

Chinook Salmon Coastal Release in Monterey Harbor

CEQA: INITIAL STUDY AND NEGATIVE DECLARATION

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FISHERIES BRANCH

Contents

INITIAL STUDY AND NEGATIVE DECLARATION FOR FALL-RUN CHINOOK SALMON COASTAL RELEASE IN MONTEREY HARBOR	2
Introduction	2
The Findings	2
Basis of the Findings.....	2
Project Description and Background Information for Fall-Run Chinook Salmon Coastal Release in Monterey Harbor	3
Introduction	3
Project Objective.....	3
Background	3
Project Location	4
Schedule.....	4
Project Description.....	4
Environmental Assessment.....	5
References	5
Initial Study Environmental Checklist	8
Initial Study (cont): Environmental Factors, Determination, Evaluation of Environmental Impacts and Explanations.....	11
Exhibit A: Statement of Work	25
Exhibit B: California Coastal Commission Notice of Permit Waiver.....	27
Exhibit C: City of Monterey Zoning Review Letter	28
Exhibit D: City of Monterey Harbor and Marina Division	29
Exhibit E: Monterey Bay National Marine Sanctuary Statement.....	30
Exhibit F: Project Location and Quadrants Identification Map.....	31
Exhibit G: CNDDDB Elements Report	32
Exhibit H: Tribal Support Letters.....	38

INITIAL STUDY AND NEGATIVE DECLARATION FOR FALL-RUN CHINOOK SALMON COASTAL RELEASE IN MONTEREY HARBOR

Introduction

The Monterey Bay Salmon and Trout Project (MBSTP) is a membership-based nonprofit 501c3 organization dedicated to the recovery of native salmon and steelhead populations of the greater Monterey Bay region. MBSTP has been operating coastal salmon releases in Monterey Harbor from the 1990's through 2002. MBSTP proposes to release 160,000 juvenile hatchery-origin (HO) Central Valley fall-run Chinook Salmon (CV FRCS) *Oncorhynchus tshawytscha* from Monterey Harbor in 2020 and again in 2021. The 2020 and 2021 releases are the Project as described and evaluated in this Initial Study and Negative Declaration. Under the direction of the California Department of Fish and Wildlife (CDFW), MBSTP would be responsible each spring for the release of 160,000 CV FRCS smolts from the Mokelumne River Fish Hatchery. The Project's objective is to increase the number of ocean Chinook Salmon landings in California enhancing local sport and commercial fisheries. Released smolts would feed and grow along the coast and be available for harvest as adults in one to three years.

The Findings

CDFW finds that the Project would not have a significant effect on the environment.

The completed Initial Study, attached to this negative declaration, documents the bases for this finding, and CDFW's determination that clearly no significant effect on the environment would occur as a result of Project implementation, and there is no substantial evidence, in light of the whole record before CDFW, that the Project may have a significant effect on the environment (see Initial Study and environmental checklist). Therefore, a Negative Declaration has been prepared pursuant to the California Environmental Quality Act, Public Resource Code Section 21080, subd. (c)(1).

The Initial Study concluded that the Project would have less than significant impacts to biological resources, greenhouse gas emissions, and public services. The Project would have no impacts to aesthetics, agriculture and forestry, air quality, cultural resources, energy, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, recreation, transportation, tribal cultural resources, utilities/service systems, and wildfire.

Basis of the Findings

The proposed Negative Declaration consists of the following:

- [Project Description and Background Information for Fall-Run Chinook Salmon Coastal Release in Monterey Harbor](#)
- [Initial Study Environmental Checklist](#)
- [Exhibit A: Statement of Work](#)
- [Exhibit B: California Coastal Commission Notice of Permit Waiver](#)
- [Exhibit C: City of Monterey Zoning Review Letter](#)
- [Exhibit D: City of Monterey Harbor and Marina Division](#)
- [Exhibit E: Monterey Bay National Marine Sanctuary Statement](#)
- [Exhibit F: Project Location and Quadrants Identification Map](#)
- [Exhibit G: CNDDDB Elements Report](#)

Project Description and Background Information for Fall-Run Chinook Salmon Coastal Release in Monterey Harbor

Introduction

MBSTP Chinook Salmon Coastal Release Project in Monterey Harbor is a project within the meaning of the California Environmental Quality Act (CEQA) (Public Resource Code, § 21000 et seq). CDFW is serving as lead agency for the Project because it has discretionary approval over the Project. Specifically, CDFW would provide juvenile fish (smolts) necessary for the Project implementation from the Mokelumne River Hatchery (MOK) and would deliver those fish to the Monterey Harbor for their release.

The Commercial Salmon Trollers Advisory Committee (Salmon Stamp Committee) and CDFW support this project. The cost for raising, marking and tagging, and delivery of CV FRCS smolts to Monterey Harbor will be covered by the Commercial Salmon Trollers Enhancement and Restoration Program fund and a matching share contributed by CDFW. MBSTP will provide any additional funding needed for program operations.

This initial study and negative declaration analyze the environmental impacts that may result from the implementation of the proposed Project.

Project Objective

The Project's objective is to enhance Central California's local sport and commercial fisheries. Released smolts will feed and grow along the coast and be available for harvest as adults in one to three years.

Background

Adult returns of CV FRCS have fluctuated over the past 30 years (CDFW 2018). Record high numbers occurred between 2000 and 2003 with an estimated 872,699 returning to the Central Valley (CV) during the 2002 spawning season. In contrast, between 2003 and 2009, returns declined significantly to record low levels. During the 2007 spawning season, an estimated 97,168 adults returned to the Central Valley. Return estimates dipped further during the 2008 season to 71,291 adults. Adult return estimates increased slowly over the next few years and reached a high of 447,621 in 2013. However, California's recent drought significantly affected survival of juvenile salmon migrating to the ocean. In 2017, only 101,222 adults returned to the CV. In addition to the drought, other factors such as loss of habitat, poor ocean conditions, low river flows, water diversions, pollution, and predation contributed to the population declines.

In an effort to improve survival to adulthood by avoiding the hazards associated with migration, CDFW transports CV FRCS downstream and releases them into net pens in the Sacramento-San Joaquin Delta or San Pablo Bay for acclimation, or directly into the Bay. It has been found that hatchery fish released into coastal net pens have higher survival rates and higher recovery rates in ocean fisheries (Palmer-Zwahlen, et al., 2019, Leet, W.S. et al. 1986). Net pens provide fish the opportunity to develop schooling behavior and acclimate to local water salinity and temperature.

The MBSTP has conducted coastal net pen releases within Monterey Bay since 1992. Beginning in 2009, 100% of fish released were adipose fin-clipped and Coded Wire Tag (CWT) with a unique tag code. The first three years of CWT recovery data shows a consistent trend that bay net pen releases have a higher recovery rate than in-basin (at the hatchery) releases, and this can mean better survival (Palmer-

Zwahlen and Kormos 2015). However, net pen fish exhibited higher stray proportions than in-basin releases (Palmer-Zwahlen, et al. 2019).

