



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
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Refer to NMFS No:
WCRO-2025-03104

August 6, 2026

P. Allen Atkins
Chief, Regulatory Division
U.S. Army Corps of Engineers, Seattle District
4735 East Marginal Way South, Bldg. 1202
Seattle, WA 98134-2388

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Shelton Yacht Club Oakland Bay Habitat Restoration and Marina Improvement Project (NWS-2021-668).

Dear Mr. Atkins:

This letter responds to your November 21, 2025, request for initiation of consultation with the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act (ESA) for the subject action. Your request qualified for our expedited review and analysis because it met our screening criteria and contained sufficient information on, and analysis of, your proposed action and its potential effects to listed species and designated critical habitat.

We reviewed the U.S. Army Corps of Engineers' (USACE) consultation request and related initiation package. Where relevant, we have adopted the information and analyses you have provided and/or referenced but only after our independent, science-based evaluation confirmed they meet our regulatory and scientific standards. In our biological opinion below, we indicate what parts of your document(s) we have incorporated by reference and where that information is being incorporated.

We adopt by reference the following sections of the Oakland Bay Marina Improvements project Biological Assessment (BA) dated November 2021 (Northwest Environmental Consulting, LLC 2021), as well as the Marine Mammal Monitoring Plan (MMMP) (Northwest Environmental Consulting, LLC 2024):

- Introduction, Project Description sections of the BA (pp. 4-12) for the proposed federal action;
- Action Area, Species Present in the Action Area, Environmental Setting Within the Action Area sections of the BA (pp. 15-18) for action area;
- Environmental Baseline Conditions section of the BA (pp. 19-20) for the environmental baseline;
- Analysis of Effects, Conclusions and Effects Determinations sections of the BA (pp. 25-32) for the effects of the action on listed species and critical habitat; and



- Essential Fish Habitat (EFH) section of the BA (33-36) for EFH analysis.

We also adopt by reference the following segments from the Salish Sea Nearshore Programmatic Biological Opinion (SSNP), WCRO-2019-04086 (NMFS 2022), to supplement the information included in the BA:

- Section 2.2 for Status of the Species (pp. 48-113) and Status of the Critical Habitat (pp. 113-127);
- Section 2.4 for Environmental Baseline;
- Section 2.5 for Effects of the Action, specifically:
 - Water quality (pp. 154-155, 157-160)
 - Noise (p. 156 and 160)
 - Diminished benthic communities and forage species from pile driving (p. 157)
 - Scour of nearshore areas from prop wash (p. 160)
 - Altered predator/prey dynamics (pp. 161-162)
 - Disruptions in salmonid migration areas (pp. 162-164)
 - Effects on Critical Habitat (pp. 180-184), specifically:
 - Summary of the effects of the action on salmon critical habitat Physical and Biological Features (PBF)s
 - Effects on listed species (pp. 184-205) pertaining to those effects listed above: water quality, noise, benthic disturbance, scour, altered predator/prey dynamics, and migration disruptions; and
- Section 2.6 for Cumulative Effects (pp. 206-210).

The SSNP biological opinion can be accessed online at <https://media.fisheries.noaa.gov/2022-06/2022-06-29-ssnp-wcro-2019-04086.pdf>.

The consultation history includes several pre-application meetings with NMFS, USACE, and the applicant between May and August 2025, to confirm details of the proposed action. NMFS received a request for formal consultation on November 25, 2025, and initiated formal consultation on May 8, 2026.

On March 30, 2026, in *Center for Biological Diversity v. Burgum*, No. 24-cv-04651 (N.D. Cal.), the U.S. District Court for the Northern District of California vacated aspects of four provisions from the 50 CFR part 402 regulations governing interagency consultation under section 7 of the Endangered Species Act and reinstated the provisions that were previously in effect. Consistent with the Court's ruling, these are the governing provisions for this consultation:

“Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.” (50 CFR 402.02 (2018)).

“Effects of the action refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The

environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.”¹ (50 CFR 402.02 (2018)).

50 CFR 402.14(g)(8): “In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation.” (50 CFR 402.14(g)(8) (2018)).

50 CFR 402.16(a): “(a) Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and” (50 CFR 402.16(a) (2023)).

Some of the information and analyses considered in this document were prepared under the version of the 50 CFR part 402 regulations in effect prior to the Court’s order. We have reviewed the information and analyses and confirm that the content of that information and those analyses, including the identification and analyses of effects, would be the same under either version of the applicable regulations.

