Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor

CEQA: INITIAL STUDY AND NEGATIVE DECLARATION CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FISHERIES BRANCH

Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor

Initial Study and Negative Declaration

Introduction

This document describes and evaluates the Chinook salmon coastal releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor (hereafter, Project). Releases of smolts (juvenile salmon that are physiologically prepared for saltwater entry) will occur annually each spring for 5 years (2025-2029). Chinook salmon releases at Santa Cruz Wharf and Monterey Harbor are proposed by Monterey Bay Salmon and Trout Project (MBSTP) and releases at Pillar Point Harbor are proposed by the Coastside Fishing Club (CFC).

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 conducted coastal salmon releases since the 1990's, with more recent releases occurring in Santa Cruz Wharf and Monterey Harbor within the last 5 years. MBSTP proposes to release up to 160,000 juvenile hatchery-origin (HO) Central Valley fall-run Chinook salmon (CV FRCS, *Oncorhynchus tshawytscha*) smolts at the Santa Cruz Wharf and up to 160,000 smolts at Monterey Harbor (Figs. 1-2), with a combined total release of up to 320,000 smolts annually each spring from 2025-2029.

CFC is a membership-based, conservation-minded community of recreational anglers that aims to enhance California's fisheries. The CFC has conducted coastal net pen releases at Pillar Point Harbor since 2011 and proposes to release up to 750,000 juvenile HO CV FRCS at Pillar Point Harbor (Fig. 3) annually each spring from 2025-2029. The CFC would provide the net pens and the volunteers responsible for care and maintenance of the pens and smolts postdelivery from the California Department of Fish and Wildlife (CDFW) at Johnson Pier in Pillar Point Harbor.

The 2025-2029 releases of HO CV FRCS at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor are the Project as described and evaluated in this Initial Study and Negative Declaration. Under the direction of the CDFW, MBSTP and the CFC would be responsible for the release of up to 320,000 and 750,000 CV FRCS smolts (respectively) from the Mokelumne River Fish Hatchery (MOK). The Project's objective is to increase the number of ocean Chinook salmon landings in California to enhance 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

The CDFW has determined that there is no substantial evidence, in light of the whole record before CDFW, that the Project may have a significant effect on the environment (Pub. Res. Code § 21080(c); Cal. Code Regs., tit. 14 § 15070). The completed Initial Study, attached to this Negative Declaration, documents the basis for this finding (see CEQA Appendix G: Initial Study Environmental Checklist).

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
- CEQA Appendix G: Initial Study Environmental Checklist
- Exhibit A: Statement of Work
- Exhibit B: Permits and Permit Waivers
- Exhibit C: Tribal Outreach
- Exhibit D: California Natural Diversity Database Elements Report and Quadrants Identification Map

Project Description and Background Information

Introduction

Chinook salmon coastal releases at Santa Cruz Wharf, Monterey Habor, and Pillar Point 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 the juvenile salmon (smolts) necessary for the Project implementation from the MOK and would deliver those fish for acclimation and release at Santa Cruz Wharf, Monterey Habor, and Pillar Point Harbor.

The California Commercial Salmon Trollers Advisory Committee (CCSTAC) and CDFW support this Project. The cost of raising, marking, tagging, and delivery of CV FRCS smolts for each release location (Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor) will be covered by the Commercial Salmon Trollers Enhancement and Restoration Program fund and a matching share contributed by CDFW. Any additional program operation costs associated with releasing fish at the Project locations will be funded MBSTP and the CFC.

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 local sport and commercial salmon 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. Record high numbers occurred between 2000 and 2003, with an estimated 872,699 adult salmon returning to the Central Valley (CV) during the 2002 spawning season. This was followed by significant declines through 2009, with an estimated 97,168 and 53,043 adults returning to spawn in Central Valley rivers in 2007 and 2009, respectively (Azat and Killam 2024). Despite gradual increases in adult return estimates over the next few years (reaching a high of 447,621 in 2013), multiple droughts in the past decade have resulted in decreased flows and elevated water temperatures during adult spawning and juvenile rearing periods, contributing to loss of suitable spawning habitat, pre-spawn mortality, disease, and suppressed recruitment and outmigration survival of juveniles (PFMC 2019). More recently, only 79,976 adults returned to the Central Valley in 2022, the lowest estimate since 2009 (Azat and Killam 2024). In addition to drought-related factors, other contributors to declining FRCS populations include habitat degradation and loss, poor ocean conditions, water diversions, pollution, and predation.

To improve survival to adulthood by avoiding the hazards associated with migration, CDFW transports and releases CV FRCS downstream into the Sacramento-San Joaquin Delta, San Pablo Bay, San Francisco Bay, or along the Central California coast via direct release or net pens. Net pens provide fish the opportunity to develop schooling behavior and acclimate to local water salinity and temperature prior to release. The Central Valley Constant Fractional Marking (CFM) Program is used to evaluate fishery and hatchery management practices using coded-wire-tag (CWT) recovery data. Previous CWT recovery data has shown that salmon from coastal and Bay net pen releases typically have higher ocean fishery recovery rates than in-basin (natal stream, near the hatchery) releases, suggesting higher survival of fish under this release strategy (Palmer-Zwahlen and Kormos 2015). However, adult salmon from coastal and Bay net pen releases that and Bay net pen releases also exhibited higher stray proportions than adult salmon from 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. Homing may be defined as the instinctual ability of an adult salmon to return to its natal stream to spawn. In contrast, straying may be defined as an adult migrating to a non-natal steam of origin (Quinn 1993). Studies have shown that salmon imprint as they migrate downstream, and transportation of hatchery-produced juveniles for release at downstream locations can promote higher straying in returning adults compared to upriver or on-site releases (Sturrock 2019; Quinn 2018). Straying in wild populations is a natural and important component of salmonid biology that promotes genetic diversity and colonization of new habitats. However, unnatural levels of straying by hatchery-origin fish can have negative impacts on the fitness of natural populations through competition, genetic introgression, and reduced productivity (Keefer and Caudill 2014).

Salmon respond to flow-related attraction cues, including physiochemical factors such as temperature and chemical composition, as well as behavioral or chemical cues from conspecifics (i.e., spawning activity) (Hasler et al. 1978; Soloman 1973). Adult Chinook salmon have been observed straying into several streams along the Central Coast and San Francisco Bay for the past two decades, often coinciding with early rain events, even though historically these streams did not have native runs of Chinook salmon (Neillands et al. 2015). To initially evaluate the impact of coastal releases of CV Chinook salmon on stray rates into coastal watersheds, CDFW conducted annual monitoring surveys for Chinook salmon in a select number of North and Central Coast streams from 2014-2016 (Neillands et al. 2015-2017). Since then, the Department has

continued to conduct opportunistic surveys and currently coordinates with ongoing coastal salmonid monitoring programs to gather data on Chinook salmon observations in coastal watersheds. Overall, CWT recovery data indicate that CV FRCS adults stray into coastal streams north and south of San Francisco Bay if accessible, however occurrences of fish originating from Project locations are relatively low. This finding may be impacted, in part, by inconsistent and spatially limited monitoring in some coastal watersheds in years when freshwater habitat is accessible to CV FRCS during adult spawning migrations.

Project Locations

The Project includes the following three primary locations:

1. Santa Cruz Wharf

CV FRCS smolts would be released directly into the ocean at Santa Cruz Wharf (36.958751° N, -122.017397° W; Fig. 1).



Figure 1. Proposed release location at Santa Cruz Wharf. The yellow circle denotes where fish will be released.

2. Monterey Harbor

CV FRCS smolts would be released directly into the ocean at Municipal Wharf 2 near the interior of Monterey Harbor (36.605514° N, -121.889288° W; Fig. 2).



Figure 2. Proposed release location at Municipal Wharf 2 in Monterey Harbor. The orange circle denotes where fish will be released.

3. Pillar Point Harbor

CV FRCS smolts would be acclimated to environmental conditions in net pens and released at Pillar Point Harbor near Half Moon Bay in San Mateo County. Smolts would be offloaded into a net pen tied to Johnson Pier (37.501274° N, -122.482717° W; Fig. 3), towed to an outer harbor mooring (37.499480° N, -122.485234° W), and then released after no more than 5 days of acclimation. Johnson Pier has a road running the length that will allow CDFW hatchery trucks direct access to the offloading location.



Figure 3. Proposed release location at Pillar Point Harbor. The inner harbor will be the location for offloading smolts into a net pen tied to Johnson Pier (see red circle) and will be towed to an outer harbor mooring prior to release.

Schedule

Annually each spring from 2025-2029, CDFW would deliver MOK CV FRCS smolts to the three Project locations: Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor (Figs. 1-3). Due to the larger release size at Pillar Point Harbor, smolts would be delivered in increments of about 250,000 fish at one-week intervals. May is the target time frame for releases at each location, however exact dates and times are dependent on fish size, growth rates, and environment conditions. Therefore, releases will be scheduled closer to the spring of each year.

Project Description

MBSTP and the CFC propose to release a combined total of up to 1,070,000 juvenile HO CV FRCS across three coastal release locations annually each spring from 2025-2029. MBSTP proposes to release up to 160,000 smolts at the Santa Cruz Wharf and up to 160,000 smolts at Monterey Harbor, for a combined total of up to 320,000 fish annually. The CFC proposes to release up to 750,000 smolts at Pillar Point Harbor annually. CDFW would deliver CV FRCS smolts by truck from the MOK.

For all Project years (2025-2029), CDFW staff would tag MOK juvenile salmon with a CWT and mark with an adipose fin-clip at a rate of 100% of the total number

of released fish at Santa Cruz Wharf and Monterey Harbor, and a rate of 25% of the total number of released fish at Pillar Point Harbor. This tagging rate aligns with requirements for mitigation and enhancement fish. All Project fish would be evaluated by a CDFW Fish Health pathologist and certified to be disease-free prior to leaving the hatchery. For all release locations, trucks would be loaded and fish transported according to MOK established standard operating procedures for transportation of salmon, including the addition of salt into the water of the trucks prior to adding fish.

Releases at Santa Cruz Wharf and Monterey Harbor by MBSTP

All smolts scheduled for release into Monterey Bay at Santa Cruz Wharf and Monterey Harbor would be transported from the MOK using 2-3 fish transport trucks per release location. MBSTP, in anticipation of fish delivery from the MOK, has secured necessary equipment and developed multiple release protocols to accommodate potentially changing Monterey Bay conditions. In the event that conditions or logistics do not allow for discharge of fish from trucks at one of these locations, smolts will be transported to the other location (Santa Cruz Wharf or Monterey Harbor, as appropriate) and released directly into Monterey Bay. It is highly unlikely that both locations would simultaneously be unable to support the release of smolts.

MBSTP would release smolts from hatchery trucks directly into Monterey Bay from Santa Cruz Wharf and Monterey Harbor via a large (10''), gravity-fed pipe. MBSTP would provide staffing and logistical support to facilitate release of fish at both release locations, including a 'tender' vessel provided and operated by MBSTP to assist in release of smolts from the height of the wharf to the water surface. No active predator deterrent for marine mammals or seabirds is planned as part of the releases at the Santa Cruz Wharf and Monterey Harbor. Past predation events were attributed to net pen acclimation, as well as proximity of the previous Monterey Habor release location to the largest numbers of sea lions in the harbor (Ben Harris, personal communication, December 9, 2019). The proposed location in Monterey Harbor 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 Chinook salmon 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

coordinate with CDFW and the CCSTAC on the schedule and release timing to work within these optimal tidal and timing windows.

Releases at Pillar Point Harbor by the CFC

Due to the larger release size at Pillar Point Harbor, smolts would be delivered to the harbor by CDFW in increments of about 250,000 fish at one-week intervals (using 3-4 fish transport trucks per trip). In anticipation of fish delivery from the MOK to Pillar Point Harbor, the CFC has secured necessary equipment to hold fish and is prepared to provide both staffing and logistical support to facilitate smolt releases, including providing and operating the boats necessary to assist with net pen movement.

Prior to the delivery of smolts, the CFC would provide, assemble, and deploy a floating net pen designed with an inner net to contain juvenile salmon, an outer net to exclude predators, an overhead net to exclude birds, and an automated feeder. Once fish are transferred into the net pen from CDFW hatchery trucks at Johnson Pier, the net pen would be towed by CFC volunteers to an existing mooring location in outer Pillar Point Harbor. Fish would be acclimated in the floating net pen for up to 5 days, at which point the CFC would remove the inner net to allow the juvenile salmon to escape into the ocean. The fish would be released in the outer harbor on an outgoing tide to facilitate their rapid exit to the ocean and to minimize in-harbor predation. The CFC would then tow the net pen back to Johnson Pier for the next delivery, or if all deliveries have been completed, to the Pillar Point launch ramp for cleaning, disassembly, and storage.

This Project is contingent upon CDFW approval after the completion of CEQA. Project results would be assessed using data acquired from CDFW landings, carcass surveys, and salmonid monitoring programs. The Regional Mark Information System (RMIS) will provide information associated with each tagged release group and CWT recovery data (RMIS online database). In addition, some coastal monitoring programs may provide data about the presence of hatchery-origin salmon based on the adipose fin clip status of adults and juvenile Chinook salmon production. Furthermore, data on coastal seasonal sandbar closures and stream flow may be utilized to provide information about the temporal access to spawning habitat.

Determination

CDFW reviewed the Project and determined that the Project will not have a significant effect on the environment. The Project would have less than

significant impacts on Biological Resources, Greenhouse Gas Emissions, and Public Services at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor and surrounding areas, as set forth in detail in the following environmental checklist, and no impacts to other resource areas. Due to minimal acclimation time at each release location (from 0-5 days), the Project does not anticipate adults returning in large numbers to Santa Cruz Wharf, Monterey Harbor, or Pillar Point Harbor, as has been observed in coastal release projects in previous years when net pen acclimation occurred for longer durations (weeks). Overall, the Project complies with CDFW hatchery release policies and aligns with standard methods of acclimating fish in net pens prior to release into ocean waters. CDFW's California Natural Diversity Database (CNDDB 2019) was reviewed to identify potential impacts to animals identified in the four Quadrants in the surrounding area.

CEQA Appendix G: Initial Study Environmental Checklist

Project Title

Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor and Pillar Point 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:

Colby Hause, Fisheries Branch 916-902-9204 Colby.hause@wildlife.ca.gov

Project Locations:

- 1. Santa Cruz Wharf (Santa Cruz County) (36.958751°, -122.017397°)
- 2. Monterey Harbor (Monterey County) (36.605514°, -121.889288°)
- 3. Pillar Point Harbor (San Mateo County) (37.501274°, -122.482717°)

Project Sponsor's Name and Address:

1. Monterey Bay Salmon and Trout Project (MBSTP)

101 Cooper St. Santa Cruz, CA 95060

2. Coastside Fishing Club (CFC)

P.O. Box 5501 San Mateo, CA 94402

General Plan Designation:

The Plans are consistent with coastal zone designation.

Zoning:

Coastal

Description of Project:

The Project's objective is to enhance the commercial and recreational ocean salmon fishery. MBSTP and the CFC propose to release a combined total of up to 1,070,000 juvenile HO CV FRCS at three coastal release locations annually each spring from 2025-2029. The CDFW's MOK would deliver up to 160,000 smolts to the Santa Cruz Wharf and up to 160,000 smolts to Monterey Harbor for direct release into Monterey Bay annually each spring. The MOK would also deliver up to 750,000 smolts annually each spring to Pillar Point Harbor for acclimation and subsequent release into the harbor or nearby open ocean.