“Homing” and “straying” are well-known behavioral traits in the ecology and life-history of Pacific Salmon (Quinn 2005). Homing may be defined as the instinctual ability of an adult Pacific Salmon to return to its natal stream to spawn. In contrast, straying may be defined as an adult migrating to a non-natal stream of origin. Studies have shown that salmon imprint as they migrate downstream and individuals that are released further downstream may show increased straying as compared to upriver releases (Quinn 2018, 127). Adult Chinook have been observed straying into several streams along the Central Coast as well as many San Francisco Bay streams for the past two decades, although historically these streams did have native runs of Chinook Salmon (Neillands et al. 2015). In 2014, CDFW began annual observation monitoring for straying CV FRCS into a few Central Coast streams and receiving adipose fin-clipped Chinook Salmon heads from cooperating agencies and NGOs throughout the San Francisco Bay streams. CWT fish released in Monterey Bay area appear to enter in relatively small numbers into coastal and Bay streams between their release point and the Sacramento-San Joaquin Delta when streams are accessible (Neillands et al. 2015, 2016, 2018 and 2019).

Project Location

Primary and secondary release methods will utilize Municipal Wharf 2 in Monterey Harbor (36.605514°, -121.889288°) 2020 and 2021.

Backup release method option one will use the boat ramp near the base of Coast Guard pier (36.608966°, -121.893299°) to discharge fish in the harbor or, if necessary, into a floating net barge.

Backup release method option two (emergency only) will release fish from Santa Cruz Harbor location used in Project Chinook Salmon Coastal Net Pen Project in Santa Cruz Harbor (36.964136°, -122.001816°) with approval of CDFW, Coastal Salmon Trollers Advisory Committee and Santa Cruz Harbor personnel.

Schedule

CDFW would deliver MOK CV FRCS smolts to Monterey Harbor in spring of 2020 and 2021. Exact dates and times would be scheduled as the time draws near and are dependent on fish size, growth rates, and environmental conditions in Monterey Harbor and Monterey Bay.

Project Description

All Project fish would be evaluated by a CDFW Fish Health pathologist and certified to be disease-free prior to leaving the hatchery. Fish will also be marked with Coded-Wire Tags (CWT) and adipose fin-clipped at a 100% rate for both years of the Project (2020 and 2021) to allow for evaluation of potential benefits and impacts of the Project. All smolts would be transported from MOK to Monterey Harbor in a single trip using 2-4 fish transport trucks. Trucks would be loaded, and fish transported according to MOK established standard operating procedures for transportation of salmon. Water in the trucks would be salted prior to adding fish at the hatchery.

MBSTP, in anticipation of fish delivery from MOK to the Monterey Harbor, has secured necessary equipment and developed multiple release protocols to accommodate potential changing bay conditions. MBSTP would release smolts from the trucks directly into Monterey Harbor, via a 10-inch, gravity-fed pipe. MBSTP would provide both staffing and logistical support to facilitate release of fish at

the Project location. This includes a 'tender' vessel provided and operated by MBSTP to assist in release of smolts from the height of the wharf to the water surface.

Smolts may be held if environmental conditions require alteration of release methods. In this case, fish would be held in a floating net barge for no more than 48 hours prior to release into the harbor. A floating net barge owned by Commercial Salmon Trollers Advisory Committee (CSTAC) and stored at Mokelumne River Hatchery would be assembled in advance of hatchery truck arrival, to be available if deemed necessary for acclimation prior to release.

The location of release is unchanged with or without use of the net barge and no feeding of fish would occur in the harbor with either release method. If a net barge is used, fish would be released at Wharf 2 location and not towed.

No active predator deterrent for marine mammals or seabirds is planned as part of the Project. Past predation events were attributed to net pen acclimation as well as the nearness of the release location to the largest numbers of sea lions in the harbor (Ben Harris, personal communication, December 9, 2019). The proposed location is on the opposite side of the harbor of these prior releases, and the elimination of net pen acclimation will prevent predators from adjusting to smolts as potential food sources. Past enhancement program operations in Monterey Bay have indicated that releases timed to coincide with a large outgoing tide have produced positive results by helping smolts avoid post-release predation and mortality. Dusk or night-time releases have also been proposed as a method for reducing post-release predation, particularly by seabirds. MBSTP will adapt schedule and release timing with CDFW and CSTAC to work within these optimal tidal and timing windows.

The Project would release 160,000 fish in 2020 and an additional 160,000 fish in 2021. The two-year total release from Monterey Harbor would be 320,000. When combined with other releases in Monterey Bay, the total release would be 280,000 fish in 2020. The total release would be 160,000 fish in 2021 or 280,000 fish in 2021 if previously approved Chinook Salmon Coastal Net Pen Project in Santa Cruz Harbor continues at current release rate.

This project is contingent upon CDFW approval after completion of CEQA. Project result data would be acquired from CDFW landings, carcass surveys, and monitoring programs.

[Environmental Assessment](#)

CDFW staff reviewed this project. It was determined that this project would have less than significant impact to Biological Resources, Greenhouse Gas Emissions, and Public Services at Monterey Harbor and surrounding areas. Due to lack of in harbor acclimation time, the Project does not anticipate adults to return to Monterey Harbor as has been seen in some previous coastal release projects. The Project complies with CDFW hatchery release policies. CDFW's California Natural Diversity Database (CNDDDB) was reviewed to identify potential impacts to animals identified in the nine Quadrants in the surrounding area.

[References](#)

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Initial Study Environmental Checklist

Project Title:

Chinook Salmon Coastal Release in Monterey Harbor

Lead Agency Name and Address:

California Department of Fish and Wildlife
Fisheries Branch
P.O. Box 944209
Sacramento, CA 92444-2090

Contact Person and Phone Number:

Ryon Kurth, Fisheries Branch
(916) 445-9935

Ryon.Kurth@wildlife.ca.gov

Project Location:

Monterey County
Monterey Harbor (36.605514°, -121.889288°)

Project Sponsor's Name and Address:

California Department of Fish and Wildlife
Fisheries Branch
P.O. Box 944209
Sacramento, CA 92444-2090

General Plan Designation:

Coastal Development Permit (CDP) Waiver 3-18-0156-W
California Coastal Commission Central Coast District Office
725 Front Street, Suite 300
Santa Cruz, CA 95060-4508

Zoning:

Coastal

Description of Project:

California Department of Fish and Wildlife's (CDFW) Mokelumne River Hatchery (MOK) would deliver 160,000 Central Valley fall-run Chinook Salmon (CV FRCS) smolts to the Project location for direct release (if possible) at the end of Municipal Wharf #2 in Monterey Harbor in 2020 and again in 2021. MBSTP is implementing this project. CDFW would deliver MOK CV FRCS smolts to Monterey Harbor in

mid-May of 2020 and 2021. Exact dates and times would be scheduled as the time draws near and are dependent on fish size, growth rates, and environmental conditions in Monterey Harbor and Monterey Bay. All smolts would be transported in a single trip each year, using 2-4 fish transport trucks (dependent upon loading density/fish size). Water in transport trucks would be salted prior to on-loading fish to initiate smoltification and aid in acclimation to the marine environment. MBSTP would provide a 'tender' vessel (12-20' outboard) on the water at the discharge point to assist with the discharge hose and any other operational logistics. Additional release methods may be used if conditions do not allow for direct discharge from transport trucks including: temporary (no greater than 48 hours) net barge holding, release at the base of the Coast Guard Pier, and (in case of emergency only) transfer to the Santa Cruz Harbor or Wharf (36.964136°, -122.001816°). The Project's objective is to enhance the commercial and recreational salmon ocean fishery.