The project is proposed by the marine owner, Shelton Yacht Club (SYC), as a community-based cooperative effort between the SYC, the Squaxin Island Tribe, and South Puget Sound Salmon Enhancement Group (SPSSEG), with support from local community and businesses. The project will take place in Oakland Bay within the City of Shelton, Mason County, Washington (Figure 1). The project proposes to construct a new Breakwater (A-Dock), reconstruct and extend the existing north Dock (B-Dock), relocate and extend the south dock (C-Dock) into deeper water, and construct a new D-dock. The existing boat launch and marine railways will be removed. A single facility will be constructed for the ongoing Oakland Bay Habitat Restoration activities by consolidating the facilities into one 30-foot-wide concrete ramp. The work will also include matching it to the grade of the nearshore restoration work and restoring the remaining 90 to 120 feet of shoreline that was previously used for these activities. The project will continue the nearshore restoration efforts proposed by the Oakland Bay Habitat Restoration project, extending the nearshore restoration work to tie into the natural shoreline located north of the existing

¹ This definition includes the second sentence of the definition of “effects of the action.” That sentence provided the definition of “environmental baseline” in effect as of 2018. In the 2019 rule amending the 50 CFR part 402 regulations, the Services established “environmental baseline” as a standalone definition. 84 Fed. Reg. 44976, 45016 (August 27, 2019). In the 2024 rule, the Services made minor revisions to the “environmental baseline” definition. 89 Fed. Reg. 24268, 24298 (April 5, 2024). The Court’s ruling did not touch upon that definition of “environmental baseline,” and it therefore remains valid. The definition is also fully consistent with the definition of “effects of the action” from 2018.

project terminus. Improvements along the shoreline will include removal of the solid finger pier from the main pier, removal of the existing guest dock facility, removal of approximately 1,360 linear feet of hard armoring consisting of creosote timber lagged walls and heavy loose rip rap, removal of two marine rails and relocation of the vessel maintenance activity onto the uplands, and removal of a large overwater building. In addition, approximately 12,000 square feet of riparian vegetation enhancement will also be completed. (Northwest Environmental Consulting, LLC 2021)

VICINITY MAP



Figure 1. Vicinity of proposed project in Oakland Bay (Northwest Environmental Consulting, LLC 2021).

BIOLOGICAL OPINION

We examined the status of each species that would be adversely affected by the proposed action to inform the description of the species' "reproduction, numbers, or distribution" as described in 50 CFR 402.02. We also examined the condition of critical habitat throughout the designated area and discussed the function of the physical or biological features essential to the conservation of the species that create the conservation value of that habitat. USACE effects determinations for species and designated critical habitats are summarized in Table 1. We also examined the likely effects on any listed species and critical habitats that your agency made "not likely to adversely affect" determinations for. Our conclusions regarding the effects of the action on those species and critical habitats is presented below under the heading: NLAA Determinations.

Table 1. Species and critical habitat effects determination summary.

Species Common Name	Species Scientific Name	Species Effects Determination	Critical Habitat Effects Determination
Puget Sound Chinook salmon	<i>Oncorhynchus tshawytscha</i>	LAA*	LAA
Puget Sound steelhead	<i>O. mykiss</i>	LAA	N/A
Southern Resident killer whale	<i>Orcinus orca</i>	NLAA**	NLAA
Humpback whale***	<i>Megaptera novaeangliae</i>	No effect	N/A

*LAA = Likely to adversely affect

**NLAA = Not likely to adversely affect

***Humpback whales are unlikely to occur in the action area and therefore have a *No effect* determination (Northwest Environmental Consulting, LLC 2021). However, they are included in the Marine Mammal Monitoring Plan for pile driving activities.

“Action area” means all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR 402.02). The work will take place in Oakland Bay within the City of Shelton, Mason County, Washington. The project effect with the farthest-reaching radius is underwater noise from vibratory pile driving. Noise will attenuate to background levels at approximately 2.12 miles from pile driving activities (Figure 2). The action area is further detailed in the BA (Northwest Environmental Consulting, LLC 2021), hereby incorporated by reference.