For all Project years, CDFW staff would tag MOK juvenile salmon with a CWT and mark with an adipose fin-clip at a rate of 100% of the total number of released fish at Santa Cruz Wharf and Monterey Harbor, and a rate of 25% of the total number of released fish at Pillar Point Harbor. This tagging rate aligns with requirements for mitigation and enhancement fish. All Project fish would be evaluated by a CDFW Fish Health pathologist and certified to be disease-free prior to leaving the hatchery. For all release locations, trucks would be loaded and fish transported according to MOK established standard operating procedures for transportation of salmon, including the addition of salt into the water of the trucks prior to adding fish. May is the target timeframe for releases at each location, however exact dates and times are dependent on fish size, growth rates, and environment conditions. Therefore, releases will be scheduled closer to the spring of each year.

MBSTP is implementing the Santa Cruz Wharf and Monterey Harbor release portions of the Project. All smolts scheduled for release into Monterey Bay at these locations would be transported from MOK in a single trip using 2-3 fish transport trucks per release location. MBSTP would release smolts from the trucks directly into Monterey Bay from Santa Cruz Wharf and Monterey Harbor via a large (10''), gravity-fed pipe. MBSTP would provide staffing and logistical support to facilitate the release of fish at both locations, including a 'tender' vessel provided and operated by MBSTP to assist in releasing smolts from the height of the wharf to the water surface.

The CFC is implementing the Pillar Point release portion of the Project. Smolts would be transported in small batch increments, approximately 250,000 fish per

trip, on a weekly basis. Prior to the delivery of smolts, the CFC would provide, assemble, and deploy a floating net pen designed with an inner net to contain juvenile salmon, an outer net to exclude predators, an overhead net to exclude birds, and an automated feeder. Fish would be held in the net pen to acclimate for up to 5 days before release into the ocean. This would occur weekly until all 750,000 smolts are released. CFC would provide all necessary boats for towing and servicing the net pen and fish, as well as any other on-site operational logistics.

Surrounding Land Uses and Setting:

Santa Cruz Wharf and Monterey Harbor

Monterey Bay is a 40-kilometer (km) ocean bay located south of San Francisco Bay. The Santa Cruz and Gabilan mountain ranges dominate topography in the area nearest the Project site, and the San Lorenzo River, Pajaro River, and Scott Creek enter Monterey Bay from these mountain ranges. The San Lorenzo River flows into Monterey Bay approximately 500 meters from the release location, whereas the Pajaro River, Elkhorn Slough and Salinas Rivers flow into Monterey Bay near Moss Landing, approximately 25 km south of the Santa Cruz Wharf and 21 km north of Monterey Harbor. The Salinas Valley and northern Santa Lucia Range are the prominent topography on the southern portion of Monterey Bay, with the Salinas River as the major drainage system for this area. 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. The ocean commercial salmon troll fishery began in Monterey Bay during the 1880s and continues to contribute to local and state economies despite decreases in Chinook salmon harvest in both commercial and recreational fisheries over time (CDFW 2011; Pomeroy and Dalton 2005). Commercial and recreational fishing are permitted within the Monterey Bay National Marine Sanctuary.

Santa Cruz Wharf is located on the northwest end of Monterey Bay within the City of Santa Cruz. At roughly 900 meters long, Santa Cruz Wharf houses fish companies, dining, recreation, fishing, boating, and various public events. Monterey Harbor is located on the southwest end of Monterey Bay within the City of Monterey. Municipal Wharf #2 is the easternmost 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. Concerns regarding foot-traffic during Project activities have been discussed with Monterey Harbor personnel and are expected to be minimal. Any traffic or crowd control will be organized by MBSTP and Monterey Harbor (Ben Harris, personal communication, December 9, 2019). Furthermore, there are no conflicts with the Monterey Bay National Marine Sanctuary because the Monterey Habor release location is fully encompassed within the harbor and outside of the boundary of the sanctuary (Sophie De Beukelaer, Monterey Bay National Marine Sanctuary, personal communication, March 9, 2020).

Pillar Point Harbor

Half Moon Bay is a protected bay just south of San Francisco Bay and the southern edge of the Pillar Point State Marine Conservation Area. Pillar Point Harbor is run by San Mateo County Harbor District and is a protected harbor at the northern end of Half Moon Bay near the town of El Granada in San Mateo County. Johnson Pier, where the Project net pen would be located, is in the center of the harbor and houses wholesale fish companies, a fuel and pump out dock, and commercial berths. The pier has a road running the length and is accessible for hatchery trucks to offload.

Approvals Needed from Other Public Agencies:

Monterey Harbor and Santa Cruz Wharf

The California Coastal Commission (CCC) determined a Coastal Development Permit (CDP) was not necessary for this Project unless net pens are required for release (Colin Bowser, California Coastal Commission, personal communication, March 9, 2021, Exhibit B1). Therefore, no CDP is required for the Santa Cruz Wharf and Monterey Harbor portions of the Project.

The City of Monterey Planning office determined the Project (1) meets all zoning requirements, (2) requires no local permits other than building permits, and (3) is "not a Project under CEQA Art. 20 Section 15378 and Art. 5 Section 15061" (Fernanada Roveri, Associate Planner, June 4, 2018). MBSTP has the support of the Harbor and Marina Division, including access to the waterfront facilities for the duration of the Project (Exhibit B2).

The City of Santa Cruz has permitted project activities to occur annually under the provision of the permit, which have not changed since its approval on December 20, 2019 (Exhibit B3). This permit covers access to the Santa Cruz Wharf, as the Port Commission is under the City of Santa Cruz permit authority. Furthermore, MBSTP has received formal support to conduct project activities from the Santa Cruz Wharf Harbormaster (Exhibit B4).

Pillar Point Harbor

The CCC issued a CDP waiver (9-13-0498-W) for the Project on August 26, 2013 (Exhibit B5) and considers coastal releases of Chinook salmon smolts exempt from future permits contingent on continuation of current release methods. The CCC has confirmed that the existing waiver still covers the scope of activities that would be carried out in the Project as outlined for 2025-2029 (Cassidy Teufel, California Coastal Commission, Deputy Director, personal communication on December 13, 2024). Additionally, the CFC has the approval of the San Mateo County Harbor District to conduct Project activities on Harbor District property (Exhibit B6).

San Francisco Regional Water Quality Control Board confirmed that the project does not meet federal definition of a Concentrated Aquatic Animal Production Facility (CAAPF) and concluded that the Project does not require permitting from the Regional Water Quality Control Board unless it expands in the future and falls within CAAPF or if operations result in impacts to water quality or beneficial uses (Sandi Potter, CA Water Boards, personal communication with Marc Gorelnik, May 4, 2011). Considering this project has not expanded since 2013, but has instead reduced potential water quality impacts through substantial reductions in acclimation periods (i.e. fish holding time in net pens), this Project remains outside of the federal definition a CAAPF (confirmed by Bill Johnson, CA Regional Water Quality Control Board (San Francisco Bay Region), personal communication on December 24, 2024).

Tribal

In compliance with PRC § 21080.3.1 and the CDFW Tribal Communications Policy, CDFW requested (1) a list of all California tribes specifically requesting to be notified for all CEQA projects (Exhibit C1) and (2) a list of Tribes potentially affected by the Project (Exhibit C2) from the Native American Heritage Commission (NAHC). Upon receipt of the listed Tribes and their contacts, CDFW provided official notification, by letter and email, of the Project to those Tribal contacts on November 18, 2024 (Exhibit C3). CDFW received one response, and one tribe requested consultation.

Determination

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.



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.

	C Do	cuSigned by:	
	Jai	Rowan	
Signatura	-21	3A9B7822F42D	

3/12/2025

Signature

Date

Responses to CEQA Appendix G: Initial Study Environmental Checklist

Table I. Aesthetics

I. Aesthetics Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Have a substantial adverse effect on a scenic vista	_	-	-	NI
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	-	-	-	NI
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.	-	_	-	NI
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	-	-	-	NI

Table II. Agriculture And Forestry Resources

 II. Agriculture And Forestry Resources¹ Would the project: 	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	-	-	-	NI
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	-	-	-	NI

¹ 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.

 II. Agriculture And Forestry Resources¹ Would the project: 	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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))?	_	-	-	Z
d) Result in the loss of forest land or conversion of forest land to non-forest use?	-	-	-	NI
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?	_	-	_	NI

Table III. Air Quality

III. Air Quality² Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Conflict with or obstruct implementation of the applicable air quality plan?	-	-	-	NI
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?	_	-	-	NI
c) Expose sensitive receptors to substantial pollutant concentrations?	-	-	-	NI
d) Result in any other emissions (such as those leading to odors) affecting a substantial number of people?	-	-	-	NI

² 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.

Table IV. Biological Resources

IV. Biological Resources Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?		_	LTS	_
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?	-	-	_	NI
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?	-	-	-	NI
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?	-	-	-	NI

IV. Biological Resources Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	-	-	-	NI
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?	_	-	-	NI

Table V. Cultural Resources

V. Cultural Resources Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	-	-	-	NI
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	-	-	-	NI
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	-	-	-	NI

Table VI. Energy

VI. Energy Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations?	-	-	-	NI
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	-	-	-	NI

Table VII. Geology and Soils

VII. Geology and Soils Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Directly or indirectly cause 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?	_	-	-	NI

VII. Geology and Soils Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
ii) Strong seismic ground shaking?	-	-	-	NI
iii) Seismic-related ground failure, including liquefaction?	-	-	-	NI
iv) Landslides?	-	-	-	NI
b) Result in substantial soil erosion or the loss of topsoil?	-	-	-	NI
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?	-	-	-	NI
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?	-	-	-	NI
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?	-	-	-	NI
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	-	-	-	NI

Table VIII. Greenhouse Gas Emissions

VIII. Greenhouse Gas Emissions Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	-	-	LTS	-
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	-	-	-	NI

Table IX. Hazards and Hazardous Materials

IX. Hazards and Hazardous Materials Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	-	-	-	NI
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?	-	-	-	NI

IX. Hazards and Hazardous Materials Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	-	-	-	NI
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?	_	-	_	NI
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?	_	_	_	NI
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	-	-	-	NI
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	-	-	-	NI

Table X. Hydrology and Water Quality

X. Hydrology and Water Quality Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	-	-	-	NI
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	-	-	-	NI
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:	_	-	-	NI
i) result in substantial erosion or siltation on- or off-site;	-	-	-	NI
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	-	-	-	NI
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of pollution runoff; or	-	-	-	NI
iv) impede or redirect flood flows?	-	-	-	NI

X. Hydrology and Water Quality Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	-	-	-	NI
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	-	-	-	NI

Table XI. Land Use and Planning

XI. Land Use and Planning Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Physically divide an established community?	-	-	-	NI
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?	-	-	-	NI

Table XII. Mineral Resources

XII. Mineral Resources Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	-	-	-	NI
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?	-	-	-	NI

Table XIII. Noise

XIII. Noise Would the project result in:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	-	-	-	NI
b) Generation of excessive ground borne vibration or ground borne noise levels?	-	-	-	NI

XIII. Noise Would the project result in:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	_	_	-	NI

Table XIV. Population and Housing

XIV. Population and Housing Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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)?	-	-	-	NI
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	-	-	-	NI

Table XV. Public Services

XV. Public Services Would the project result in:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) 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?	-	-	-	NI
Police protection?	-	-	-	NI
Schools?	-	-	-	NI
Parks?	-	-	-	NI
Other public facilities?	-	-	LTS	-

Table XVI. Recreation

XVI. Recreation	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	_	-	_	NI
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?	-	-	_	NI

Table XVII. Transportation

XVII. Transportation Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	-	-	-	NI
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?	-	-	-	NI

XVII. Transportation Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	-	-	-	NI
d) Result in inadequate emergency access?	-	-	-	NI

Table XVIII. Tribal Cultural Resources

XVIII. Tribal Cultural Resources	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 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:	-	_	-	NI

XVIII. Tribal Cultural Resources	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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	-	-	-	NI
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 section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		_	-	NI

Table XIX. Utilities and Service Systems

XIX. Utilities and Service Systems Would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	-	-	_	NI
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	-	-	-	NI
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?	_	_	-	NI
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?	-	-	-	NI
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	-	-	-	NI
Table XX. Wildfire

XX. Wildfire If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	-	-	-	NI
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?	-	-	_	NI
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.	_	-	_	NI
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?	_	_		NI

Table XXI. Mandatory Findings of Significance

XXI. Mandatory Findings Of Significance	Potentially Significant Impact (PSI)	Less Than Significant with Mitigation (LTSM)	Less Than Significant Impact (LTS)	No Impact (NI)
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?	_	-		NI
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)?	-	-	LTS	-
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	-	-	_	NI

Explanation of Responses to CEQA Appendix G: Initial Study Environmental Checklist

I. Aesthetics a. – d.: No impact

Discussion: Any additional equipment or lighting that may be used for this project (i.e., net, barge, vessels) 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 Farmland Mapping and Monitoring Program 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.– e.: No impact

Discussion: Potential for air quality impacts would result from hatchery trucks and boats used for offloading the smolts. However, (1) this is not an ongoing Project and would not conflict with or obstruct implementation of any air quality control plan and (2) Project operations would only occur for 1-3 days (depending on location) for 5-7 hours per day, thus emissions from trucks and boats would be limited. Furthermore, any diesel fuel odors when delivering fish would be temporary and would not adversely affect a substantial number of people. For the portion of the Project conducted at Pillar Point, emissions generated by hatchery trucks and boats were previously evaluated using Bay Area Air Quality Management District California Environmental Quality Act Air Quality Guidelines (BAAQMD 2017) and the quantities expected for Project operations (i.e., hatchery truck deliveries and for boats moving net pens) are below listed thresholds for significant impacts. For the portion of the Project conducted at Santa Cruz Wharf and Monterey Harbor, Project emissions generated by hatchery trucks, any necessary 'tender' vessel, and net barges are low enough to be accounted for in the Monterey Bay Air Resources District's projected 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 California Natural Diversity Database (CNDDB) Rare Find was used to report presence and status of all animals within all quadrants encompassed in the Project area, resulting in examination of the quadrants identified in Table 1 (see Exhibit D for details). This Project would have less than a significant impact on the species identified as candidate, sensitive, or special status species.

Project LocationCNDDB area quadrantsPillar Point (including Half Moon Bay)Montara Mountain, Half Moon Bay,
San Gregorio, and Pigeon PointMonterey Harbor and Santa Cruz
Wharf (including Monterey Bay)Ano Nuevo, Davenport, Santa Cruz,
Soquel, Watsonville West, Moss
Landing, Marina, Seaside and
Monterey

Table 1. CNDDB area quadrants included in species review.

Fishes

Based on a query of CNDDB Rare Find, this analysis considers whether any fish species that are 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 no impacts to Longfin Smelt (Spirinchus thaleichthys), Eulachon (Thaleichthys pacificus), and Tidewater Goby (Eucyclogobius newberryi).