Surrounding Land Uses and Setting:

Monterey Harbor is located on the south west end of Monterey Bay within the City of Monterey. Municipal Wharf #2 is the eastern most structure in Monterey Harbor which houses wholesale fish companies, restaurants, a boat hoist, private docks, public restrooms and a 700-foot fishing promenade open to public sport fishing. Foot-traffic issues have been discussed with Monterey Harbor personnel and is expected to be minimal. Any traffic or crowd control will be organized by MBSTP and Monterey Harbor (Ben Harris, personal communication, December 9, 2019). Total release time is expected to be less than one hour.

Monterey Bay is a 25-mile ocean inlet, which allows marine air at low levels to penetrate the interior. The Salinas Valley is a steep-sloped coastal valley that opens out on Monterey Bay and extends southeastward with mountain ranges of two to three thousand feet in elevation on either side. Monterey Bay is within the Monterey Bay National Marine Sanctuary, a federally protected marine area, established for the purpose of resource protection, research, education and public use. Commercial and recreational fishing are permitted within the sanctuary.

The Pajaro River, Elkhorn Slough and Salinas Rivers flow into Monterey Bay near Moss Landing, approximately 13 miles north of Monterey Harbor.

Approvals Needed from Other Public Agencies:

The Coastal Commission issued Coastal Development Permit waiver 3-18-0156-W on July 13, 2018 for this Project.

City of Monterey Planning office determined the Project meets all zoning requirements and needs no local permits other than building permits and considered it "Not a Project under CEQA Art. 20 Section 15378 and Art. 5 Section 15061" June 4, 2018 ([Exhibit C: City of Monterey Zoning Review Letter](#)).

Tribal:

Notification letters describing the Project were mailed to all federally recognized California tribes and California tribes specifically requesting to be notified for all CEQA projects on December 10, 2019.

CDFW received three responses. No tribes requested consultation. One tribe expressed support ([Exhibit H: Tribal Support Letters](#)).

Initial Study (cont): Environmental Factors, Determination, Evaluation of Environmental Impacts and Explanations

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 / Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <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 | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

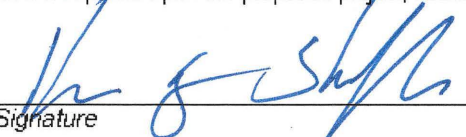
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

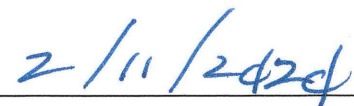
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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.


Signature


Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analyses Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
<ul style="list-style-type: none"> 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) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? 				
II. AGRICULTURE AND FORESTRY 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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
<ul style="list-style-type: none"> 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 district or air pollution control district may be relied upon to make the following determinations. Would the project:				
<ul style="list-style-type: none"> a) Conflict with or obstruct implementation of the applicable air quality plan? b) 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? c) Expose sensitive receptors to substantial pollutant concentrations? d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? 				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
<ul style="list-style-type: none"> 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 U.S. Fish and Wildlife Service? c) Have a substantial adverse effect on state or federally protected wetlands (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? 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:				
<ul style="list-style-type: none"> a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? c) Disturb any human remains, including those interred outside of dedicated cemeteries? 				
VI. ENERGY. Would the project:				
<ul style="list-style-type: none"> a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? 				
VII. GEOLOGY AND SOILS. Would the project:				
<ul style="list-style-type: none"> a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> 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? 				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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 direct or indirect 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?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

VIII. 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?

IX. 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?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 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 or excessive noise for people residing or working in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

X. HYDROLOGY AND WATER QUALITY. Would the project:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> i) result in a substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) 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; or iv) impede or redirect flood flows? d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? 				

XI. LAND USE AND PLANNING. Would the project:

- a) Physically divide an established community?
- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

XII. MINERAL RESOURCES. Would the project:

- a) Result in the loss of availability of a known mineral resource that would be a 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?

XIII. NOISE. Would the project result in:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or 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?

XIV. POPULATION AND HOUSING. Would the project:

- a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?

XV. PUBLIC SERVICES. Would the project:

- a) 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:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?				
Police protection?				
Schools?				
Parks?				
Other public facilities?				

XVI. RECREATION.

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that 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?

XVII. TRANSPORTATION. Would the project:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d) Result in inadequate emergency access?

XVIII. TRIBAL CULTURAL RESOURCES.

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
c) Result in a determination by the waste water 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?				
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

- a) Does the project have the potential to substantially 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?

I. Aesthetics

a. – d. : No impact

Discussion: Any additional equipment or lighting that may be used for this project (i.e. net barge, boat illumination) will be temporary and removed after use. There would be no other changes to scenic or urban landscapes.

II. Agriculture and Forestry Resources

a. – e. : No impact

Discussion: Activities proposed by the Project would not occur in any FMMP designated farmland, or area zoned for agricultural use, nor would the Project affect other resources related to agriculture, farmland or forest land.

III. Air Quality

a. – d. : No impact

Discussion: Any potential for air quality impacts would result from hatchery trucks and boats used for offloading the smolts. This is not an ongoing project and would not conflict with or obstruct implementation of any air quality control plan. Any diesel fuel odors when delivering fish would be temporary and would not adversely affect a substantial number of people. Significance criteria is established through Monterey Bay Air Resources District and adopted by the District Board of Directors on March 15, 2017. Project emissions generated by hatchery trucks and boat are accounted for in the Daily Emissions Inventory (David Frisbey, Monterey Bay Air Resources District, personal communication, November 22, 2019).

IV. Biological Resources

a. Less Than Significant Impact

Discussion: The Monterey Harbor and Monterey Bay area quadrants examined for this study include: Santa Cruz, Soquel, Watsonville West, Moss Landing, Marina, Seaside and Monterey. The California Natural Diversity Database (CNDDDB) Rare Find was used to report presence and status of all animals within these seven quadrants ([Exhibit F: Project Location and Quadrants Identification Map](#), Attachment 2: CNDDDB Grids included in species review., [Exhibit G: CNDDDB Elements Report](#)).

This project will have less than significant impact on species identified as candidate, sensitive, or special status species.

Fishes

Based on a query of CNDDDB Rare Find, this analysis considers whether any fish species that is documented to have occurred in the vicinity of the Project could be adversely affected by the presence of hatchery origin CV FRCS juveniles or returning adults.

The Project would result in less than significant impacts to California and federally endangered Central California Coast Evolutionarily Significant Unit Coho Salmon *Oncorhynchus kisutch* (CC Coho ESU), federally threatened Central California Coast Distinct Population Segment Steelhead (CCC Steelhead DPS) and South-Central Coast Steelhead (SCC Steelhead DPS) *Oncorhynchus mykiss*, and California Coastal Chinook Salmon (CC Chinook ESU) *Oncorhynchus tshawytscha*. Possible impacts to these species include: 1) competition for resources with CC Coho ESU, CCC and SCC steelhead DPSs *Oncorhynchus mykiss*, and California Coastal Chinook Salmon (CC Chinook

ESU) *Oncorhynchus tshawytscha*, 2) stock hybridization with CC Chinook ESU and CC Coho ESU, or 3) the establishment of an out-of-basin spawning population for CV FRCS in coastal streams where the species does not naturally occur. It is unlikely that these three concerns would result in any significant effects, either directly or indirectly. The three potential impacts above are addressed in turn, below.