Figure 2. Map showing the lineal extent of the action area resulting from underwater noise (2.12 miles) that would occur from vibratory pile driving (Northwest Environmental Consulting, LLC 2021).

Status of the Species

The BA did not include detailed information regarding the status of species. Therefore, we incorporate by reference Section 2.2 of the SSNP Biological Opinion WCRO-2019-04086

(NMFS 2022). We summarize the status of the species in Table 2. More information can be found in recovery plans and status reviews for these species.

Acronyms appearing in the table include DPS (Distinct Population Segment), ESU (Evolutionarily Significant Unit), DIP (Demographically Independent Population, MPG (Multiple Population Grouping), NWFSC (Northwest Fisheries Science Center), TRT (Technical Recovery Team), and VSP (Viable Salmonid Population).

Status of the Critical Habitat

The BA did not include detailed information regarding the status of the critical habitat. Therefore, we incorporate by reference Section 2.2 of the SSNP Biological Opinion WCRO-2019-04086 (NMFS 2022). We summarize the status of the critical habitat in Table 3.

Table 2. Listing classification and date, recovery plan reference, most recent status review, status summary, and limiting factors for each species considered in this opinion.

Species	Listing Classification and Date	Recovery Plan Reference	Most Recent Status Review	Status Summary	Limiting Factors
Puget Sound Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Threatened 6/28/05 (70 FR 37159)	Shared Strategy for Puget Sound 2007; NMFS 2006	NMFS 2017; Ford 2022	This ESU comprises 22 populations distributed over five geographic areas. All Puget Sound Chinook salmon populations continue to remain well below the TRT planning ranges for recovery escapement levels. Most populations also remain consistently below the spawner-recruit levels identified by the TRT as necessary for recovery. Across the ESU, most populations have increased somewhat in abundance since the last status review in 2016 but have small negative trends over the past 15 years. Productivity remains low in most populations. Overall, the Puget Sound Chinook salmon ESU remains at “moderate” risk of extinction.	• Degraded floodplain and in-river channel structure • Degraded estuarine conditions and loss of estuarine habitat • Degraded riparian areas and loss of in-river large woody debris • Excessive fine-grained sediment in spawning gravel • Degraded water quality and temperature • Degraded nearshore conditions • Impaired passage for migrating fish • Severely altered flow regime
Puget Sound Steelhead (<i>O. mykiss</i>)	Threatened 5/11/07 (72 FR 26722)	NMFS 2019	NMFS 2017; Ford 2022	This DPS comprises 32 populations. Viability of has improved somewhat since the PSTRT concluded that the DPS was at very low viability, as were all three of its constituent MPGs and many of its 32 DIPs (Hard et al. 2015). Increases in spawner abundance were observed in a number of populations over the last five years within the Central & South Puget Sound and the Hood Canal & Strait of Juan de Fuca MPGs, primarily among smaller populations. There were also declines for summer- and winter-run populations in the Snohomish River basin. In fact, all summer-run steelhead populations in the Northern Cascades MPG are likely at a very high demographic risk.	• Continued destruction and modification of habitat • Widespread declines in adult abundance despite significant reductions in harvest • Threats to diversity posed by use of two hatchery steelhead stocks • Declining diversity in the DPS, including the uncertain but weak status of summer-run fish • A reduction in spatial structure • Reduced habitat quality • Urbanization • Dikes, hardening of banks with riprap, and channelization

Table 3. Critical habitat, designation date, federal register citation, and status summary for critical habitat considered in this opinion.

Species	Designation Date and Federal Register Citation	Critical Habitat Status Summary
Puget Sound Chinook salmon	9/02/05, 70 FR 52630	Critical habitat for Puget Sound Chinook salmon includes 1,683 miles of streams, 41 square miles of lakes, and 2,182 miles of nearshore marine habitat in Puget Sounds. The Puget Sound Chinook salmon ESU has 61 freshwater and 19 marine areas within its range. Of the freshwater watersheds, 41 are rated high conservation value, 12 low conservation value, and eight received a medium rating. Of the marine areas, all 19 are ranked with high conservation value.