• Longfin Smelt (Spirinchus thaleichthys)

Longfin smelt are protected under both the federal and state ESA. The CNDDB finding in Montara Mountain was from CDFW Bay study samples, which occur inside the Bay and not on the ocean side near Pillar Point. The CNDDB finding in San Gregorio was one individual in 1893, which was likely a stray from the San Francisco Bay-Delta population. It is extremely unlikely for Longfin Smelt to be present or adversely affected by the Project. The CNDDB 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 do not spawn in the Project. It is extremely unlikely for Longfin Smelt to be present or adversely affected by the Project. The CNDDB 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.

• Tidewater Goby (Eucyclogobius newberryi)

The Tidewater Goby is a small fish endemic to the California coast and is federally protected under the ESA. Multiple occurrences in San Gregorio, Santa Cruz, and one occurrence in Pigeon Point Quadrant are shown in the CNDBB (Exhibit D). However, Tidewater Goby is found in shallow lagoons, brackish marshes and lower stream reaches. Adult salmonids migrate through lower stream reaches, but do not spawn in the habitat used by Tidewater Goby. Furthermore, smolts would immediately migrate to coastal waters upon release and therefore would not have any impact on Tidewater Goby.

• Eulachon (Thaleichthys pacificus)

Eulachon are protected under the federal ESA. 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 CNDDB Soquel Quadrant details one Eulachon collected in the early 1900s near the mouth of Soquel Creek. This was a rare occurrence and it is extremely unlikely for Eulachon to be present or adversely affected by the Project.

• Salmonid species

The Project would result in less than significant impacts to California state and federally endangered Central California Coast Evolutionarily Significant Unit Coho salmon (CCC coho ESU) *Oncorhynchus kisutch*, federally threatened Central California Coast Distinct Population Segment Steelhead (CCC Steelhead DPS) and South-Central California Coast Steelhead (SCCC Steelhead DPS) *Oncorhynchus mykiss*, and California Coastal Chinook salmon (CC Chinook ESU) *Oncorhynchus tshawytscha*. Off-site or downstream releases of hatchery-origin salmon and greater transport distances from rearing sites are associated with lower adult homing success and increased straying of returning adult spawners (Solazzi et al. 1991; Keefer and Caudill 2014; Lasko et al. 2014; Sturrock 2019). The potential for CV hatchery-raised salmon released at coastal sites to stray into nearby coastal streams is of particular concern, as this could impact native populations of threatened or endangered salmon and steelhead. Possible impacts include:

- 1. Competition for resources with CCC coho ESU, CCC and SCCC steelhead DPSs, and CC Chinook ESU
- 2. Stock hybridization with CC Chinook ESU and CCC coho ESU
- 3. Establishment of an out-of-basin spawning population of 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. Competition for resources

If hatchery-origin fish stray into coastal streams, competition for resources could result in negative impacts to sensitive populations of native salmonids. This could include competition for spawning territory and subsequent spawning success during the adult stage (Hayes 1987). If successful spawning occurs, competition for food resources and territory with native salmonids could result depending on size and relative abundance of juvenile CV FRCS present (Thorton et al 2016). However, we expect this risk to be minimal due to (1) differing life history strategies between CV FRCS and CCC coho, CCC and SCCC steelhead DPSs and (2) relatively few observations of Chinook salmon in coastal streams south of the CC Chinook ESU boundary and within the range of CCC coho, CCC and SCCC steelhead. While there is potential for higher temporal overlap in spawning migration timing between CV FRCS and CC Chinook compared to other species, we do not expect competition for resources to result in significant negative impacts to this ESU due to the low reported occurrence (and thus lack of spatial overlap) of CV FRCS in streams within the range of CC Chinook salmon. This observation is likely influenced by the large distance between release locations of CV FRCS smolts (Figs. 1-3) and the CC Chinook ESU boundary (Fig. 4).

Adult life stage

Differing life history strategies between CV FRCS, CCC coho, CCC and SCCC steelhead should result in minimal overlap of adults in the freshwater environment. Migration and spawning timing of CV FRCS is typically earlier than that of Coho salmon and steelhead populations. The peak migration period for CV FRCS occurs between late September-October, with spawning between late-September-December (Moyle 2002). The timing of coho and steelhead spawning can be variable in streams that rely on winter storms to provide access to spawning habitat, though generally freshwater entry occurs during the highest flows of the year (typically late December) and can extend through January and April for CCC coho and CCC steelhead (respectively) and May for SCCC Steelhead (Weitkamp et al. 1995, Moyle et al. 2017). Extant populations of the CC Chinook ESU exhibit a fall-run salmon life history strategy, as the spring-run phenotype has been lost throughout the ESU (NMFS 2016). However, there is some temporal separation between the timing of adult spawning migrations

between CC Chinook and CV FRCS. Compared to CV FRCS, adult CC Chinook salmon can migrate later in year (November-January) due to their reliance on large winter storms to allow access to the rivers they inhabit.

Overall, previous coastal monitoring data and CWT recoveries suggest a relatively low occurrence of CV FRCS within the ranges of CCC coho, CCC and SCCC steelhead, and CC Chinook salmon (Shen et al. 2025). South of the range of CC Chinook, long-term monitoring for listed salmonids has occurred in Lagunitas Creek, Olema Creek, Redwood Creek (Marin County), Scott Creek, the Big Basin-San Mateo region, the Salinas River, and the Big Sur River (Fig. 4; Shen et al. 2025). Of these water bodies, only Lagunitas Creek has experienced consistent observations of live Chinook salmon or carcasses since coastal releases within the Project area began in 2009. While this finding is in part due to year-around access to Lagunitas Creek, it is also likely influenced by comparatively inconsistent monitoring in watersheds south of San Francisco Bay. Spawner surveys for listed salmonids have been conducted annually in the Lagunitas watershed by the National Park Service (NPS) and Marin Municipal Water District (MMWD) since the early 2000s, allowing for opportunistic data collection on Chinook salmon over this time period. In contrast, monitoring efforts in coastal streams south of San Francisco Bay (such as the Salinas River, Scott Creek, and Big Sur River) have been limited in scope due to funding and resource constraints, as well as inconsistent access to these watersheds by Chinook salmon in years when run timing misaligns with the timing of sufficient flows to breach sandbars.

Lagunitas Creek sustains flow throughout the year due to releases from Kent Lake, whereas connection to the ocean is typically cut off during the dry summer months by the formation of bars at the river mouths in unregulated coastal streams. Chinook salmon have been observed in Lagunitas Creek during most return years from 2001/02 to 2022/23 (range = 0-134 live fish; Ettlinger et al. 2023), and recently live Chinook salmon and carcasses were also recorded in Olema Creek (6 live fish), Redwood Creek (Marin County, 221 live fish) and Scott Creek (1 live fish) in return year 2021/22 (Ettlinger et al. 2022; Michael Reichmuth [National Park Service], personal communication).



Figure 4. Coastal streams and regions evaluated for the presence of hatcheryorigin Chinook salmon in Shen et al. (2025). Data was synthesized from streams that maintained long-term population monitoring and support populations of listed salmonids. The CC Chinook salmon ESU boundary is delineated in orange and its range is shaded in yellow. Map from Shen et al. (2025).

Despite consistent observations of Chinook salmon in the Lagunitas Creek watershed, CWT recoveries of adipose-clipped Chinook salmon have been relatively low. Out of the 25 CWTs recovered from coastal watersheds between

return years 2014/15 and 2022/23 (Table 2), four were from Lagunitas Creek in 2016-2019. CWT analysis indicated that all four fish had originated from net pen releases in the Project area (Half Moon Bay). Of the six hatchery-origin Chinook salmon carcasses that were recovered from Redwood Creek (Marin County), CWT analysis identified five as Mokelumne River Hatchery FRCS released outside of the Project area at Fort Baker in 2020, and one as a Feather River Hatchery FRCS released within the Project area at Half Moon Bay in 2015 (Table 2). Most Chinook salmon observed in Lagunitas Creek have their adipose fin intact, which can represent either an unmarked Central Valley hatchery fish or an individual within the CC Chinook salmon ESU. There is evidence to suggest that a portion of Chinook salmon observed in Lagunitas Creek originate from the CC Chinook salmon ESU. Genetic analysis of tissue samples previously collected from Chinook salmon in Lagunitas Creek resulted in roughly half assigned to CV FRCS and the other half affiliated with CC Chinook salmon genetics. Of note, a small fraction of these samples were also associated with Oregon Coastal Chinook salmon (Garza et al., unpublished data; Garza and Pearse 2008; Neillands et al. 2015).

Only three Chinook carcasses have been recovered in CDFW spawning ground surveys in the Big Basin-San Mateo region from 2011-2019, one of which was found with a clipped adipose fin (origin unknown; Shen et al. 2025). Two additional CWTs have been recovered in this region since then, one in Pescadero Creek and one in Scott Creek, both of which originated from the 2020 Fort Baker release (Table 2). Based on previous salmonid monitoring of select streams conducted by CDFW in Santa Cuz and Monterey counties from 2014-2016, Chinook salmon have also been observed Arana Gulch and San Lorenzo River (Neillands et al. 2015-2017). Of these observations, three CWTmarked fish were recovered in Arana Gulch, two of which originated from net pens within the Project area (Santa Cruz Harbor) and the third from Sandy Hatchery in Oregon (Table 2). 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. While recorded observations of Chinook salmon were relatively low, this effort served as an initial evaluation of coastal net pen-released Chinook salmon straying and monitoring was often inconsistent through time and space. Ten additional CWTs have been recovered in Santa Cruz and Monterey counties since 2017 that originated from releases within the Project area (Santa Cruz Harbor and Half Moon Bay). One CWT was reported from the San Lorenzo River in 2017/18 and Tembladero Slough (accessible through Old Salinas River) in 2022/23, however most were

recovered during the 2021/22 survey year (n = 7 from San Vincent Creek, and n = 1 from the San Lorenzo River)(Table 2).

Table 2. Information associated with CWTs recovered from Chinook salmon carcasses found in coastal watersheds, where HMB = Half Moon Bay, SC = Santa Cruz, MOK = Mokelumne River Hatchery, and FRH = Feather River Hatchery. Note that the Sandy Hatchery observation was a spring-run Chinook salmon from Oregon.

Waterbody	Recovery Year	Count	Brood Year	Hatchery	Release Site	Source
Arana Gulch	2014/15	1	2012	FRH	SC Net Pen	Neillands et al. (2015)
Arana Gulch	2015/16	1	2013	Sandy Hatchery	Bull Run River	Neillands et al. (2015)
Arana Gulch	2015/16	1	2013	MOK	SC Net Pen	Neillands et al. (2015)
Lagunitas Cr.	2016/17	3	2013	FRH	HMB Net Pen	Neillands et al. (2017)
San Lorenzo R.	2017/18	1	2013	FRH	HMB Net Pen	CDFW, unpub. data
Redwood Cr. (Marin)	2017/18	1	2014	FRH	HMB Net Pen	CDFW, unpub. data
Lagunitas Cr.	2019/20	1	2016	MOK	HMB Net Pen	CDFW, unpub. data
Redwood Cr. (Marin)	2021/22	5	2019	MOK	Fort Baker	Neillands et al. (2023)
Scott Ćr.	2021/22	1	2019	MOK	Fort Baker	Neillands et al. (2023)
Pescadero Cr.	2021/22	1	2019	МОК	Fort Baker	Neillands et al. (2023)
San Vicente Cr.	2021/22	7	2019	MOK	SC Harbor	Neillands et al. (2023)
San Lorenzo R.	2021/22	1	2019	MOK	SC Harbor	Neillands et al. (2023)
Tembladero Slough	2022/23	1	2019	МОК	SC Harbor	Michie (2025)

Within the range of CC Chinook salmon, long-term monitoring has occurred on Redwood Creek (Humboldt County), the Eel River, the Mattole River, and the Russian River (Shen et al. 2025; Fig. 4). During survey years 2003/04 through 2021/22, very few adipose fin-clipped Chinook salmon carcasses were observed in annual spawning ground surveys, suggesting minimal straying of CV FRCS into more northern coastal watersheds. During this time period, a total of 2,607 Chinook salmon carcasses were found in four watersheds within the CC Chinook salmon ESU boundary. Only 4 (0.15%) Chinook salmon were adipose fin-clipped, all of which were recovered from the Mattole River watershed between 2004/05 and 2005/06 (Shen et al. 2025). No adipose-clipped Chinook salmon were observed in spawning ground surveys conducted from 2009/10 through 2019/20 on Redwood Creek (Humboldt County) (Shen et al. 2025).

Live fish counts at stations located on the Eel River (Van Arsdale Fish Station [VAFS]) and mainstem Russian River (Mirabel Fish Ladder) have also recorded very few adipose fin-clipped Chinook salmon. On the Eel River, counts of adipose fin-clipped Chinook salmon sharply declined after the 2005/06 return year, coinciding with the discontinuation of releases of marked and tagged (CWT) hatchery-origin CC Chinook salmon after brood year (BY) 2000 and 2002 (O'Farrell et al. 2012). Over the last 13 return years where adipose fin clip status was recorded during spawning ground surveys (2006/07 to 2018/19), 3 of 12,078 (0.02%) Chinook salmon returning to the VAFS were observed with an adipose fin clip in 2013/14 and 2016/17-2020/21 at the Mirabel Fish Ladder on the Russian River (Shen et al. 2025).

Juvenile life stage

During the juvenile life stage, competition for food and feeding habitat can impact survival and growth of individuals (Hearn 1987; Milner et al. 2003). The level of competition between juvenile CV FRCS (i.e., offspring of CV FRCS released within the Project area that can stray to coastal streams as adults) and native salmonids may depend upon their seasonal stream abundance. Low observations of adipose-clipped Chinook salmon adults in northern coastal watersheds within the CC Chinook salmon ESU boundary (0-<1% in watersheds monitored) suggest that juvenile production, if successful, is unlikely to have negative impacts on CC Chinook salmon populations. In coastal watersheds within the range of CCC Coho salmon, CCC and SCCC steelhead, a number of factors are likely to reduce the negative impacts of resource competition with juvenile CV FRCS, including (1) low observations of out migrating juvenile Chinook salmon, likely due to the relatively low occurrences of adult Chinook salmon observed in these watersheds (2) phenological differences in fry emergence as a result of adult spawn timing, and (3) behavioral differences and habitat partitioning amongst co-existing species.

In monitored watersheds south of the CC Chinook ESU and within the range of CCC coho, SCCC and CCC Steelhead, observations of juvenile Chinook salmon have only been consistently documented in Lagunitas Creek. The exception was in 2021/22 survey year, where juvenile Chinook salmon also were encountered in out-migration traps in Redwood Creek (Marin County) and Olema Creek. However, preliminary genetic analyses revealed that 85% of juvenile salmon sampled from Lagunitas Creek in recent years (mostly 2017 and 2021/22) were of CC Chinook salmon lineage, about 10% were CV Chinook salmon, and the remaining 5% were Coho salmon (C. Garza [NMFS], personal communication). This aligns with previous analysis of adult Chinook tissues samples collected from Lagunitas Creek, which resulted in roughly half of the samples originating from the CC Chinook ESU and half of CV-origin. Juvenile CC Chinook salmon tissue samples from Lagunitas Creek were closely related to the Russian River population, which is not surprising, given the proximity of these two watersheds. Although there have been very few juvenile Chinook salmon observed in Olema Creek, a tributary of Lagunitas Creek, and nearby Redwood Creek (Marin County), these results from Lagunitas Creek suggest the possibility of CC Chinook salmon in these creeks as well.