1. If CV FRCS adults stray into coastal streams, some competition for resources with salmonids native to the area may occur. CDFW monitoring observations show that CV FRCS adults have strayed mainly into three coastal streams within and outside the Project area: Lagunitas Creek (Marin), Arana Gulch, and San Lorenzo River (Neillands et al. 2015, 2016, 2018 and 2019). Of these observations, only three CWT marked fish were recovered in Lagunitas Creek and later identified as returns from a Half Moon Bay net pen release. The remainder of the observations consisted of adipose fin-clipped live fish, carcasses, and redd counts that cannot be attributed to a particular release location. The mouth of Lagunitas Creek is open all year when the mouths of most coastal streams are blocked by sediment until fall rains begin and high flows flush open the mouth. This may be a reason more CV FRCS migrate into this stream to spawn. CV FRCS adults migrate earlier than Coho Salmon or steelhead, thus CV FRCS do not likely compete directly with adult Coho Salmon and steelhead for spawning habitat. Furthermore, expert opinion suggests that Lagunitas Creek is not reliable habitat for Chinook Salmon (E. Ettinger personal communication, 2019). The small releases of CV FRCS planned for 2020 and 2021 would likely not cause significant impacts through competition with listed anadromous stocks in coastal streams.
2. CV FRCS are genetically different from CC Chinook ESU but the two are of the same species and genetic hybridization is possible. What keeps different populations genetically distinct is the tendency to migrate back to their natal streams (spatial), and the timing of those migrations (temporal). The genetic distinctiveness illustrated in Clemento et al. (2014) strongly suggests that Russian River and Eel River Chinook Salmon, both in the southern most range of CC Chinook ESU, are more similar to the CC Chinook ESU than the CV FRCS. In other words, if hybridization was occurring in the Russian or Eel Rivers, genetic samples would likely be more similar to CV FRCS. Video monitoring at Mirabel Dam on the Russian River has reported low numbers of adipose fin-clipped fish entering the basin, and due to proximity, it is more likely these fish originated from the San Pablo Bay hatchery releases.

Hybridization with Coho Salmon has been documented although it is extremely rare (Chevassus 1979 (cited in Bartley et al 1990)). It is very unlikely for this to occur in or near the Project area due to the difference in timing of the two migrations. CC Coho ESU return to spawn later than CV FRCS, usually late November to early February and peaking in December and January. Adult CV FRCS migrate late-summer, early-fall and spawn almost immediately (Moyle 2002). Recognition of the same species through olfactory senses is also thought to be an important mechanism maintaining reproductive isolation in salmonids (Lily 1982). It is very unlikely that the small releases planned for 2020 and 2021 would significantly impact listed anadromous stocks due to hybridization with CV FRCS in coastal streams.

3. Hatchery fish have been transported and released into the San Francisco Bay for decades and more specifically, MBSTP has conducted net pen smolt acclimation in the Santa Cruz Harbor since 2010 and no out-of-basin spawning population has been observed. It is very unlikely that the small releases planned for 2020 and 2021 would establish an out-of-basin spawning population of CV FRCS.

The Project would result in no impacts to federally threatened Eulachon *Thaleichthys pacificus*. In California, Eulachon are historically found in the Klamath River as well as some smaller coastal rivers including the Mad River and Redwood Creek. The CNDDDB Soquel Quadrant details one Eulachon collected around 1911 near the mouth of Soquel Creek. This was a rare occurrence; it is extremely unlikely for Eulachon to be present or adversely affected by the Project.

The Project would result in no impacts to federal and state protected Longfin Smelt *Spirinchus thaleichthys*. The CNDDDB finding in Moss Landing Quadrant describes specimens of this species collected offshore in 1890, 1980, and 1993. However, Longfin Smelt do not spawn in this area and these specimens may have been strays from the San Francisco/Bay Delta population. It is extremely unlikely for Longfin Smelt to be present or adversely affected by the Project.

The Project would result in no impacts to federally endangered Tidewater Goby *Eucyclogobius newberryi*. Tidewater Goby is a small fish endemic to the California coast. Multiple occurrences in Santa Cruz Quadrant are shown in the CNDBB. However, Tidewater Goby is found in shallow lagoons, brackish marshes and lower stream reaches. This is not the habitat used by returning adult salmon, and thus would not be adversely affected by the Project.

Birds, Amphibians, Reptiles, and Insects

Several special status birds occur in the Project area, including federally and state endangered California Ridgway's rail *Rallus obsoletus obsoletus*, state threatened bank swallow *Riparia riparia*, federally threatened California black rail *Laterallus jamaicensis coturniculus*, state threatened tricolored blackbird *Eucyclogobius newberry*, and federally threatened and state species of special concern western snowy plover *Charadrius alexandrinus nivosus*. Because the Project would occur within the developed Monterey Harbor and given the short duration of the delivery there would be no potential for the Project to disrupt nesting, feeding, or other activities of these birds. In addition, any adult CV FRCS straying into coastal streams would be minimal and would not significantly affect these species.

Similarly, special status amphibians, reptiles, and insects have been documented to occur within the quadrants analyzed for this review, but the Project would not significantly impact these species.

Marine Mammals

Based on a query of CNDDDB Rare Find, this analysis considers whether any marine mammal that is documented to have occurred in the vicinity of the Project could be adversely affected by the

presence of hatchery origin CV FRCS juveniles or returning adults. No marine mammals were listed in the CNDDDB for the quadrants selected.

b. – f. : No impact

Discussion: The Project involves no changes to terrestrial habitats or wetlands and involves no activities that would impede movement within migratory corridors, or conflict with local ordinances or adopted conservation plans.

V. Cultural Resources

a. – c. : No impact

Discussion: Project does not include usage of historical or archaeological resources, nor does it include any ground modifying activity.

VI. Energy

a. – b. : No impact

Discussion: The Project would be complete in a short amount of time and does not require local energy use or impact local energy plans. The extent of energy resources used would be hatchery trucks and boat fuel use covered in previous sections.

VII. Geology and Soils

a. – f. : No impact

Discussion: The Project does not include any ground disturbing work.

VIII. Greenhouse Gas Emissions

a. : Less Than Significant Impact

Discussion: The Project would emit greenhouse gases (GHG) due to the use of fuel to transport the Chinook Salmon smolts from MOK to Monterey Harbor and the use of an on-the-water boat to assist in the release of the smolts. Project emissions generated by hatchery trucks and boat are accounted for in the daily emissions Daily Emissions Inventory outlined on pages 20 and 21 of the 2012-2015 Air Quality Management Plan released by the Monterey Bay Air Resources District and adopted by the District Board of Directors on March 15, 2017. (David Frisbey, Monterey Bay Air Resources District, personal communication, November 22, 2019).

b. : No impact

Discussion: The very low levels of GHG emissions from the Project will not conflict with plans for reducing GHG.

IX. Hazards and Hazardous Materials

a. – g. : No impact

Discussion: The Project will not be transporting, located in areas with, or blocking hazards or hazardous materials.

X. Hydrology and Water Quality

a. – c. : No impact

Discussion: Fish will be acclimated to saltwater in hatchery trucks and will not be fed on site. Any fecal matter produced on site will be minimal with direct release of smolts into the Project site. No local groundwater, existing drainage, tidal or river flow, or alteration of management plans would be affected or changed due to this Project and no pollutants will be released.