Environmental Baseline

The “environmental baseline” refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all federal, state, or private actions and other human activities in the action area, the anticipated impacts of all proposed federal projects in the action area that have already undergone formal or early section 7 consultations, and the impact of State or private actions which are contemporaneous with the consultation in process. The impacts to listed species or designated critical habitat from federal agency activities or existing federal agency facilities that are not within the agency’s discretion to modify are part of the environmental baseline (50 CFR 402.02). The environmental baseline is detailed in the BA (Northwest Environmental Consulting, LLC 2021), which is hereby incorporated by reference. Section 2.4, Environmental Baseline, from the SSNP BO, WCRO-2019-04086 (NMFS 2022), is also incorporated by reference to supplement the information in the BA.

The action area is highly developed and impacted by a myriad of anthropogenic factors such as shoreline armoring, stormwater runoff, and overwater structures. When considered at the landscape scale, the baseline condition of nearshore habitat in the action area is degraded overall, with reduced water quality, reduced forage and prey availability, reduced quality of forage and prey communities, reduced amount of estuarine habitat, reduced quality of nearshore and estuarine habitat, and reduced condition of migration habitat due to structure noise and vessel perturbations (NMFS 2022). Each of these baseline conditions exerts downward pressure on affected cohorts of listed species (NMFS 2022).

Effects of the Action

Under the ESA, “effects of the action” are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

The effects of the proposed action are detailed in the BA (Northwest Environmental Consulting, LLC 2021), hereby incorporated by reference (50 CFR 402.14(h)(3)). NMFS has evaluated this section, and after our independent, science-based evaluation, we supplement the provided information with Section 2.5, Effects of the Action, from the SSNP BO, WCRO-2019-04086 (NMFS 2022).

Summary of Effects on Species

The effects of the proposed action include:

- Impacts to water quality;
 - Turbidity;

- Disturbed sediments, including effects to benthic prey communities;
- Toxic materials, including polycyclic aromatic hydrocarbons from creosote-treated piles;
- Copper;
- Potential spills;
- Noise, including from vibratory pile driving;
- Impacts to shoreline and nearshore environment;
- Nighttime illumination; and
- Overwater shading.

Water quality is likely to be affected during in-water work. Water quality effects during construction are likely to include turbid conditions and suspension of contaminated materials as described below. In-water construction is proposed to occur during the established in-water work window of July 15-February 15. Salmonid presence, particularly juveniles, is lowest during this window. This helps minimize the number of fish exposed to effects on water quality.

In-water and nearshore construction activities can temporarily elevate localized turbidity by disrupting fine shoreline and aquatic sediments. Pile installation and removal, heavy equipment operation, and the movement of existing bulkhead rocks can cause turbid conditions. Vessel operations, specifically propwash from tugs and barges transiting to and from the site, further contribute to the temporary turbidity. Propwash can occur in waters as deep as 40 feet from fully burdened tugs. On the shoreline, activities such as topsoil installation and the deposition of construction-generated dust can introduce additional particulate matter into the water column. Furthermore, clearing terrestrial or riparian vegetation removes natural buffers, increasing the risk of erosion and sediment-laden stormwater runoff during weather events. Ultimately, these suspended sediments temporarily degrade water quality before settling, which can potentially bury existing benthic substrates. In estuaries, state water quality regulations (WAC 173-201A-400) establish a mixing zone of 200 feet plus the depth of water over the discharge port(s) as measured during mean lower low water. If used on the beach, construction machinery will be restricted to use during low tide when sediment disturbance is least likely. Moored vessels are not expected to operate at speeds that may disturb sediments in deeper waters. Suspended sediments from propwash will be temporary and are not expected to cause chronic impacts to fish. Removal of the existing rock boat ramp will reduce long term turbidity in the bay that is caused by loading and offloading boats and transfer of shellfish from the water on large oyster barges to trucks. Currently, shellfish or oyster barge boats beach on the launch and maintain engine power for stability while offloading shellfish. This results in large plumes of turbidity during the offloading process which will no longer occur once the concrete ramp is constructed.

In general, increased erosion, turbidity, and sedimentation may affect fish in many ways, including reduced visibility of prey or forage items, respiratory stress, changes in temperature regimes, and in severe cases, damage to gills or other organs. Increases in erosion, turbidity, and sedimentation are likely to lead to under use of stream habitats, displacement from or avoidance of preferred rearing areas, or abandonment of preferred spawning grounds by fish, which may increase losses to competition, disease, predation, or, for juveniles, reduce the ability to obtain food necessary for growth and maintenance (Moberg 2000; Newcombe and Jensen 1996). Consolidating the two marine rails and boat launch facilities from approximately 130 feet wide

to 30 feet wide will improve sediment disturbance along the shoreline and allow the excess area to be restored to match the adjacent habitat restoration work will result in a long-term improvement. The sediment containment boom is expected to effectively contain construction-related turbidity to a small area. The project will meet state water quality standards and any turbidity is expected to be minor, localized, and short in duration. While avoidance and minimization measures (AMMs) reduce severity, the release of fine sediments is reasonably certain to result in harm, rising to the level of incidental take.