FRCS typically exhibit an 'ocean-type' life history, where juveniles spend a relatively short time rearing in freshwater, which may reduce resource competition with juvenile steelhead and Coho salmon. This was evidenced in the relatively low abundance of juvenile Chinook salmon observed in Olema and Redwood Creeks compared to CCC Coho salmon in the summer following the relatively high return of spawning adult Chinook salmon recorded in these creeks in 2021 (Ward et al. 2023). Furthermore, an evaluation of interactions between Chinook salmon, coho, and steelhead trout in Redwood and Olema Creeks in 2022 revealed that juvenile Chinook salmon were less likely to initiate aggressive interactions and had a higher likelihood of receiving aggressive interactions compared to the other species (Ward et al. 2023). Coho salmon were found to be the most common opponent in aggressive interactions, which is supported by previous findings of aggressive and dominating behavior by coho in streams with Chinook salmon (Taylor 1991, Stein et al. 1972). Habitat partitioning and diet differences among mixed salmonid species assemblages may also reduce resource competition. For example, Chinook salmon have been observed to drift forage for terrestrial invertebrates from the surface or midwater, as opposed to more benthic foraging by young-of-year steelhead (Johnson 2007). Taylor (1991) observed spatial differentiation in habitat use

between coho and Chinook salmon, with deeper, slower water dominated by coho versus faster, shallow riffle areas dominated by Chinook salmon.

In conclusion, we do not expect the releases of CV FRCS planned for 2025-2029 to cause significant impacts through competition with listed anadromous salmonid stocks in coastal streams. This concern is minimized by relatively low straying rates of adult CV FRCS into coastal watersheds, temporal differences in CV FRCS migration and spawning timing with that of listed stocks, and overall low observations of juvenile production south of the range of CC Chinook salmon. Phenological, behavioral, and dietary differences between Chinook salmon and other native salmonids further reduces potential direct competition for resources during the juvenile freshwater rearing stage.

2. Stock Hybridization

CV FRCS are genetically different from the CC Chinook ESU, but the two are of the same species and thus genetic hybridization is possible. However, long-term monitoring of watersheds within the range of CC Chinook salmon suggests there is substantial spatial separation in the ESUs to minimize this concern. A combination of spawning ground surveys and fish counting stations on Redwood Creek (Humboldt County), the Eel River, the Mattole River, and the Russian River have recorded relatively few observations (<1%) of adiposeclipped Chinook salmon (thus presumed to be CV FRCS) in the past decade (Shen et al. 2025). Not all fish released in the Project area are marked at a rate of 100%, and therefore estimates of CV-origin Chinook salmon in these watersheds based on the absence of an adipose fin represents a minimum proportion. However, differences in spawning migration timing between CV FRCS and CC Chinook salmon may further reduce this concern. Peak spawning for CC Chinook occurs in November and December (compared to October-November for CV FRCS) and often later in the year for smaller streams that rely on large winter storms to allow access to these habitats (Moyle 2017). Furthermore, the genetic distinctiveness illustrated in Clemento et al. (2014) strongly suggests that Russian River and Eel River Chinook salmon, both in the 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.

CC Chinook salmon and CCC Coho salmon naturally co-occur in many of the same northern California watersheds (for example, the Russian River, Noyo River, Eel River, and Freshwater Creek), yet hybridization between Chinook and Coho salmon populations has been extremely rare (Chevassus 1979, cited in Bartley et

al. 1990). In an analysis of 36 spawning populations of Chinook salmon and 27 populations of Coho salmon in northern California, the only occurrence of natural coho-Chinook hybridization was from a tributary to the Klamath River (Bartley et al. 1990). Additionally, Utter et al. (1989) did not report any evidence of coho-Chinook hybridization in a study of 86 populations of Chinook salmon from Babine River, British Columbia, to the Sacramento River, California. In the event that CV FRCS released in the Project area return to native CCC coho streams as adults, a number of mechanisms may inhibit genetic hybridization of the two species, including temporal separation of spawning adults (Moyle 2002) and olfactory recognition of conspecifics (Liley 1982).

Coho salmon typically return to their natal streams to spawn later than Chinook salmon. Peak spawning for CCC coho usually occurs in December and January, compared to October- November for CV FRCS (Moyle 2002, 2017). However, variability in stream access and flow could create potential for overlap in some coastal streams if adult CV FRCS migration is delayed or if substantial early rains alter Coho salmon migration timing. The risk of hybridization under these conditions is likely still low, as recognition of the same species through olfactory senses is understood to be an important mechanism maintaining reproductive isolation in salmonids (Lily 1982). Therefore, despite potential overlap in migration timing, it is unlikely that the releases planned for 2025-2029 would significantly impact listed anadromous salmon stocks due to hybridization with CV FRCS in coastal streams.

3. Risk of an out-of-basin spawning population

No out-of-basin spawning population of CV FRCS has been observed despite decades of transporting and releasing hatchery salmon into the San Francisco Bay, and more recently, along the coast from net pens. Therefore, it is very unlikely that the releases planned for 2025-2029 would establish an out-of-basin spawning population of CV FRCS.

Birds, Amphibians, Reptiles, and Insects

Several special status birds occur in the Project area, including the federally and state endangered California Ridgway's rail *Rallus obsoletus obsoletus*, the state threatened bank swallow *Riparia riparia*, the federally threatened California black rail *Laterallus jamaicensis coturniculus*, the state threatened tricolored blackbird *Eucyclogobius newberry*, the federally threatened western snowy plover *Charadrius alexandrines nivosus*, and the federally threatened and state endangered marbled murrelet *Brachyramphus marmoratu*. Sensitive Species or

Species of Special Concern that occur in the Project Area include Alameda song sparrow Melospiza melodia pusillula, burrowing owl Athene cunicularia, great blue heron Ardea Herodias, saltmarsh common yellowthroat Geothlypis trichas sinuosa, yellow rail Coturnicops noveboracensis, black swift Cypseloides niger, and short-eared owl Asio flammeus. Because the Project would occur within the developed harbors in Monterey, Santa Cruz, and Pillar Point, and given the short duration of the delivery and release, 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 (Exhibit D). However, the Project would not significantly impact these species because it would occur within the developed harbors of Santa Cruz, Monterey, and Pillar Point over a short timeframe.

Marine Mammals

Based on a query of CNDDB 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 listed marine mammals were listed in the CNDDB for the quadrants selected. Federally delisted Northern Steller sea-lions *Eumetopias jubatus* were reported in Ano Nuevo and Monterey quadrants. The project will be releasing CV FRCS without holding net pens to reduce interactions with predators. Direct releases are not expected to attract sealions.

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: The 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 Chinook salmon smolts from the MOK to release locations within the Project area and the use of boats to assist in the acclimation and release of smolts. Project emissions generated by hatchery trucks and boats at Pillar Point Harbor were evaluated using Bay Area Air Quality Management District California Environmental Quality Act Air Quality Guidelines (BAAQMD 2017) and are below listed thresholds for significant impacts. Emissions generated in pursuit of Project activities at Santa Cruz Wharf and Monterey Bay Harbor are accounted for in the Daily Emissions Inventory outlined on pages 20 and 21 of the 2012-2015 Air Quality Management Plan (MBARD 2012) released by the Monterey Bay Air Resources District (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 hazardous materials, located in areas with hazardous materials, or blocking hazards.

X. Hydrology and Water Quality a- e.: No impact

Discussion: Juvenile salmon will be acclimated to saltwater in hatchery trucks and on-site feeding will not occur at the Santa Cruz Wharf and Monterey Harbor release locations. On-site feeding will occur at Pillar Point Harbor, however the acclimation time is minimal (up to 5 days). Any fecal matter produced on site at all three locations is also expected to be minimal. 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 net pens used will be removed after use. If temporary net barges are needed, they will be removed immediately 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 Pillar Point Harbor, Monterey Harbor, Santa Cruz Wharf, 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: Using direct release methods at Santa Cruz Wharf and Monterey and short net pen acclimation times (up to 5 days) at Pillar Point Harbor, smolts will not have sufficient time to imprint on the surrounding environment. Therefore, adult salmon are not expected to return to these locations, as has been observed in previous coastal release projects when acclimation times were longer (up to three weeks). In past years, adult salmon returned to the release sites, bringing traffic from recreational anglers. Given reduced acclimation times, it is unlikely that significant numbers of CV FRCS adults would return to the Project locations and lead to fishing in the area. If some adult salmon return to Monterey or Half Moon Bay, their numbers are expected to be low, resulting in less than significant impacts to public services. The Project does not include any construction or alterations to facilities. The Project will use the public dock at Pillar Point Harbor to build the net pen, however the dock is large enough to accommodate both this activity and normal harbor business (James Pruett, General Manager of San Mateo County Harbor District, personal communication, February 10, 2020).

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 Santa Cruz Wharf, Municipal Wharf #2 at Monterey Harbor, Johnson Pier at Pillar Point Harbor (Figs. 1-3), or nearby launch ramps where public facilities are present and capable of covering 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 relatively low number of vehicle miles associated with hatchery trucks from the MOK to the Project locations (242, 258, and 348 miles round-trip to Pillar Point Harbor, Santa Cruz Wharf and Monterey Harbor, respectively) would not have an appreciable impact on roadways or pedestrian facilities or block any emergency access.

XVIII. Tribal Cultural Resources a-b: 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 November 18, 2024. CDFW received one response; one tribe requested consultation.

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 processed by utilities. The small amount of solid waste produced by juvenile salmon in net pens or hatchery trucks is not expected to be significant or have an impact due to the short holding period and location in the harbor.

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 would use 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. Salmon smolts used for the Project would grow into adults in the nearby ocean environment and become available for harvest in commercial and recreational fisheries. Unharvested adults may stray or return to the 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.: Less than significant impact

Discussion: Analysis of CWT data show that net pen releases generally have a higher ocean recovery rate than fish released in river, yet they also exhibit higher stray rates (Palmer-Zwahlen and Kormos 2015). Adults originating from Project release locations in the past have been detected in coastal streams, though the available data indicate that these numbers have been relatively low and are not having a significant impact on listed species through resource competition. Cumulative impacts to native salmonids in coastal watersheds might be of concern if CV Chinook salmon were to hybridize with other salmon species, though this evaluation has determined that the potential for this is low due to olfactory recognition of conspecifics and temporal differences in spawning timing. Additionally, the risk of establishment of an out-of-basin spawning population of CV Chinook salmon is extremely low and has not occurred to date. Furthermore, this Project has taken steps to reduce potential for straying through lowered acclimation times (0-5 days). Therefore, any potential cumulative effects resulting from Project activities will have less than significant impacts based on the best available data.

Despite millions of hatchery-origin salmon released in coastal and Bay locations annually for decades, few adults have been documented straying into coastal watersheds. However, coastal monitoring for CV Chinook salmon has been fragmented over space and time, and sampling is often opportunistic because the resources available are simply inadequate for effective monitoring at the necessary spatial scale. Therefore, additional coordination and available resources should be invested in the establishment of standardized monitoring protocols across a broader spatial scale to ensure impacts remain nonsignificant. CDFW has taken steps to address this in the Lagunitas Creek watershed with the establishment of a monitoring plan that formalizes protocols and sampling coordination across multiple state and federal agencies (CDFW 2024).

c.: No impact

Discussion: The Project does not have environmental effects which will cause substantial adverse effects on humans either directly or indirectly.

References

Azat, J. and D. Killam. 2024. GrandTab, California Central Valley Chinook Escapement Database Report. California Department of Fish and Wildlife.

Bartley, D. M., G. A. E. Gall, and B. Bentley. 1990. Biochemical genetic detection of natural and artificial hybridization of Chinook and Coho Salmon in Northern California. Transactions of the American Fisheries Society 119: 431-437, 1990

Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Available at <u>https://www.baaqmd.gov/~/media/files/planning-and-</u> <u>research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en</u>

California Department of Fish and Wildlife (CDFW). 2011. Status of the Fisheries Report: An Update Through 2011. California Department of Fish and Wildlife. Technical Report.

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=65498&inline

California Department of Fish and Wildlife (CDFW). 2024. CDFW 2024-2029 Monitoring Plan for Central Valley Fall-run Chinook salmon in Lagunitas Watershed. Technical Document.

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=227520

California Natural Diversity Database (CNDDB). 2019. Rare Find 5 [Internet]. California Department of Fish and Wildlife [Accessed on October 1, 2024].

Chevassus, B. 1979. Hybridization in salmonids: results and perspectives. Aquaculture, 17:113-128.

Clemento, A. J., E. D. Crandall, J. C. Garza, and E. C. Anderson. 2014. Evaluation of a single nucleotide polymorphism baseline for genetic stock identification of Chinook salmon (*Oncorhynchus tshawytscha*) in the California Current large marine ecosystem. Fisheries Bulletin 112:112-130.

Ettlinger, E., J. Koehler, K. Joe, and E. Cox. 2022. Adult Salmonid Monitoring in the Lagunitas Creek Watershed 2021-2022. Marine Municipal Water District. Technical Report.

Ettlinger, E., J. Koehler, H. Deese, and O. Macdonald. 2023. Adult Salmonid Monitoring in the Lagunitas Creek Watershed 2022-2023. Marine Municipal Water District. Technical Report. Garza, J. C. and D. E. Pearse. 2008. Population genetic structure of Oncorhynchus mykiss in the California Central Valley. Final report for California Department of Fish and Game Contract # PO485303.

Guczek, J., S. Powers, and M. Larson. 2019. Results of regional spawning ground surveys and estimates of salmonid redd abundance in the South Fork Eel River, Humboldt and Mendocino Counties California, 2018-2019. Annual report prepared for Grantee Agreement Number P1510507.

Hasler A.D, A.T. Scholz, and R.M. Horrall. 1978. Olfactory imprinting and homing in salmon. Am Sci, 66:347–355.

Hayes, J. W. 1987. Competition for Spawning Space Between Brown (Salmo trutta) and Rainbow Trout (S. gairdneri) in a Lake Inlet Tributary, New Zealand. Canadian Journal of Fisheries and Aquatic Sciences, 44(1):40–47. https://doi.org/10.1139/f87-005

Hearn, W. E. 1987. Interspecific competition and habitat segregation among stream-dwelling trout and salmon: a review. *Fisheries*, 12(5):24-31.

Johnson, J. H. 2007. Comparative diets of subyearling Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*O. mykiss*) in the Salmon River, New York. J. Great Leakes Res. 33:906-911.

Keefer, M. L., and C. C. Caudill. 2014. Homing and straying by anadromous salmonids: a review of mechanisms and rates. *Reviews in Fish Biology and Fisheries* 24: 333–368.

Lasko, G. R., R. G. Titus, J. R. Ferreira, and R. M. Coleman. 2014. Straying of latefall run Chinook Salmon from the Coleman National Fish Hatchery into the lower American River, California. California Fish and Game 100:665–682.

Lily, N. R. 1982. Chemical communication in fish. Canadian Journal Fisheries Aquatic Science 39: 22-35.