XI. Land Use and Planning

a. – b. : No impact

Discussion: There is no land use anticipated for this Project and if temporary net barges are needed dockside, they will be removed after use.

XII. Mineral Resources

- a. – b. : No impact

Discussion: No mineral resources will be used in the Project.

XIII. Noise

- a. – c. : No impact

Discussion: The Project will not produce substantial temporary or permanent increase in ambient noise levels and hatchery trucks and boats are within expected noise levels for Monterey Harbor and nearby communities.

XIV. Population and Housing

- a. – b. : No impact

Discussion: The Project does not include any construction or alterations to local housing or population.

XV. Public Services

- a. : Less Than Significant Impact

Discussion: Due to shorter acclimation time, adults are not expected to return to Monterey Harbor as has been seen in previous coastal release projects. Previous impact was seen in net pen releases when acclimation times were longer and adults returned to the release site, bringing traffic from recreational anglers. Given the changes in acclimation times, it appears unlikely that significant numbers of CV FRCS adults would home to Monterey Harbor and lead to fishing in the area, and if some do return, their numbers would be less than significant. The Project does not include any construction or alterations to facilities.

XVI. Recreation

- a. – b. : No impact

Discussion: The Project would not be in a regional park area and all aspects of potential additional public use would be centralized to the Municipal Wharf 2 where public facilities are present and capable of covering increase in tourist traffic. No additional facilities are likely to be needed.

XVII. Transportation

- a. – d. : No impact

Discussion: The Project does not involve alterations to public transportation facilities. The low number of vehicle miles associated with the hatchery trucks from MOK to Monterey Harbor would not have an appreciable impact to roadways or pedestrian facilities or block any emergency access.

XVIII. Tribal Cultural Resources

- a. : No impact

Discussion: Notification letters describing the Project were mailed to all federally recognized tribes in California and California tribes specifically requesting to be notified for all CEQA projects on December 10, 2019. CDFW received three responses. No tribes requested consultation; one issued a letter of support ([Exhibit H: Tribal Support Letters](#)).

XIX. Utilities and Service Systems

- a. – e. : No impact

Discussion: The Project would not rely on utilities or service systems nor generate liquid or solid waste.

XX. Wildfire

a. – d. : No impact

Discussion: The Project would not block emergency vehicles or evacuations. There would be no increased wildfire or exposure to risks and the Project uses infrastructure already in existence with no additional infrastructure needed.

XXI. Mandatory Findings of Significance

a. : No impact

Discussion: The Project would not degrade the environment or species. Project smolts would grow into harvestable adults in the near ocean environmental and be available to commercial and recreational fisheries. Unharvested adults may stray or return to MOK, but this would not impact habitat of other native species or substantially reduce the number of species or restrict the range of a rare or endangered plant or animal.

b. No impact

Discussion: No impact. Kormos and Palmer-Zwahlen (2015) explain that CWT data indicates net pen releases generally have a higher recovery rate than fish released in river, but conversely, they also exhibited higher stray rates. There are concerns that returning adult net pen fish strays may adversely affect native stocks within coastal streams, however this has to be shown to impact native fishes. Features of the Project serve to reduce the potential for Project fish to stray into coastal streams and minimize any impact in the event straying occurs. In addition, this Project has taken steps to reduce potential for straying through lowered acclimation times.

Based on the available data, there will be no cumulative impacts.

c. No impact

Discussion: The Project does not have environmental effects which 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) would fulfill the following:

1. MBSTP is responsible for acclimating 160,000 Chinook Salmon smolts provided by the Mokelumne River Fish Hatchery in 2020 and 160,000 in 2021. CDFW would deliver fish to harbor directly or through net barge to Municipal Wharf 2 within Monterey Harbor. Fish delivered to the net barge would be held no greater than 48 hours and if environmental conditions prevent release from either Municipal Wharf 2 or Coast Guard pier in Monterey Harbor, release could be conducted in Santa Cruz Harbor in case of emergency only.

If a net barge is used, it will be towed and placed prior to arrival of hatchery fish. It will be located in the same Municipal Wharf 2 location as the direct release. Hatchery fish will be delivered at the same time in 2-4 hatchery trucks. This project has been reviewed and accepted by California Coastal Commission, City of Monterey, Monterey Harbor and Monterey Bay National Marine Sanctuary (see Exhibits B-E). MBSTP has engaged with the public and local communities included a public meeting on August 21, 2019. The public meeting was widely broadcast and had staff from Monterey Bay Aquarium, Monterey Bay National Marine Sanctuary, Monterey Harbor and Monterey Bay Fisheries Trust in attendance with over 25 members of the public (Ben Harris, personal communication, December 9, 2019).

2. MBSTP understands the availability of salmon for this project may be reduced based on availability. CDFW would mark and tag the fish with a coded-wire tag (CWT) and adipose fin clip. Salmon would be healthy and disease free when delivered to Monterey Harbor. All fish would be delivered, acclimated, and released within the same day with the exception alternative release methods in which they will be released no greater than 48 hours after delivery. Fish are scheduled to be delivered mid-May depending on fish size, growth rates, and environmental conditions in Monterey Harbor and Monterey Bay.

3. MBSTP agrees to provide a written report on all fish releases to CDFW and Commercial Salmon Trollers Advisory Committee (CSTAC) by August 15, 2020 for the 2020 release and by August 15, 2021 for the 2021 release. The report will include the following information:

- Estimated number of fish, mortalities, and condition upon delivery
- Estimated number of fish mortalities and condition upon release
- Environmental conditions; water temperature, air temperature
- Estimated number and species of avian and marine predators present at release
- Location (lat/long) of release site and time
- Duration of acclimation (hours, minutes)

4. MBSTP would provide a hard copy and an electronic copy of the final report in MS Word or PDF format.

5. MBSTP would obtain permits required by the Coastal Commission, local planners, and any other permits that may be needed to implement the project.

6. MBSTP would 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 Chinook Salmon Coastal Release Project in Monterey Harbor.

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
125 FRODO STREET, SUITE 300
SANTA CRUZ, CALIFORNIA 95060-4508
PH (831) 427-4867 FAX (831) 427-4877
WWW.COASTAL.CA.GOV



**NOTICE OF
PERMIT WAIVER EFFECTIVENESS**

July 13, 2018

To: Monterey Bay Salmon and Trout Project
From: Susan Craig, District Manager
Sarah Carvill, Coastal Program Analyst
Subject: Coastal Development Permit (CDP) Waiver 3-18-0156-W

Please note that CDP Waiver 3-18-0156-W was reported to the California Coastal Commission on July 12, 2018 and became effective as of that date. CDP Waiver 3-18-0156-W allows for:

Placement of a 46-foot by 26-foot floating net pen (in the spring of 2019 and again in the spring of 2020) in the Monterey Harbor for up to 48 hours to contain Chinook salmon smolts that will be transported to and released in the open waters of Monterey Bay. The pen consists of a floating dock encircled by a six-foot-high chain link fence; a net attached to the floating dock extends eight feet below the surface of the water. The pen will be moored to existing Harbor infrastructure (i.e., a floating dock) near the Coast Guard pier.