Areas where sediment is disturbed by pile driving, pile removal, or other in- or near-water work will disturb and diminish benthic prey communities. In areas where suspended sediment settles on the bottom, smothering of benthic communities can occur. The speed of recovery by benthic communities is affected by several factors, including the intensity of the disturbance, with greater disturbance increasing the time to recovery (Dernie et al. 2003). Additionally, the ability of a disturbed site to recolonize is affected by whether or not adjacent benthic communities can re-seed the affected area. Thus, recovery can range from several weeks to many months.

In-water work is likely to include resuspension of contaminated sediments, including the incidental discharge of contaminated materials when creosote treated wood materials are being removed. Creosote-treated piles can contaminate the surrounding sediment a distance up to two meters with polycyclic aromatic hydrocarbons (PAHs) (Evans et al. 2009). The removal of the creosote-treated piles mobilizes these PAHs into the surrounding water and sediments (Parametrix 2011). Projects can also release PAHs directly from creosote-treated timber during the demolition of overwater timber and if any of the piles break during removal (Parametrix 2011). While the concentration of PAHs released into surface water rapidly dilutes, PAH levels in the sediment can remain high for six months or more after pile removal (Smith 2008). These toxins will dilute to below background levels within three years and will improve sediment conditions at the site in the long term (NMFS 2017). Removal of creosote timber piles will reduce leaching of chemical compounds into nearshore sediments (WDNR 2019), which can cause toxic conditions for salmonids and their prey. High levels of PAHs can cause the mutation or malformation of developing fish embryos (WDNR 2019). PAHs can lead to adverse impacts such as reproductive impairment, suppressed immune function, liver lesions, and fin abnormalities (WDNR 2019). Furthermore, juvenile salmon migrating through urban estuaries show increased PAH exposure, reduced disease resistance, and changes in growth and metabolism (WDNR 2019). Fish at higher doses experience delayed mortality several months after exposure ended (WDNR 2019). While the toxins can accumulate quickly in organisms, fish can metabolize and excrete PAHs (WDNR 2019). The proposed action includes specific AMMs designed to minimize the introduction of contaminants from pile removal (Northwest Environmental Consulting, LLC 2021). Re-suspended contaminants are not expected to be detectable beyond background levels beyond the established mixing zone of 200 feet plus the depth of water over the discharge port(s) as measured during mean lower low water.

Copper may be released into the water from wood treated with ammoniacal copper zinc arsenate (ACZA) used for rub strips and grated decking (Northwest Environmental Consulting, LLC 2021). Copper may also leach from ablative paints on moored vessels (Northwest Environmental Consulting, LLC 2021). Research indicates that copper exposure alters behavior and impairs olfactory function in salmonids (Sommers et al. 2016). Notably, while behavioral anomalies

manifest across both fresh and saltwater environments, salinity provides a distinct protective barrier for olfaction; olfactory function remains unimpaired when copper exposure occurs in salinities of 10‰ or full saltwater (Sommers et al. 2016). Given the critical role of olfaction in salmonid survival, freshwater effects include avoidance of copper-contaminated habitat, compromised predator avoidance, reduced feeding efficiency, and impaired juvenile stream imprinting. In both fresh and salt water, salmonids will avoid habitat where copper is present (Sommers et al. 2016). The waters of Oakland Bay are brackish, and adverse effects are expected to be limited to altered behavior and will not have a significant effect on listed salmonids. Furthermore, project-specific AMMs are expected to reduce potential adverse effects to a level where take of listed species would not be anticipated, and the effects would be insignificant and/or discountable.

