento Sucker/Roach River*	CARA2623CA	None	None	GNR	SNR	
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G4?	S1S2	
Ohlone tiger beetle *Cicindela ohlone*	IICOL026L0	Endangered	None	G1	S1	
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G5	S3	SSC
perennial goldfields *Lasthenia californica ssp. macrantha*	PDAST5L0C5	None	None	G3T2	S2	1B.2
Point Reyes horkelia *Horkelia marinensis*	PDROS0W0B0	None	None	G2	S2	1B.2
robust spineflower *Chorizanthe robusta var. robusta*	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
San Francisco popcornflower *Plagiobothrys diffusus*	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
Santa Cruz black salamander *Aneides niger*	AAAAD01070	None	None	G3	S3	SSC
Santa Cruz clover *Trifolium buckwestiorum*	PDFAB402W0	None	None	G2	S2	1B.1
Santa Cruz kangaroo rat *Dipodomys venustus venustus*	AMAFD03042	None	None	G4T1	S1	
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	AAAAA01082	Endangered	Endangered	G5T1T2	S1S2	FP
Santa Cruz tarplant *Holocarpha macradenia*	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
steelhead - central California coast DPS *Oncorhynchus mykiss irideus*	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
tear drop moss *Dacryophyllum falcifolium*	NBMUS8Z010	None	None	G2	S2	1B.3
tidewater goby *Eucyclogobius newberryi*	AFCQN04010	Endangered	None	G3	S3	SSC
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	Candidate Threatened	G3G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Candidate Threatened	G2G3	S1S2	SSC
western bumble bee *Bombus occidentalis*	IIHYM24250	None	None	G2G3	S1	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western snowy plover *Charadrius alexandrinus nivosus*	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
white-rayed pentachaeta *Pentachaeta bellidiflora*	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
woodland woollythreads *Monolopia gracilens*	PDAST6G010	None	None	G3	S3	1B.2
Zayante band-winged grasshopper *Trimerotropis infantilis*	IIORT36030	Endangered	None	G1	S1	

Record Count: 50