Please be advised that CDP Waiver 3-18-0156-W only authorizes the development as proposed and described in the Commission's files; any changes to the proposed and described project may require a CDP to account for the changes or a CDP for the entire project. If you have any questions, please contact Sarah Carvill in the Central Coast District Office at the address and phone number above.

Sincerely,

John Ainsworth
Executive Director

Susan Craig 
Central Coast District Manager

cc: File

Exhibit C: City of Monterey Zoning Review Letter

APPENDIX B
LOCAL AGENCY REVIEW FORM

SECTION A (TO BE COMPLETED BY APPLICANT)

Applicant Benjamin Harris

Project Description MBSTP Chinook Net Pen Release Program

Location Monterey Harbor, Monterey, CA

Assessor's Parcel Number Not Applicable

SECTION B (TO BE COMPLETED BY LOCAL PLANNING OR BUILDING INSPECTION DEPARTMENT)

Zoning Designation PC-W (Planned Community - Waterfront) N/A du/ac

General or Community Plan Designation Public/Semi-Public N/A du/ac

Local Discretionary Approvals

Proposed development meets all zoning requirements and needs no local permits other than building permits.

Proposed development needs local discretionary approvals noted below.

Needed	Received	
<input type="checkbox"/>	<input type="checkbox"/>	Design/Architectural review
<input type="checkbox"/>	<input type="checkbox"/>	Variance for _____
<input type="checkbox"/>	<input type="checkbox"/>	Rezone from _____
<input type="checkbox"/>	<input type="checkbox"/>	Tentative Subdivision/Parcel Map No. _____
<input type="checkbox"/>	<input type="checkbox"/>	Grading/Land Development Permit No. _____
<input type="checkbox"/>	<input type="checkbox"/>	Planned Residential/Commercial Development Approval
<input type="checkbox"/>	<input type="checkbox"/>	Site Plan Review
<input type="checkbox"/>	<input type="checkbox"/>	Condominium Conversion Permit
<input type="checkbox"/>	<input type="checkbox"/>	Conditional, Special, or Major Use Permit No. _____
<input type="checkbox"/>	<input type="checkbox"/>	Other _____

CEQA Status

- Categorically Exempt Class _____ Item _____
- Negative Declaration Granted (Date) _____
- Environmental Impact Report Required, Final Report Certified (Date) _____
- Other Not a Project under CEQA Art. 20 S. 15378 + Art. 5 S. 15061

Prepared for the City/County of Monterey by Fernanda Roveri, AICP

Date 6/4/2018 Title Associate Planner

Exhibit D: City of Monterey Harbor and Marina Division



HARBOR/MARINA DIVISION

January 7, 2020

Ben Harris
101 Cooper St.
Santa Cruz, CA 95060

Dear Mr. Harris:

Thank you for helping in the efforts to bring a salmon release fishery enhancement program to the Monterey Harbor. I recognize that such a program would bring a social and economic benefit to Monterey Bay by helping to sustain fishing opportunities for future generations.

In the past, Monterey Harbor Staff worked with the Monterey Bay Salmon and Trout Project to release salmon smelt into the wild but the program was discontinued for various reasons. Recently, through the acceptance of the City of Monterey's Fishing Community Sustainability Plan, the City Council of Monterey has expressed a desire to work with interested parties to reinstate a salmon release program.

I welcome the opportunity to support interested parties in releasing up to 250,000 salmon smolt at Monterey. The City of Monterey will permit and grant access to the Waterfront Facilities in Monterey to the Monterey Bay Salmon and Trout Project Personnel for the duration of a salmon release fishery enhancement project.

Sincerely,

A handwritten signature in black ink, appearing to read "John Haynes".

John Haynes

City of Monterey Harbormaster

Exhibit E: Monterey Bay National Marine Sanctuary Statement

From: Sophie De Beukelaer - NOAA Affiliate
Sent: Wednesday, February 5, 2020 12:56 PM
To: Parker, Christina@Wildlife
Cc: Karen Grimmer - NOAA Federal; Kurth, Ryon@Wildlife
Subject: Re: FW: Monterey harbor chinook release letter

Hello Christina,

Thank you for providing the follow-up information. Monterey Bay National Marine Sanctuary (MBNMS) has reviewed the project description and supplemental information provided for the release of juvenile Chinook Salmon into the Monterey Harbor in May 2020 by the Monterey Salmon and Trout Project. The release will occur within Monterey Harbor and will not be occurring in the MBNMS's jurisdiction, which is seaward of the Monterey harbor waters (see map on https://nmsmontereybay.blob.core.windows.net/montereybay-prod/media/materials/maps/harbor1_lg.jpg). MBNMS is aware of this project, and does not object to this project as described.

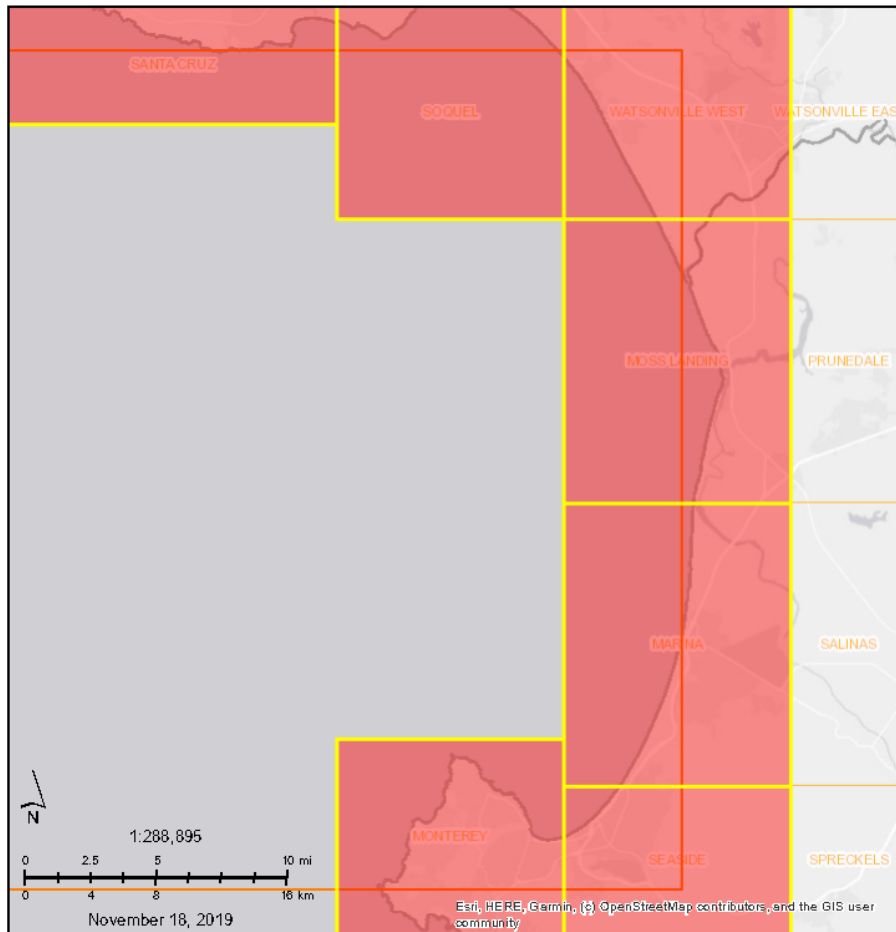
Please do reach out to us if your methods change, particularly the release location.