Michie, M. 2025. Stray Chinook Salmon Monitoring in Monterey County, California. California Department of Fish and Wildlife. Technical Report.

Milner, N. J., J. M. Elliott, J. D. Armstrong, R. Gardiner, J. S. Welton, and M. Ladle. 2003. The natural control of salmon and trout populations in streams. *Fisheries Research*, 62(2), 111-125.

Monterey Bay Air Resources District (MBARD). 2012. Monterey Bay Air Resources District, 2012-2015 Air Quality Management Plan, adopted by the Board of

Directors March 15, 2017, 24580 Silver Cloud Ct. Monterey, CA 93940. http://www.co.monterey.ca.us/home/showdocument?id=62318

Moyle, P.B. 2002. Inland Fishes of California, University of California Press.

Moyle, P., R. Lusardi, P. Samuel, and J. Katz. 2017. State of the Salmonids: Status of California's Emblematic Fishes 2017. Center for Watershed Sciences, University of California, Davis.

National Marine Fisheries Service (NMFS). 2016. Final Coastal Multispecies Recovery Plan. National Marine Fisheries Service, West Coast Region, Santa Rosa, California. 900pp. Accessed from

https://www.fisheries.noaa.gov/resource/document/final-coastal-multispeciesrecovery-plan-california-coastal-chinook-salmon

Neillands, G., J. Nelson, and E. Larson. 2015. Annual Report 2014: Chinook salmon Observation Monitoring Central California Coastal Streams. CDFW Bay Delta Region.

Neillands, G., J. Nelson, and E. Larson. 2016. Annual Report 2015, Chinook salmon Observation Monitoring Central California Coastal Streams. CDFW Bay Delta Region. Technical Report.

Neillands, G., J. Nelson, A. Persau, and E. Larson. 2017. Annual Report 2016, Chinook salmon Observation Monitoring Central California Coastal Streams. CDFW Bay Delta Region. Technical Report.

Neillands, G., J. Nelson, M. Michie, and H. Guiles. 2023. 2019-22 Chinook Salmon Observation Monitoring Central California Coastal Streams. CDFW Bay Delta Region. Technical Report.

O'Farrell, M. R., W. H. Satterthwaite, and B. C. Spence. 2012. California Coastal Chinook salmon: Status, Data, and Feasibility of Alternative Fishery Management Strategies. U.S. Department of Commerce, NOAA Technical Memorandum, NMFS-SWFSC-494.

Pacific Fishery Management Council (PFMC). 2019. Salmon Rebuilding Plan for Sacramento River Fall Chinook. Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220-1384.

Palmer-Zwahlen M. and B. Kormos. 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 Report2015-4. November 2015. Palmer-Zwahlen M., V. Gusman, and B. Kormos. 2019. Recovery of Coded-Wire Tags from Chinook salmon in California's Central Valley Escapement, Inland Harvest, and Ocean Harvest in 2014. California Department of Fish and Wildlife and Pacific States Marine Fisheries.

Pomeroy, C. and M. Dalton. 2007. Market Channels and Value Added to Fish Landed at Monterey Bay Area Ports. UC San Diego: California Sea Grant College Program. Retrieved from https://escholarship.org/uc/item/0962g7sz

Quinn, T. P. 1993. A review of homing and straying of wild and hatcheryproduced salmon. Fish Res 18:29–44.

Quinn, Thomas P. 2018. The Behavior and Ecology of Pacific Salmon and Trout. Second. Seattle, WA: University of Washington Press.

Sedoryk, M. 2019. Adult Coho Salmon (Oncorhynchus kisutch) and Steelhead (Oncorhynchus mykiss) spawning in Coastal San Mateo and Santa Cruz Counties for 2018-2019. CDFW Aquatic Surveys Program Database. Annual report for Grant Agreement Number P1530409.

Shen, C., A. Dean, and R. Bilski. 2025. Assessment of Hatchery-Origin Chinook Salmon Occurrence in Coastal Watersheds. California Department of Fish and Wildlife. West Sacramento, CA. February 2025.

Solazzi, M. F., T. E. Nickelson, and S. L. Johnson. 1991. Survival, contribution, and return of hatchery coho salmon (*Oncorhynchus kisutch*) released into freshwater, estuarine, and marine environments. Can J Fish Aquat Sci 48:248–253.

Solomon, D.J. 1973. Evidence for pheromone-influenced homing by migrating Atlantic salmon, Salmo salar. Nature, 244:231–232.

Stein, R. A., P. E. Reimers, and J. D, Hall. 1972. Social interaction between juvenile coho (*Oncorhynchus kisutch*) and fall Chinook salmon (*O. tshawytscha*) in Sixes River, Oregon. Journal of the Fisheries Board of Canada, 29(12), 1737-1748.

Sturrock, A. M., W. H. Satterthwaite, K. M. Cervantes-Yoshida, E. R. Huber, H. J. W. Sturrock, S. Nusslé and S. M. Carlson. 2019. Eight Decades of Hatchery Salmon Releases in the California Central Valley: Factors Influencing Straying and Resilience. In *Fisheries* (Vol. 44, Issue 9, pp. 433–444). Wiley-Blackwell. https://doi.org/10.1002/fsh.10267

Taylor, E. B. 1991. Behavioural interaction and habitat use in juvenile chinook, Oncorhynchus tshawytscha, and coho, O. kissutch, salmon. Animal Behaviour, 42(5): 729-744. https://doi.org/10.1016/S0003-3472(05)80119-8.

Thompson, C. 2006a. Spawning ground surveys, 2004-2005 season - Mattole River Watershed. Report prepared for Bureau of Land Management Task Order Number 003, Cooperative Agreement Number BAA020030.

Thompson, C. 2006b. Spawning ground surveys, 2005-2006 season - Mattole River Watershed. Report prepared for Bureau of Land Management Task Order Number BCF052002, Cooperative Agreement Number BAA020030 and California Coastal Conservancy, Mattole River and Range Partnership Task 4.1, Agreement Number 05-015.

Thornton, E. J., J. J. Duda, and T. P. Quinn. 2016. Influence of species, size and relative abundance on the outcomes of competitive interactions between brook trout and juvenile coho salmon. *Ethology Ecology & Evolution*, 29(2), 157–169. https://doi.org/10.1080/03949370.2015.1125393

Utter, F. M., G. Miller, G. Stahl, and D. Teel. 1989. Genetic population structure of Chinook salmon, *Oncorhynchus tshawytscha*, in the Pacific Northwest. U.S. National Marine Fisheries Service Fishery Bulletin 87:239-264.

Ward, D., B. Fujita, A. Acala, E. Martineau, and C. Kennelly. 2023. Juvenile salmonid species interaction study: Documenting juvenile Chinook salmon behavior in Olema and Redwood Creeks for the first time in recorded history. Humboldt State University. Unpublished Report.

Weitkamp, L.A., T. C. Wainwright, G. J. Bryant., G. B. Milner, D. J. Teel, R. G. Kope, and R. S. Waples. 1995. NOAA technical memorandum NMFS-NWFSC-24. Accessed from <u>https://repository.library.noaa.gov/view/noaa/6218</u>

Exhibit A: Statement of Work

Under the direction of the California Department of Fish and Wildlife (CDFW), the Monterey Bay Salmon and Trout Project (MBSTP) and CFC Fishing Club (CFC) would fulfill the following:

- 1. In each spring of 2025, 2026, 2027, 2028 and 2029:
 - a) MBSTP would be responsible for releasing up to 320,000 Chinook salmon smolts provided by the Mokelumne River Fish Hatchery (MOK). Of this total, up to 160,000 smolts would be released at Santa Cruz Wharf and up to

160,000 smolts would be released at Municipal Wharf 2 within Monterey Harbor via direct release using a gravity fed pipe. Hatchery salmon would be delivered all at once to each release location using 2-3 hatchery trucks per release site. In the event that conditions or logistics do not allow for discharge of fish at one of these locations, smolts will be transported to the other location (Santa Cruz Wharf or Monterey Harbor, as appropriate) and released directly into Monterey Bay.

- b) CFC would be responsible for acclimating and releasing up to 750,000 Chinook salmon smolts provided by the MOK at Pillar Point Harbor. Using 3-4 hatchery trucks per trip, CDFW would deliver fish to floating net pens for acclimation in batches of approximately 250,000 on a weekly basis. Fish would be acclimated for up to 5 days and subsequently released outside of the harbor.
- 2. Project activities for Santa Cruz Wharf and Monterey Harbor release locations have been reviewed and accepted by the California Coastal Commission, City of Monterey, Monterey Harbor and Marina Division, City of Santa Cruz, and the Santa Cruz Wharf Harbormaster (Exhibit B1-B4). Project activities for the Pillar Point Harbor release location have been reviewed and accepted by the California Coastal Commission, the San Mateo County Harbor District (Exhibits B5-B6) and the San Francisco Regional Water Quality Control Board (Bill Johnson, CA Regional Water Quality Control Board, personal communication on December 24, 2024). CFC and MBSTP would obtain any additional permits that may be needed to implement the project.
- 3. CFC and MBSTP understand that the number of salmon provided by CDFW for the Project at each release location may be reduced based on availability. To track the impact of Project releases on commercial and recreational fisheries, 100% of fish released at Monterey and Santa Cruz locations and 25% of fish released at Pillar Point would be marked with a coded wire tag (CWT) and a clipped adipose fin by CDFW. Healthy and disease-free salmon would be delivered to all Project locations by mid-May, though this timing is dependent on fish size, growth rates, and environmental conditions at release sites.
- 4. CFC and MBSTP agree to provide a written report (in electronic format) on all salmon releases to CDFW and the CCSTAC by August 15 of each of the release years (2025-2029). 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 (latitude and longitude) of release site and time
- Duration of acclimation (hours, minutes)
- 5. CFC and MBSTP would acknowledge the participation of CDFW and the Commercial Salmon Stamp on any signs, flyers, or other types of written communication or notice to advertise or explain the Project.

Exhibit B: Permits and Permit Waivers

B1. California Coastal Commission CDP Waiver for Santa Cruz Wharf and Monterey Harbor

------ Forwarded message ------From: **Bowser, Colin@Coastal** <<u>colin.bowser@coastal.ca.gov</u>> Date: Tue, Mar 9, 2021 at 2:17 PM Subject: MBSTP release from Santa Cruz wharf To: Ben Harris <<u>director@mbstp.org</u>>, Parker, Christina@Wildlife <<u>Christina.Parker@wildlife.ca.gov</u>> Cc: Kurth, Ryon@Wildlife <<u>Ryon.Kurth@wildlife.ca.gov</u>>

Hi, Ben and Christina,

The salmon fry release from the Santa Cruz wharf that we discussed last week does not require a CDP but using equipment such as net pens as part of the release would trigger the need for a CDP. I know conducting the fish release from the Santa Cruz wharf is your preferred strategy, but if that plan changes and placing some kind of equipment into coastal waters becomes necessary, we should discuss those next steps. Thanks for reaching out to us about this project, and if you produce some kind of after-action report or summary or take photos of the release, we would appreciate being included in that report distribution.

Thanks, and good luck,

Colin

Colin Bowser

coastal planner, Central Coast District California Coastal Commission 725 Front St., Suite 300 Santa Cruz, CA 95060 Colin.Bowser@coastal.ca.gov B2. City of Monterey Harbor and Marina Division Letter



HARBOR/MARINA DIVISION

Friday December 13, 2024

Ben Harris Executive Director Monterey Bay Salmon and Trout Project 101 Cooper Street Santa Cruz, Ca. 95060

Dear Mr. Harris,

Thank you for your efforts to continue the salmon release fishery enhancement program in Monterey Harbor. This initiative holds great promise in fostering both social and economic benefits for Monterey Bay while supporting sustainable fishing opportunities for future generations.

Historically. Monterey Harbor staff collaborated with the Monterey Bay Salmon and Trout Project to release salmon smolt into the wild. This aligns closely with one of the City's key Value Drivers: "Develop a long-term strategy for Municipal Wharf No. 2 and a sustainable fishing industry." Additionally, the Monterey City Council has expressed its commitment to working with stakeholders to advance efforts like a salmon release program.

In this spint. 1 welcome the opportunity to support the release of up to 250,000 salmon smolt in Monterey. The City of Monterey is prepared to permit and grant access to our Waterfront Facilities for the Monterey Bay Salmon and Trout Project personnel during the duration of this enhancement project.

We appreciate your dedication to this important endeavor and look forward to the positive impact it will have on our community and environment. Please do not hesitate to reach out if further support or collaboration is needed.

Sincerely,

Capt. Brian Nelson Harbormaster, City of Monterey

B3. City of Santa Cruz Permit

AGREEMENT BETWEEN CITY OF SANTA CRUZ AND THE MONTEREY BAY SALMON & TROUT PROJECT, INC

This Agreement is entered into between the City of Santa Cruz ("City") and The Monterey Bay Salmon & Trout Project, Inc., a 501c3 Non-profit organization. ("Permittee") and is effective as of <u>Dec</u> 20 , 2019. City and Pennittee are referred to individually as "Party", or collectively, as the "Parties".

WHEREAS Permittee, its employees, agents and/or volunteers (collectively, the "Permittees") are participating in a Monterey Bay Salmon & Trout Project ("Project") intending to once annually, release juvenile chinook salmon arriving in a California Department of Fish & Wildlife aerated transport vehicle via a flexible dispersal hose from the roadway of the Santa Cruz Wharf ("City Property") into the water of the adjacent Monterey Bay. Pennittees will accompany an aerated live fish transport truck onto the City Property during evening hours, one time each year during the month of May for the express purpose of releasing up to 240,000 live juvenile chinook salmon into the Monterey Bay.

WHEREAS, City agrees to the Permittees' access and use of the City Property related to the Project.

NOW THEREFORE, in consideration of the mutual covenants and promises set forth in this Agreement and other valuable consideration, receipt of which is hereby acknowledged, the parties to this Agreement do hereby agree as follows:

- 1. RESPONSIBILITIES OF CITY:
 - 1.1 City shall cooperate with Permittees in their access and use of City Property for the placement of Pennittees' fish transport vehicle and Project-related dispersal equipment on City Property.
 - 1.2 City shall at all times retain exclusive final authority over the use of City Property.
- 2. RESPONSIBILITIES OF UNIVERSITY/PERM1TTEES:

2.1. Use of Property. Pennittees shall keep the fish transport vehicle located in the roadway only and during times as specified by the City, and shall use City Property with care, keep the City Property in a clean and attractive condition, and shall comply with all applicable laws and City ordinances applicable to the above-referenced activity. Pennittees shall not unreasonably interfere with the use of City Property by the City and/or the public.

2.2. As-Is Condition, Pennittees acknowledge the uniqueness of the City Property and accept the current "AS-IS, IN ITS CURRENT CONDITION, WITH ALL FAULTS" condition of the City Property existing on the date of execution of this Agreement. Pennittees acknowledges by their own independent investigation, that the City Property to be used is suitable for Pennittees' intended use and neither City nor its agents or representatives have made

any representation or warranty as to the present or future suitability of the City Property for the conduct of Permittee's activities.