Sincerely,
Sophie

Exhibit F: Project Location and Quadrants Identification Map



Attachment 1: Monterey Harbor release location. Yellow circle indicates approximate primary release site.



Attachment 2: CNDDB Grids included in species review.

Exhibit G: CNDDDB Elements Report



Selected Elements by Common Name California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria: Quad IS (Santa Cruz (3612281) OR Sequel (3612188) OR Watsonville West (3612187) OR Moss Landing (3612177) OR Marina (3612167) OR Seaside (3612157) OR Monterey (3612158))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
American peregrine falcon <i>Falco peregrinus anatum</i>	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Anderson's manzanita <i>Arctostaphylos andersonii</i>	PDERI04030	None	None	G2	S2	1B.2
angel's hair lichen <i>Famalina thrausta</i>	NLLEC3S340	None	None	G5?	S2S3	2B.1
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
beach layia <i>Layia carnosa</i>	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
black swift <i>Cypseloides niger</i>	ABNUA01010	None	None	G4	S2	SSC
Blasdale's bent grass <i>Agrostis blasdalei</i>	PMPOA04060	None	None	G2	S2	1B.2
burrowing owl <i>Athene cucularia</i>	ABNSB10010	None	None	G4	S3	SSC
California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041	None	Threatened	G3G4T1	S1	FP
California brown pelican <i>Pelecanus occidentalis californicus</i>	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
California giant salamander <i>Dicamptodon ensatus</i>	AAAAH01020	None	None	G3	S2S3	SSC
California horned lark <i>Eremophila alpestris actia</i>	ABPAT02011	None	None	G5T4Q	S4	WL
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
California red-legged frog <i>Rana draytonii</i>	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	ABNME05011	Endangered	Endangered	G5T1	S1	FP
California tiger salamander <i>Ambystoma californiense</i>	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Carmel Valley bush-mallow <i>Malacothamnus palmeri var. involucratus</i>	PDMAL0Q0B1	None	None	G3T2Q	S2	1B.2
Carmel Valley malacothrix <i>Malacothrix saxatilis var. arachnoidea</i>	PDAST660C2	None	None	G5T2	S2	1B.2



Selected Elements by Common Name
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 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Central Dune Scrub <i>Central Dune Scrub</i>	CTT21320CA	None	None	G2	S2.2	
Central Maritime Chaparral <i>Central Maritime Chaparral</i>	CTT37C20CA	None	None	G2	S2.2	
Choris' popcornflower <i>Flagiobothrys chorisianus var. chorisianus</i>	PDBOR0V081	None	None	G3T1Q	S1	1B.2
coast horned lizard <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G3G4	S3S4	SSC
Coast Range newt <i>Taricha torosa</i>	AAAAF02032	None	None	G4	S4	SSC
Coastal and Valley Freshwater Marsh <i>Coastal and Valley Freshwater Marsh</i>	CTT52410CA	None	None	G3	S2.1	
Coastal Brackish Marsh <i>Coastal Brackish Marsh</i>	CTT52200CA	None	None	G2	S2.1	
coastal dunes milk-vetch <i>Astragalus tener var. titi</i>	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
coho salmon - central California coast ESU <i>Oncorhynchus kisutch pop. 4</i>	AFCHA02034	Endangered	Endangered	G4	S2?	
Congdon's tarplant <i>Centromadia parryi ssp. congdoni</i>	PDAST4R0P1	None	None	G3T1T2	S1S2	1B.1
Contra Costa goldfields <i>Lasthenia conjugens</i>	PDAST5L040	Endangered	None	G1	S1	1B.1
Cooper's hawk <i>Accipiter cooperii</i>	ABNKC12040	None	None	G5	S4	WL
Dolloff Cave spider <i>Meta dolloff</i>	ILARA17010	None	None	G1	S1	
Dudley's lousewort <i>Pedicularis dudleyi</i>	PDSOR1K0D0	None	Rare	G2	S2	1B.2
Eastwood's goldenbush <i>Ericameria fasciculata</i>	PDAST3L080	None	None	G2	S2	1B.1
Empire Cave pseudoscorpion <i>Fissiliocreagris imperialis</i>	ILARAE5010	None	None	G1	S1	
Empire Cave pseudoscorpion <i>Neochthonius imperialis</i>	ILARAD1010	None	None	G1	S1	
eulachon <i>Thaleichthys pacificus</i>	AFCHB04010	Threatened	None	G5	S3	
ferruginous hawk <i>Buteo regalis</i>	ABNKC19120	None	None	G4	S3S4	WL
foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Fort Ord spineflower <i>Chorizanthe minutiflora</i>	PDPGN04100	None	None	G1	S1	1B.2



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fragrant fritillary <i>Fritularia liliacea</i>	PMLIL0V0C0	None	None	G2	S2	1B.2
globose dune beetle <i>Coelus globosus</i>	IICOL4A010	None	None	G1G2	S1S2	
Gowen cypress <i>Hesperocyparis goweniana</i>	PGCUP04031	Threatened	None	G1	S1	1B.2
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
Hickman's cinquefoil <i>Potentilla hickmanii</i>	PDR0S1B0U0	Endangered	Endangered	G1	S1	1B.1
Hickman's onion <i>Allium hickmanii</i>	PMLIL02140	None	None	G2	S2	1B.2
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4	
Hooker's manzanita <i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	PDERI040J1	None	None	G3T2	S2	1B.2
Hospital Canyon larkspur <i>Delphinium californicum</i> ssp. <i>interius</i>	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Hutchinson's larkspur <i>Delphinium hutchinsoniae</i>	PDRAN0B0V0	None	None	G2	S2	1B.2
Jolon clarkia <i>Clarkia jolonensis</i>	PDONA050L0	None	None	G2	S2	1B.2
Kellogg's horkelia <i>Horkelia cuneata</i> var. <i>sericea</i>	PDR0S0W043	None	None	G4T1?	S1?	1B.1
longfin smelt <i>Spirinchus thaleichthys</i>	AFCHB03010	Candidate	Threatened	G5	S1	
Mackenzie's Cave amphipod <i>Stygobromus mackenziei</i>	ICMAL05530	None	None	G1	S1	
maple-leaved checkerbloom <i>Sidalcea malachroides</i>	PDMAL110E0	None	None	G3	S3	4.2
marsh microseris <i>Microseris paludosa</i>	PDAST6E0D0	None	None	G2	S2	1B.2
marsh sandwort <i>Arenaria paludicola</i>	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Menzies' wallflower <i>Erysimum menziesii</i>	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
mimic tryonia (=California brackishwater snail) <i>Tryonia imitator</i>	IMGASJ7040	None	None	G2	S2	
moetan blister beetle <i>Lytta moesta</i>	IICOL4C020	None	None	G2	S2	
monarch - California overwintering population <i>Ganaus plexippus</i> pop. 1	IILEPP2012	None	None	G4T2T3	S2S3	



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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Monterey clover <i>Trifolium trichocalyx</i>	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1
Monterey cypress <i>Hesperocyparis macrocarpa</i>	PGCUP04060	None	None	G1	S1	1B.2
Monterey Cypress Forest <i>Monterey Cypress Forest</i>	CTT83150CA	None	None	G1	S1.2	
Monterey gilia <i>Gilia tenuiflora ssp. arenaria</i>	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Monterey pine <i>Pinus radiata</i>	PGPIN040V0	None	None	G1	S1	1B.1
Monterey Pine Forest <i>Monterey Pine Forest</i>	CTT83130CA	None	None	G1	S1.1	
Monterey Pygmy Cypress Forest <i>Monterey Pygmy Cypress Forest</i>	CTT83162CA	None	None	G1	S1.1	
Monterey shrew <i>Sorex ornatus salarius</i>	AMABA01105	None	None	G5T1T2	S1S2	SSC
Monterey spineflower <i>Chorizanthe pungens var. pungens</i>	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
North Central Coast Drainage Sacramento Sucker/Roach River <i>North Central Coast Drainage Sacramento Sucker/Roach River</i>	CARA2623CA	None	None	GNR	SNR	
Northern Bishop Pine Forest <i>Northern Bishop Pine Forest</i>	CTT83121CA	None	None	G2	S2.2	
northern California legless lizard <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S3	SSC
Northern Coastal Salt Marsh <i>Northern Coastal Salt Marsh</i>	CTT52110CA	None	None	G3	S3.2	
northern curly-leaved monardella <i>Monardella sinuata ssp. nigrescens</i>	PDLAM18162	None	None	G3T2	S2	1B.2
obscure bumble bee <i>Bombus caliginosus</i>	IHYM24380	None	None	G4?	S1S2	
Ohlone tiger beetle <i>Cicindela ohlone</i>	IICOL026L0	Endangered	None	G1	S1	
Pacific Grove clover <i>Trifolium polyodon</i>	PDFAB402H0	None	Rare	G1	S1	1B.1
Pajaro manzanita <i>Arctostaphylos pajaroensis</i>	PDERI04100	None	None	G1	S1	1B.1
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G5	S3	SSC
perennial goldfields <i>Lasthenia californica ssp. macrantha</i>	PDAST5L0C5	None	None	G3T2	S2	1B.2
pine rose <i>Rosa pinetorum</i>	PDRDS1J0W0	None	None	G2	S2	1B.2



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pink Johnny-nip <i>Castilleja ambigua</i> var. <i>insalutata</i>	PDSCR0D403	None	None	G4T2	S2	1B.1
Point Reyes horkelia <i>Horkelia marinensis</i>	PDROS0W0B0	None	None	G2	S2	1B.2
robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	PDPGN040G2	Endangered	None	G2T1	S1	1B.1
Salinas harvest mouse <i>Reithrodontomys megalotis distichlis</i>	AMAFF02032	None	None	G5T1	S1	
saline clover <i>Trifolium hydrophilum</i>	PDFAB400R5	None	None	G2	S2	1B.2
San Francisco collinsia <i>Collinsia multicolor</i>	PDSCR0H0B0	None	None	G2	S2	1B.2
San Francisco popcornflower <i>Flagiobothrys diffusus</i>	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
sand-loving wallflower <i>Erysimum amorphilum</i>	PDBRA16010	None	None	G2	S2	1B.2
sandmat manzanita <i>Arctostaphylos pumila</i>	PDERI04180	None	None	G1	S1	1B.2
sandy beach tiger beetle <i>Cicindela hirticollis gravida</i>	IICOL02101	None	None	G5T2	S2	
Santa Cruz black salamander <i>Aneides niger</i>	AAAAD01070	None	None	G3	S3	SSC
Santa Cruz clover <i>Trifolium buckwestorum</i>	PDFAB402W0	None	None	G2	S2	1B.1
Santa Cruz kangaroo rat <i>Dipodomys venustus venustus</i>	AMAFD03042	None	None	G4T1	S1	
Santa Cruz long-toed salamander <i>Ambystoma macrodactylum croceum</i>	AAAAA01082	Endangered	Endangered	G5T1T2	S1S2	FP
Santa Cruz microseris <i>Stebbinsoseris decipiens</i>	PDAST6E050	None	None	G2	S2	1B.2
Santa Cruz tarplant <i>Holocarpha macradenia</i>	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
seaside bird's-beak <i>Cordylanthus rigidus</i> ssp. <i>ittoralis</i>	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
short-eared owl <i>Asio flammeus</i>	ABNSB13040	None	None	G5	S3	SSC
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>	IILEPG2026	Endangered	None	G5T1T2	S1S2	
steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus</i> pop. 8	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
steelhead - south-central California coast DPS <i>Oncorhynchus mykiss irideus</i> pop. 9	AFCHA0209H	Threatened	None	G5T2Q	S2	



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tear drop moss <i>Cacryophyllum falcatifolium</i>	NBMUS8Z010	None	None	G2	S2	1B.3
Tidestrom's lupine <i>Lupinus tidestromii</i>	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered	None	G3	S3	SSC
Toro manzanita <i>Arctostaphylos montereyensis</i>	PDERI040R0	None	None	G2?	S2?	1B.2
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
twisted horsehair lichen <i>Bryoria spiriferia</i>	NLTEST5460	None	None	G1G2	S1S2	1B.1
Valley Needlegrass Grassland <i>Valley Needlegrass Grassland</i>	CTT42110CA	None	None	G3	S3.1	
western bumble bee <i>Bombus occidentalis</i>	IHYM24250	None	Candidate Endangered	G2G3	S1	
western pond turtle <i>Emys rarmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western snowy plover <i>Charadrius alexandrinus nivosus</i>	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
white-rayed pentachaeta <i>Pentachaeta bewidiflora</i>	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
woodland woollythreads <i>Monolopia gracilens</i>	PDAST6G010	None	None	G3	S3	1B.2
Yadon's rein orchid <i>Fiperia yadonii</i>	PMORC1X070	Endangered	None	G1	S1	1B.1
yellow rail <i>Coturnicops noveboracensis</i>	ABNME01010	None	None	G4	S1S2	SSC
Zayante band-winged grasshopper <i>Trimerotropis infantilis</i>	IORT36030	Endangered	None	G1	S1	

Record Count: 119

Exhibit H: Tribal Support Letters



CAHTO TRIBE

LAYTONVILLE RANCHERIA
P.O. Box 1239 • Laytonville, CA 95454
(707) 984-6197



State of California
Department of Fish and Wildlife
1010 Riverside Parkway
West Sacramento, CA 95605



January 8, 2020

Dear Mr. Shaffer,



We are writing to you to express the support of the Cahto Tribe of the Laytonville Rancheria for the MBSTP Chinook Salmon Coastal Release Project in Monterey Harbor. This is not in our area geographically, but we generally support efforts to improve the populations of salmonids. Their habitat has been negatively impacted through cumulative human influences due to pollution, overuse of resources, poor development decisions, and climate change impacts. Chinook is one of the culturally important species of salmonids for the Cahto Tribe and has traditionally been an important subsistence food. The decline of salmonids is extremely concerning to the Tribe. Efforts to restore their populations, protect their habitat, and increase numbers of native salmonids in California is important to their survival as a species. We ask that you consider the importance of combining these efforts with habitat improvements so that long term survival and natural repopulation can occur.



Thank you for your time and consideration.



Sincerely,

A handwritten signature in blue ink that reads "Mary J. Norris".

Mary J. Norris
Tribal Chairwoman