2.3. Indemnification on behalf of Permittees.

a) Monterey Bay Salmon & Trout Project, Inc. agrees to defend, indemnify, and hold harmless the City of Santa Cruz, its officials, officers, employees, agents and volunteers from and against any and all loss, damages, liability, claims, suits, costs and expenses (including reasonable attorneys' fees), for any injury or damages resulting from or in any way related to Permittees' activities as referenced in this Agreement, except for the sole negligence or willful misconduct of the City.

b) Monterey Bay Salmon & Trout Project, Inc. further agrees not to assert any claim against or sue City, its officers, employees, agents or volunteers for injury or damage allegedly to have been caused in whole or in part by Permittees' use of City Property, or any other activity undertaken by Permittees at or on City Property with or without City's permission.

c) Monterey Bay Salmon & Trout Project, Inc. agrees to require all individuals accessing City Property related to this Agreement to execute individual waiver forms approved by the City (attached here to as Exhibit A), in which said individuals agree not to assert any claims against or sue the City, its officials, officers, employees, agents or volunteers for injury or damage allegedly to have been caused in whole or in part by said individuals' use of City Property.

2.4. Loss or Damage to City Property. Monterey Bay Salmon & Trout Project, Inc. shall assume all liability, including any costs for repair as determined by City, in its sole discretion, for any damage or loss to City Property arising out of Permittees' activities, except for normal wear and tear, under this Agreement.

2.5 Insurance Requirements. Monterey Bay Salmon & Trout Project, Inc. Directors agrees to provide proof of its a certificate of insurance coverage naming the City of Santa Cruz, its officials, officers, employees, and volunteers, an additional insured on its General Liability Insurance policy, and which meets the City's insurance requirements as required in Exhibit B.

3. GENERAL PROVISIONS:

3.1 Governing Law: This Agreement shall be governed by the laws of the State of California.

3.2. Severability: In the event any portion of this Agreement is deemed to be unenforceable, or is in conflict with applicable law, the remainder of this Agreement shall be enforced and shall remain in full force and effect.

3.3. <u>Entire Agreement</u>: This Agreement sets forth the entire understanding of the parties, and each party acknowledges there were not other oral agreements, representations, warranties or statements of fact made prior to or at the time of the signing of this Agreement.

3.4 Modification: It is expressly understood and agreed that this Agreement may not be altered, amended, modified or otherwise changed in any respect whatsoever except by a writing duly executed by authorized representatives of the parties hereto.

3.5 Understanding and Interpretation: The parties acknowledge that each party has reviewed this Agreement and fully understand its terms and consequences. The parties also acknowledge that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

3.6 Binding and No Assignment: This Agreement shall be binding upon the parties hereto and upon their respective officials, officers, directors, employees, agents, legal representatives, and successors. This Agreement is not assignable without the express written approval by the City.

3.7 Counterparts: This Agreement may be signed in counterparts, and when each party has signed and delivered at least one such counterpart, each one shall be deemed an original and when taken together with other signed counterparts, shall constitute one Agreement, which shall be binding on and effective regarding all parties. Facsimile and scanned signatures have the same force and effect as original signatures.

By their signatures below, the parties herein acknowledge that they have read the terms of this Agreement, understand the terms thereof, and are authorized to enter into this Agreement on behalf of their respective entities.

CITY OF SANA CRUZ

By: Att. BQ Name: Toiny Elliot Title: Director of Parks and Recreations Date: 12/20/2019

THE MONTEREY BAY SALMON & TROUT PROJECT, INC.

By: Branning HARKIS Title: EXECUTIVE DEECTOR Date: 12/2/2019

B4. Santa Cruz Wharf



12/1/2024

To whom it may concern,

The Santa Cruz Wharf is proud to support Mr. Harris and the Monterey Bay Salmon & Trout Project's planned participation in CDFW's Ocean Salmon Enhancement Program. We welcome the opportunity to provide access and assistance in releasing salmon smolts into the Monterey Bay from the Wharf. I recognize that such a program will bring a social and economic benefit to Monterey Bay and its many fisherman. It will also help in sustaining fishing opportunities for future generations

Recently we witnessed the return of salmon from earlier plantings and watched fisherman off the Wharf hook and land many salmon from the schools swimming around the Wharf. Being a fisherman myself I feel proud to support the Monterey Bay Salmon and Trout Project.

Sincerely,

Britt Hoberg

Wharf Supervisor


B5. California Coastal Commission Notice of Permit Waiver for Pillar Point Harbor

CALIFORNIA COASTAL COMMISSION •S FREMONT, SUITE WOO SaN FRANCKCO. CA *103 ill 9 VOICE AND TDD A15) 90< 200 Fax [#35] 90*. 3*00



NOTICE OF COASTAL DEVELOPMENT PERMIT DE MINIMIS WANNER

DATE: August 26, 2013

PERMIT NO. 9-13-0498-W

TO: Coastal Commissioners and Interested Parties

SUBJECT: Waiver of Coastal Development Permit Requirements

Based on the plans and information submitted by the applicants for the development described below, the Executive Director of the Coastal Commission (Commission) hereby waives the requirements for a coastal development permit, pursuant to Section 30624.7 of the Callfornia Coastal Act.

Applicants:	Marc Gorelnik	Fisheries Branch
	Coastside Fishing Club	California Department of Fish and Game
	8042 Terrace Dr.	830 S. Street
	El Cerrito, CA 94530	Sacramento. CA 95811

Project Description and Background: The Coastside Fishing Club in partnership with the California Department of Fish and Wildlife (the applicants), propose to install and operate a pair of floating salmon smolt acclimation net pens in the outer harbor portion of Pillar Point Harbor. The net pens would serve as a temporary holding facility for young hatchery-reared Chinook salmon from California Department of Fish and Wildlife (DFW) fish hatcheries tn the Central Valley. DFW research has shown that salmon smolts released directly from these Central Valley hatcheries into rivers experience high rates of mortality as they move downstream towards the San Francisco Bay and ocean due to poor water quality, water diversions, and predation along the route. As a result, DFW has developed a system to transport young salmon in large tanker trucks from the hatcheries directly to the ocean and San Francisco Bay for release. However, this immediate transfer of juvenile fish from fresh water to estuarine or marine waters is known to result in a variety of shocks and stressors on the fish that can also make them susceptible to high levels of predation and mortality. In response, hatchery reared smolts are typically released into temporary holding pens that provide them with a protected area in which to recover from these shocks and acclimate to a salt water environment. After one to three weeks of acclimation, the fish are released into the wild in order to enhance existing populations.

The applicants propose to install and operate two salmon acclimation net pens for use by DFW. These pens were used successfully in 2012 and 2013 under authorization by the

Commission (CDP Waiver No. E-11-022-W). The net pens would be in place for the spring and summer (March through July) of each year that fish are available. By the end of July each year, the pens would be removed from the harbor and stored offsite. The applicants propose to use the Johnson Pier in the inner Pillar Point Harbor during stocking of the net pens, an activity that would occur approximately three to seven times each year. During stocking, the net pens would be towed to the pier to receive roughly 60,000 fish from DFW transport trucks. The stocked net pens would then be towed to an existing mooring location in the outer harbor and would remain in place for roughly seven to 21 days while the smolts are fed and provided with an opportunity to acclimate. Feeding would be carried out with an automated belt-operated fish feeder and would use roughly 26 pounds of three millimeter salmonid feed per day (assuming both pens are stocked at capacity with 60,000 fish each). Coastside Fishing Club volunteers would monitor the net pens and tend to the fish feeders on a daily basis. At the end of the acclimation period, the holding net would be opened and the smolts would be released into the outer Pillar Point Harbor near the entrance to the open ocean.

The pens would include an inner nylon net with a mesh size of 1/8 inch to keep the smolts in place as well as a heavy outer net with a mesh size of four inches that would function as a physical barrier against predators. The outer net would be weighted to maintain tautness and would extend from approximately three feet above the water line to a depth of 12 feet. In addition, a two inch mesh net would be erected over the top of the entire structure to protect the smolts from avian predators. Each net pen would measure approximately 30 feet wide by 54 feet long, including net supports and an encircling walkway.

The applicants have received approval for the project from the California Department of Fish and Wildlife, State Water Quality Control Board, and San Mateo County Harbor District.

Waiver Rationale: For the following reasons, the proposed project will not have a significant adverse effect, either individually or cumulatively, on coastal resources, nor will it conflict with Chapter 3 policies of the Coastal Act:

- o The net pens will use existing mooring locations in the outer Pillar Point Harbor and would not require the placement of permanent mooring devices or anchors on the seafloor.
- o The net pens will only be in place seasonally (March through July) and would be removed from the water by the end of July each year.
- o The net pens include predator exclusion netting to <u>minimize</u> interactions with predators such as <u>marine</u> mammals and seabirds. Such netting has been shown to be effective in protecting the enclosed fish while <u>minimizing</u> the potential entanglement or <u>injury</u> of predatory animals that may be attracted to the net pens.
- o Coastside Fishing Club has developed a plan for addressing potential interactions with marine mammals and seabirds. This plan would be implemented as part of the project and it includes both daily inspections and the maintenance of a daily log as well as immediate reporting of any incidents involving marine mammals or seabirds to the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Marine Mammal Center.

Notice of Coastal Development Permit De Minimus Waiver 9-13-0498-W Page 3 of J

- Coastside Fishing Club members would monitor the net pens on a daily basis to ensure that they are maintained in good repair and no fugitive materials are released into the marine environment.
- Feeding operations for the salmon smolts during acclimation would be limited and holding times for the fish would not exceed three weeks. At these levels, accumulation of uneaten feed and fecal materials below the net pens is expected to be minimal and not anticipated to adversely affect the water quality or benthic habitat of Pillar Point Harbor.
- o The California Department of Fish and Wildlife will implement a contingency plan for the net pen operation to address any disease or parasite outbreak in the salmon population during acclimation. This plan includes daily monitoring, coordination with DFW pathologists, as well as management oversight by DFW staff during acclimation.

Important: This waiver is not effective unless the project site has been posted and until the waiver has been reported to the Coastal Commission. This waiver is proposed to be reported to the Commission at the meeting of September 11-12 in Eureka, CA. If four or more Commissioners object to this waiver, a coastal development permit will be required.

Sincerely.

CHARLES LESTER Executive Director

Bv: MARK DELAPLAI Manager

B6. San Mateo County Harbor District

Board of Harbor Commissioners

Tom Mattusch, President Kathryn Slater-Carter, Vice President Virginia Chang Kiraly, Treasurer George Domurat, Secretary William Zemke, Commissioner

James B. Pruett, General Manager Trisha Ortiz, District Counsel

December 10, 2024

Email: colby.hause@wildlife.ca.gov

Chinook Salmon Sportfish Coordinator Atten: Colby Hause 1010 Riverside Parkway West Sacramento, CA 95605

Subj: Coastside Fishing Club Net Pen Project (Juvenile Salmon Release) Pillar Point Harbor

Dear Mr. Hause:

The net pen project that supports the Coastside Fishing Club's juvenile salmon release program in Pillar Point Harbor has been highly successful for the past 12 years. The San Mateo County Harbor District is both honored and proud to be part of the program and fully supports its continuation.

Pillar Point Harbor is owned and operated by the San Mateo County Harbor District pursuant to a State tidelands grant (Chapter 68, Statutes of 1960). As the owner/operator, the Harbor District will provide necessary water and facilities access including use of the launch ramp to assemble the pens, moorings for placement of pens, and use of Johnson Pier for delivery of the juvenile salmon.

The Harbor District hereby grants Coastside Fishing Club (applicant), California Department of Fish and Game (DFG), and National Oceanic and Atmospheric Administration (NOAA Fisheries) representatives' permission to enter onto real property controlled by the Harbor District pursuant to its tidelands grant to assemble, install, and manage the net pen project. Access shall be limited to those portions of the District's real property at Pillar Point where actual project work is proposed to be performed and those additional portions of real property that must be traversed to gain access to the work site.

The Department or applicant shall give the District not less than 24 hours prior to use of Johnson Pier for delivery of smolt, to ensure no use conflicts occur with pier-related harbor operations. It is requested that the DFG or NOAA Fisheries representatives notify the Harbormaster prior to accessing the property without the applicant.

The grant of access will expire upon termination of the net pen project, or within 180 days of written notice by the Harbor District.

To the best of our knowledge, water quality at the project site is satisfactory for project purposes.

James B. Pruett General Manager San Mateo County Harbor District

Exhibit C: Tribal Outreach

C1: NAHC CEQA/AB 52 (Section 21080.3.1. Tribal Consultation List) Request



October 24, 2024

Raymond C. Hitchcock Executive Secretary Native American Heritage Commission 1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691 (916) 373-3710 nahc@nahc.ca.gov

LIST OF TRIBAL CONTACTS FOR CHINOOK SALMON COASTAL RELEASES AT SANTA CRUZ WHARF, MONTEREY HARBOR, AND PILLAR POINT HARBOR

Dear Executive Secretary Hitchcock:

The California Department of Fish and Wildlife (CDFW) requests a list of tribes that are culturally or traditionally affiliated with the geographic area of the Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor.

Type of Request (Chose One):

🛛 CEQA/AB 52 (Section 21080.3.1. Tribal Consultation List

🗆 General Tribal Contact List

Sacred Lands File Search (Optional)

 \Box Yes (Details provided below) \boxtimes No

Below is the following Project information for this request.

☑ Project Map Included (Recommended)

Project Information

Name: the Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor Address: Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor NAHC Contact List Request 10/24/2024 Page 2

• Santa Cruz Wharf in Monterey Bay in Santa Cruz County (Attachment 1a). The Santa Cruz Harbor will be designated as an alternative contingency location if conditions at the wharf prohibit release.

• Monterey Harbor at Municipal Wharf 2 in Monterey County (Attachment 1b).

• Pillar Point Harbor near Half Moon Bay in San Mateo County (Attachment 1c).

City/Community: Santa Cruz, Monterey, Half Moon Bay

County: Santa Cruz, Monterey, and San Mateo County

Description (1 sentence): This Project would involve releasing up to 1,070,000 Central Valley Fall-run Chinook Salmon (CV FRCS) smolts (juvenile salmon that are physiologically prepared to enter saltwater) across three coastal release locations annually each spring from 2025-2029

Contact Information

Name: Maggie McCann Agency: CDFW Fisheries Branch Address: 1010 Riverside Parkway City, State, Zip: West Sacramento, CA, 95605 Phone: 707 367-1178 Email: <u>Marguerite.Mccann@wildlife.ca.gov</u> CC'd Emails: <u>Tribal.Liaison@wildlife.ca.gov</u>

\Box Sacred Lands File Search

USGS Quadrangle Information (for multiple quad searches, copy/paste below for each one OR include excel with a list of all)

Quad Name: Quad County: [if applicable] Township: Range: Section(s):

Thank you for your assistance. Please respond with the list of tribes or any questions to Maggie McCann, Fisheries Branch Regulations Specialist, at <u>marguerite.mccann@wildlife.ca.gov</u>.

Sincerely,

Maggie McCann Regulations Specialist

NAHC Contact List Request 10/24/2024 Page 3

California Department of Fish and Wildlife

ec: Sarah Fonseca, Department Tribal Liaison <u>Tribal Liaison@wildlife.ca.gov</u>

Attachment 1

A. Proposed Release location at Santa Cruz Wharf (36.958751°, -122.017397°) Yellow circle denotes where fish will be released.

B. Proposed release location at Municipal Wharf 2 in Monterey Harbor (36.604872°, -121.889787°). Red circle denotes where fish will be released.

C. Proposed release location at Pillar Point Harbor. The inner harbor will be the location for offloading smolts into a net pen tied to Johnson Pier (37.501274°, - 122.482717° see red circle) and will be towed to an outer harbor mooring prior to release (37.499480°, - 122.485234°).

C2: NAHC General Tribal Contact List Request

State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Fisheries Branch 1010 Riverside Parkway West Sacramento, CA 95605 www.wildlife.ca.gov GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



October 24, 2024

Raymond C. Hitchcock Executive Secretary Native American Heritage Commission 1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691 (916) 373-3710 nahc@nahc.ca.gov

LIST OF TRIBAL CONTACTS FOR CHINOOK SALMON COASTAL RELEASES AT SANTA CRUZ WHARF, MONTEREY HARBOR, AND PILLAR POINT HARBOR

Dear Executive Secretary Hitchcock:

The California Department of Fish and Wildlife (CDFW) requests a list of tribes that are culturally or traditionally affiliated with the geographic area of the Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor.

Type of Request (Chose One):

- CEQA/AB 52 (Section 21080.3.1. Tribal Consultation List
- 🛛 General Tribal Contact List

Sacred Lands File Search (Optional)

 \Box Yes (Details provided below) \boxtimes No

Below is the following Project information for this request.

☑ Project Map Included (Recommended)

Project Information

Name: the Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor Address: Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor NAHC Contact List Request 10/24/2024 Page 2

• Santa Cruz Wharf in Monterey Bay in Santa Cruz County (Attachment 1a). The Santa Cruz Harbor will be designated as an alternative contingency location if conditions at the wharf prohibit release.

• Monterey Harbor at Municipal Wharf 2 in Monterey County (Attachment 1b).

• Pillar Point Harbor near Half Moon Bay in San Mateo County (Attachment 1c).

City/Community: Santa Cruz, Monterey, Half Moon Bay

County: Santa Cruz, Monterey, and San Mateo County

Description (1 sentence): This Project would involve releasing up to 1,070,000 Central Valley Fall-run Chinook Salmon (CV FRCS) smolts (juvenile salmon that are physiologically prepared to enter saltwater) across three coastal release locations annually each spring from 2025-2029

Contact Information

Name: Maggie McCann Agency: CDFW Fisheries Branch Address: 1010 Riverside Parkway City, State, Zip: West Sacramento, CA, 95605 Phone: 707 367-1178 Email: <u>Marguerite.Mccann@wildlife.ca.gov</u> CC'd Emails: <u>Tribal.Liaison@wildlife.ca.gov</u>

\Box Sacred Lands File Search

USGS Quadrangle Information (for multiple quad searches, copy/paste below for each one OR include excel with a list of all)

Quad Name: Quad County: [if applicable] Township: Range: Section(s):

Thank you for your assistance. Please respond with the list of tribes or any questions to Maggie McCann, Fisheries Branch Regulations Specialist, at marguerite.mccann@wildlife.ca.gov.

Sincerely,

Maggie McCann Regulations Specialist NAHC Contact List Request 10/24/2024 Page 3

California Department of Fish and Wildlife

ec: Sarah Fonseca, Department Tribal Liaison Tribal.Liaison@wildlife.ca.gov

Attachment 1

- A. Proposed Release location at Santa Cruz Wharf (36.958751°, -122.017397°)
- B. Proposed release location at Municipal Wharf 2 in Monterey Harbor (36.604872°, -121.889787°).
- C. Proposed release location at Pillar Point Harbor. The inner harbor will be the location for offloading smolts into a net pen tied to Johnson Pier (37.501274°, 122.482717° see red circle) and will be towed to an outer harbor mooring prior to release (37.499480°, 122.485234°)

C3: Tribal Notification Letter





November 18, 2024

NOTIFICATION PURSUANT TO CALIFORNIA ENVIRONMENTAL QUALITY ACT SECTION 21080.3.1 OF Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor

Dear Tribal Representative:

The California Department of Fish and Wildlife (CDFW) would like to inform you that its Fisheries Branch has received proposals for the Chinook Salmon Coastal Releases at Santa Cruz Wharf, Monterey Harbor, and Pillar Point Harbor (Project). CDFW is providing this formal notice as the Project lead agency pursuant to the California Environmental Quality Act (CEQA, Public Resources Code section 21080.3.1.)

Your input can be provided through direct communication and consultation pursuant to Public Resources Code sections 21080.3.1 and 21080.3.2 or during the CEQA public comment period planned to begin in February 2025. The Department welcomes direct communication and consultation prior to the public process on this proposed Project and any anticipated impacts on tribal interests or cultural resources.

Project Background

This Project would involve releasing up to 1,070,000 Central Valley Fall-run Chinook Salmon (CV FRCS) smolts (juvenile salmon that are physiologically prepared to enter saltwater) across three coastal release locations annually each spring from 2025-2029. Under the direction and guidance of CDFW, Monterey Bay Salmon and Trout Project (MBSTP) and Coastside Fishing Club (CFC) plan to release hatchery-origin CV FRCS smolts in an effort to increase the number of ocean salmon landings for local sport and commercial fisheries.

The Project area includes the following three locations:

- Santa Cruz Wharf in Monterey Bay in Santa Cruz County (Attachment 1a). The Santa Cruz Harbor will be designated as an alternative contingency location if conditions at the wharf prohibit release.
- Monterey Harbor at Municipal Wharf 2 in Monterey County (Attachment 1b).
- Pillar Point Harbor near Half Moon Bay in San Mateo County (Attachment 1c).

MBSTP plans to release up to 160,000 smolts at the Santa Cruz Wharf and up to 160,000 smolts at Monterey Bay Harbor (Attachment 1a and 1b), for a combined total release of up to 320,000 fish. CFC plans to release up to 750,000 smolts into net pens at Pillar Point Harbor for a 5-day acclimation period before release. To track the impact of planned releases on commercial and recreational fisheries, 100% of fish released at Monterey and Santa Cruz locations and 25% of fish released at Pillar Point will be marked with a coded wire tag (CWT) and clipped adipose fin. The Project may affect coastal resources including native fishes and wildlife, which may be of interest to your Tribe.

Request for Input and/or Consultation

CDFW's goal is to understand tribal interests and concerns early in the Project and to work collaboratively to resolve any concerns. CDFW is committed to open communication with your Tribe under its Tribal Communication and Consultation Policy, which is available through CDFW's Tribal Affairs webpage at https://www.wildlife.ca.gov/General-Counsel/Tribal-Affairs.

CDFW respectfully requests your input, written comments or questions regarding the Project be submitted by February 19, 2025 to Colby Hause, Senior Environmental Scientist at Colby.hause@wildlife.ca.gov, or write to P.O. Box 944209, Sacramento, CA 94244.

To request a consultation pursuant to CEQA section 21080.3.1, please respond in writing by February 19, 2025 to the Department Tribal Liaison Ms. Sarah Fonseca by email tribal.liaison@wildlife.ca.gov with the subject line "Chinook Coastal Releases: [Tribe Name] Tribal Consultation Response". Or you can submit by mail to Department of Fish and Wildlife, ATTN: Department Tribal Liaison, PO Box 944209, Sacramento, CA 94244-2090. Please designate and provide contact information for the appropriate Tribal lead person.

Thank you for your consideration and time on our request for input and/or consultation. We look forward to your response and input on the Project.

Respectfully,

Jay Rowan Fisheries

Fisheries Branch Chief

California Department of Fish and Wildlife ec:

> Sarah Fonseca, Department Tribal Liaison Tribal.Liaison@wildlife.ca.gov

> Colby Hause, Senior Environmental Scientist Colby.hause@wildlife.ca.gov

Attachment 1

A. Proposed release location at Santa Cruz Wharf (36.958751°, -122.017397°). Yellow circle denotes where fish will be released.



B. Proposed release location at Municipal Wharf 2 in Monterey Harbor (36.604872°, -121.889787°). Red circle denotes where fish will be released.



C. Proposed release location at Pillar Point Harbor. The inner harbor will be the location for offloading smolts into a net pen tied to Johnson Pier (37.501274°, - 122.482717°, see red circle) and will be towed to an outer harbor mooring prior to release (37.499480°, - 122.485234°).



Exhibit D: California Natural Diversity Database Elements Report and Quadrants Identification Map

Attachment D1. CNDDB Elements Report





California Natural Diversity Database

 Query Criteria:
 Quad IS (Montara Mountain (3712254) OR Half Moon Bay (3712244) OR San Gregorio (3712234) OR Pigeon Point (3712224) OR Davenport (3712212) OR Davenport (3712212) OR Davenport (3712212) OR Davenport (3712212) OR Santa Cruz (3612281) OR Soquel (3612188) OR Matsonville West (3612187) OR Monterey (3612158) OR Seaside (3612157))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii	ABNKC12040	None	None	G5	S4	WL
Cooper's hawk						
Acipenser medirostris pop. 1	AFCAA01031	Threatened	None	G2T1	S1	SSC
green sturgeon - southern DPS						
Actinemys marmorata	ARAAD02031	Proposed	None	G2	SNR	SSC
northwestern pond turtle		Ihreatened				
Actinemys pallida	ARAAD02032	Proposed	None	G2G3	SNR	SSC
southwestern pond turtle		Inreatened				
Agelaius tricolor	ABPBXB0020	None	Threatened	G1G2	S2	SSC
tricolored blackbird						
Agrostis blasdalei	PMPOA04060	None	None	G2G3	S2	1B.2
Blasdale's bent grass						
Allium hickmanii	PMLIL02140	None	None	G2	S2	1B.2
Hickman's onion						
Allium peninsulare var. franciscanum	PMLIL021R1	None	None	G4G5T2	S2	1B.2
Franciscan onion						
Ambystoma californiense pop. 1	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
California tiger salamander - central California DPS					_	
Ambystoma macrodactylum croceum	AAAAA01082	Endangered	Endangered	G5T1T2	S2	FP
Santa Cruz long-toed salamander						
Amsinckia lunaris	PDBOR01070	None	None	G3	S3	1B.2
				00	00	
Aneldes niger	AAAAD01070	None	None	G3	53	550
	ABACC01020	None	Nana	<u></u>	6060	880
Northern California legless lizard	ARACC01020	None	None	63	5253	330
		None	None	GA	63	SSC
pallid bat	AMAGG10010	None	None	04	00	000
Aphyllon robbinsii	PDORO040Q0	None	None	G1	S1	1B.1
Robbins' broomrape					•	
Arctostaphylos andersonii	PDERI04030	None	None	G2	S2	1B.2
Anderson's manzanita						
Arctostaphylos glutinosa	PDERI040G0	None	None	G1	S1	1B.2
Schreiber's manzanita						
Arctostaphylos hookeri ssp. hookeri	PDERI040J1	None	None	G3T2	S2	1B.2
Hooker's manzanita						





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Arctostaphylos montaraensis	PDERI042W0	None	None	G1	S1	1B.2
Montara manzanita						
Arctostaphylos montereyensis	PDERI040R0	None	None	G2?	S2?	1B.2
Toro manzanita						
Arctostaphylos ohloneana	PDERI042Y0	None	None	G1	S1	1B.1
Ohlone manzanita						
Arctostaphylos pajaroensis	PDERI04100	None	None	G1	S1	1B.1
Pajaro manzanita						
Arctostaphylos pumila	PDERI04180	None	None	G1	S1	1B.2
sandmat manzanita						
Arctostaphylos regismontana	PDERI041C0	None	None	G2	S2	1B.2
Kings Mountain manzanita				_	_	_
Arctostaphylos silvicola	PDERI041F0	None	None	G1	S1	1B.2
Bonny Doon manzanita				05	<u></u>	
Ardea herodias	ABNGA04010	None	None	G5	S4	
		Endongorod	Endongorod	C1	C1	10 1
marsh sandwort	PDCAR040L0	Endangered	Endangered	GI	31	ID.I
Asio flammeus	4BNSB13040	None	None	G5	S 2	550
short-eared owl	ABI(00100+0	None	None	00	02	000
Astragalus pvcnostachvus var. pvcnostachvus	PDFAB0F7B2	None	None	G2T2	S2	1B.2
coastal marsh milk-vetch						
Astragalus tener var. titi	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
coastal dunes milk-vetch		-	-			
Athene cunicularia	ABNSB10010	None	None	G4	S2	SSC
burrowing owl						
Bombus caliginosus	IIHYM24380	None	None	G2G3	S1S2	
obscure bumble bee						
Bombus crotchii	IIHYM24480	None	Candidate	G2	S2	
Crotch's bumble bee			Endangered			
Bombus occidentalis	IIHYM24252	None	Candidate	G3	S1	
western bumble bee			Endangered			
Bombus pensylvanicus	IIHYM24260	None	None	G3G4	S2	
American bumble bee						
Brachyramphus marmoratus	ABNNN06010	Threatened	Endangered	G3	S2	
marbled murrelet						
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
ferruginous hawk						
Callophrys mossii bayensis	IILEPE2202	Endangered	None	G4T2	S2	
		News	News	000 170	00	45.4
Caryperiorum parryr var. nesseae	PDPOR09052	NONE	None	636412	32	1B.1
cana oraz moantano pusoypawo						





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Carex comosa	PMCYP032Y0	None	None	G5	S2	2B.1
bristly sedge						
Castilleja ambigua var. insalutata	PDSCR0D403	None	None	G5T2	S2	1B.1
pink Johnny-nip						
Central Dune Scrub	CTT21320CA	None	None	G2	S2.2	
Central Dune Scrub						
Central Maritime Chaparral	CTT37C20CA	None	None	G2	S2.2	
Central Maritime Chaparral						
Centromadia parryi ssp. congdonii	PDAST4R0P1	None	None	G3T2	S2	1B.1
Congdon's tarplant						
Centromadia parryi ssp. parryi	PDAST4R0P2	None	None	G3T2	S2	1B.2
pappose tarplant						
Charadrius nivosus nivosus	ABNNB03031	Threatened	None	G3T3	S3	SSC
western snowy plover						
Chorizanthe cuspidata var. cuspidata	PDPGN04081	None	None	G2T1	S1	1B.2
San Francisco Bay spineflower						
Chorizanthe minutiflora	PDPGN04100	None	None	G1	S1	1B.2
Fort Ord spineflower						
Chorizanthe pungens var. hartwegiana	PDPGN040M1	Endangered	None	G2T1	S1	1B.1
Ben Lomond spineflower						
Chorizanthe pungens var. pungens	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Monterey spineflower						
Chorizanthe robusta var. robusta	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
robust spineflower						
Cicindela hirticollis gravida	IICOL02101	None	None	G5T2	S2	
sandy beach tiger beetle					<i></i>	
Cicindela onione	IICOL026L0	Endangered	None	G1	S1	
		Neze	Neze	00	00	40.0
Eropoiscon thistle	PDAS12E050	None	None	G3	53	18.2
		Nana	Nene	<u></u>	60	40.0
	PDONA050L0	none	None	G2	52	10.2
Coastal and Valloy Frashwatar Marsh	CTT52410CA	Nono	Nono	Ga	C 2 1	
Coastal and Valley Freshwater Marsh	C1132410CA	None	None	65	32.1	
Coastal Brackish Marsh		None	None	G2	S2 1	
Coastal Brackish Marsh	C1132200CA	None	NONE	92	32.1	
Coelus alobosus	IICOI 4A010	None	None	G1G2	S1S2	
alobose dune beetle		None	None	0102	0102	
Collinsia multicolor	PDSCR0H0B0	None	None	G2	S2	1B.2
San Francisco collinsia	200.00000					· = ·=
Cordvlanthus rigidus ssp. littoralis	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
seaside bird's-beak			<u> </u>		-	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Corynorhinus townsendii	AMACC08010	None	None	G4	S2	SSC
Townsend's big-eared bat						
Coturnicops noveboracensis	ABNME01010	None	None	G4	S2	SSC
yellow rail						
Cypseloides niger black swift	ABNUA01010	None	None	G4	S3	SSC
Dacryophyllum falcifolium	NBMUS8Z010	None	None	G2	S2	1B.3
tear drop moss						
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Delphinium californicum ssp. interius Hospital Canyon larkspur	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Delphinium hutchinsoniae	PDRAN0B0V0	None	None	G2	S2	1B.2
Hutchinson's larkspur						
Dicamptodon ensatus	AAAAH01020	None	None	G2G3	S2S3	SSC
California giant salamander						
Dipodomys venustus venustus	AMAFD03042	None	None	G4T1	S1	
Santa Cruz kangaroo rat						
Dirca occidentalis	PDTHY03010	None	None	G2	S2	1B.2
western leatherwood						
Eremophila alpestris actia	ABPAT02011	None	None	G5T4Q	S4	WL
California horned lark						
Ericameria fasciculata	PDAST3L080	None	None	G2	S2	1B.1
Eastwood's goldenbush						
Eriogonum nudum var. decurrens	PDPGN08492	None	None	G5T1	S1	1B.1
Ben Lomond buckwheat						
Eriophyllum latilobum	PDAST3N060	Endangered	Endangered	G1	S1	1B.1
San Mateo woolly sunflower						
Eryngium montereyense	PDAPI0Z150	None	None	G1	S1	1B.1
Fort Ord button-celery						
Erysimum ammophilum sand-loving wallflower	PDBRA16010	None	None	G2	S2	1B.2
Erysimum menziesii Menzies' wallflower	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
Erysimum teretifolium	PDBRA160N0	Endangered	Endangered	G1	S1	1B.1
Santa Cruz wallflower						
Eucyclogobius newberryi	AFCQN04010	Endangered	None	G3	S3	SSC
tidewater goby						
Eumetopias jubatus	AMAJC03010	Delisted	None	G3	S2	
Steller sea lion						
Euphilotes enoptes smithi Smith's blue butterfly	IILEPG2026	Endangered	None	G5T2	S2	





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFV SSC or FP
Falco columbarius	ABNKD06030	None	None	G5	S3S4	WL
merlin						
Falco peregrinus anatum	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
American peregrine falcon						
Fissilicreagris imperialis	ILARAE5010	None	None	G1	S1	
Empire Cave pseudoscorpion						
Fritillaria agrestis	PMLIL0V010	None	None	G3	S3	4.2
stinkbells						
Fritillaria biflora var. ineziana	PMLIL0V0M1	None	None	G3G4T1	S1	1B.1
Hillsborough chocolate lily						
Fritillaria liliacea	PMLIL0V0C0	None	None	G2	S2	1B.2
fragrant fritillary						
Geothlypis trichas sinuosa	ABPBX1201A	None	None	G5T3	S3	SSC
saltmarsh common yellowthroat						
Gilia tenuiflora ssp. arenaria	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Monterey gilia						
Grindelia hirsutula var. maritima	PDAST470D3	None	None	G5T1Q	S1	3.2
San Francisco gumplant						
Hesperocyparis abramsiana var. abramsiana	PGCUP04081	Threatened	Endangered	G1T1	S1	1B.2
Santa Cruz cypress						
Hesperocyparis goveniana	PGCUP04031	Threatened	None	G1	S1	1B.2
Gowen cypress						
Hesperocyparis macrocarpa	PGCUP04060	None	None	G1	S1	1B.2
Monterey cypress						
Holocarpha macradenia	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
Santa Cruz tarplant						
Horkelia cuneata var. sericea	PDROS0W043	None	None	G4T1?	S1?	1B.1
Kellogg's horkelia						
Horkelia marinensis	PDROS0W0B0	None	None	G2	S2	1B.2
Point Reyes horkelia						
Hypogymnia schizidiata	NLT0032640	None	None	G2G3	S2	1B.3
island tube lichen						
Icaricia icarioides missionensis	IILEPG801A	Endangered	None	G5T2	S2	
Mission blue butterfly						
Ischnura gemina	IIODO72010	None	None	G2	S2	
San Francisco forktail damselfly						
Lasiurus cinereus	AMACC05032	None	None	G3G4	S4	
hoary bat						
Lasthenia californica ssp. macrantha	PDAST5L0C5	None	None	G3T2	S2	1B.2
perennial goldfields						
Lasthenia conjugens	PDAST5L040	Endangered	None	G1	S1	1B.1
Contra Costa goldfields						





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G3T1	S2	FP
California black rail						
Lavinia exilicauda harengus	AFCJB19013	None	None	G4T3	S3	SSC
Monterey hitch						
Layia carnosa	PDAST5N010	Threatened	Endangered	G2	S2	1B.1
beach layia						
Leptosiphon croceus	PDPLM09170	None	Endangered	G1	S1	1B.1
coast yellow leptosiphon						
Leptosiphon rosaceus	PDPLM09180	None	None	G1	S1	1B.1
rose leptosiphon						
Lessingia arachnoidea	PDAST5S0C0	None	None	G2	S2	1B.2
Crystal Springs lessingia						
Lichnanthe ursina	IICOL67020	None	None	G2	S2	
bumblebee scarab beetle						
Limnanthes douglasii ssp. ornduffii	PDLIM02039	None	None	G4T1	S1	1B.1
Ornduff's meadowfoam						
Linderiella occidentalis	ICBRA06010	None	None	G2G3	S2S3	
California linderiella						
Lupinus tidestromii	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
Tidestrom's lupine						
Lytta moesta	IICOL4C020	None	None	G2	S2	
moestan blister beetle						
Malacothamnus arcuatus var. arcuatus	PDMAL0Q0E0	None	None	G2Q	S2	1B.2
arcuate bushmallow						
Malacothamnus involucratus	PDMAL0Q0B1	None	None	G3T2Q	S2	1B.2
		News	News	0.570	00	40.0
Carmel Vallev malacothrix	PDAS1660C2	None	None	G512	52	1B.2
Margaritifera falcata	IMBIV27020	None	None	G3G4	S1S2	
western pearlshell					0.01	
Maritime Coast Range Ponderosa Pine Forest	CTT84132CA	None	None	G1	S1.1	
Maritime Coast Range Ponderosa Pine Forest						
Melospiza melodia pusillula	ABPBXA301S	None	None	G5T2T3	S2	SSC
Alameda song sparrow						
Meta dolloff	ILARA17010	None	None	G3	S3	
Dolloff Cave spider						
Microseris paludosa	PDAST6E0D0	None	None	G2	S2	1B.2
marsh microseris						
Microtus californicus halophilus	AMAFF11036	None	None	G5T1	S2	
Monterey vole						
Mielichhoferia elongata	NBMUS4Q022	None	None	G5	S3S4	4.3
elongate copper moss						





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Monardella sinuata ssp. nigrescens	PDLAM18162	None	None	G3T2	S2	1B.2
northern curly-leaved monardella						
Monolopia gracilens	PDAST6G010	None	None	G3	S3	1B.2
woodland woollythreads						
Monterey Cypress Forest	CTT83150CA	None	None	G1	S1.2	
Monterey Cypress Forest						
Monterey Pine Forest	CTT83130CA	None	None	G1	S1.1	
Monterey Pine Forest						
Monterey Pygmy Cypress Forest	CTT83162CA	None	None	G1	S1.1	
Monterey Pygmy Cypress Forest						
Myotis thysanodes	AMACC01090	None	None	G4	S3	
fringed myotis						
N. Central Coast Calif. Roach/Stickleback/Steelhead Stream	CARA2633CA	None	None	GNR	SNR	
N. Central Coast Calif. Roach/Stickleback/Steelhead Stream						
Neochthonius imperialis	ILARAD1010	None	None	G1	S1	
Empire Cave pseudoscorpion						
Neotoma fuscipes annectens	AMAFF08082	None	None	G5T2T3	S2S3	SSC
San Francisco dusky-footed woodrat						
North Central Coast Drainage Sacramento Sucker/Roach River	CARA2623CA	None	None	GNR	SNR	
North Central Coast Drainage Sacramento Sucker/Roach River						
North Central Coast Short-Run Coho Stream	CARA2632CA	None	None	GNR	SNR	
North Central Coast Short-Run Coho Stream						
North Central Coast Steelhead/Sculpin Stream	CARA2637CA	None	None	GNR	SNR	
North Central Coast Steelhead/Sculpin Stream						
Northern Bishop Pine Forest	CTT83121CA	None	None	G2	\$2.2	
Northern Bishop Pine Forest						
Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Northorn Interior Cupross Forost	CTT82220CA	Nono	Nono	62	S 2 2	
Northern Interior Cypress Forest	011032200A	None	None	02	02.2	
Northern Maritime Chaparral Northern Maritime Chaparral	CTT37C10CA	None	None	G1	S1.2	
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus kisutch pop. 4	AFCHA02034	Endangered	Endangered	G5T2Q	S2	
coho salmon - central California coast ESU		5	U U			
Oncorhynchus mykiss irideus pop. 8	AFCHA0209G	Threatened	None	G5T3Q	S3	SSC
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Pedicularis dudleyi	PDSCR1K180	None	Rare	G2	S2	1B.2
Dudley's lousewort						
Pelecanus occidentalis californicus	ABNFC01021	Delisted	Delisted	G4T3T4	S3	
California brown pelican						
Penstemon rattanii var. kleei	PDSCR1L5B1	None	None	G4T2	S2	1B.2
Santa Cruz Mountains beardtongue						
Pentachaeta bellidiflora	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
white-rayed pentachaeta						
Phrynosoma blainvillii	ARACF12100	None	None	G4	S4	SSC
coast horned lizard						
Pinus radiata	PGPIN040V0	None	None	G1	S1	1B.1
Monterey pine						
Piperia candida	PMORC1X050	None	None	G3?	S3	1B.2
white-flowered rein orchid						
Piperia yadonii	PMORC1X070	Endangered	None	G1	S1	1B.1
Yadon's rein orchid						
Plagiobothrys chorisianus var. chorisianus	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Choris' popcornflower						
Plagiobothrys diffusus	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
San Francisco popcornflower						
Polemonium carneum	PDPLM0E050	None	None	G3G4	S2	2B.2
Oregon polemonium						
Potentilla hickmanii	PDROS1B370	Endangered	Endangered	G1	S1	1B.1
Hickman's cinquefoil						
Rallus obsoletus obsoletus	ABNME05011	Endangered	Endangered	G3T1	S2	FP
California Ridgway's rail						
Ramalina thrausta	NLLEC3S340	None	None	G5?	S2S3	2B.1
angel's hair lichen						
Rana boylii pop. 4	AAABH01054	Threatened	Endangered	G3T2	S2	
foothill yellow-legged frog - central coast DPS						
Rana boylii pop. 6	AAABH01056	Endangered	Endangered	G3T1	S1	
foothill yellow-legged frog - south coast DPS						
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog						
Reithrodontomys megalotis distichlis	AMAFF02032	None	None	G5T1	S2	
Salinas harvest mouse						
Riparia riparia	ABPAU08010	None	Threatened	G5	S3	
bank swallow						
Rosa pinetorum	PDROS1J0W0	None	None	G1Q	S1	1B.2
pine rose						
Sacramento-San Joaquin Coastal Lagoon	CALA1360CA	None	None	GNR	SNR	
Sacramento-San Joaquin Coastal Lagoon						





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFV SSC or FP
Scaphinotus behrensi	IICOL4L070	None	None	G2G4	S2S4	
Behrens' snail-eating beetle						
Senecio aphanactis	PDAST8H060	None	None	G3	S2	2B.2
chaparral ragwort						
Serpentine Buncharass	CTT42130CA	None	None	G2	S2.2	
Serpentine Bunchgrass				-	-	
Sidalcea malachroides	PDMAL110E0	None	None	G3	S3	4.2
maple-leaved checkerbloom						
Silene scouleri ssp. scouleri	PDCAR0U1MC	None	None	G5T4T5	S2S3	2B.2
Scouler's catchfly						
Silene verecunda ssp. verecunda	PDCAR0U213	None	None	G5T1	S1	1B.2
San Francisco campion						
Sorex ornatus salarius	AMABA01105	None	None	G5T1T2	S1S2	SSC
Monterey shrew						
Speyeria zerene myrtleae	IILEPJ608C	Endangered	None	G5T1	S1	
Myrtle's silverspot butterfly						
Spirinchus thaleichthys	AFCHB03010	Proposed	Threatened	G5	S1	
longfin smelt		Endangered				
Spirinchus thaleichthys pop. 2	AFCHB03040	Endangered	None	G5TNRQ	S1	
longfin smelt - San Francisco Bay-Delta DPS						
Stebbinsoseris decipiens	PDAST6E050	None	None	G2	S2	1B.2
Santa Cruz microseris						
Stuckenia filiformis ssp. alpina	PMPOT03091	None	None	G5T5	S2S3	2B.2
northern slender pondweed						
Stygobromus imperialis	ICMAL05E30	None	None	G1	S1	
Empire Cave amphipod						
Stygobromus mackenziei	ICMAL05530	None	None	G1	S1	
Mackenzie's Cave amphipod						
Sulcaria spiralifera	NLT0042560	None	None	G3G4	S2	1B.2
twisted horsehair lichen						
Taricha torosa	AAAAF02032	None	None	G4	S4	SSC
Coast Range newt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger				_	_	
Thaleichthys pacificus	AFCHB04010	Threatened	None	G5	S1	SSC
				00		
Thamnophis sirtalis tetrataenia	ARADB3613B	Endangered	Endangered	G512Q	S2	FP
				0.0	00	15.4
Sonto Cruz clover	PDFAB402W0	None	None	G2	52	1B.1
		Nens	Mone	<u></u>	60	4D 0
saline clover	PDFAB400R5	None	None	62	32	1B.Z





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Trifolium polyodon	PDFAB402H0	None	Rare	G1	S1	1B.1
Pacific Grove clover						
Trifolium trichocalyx	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1
Monterey clover						
Trimerotropis infantilis	IIORT36030	Endangered	None	G1	S1	
Zayante band-winged grasshopper						
Triphysaria floribunda	PDSCR2T010	None	None	G2?	S2?	1B.2
San Francisco owl's-clover						
Triquetrella californica	NBMUS7S010	None	None	G2	S2	1B.2
coastal triquetrella						
Tryonia imitator	IMGASJ7040	None	None	G2	S2	
mimic tryonia (=California brackishwater snail)						
Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Needlegrass Grassland						

Record Count: 192

Attachment D2. CNDDB Grids included in species review