There is a risk of potential petroleum spills that can occur with any heavy equipment operation. The level of impact to the aquatic environment is expected to be minor because of the small amount of petroleum products available for spillage during typical construction activities. Spill containment measures will also be employed, including degreasing and cleaning of all equipment prior to use, refueling and maintenance of equipment on uplands, spill response kits, clear notification procedures, and implementation of a Spill Prevention Containment and Countermeasures plan. Some release of petroleum-based oils and lubricants will occur over the life of the marina from vessels. Exposure to these discharges can result in reduced growth, increased susceptibility to infection, and increased mortality in fish. However, based on the infrequency of releases of discharges and the natural tidal flushing of the marina, these impacts are expected to be discountable.

The proposed project will include vibratory pile driving activities. Pile driving can cause high levels of underwater sound and significantly increase sound waves in the aquatic habitat. The sound pressure levels from pile driving and extraction will occur contemporaneously with the work and radiate outward. The effect attenuates with distance. Cumulative sound exposure level (SEL) is a measure of the sound energy integrated across all of the pile strikes. Underwater noise will reach up to 165 dB_{SEL} during vibratory pile driving. This estimate is conservatively based on noise levels measured for 24-inch piles because data on 18-inch piles were not available (Northwest Environmental Consulting, LLC 2021). The behavioral effects threshold for salmonids is 150 dB_{SEL} (Northwest Environmental Consulting, LLC 2021). If the threshold is reached, it will be confined to about a 400-foot radius. The injury threshold for juvenile and adult salmonids, 206 dB_{PEAK}, will not be reached. The behavioral disturbance threshold for cetaceans is 120 dB_{SEL} (NMFS 2023). Cetaceans may encounter disturbing noise levels in Oakland Bay. However, shallow depths in the bay (under 30 feet) and the narrow Hammersley Inlet make the presence of humpback whales (*Megaptera novaeangliae*) unlikely. While killer whale sightings in the bay do occur, including Bigg's (transient) killer whales (*Orcinus orca*) as recently as June 2006, Southern Resident killer whales (SRKW) (*Orcinus orca*) have not been recorded there for at least six years (Orca Behavior Institute 2026). Per the Marine Mammal Monitoring Plan (MMMP) (Northwest Environmental Consulting, LLC 2024), marine mammal monitoring will include an aquatic area of 2.12 miles from all pile work within line of sight of pile driving activities (Figure 2). Because ESA-listed marine mammals are unlikely to occur in the action area and an MMMP will be implemented, effects to SRKWs from pile driving are expected to be

discountable. However, the behavioral disturbance threshold for salmonids is expected to be reached, which will cause harm and result in incidental take of salmonids.

Propeller noise from construction tugs and moored vessels can produce noise levels that may exceed the disturbance threshold for fish. Boats can produce sound levels that are considered harmful to fish; however, work tugs and boats using the moorage will not operate at wide open throttle, so these noise levels will not occur from construction-related tugs or moored vessels. During operation of moored vessels, the sounds will be brief as boats enter and leave the marina. The effects of this noise are expected to be insignificant.

Shoreline improvements include removal of 1,360 linear feet of damaged shoreline that includes creosote timber lagging and heavy loose riprap used as hard armor. This will be replaced with soft armoring, and two feet of beach nourishment will be added on top of the soft armoring (approximately 9,900 cubic yards total). The soft armor will create a sloped beach that attenuates wave action and provides better benthic habitat over a vertical or near vertical shoreline. Soft armor placement will remove the last remaining gap in shoreline restoration, connecting the existing unarmored natural shoreline that contains surf smelt and sand lance spawning area north of the marina to the restored tidelands south of the marina. In addition, the soft armored shoreline will provide more sediment drift along the shoreline. Removing the remaining section of existing damaged shoreline will close the gap in shoreline restoration, allowing for a continuous uninterrupted beach habitat along the restored Oakland Bay Shoreline. Preservation and enhancement of more than 26,000 square feet of riparian vegetation by removing invasive shrubs species and planting with a forested shoreline will improve shoreline habitat and provide for long-term woody material recruitment into Oakland Bay.

Most of the Oakland Bay shoreline is armored by railroads, industrial, and residential uses. Shoreline erosion and eroding bluffs are essential to beach sediment nourishment of sand and gravel that are used by forage fish for spawning. Forage fish in the area include herring, sand lance, and surf smelt. A surf smelt breeding area is approximately north of the action area. A surf smelt breeding area is approximately 0.2 mile north of the marina. Sand lance spawning has been documented 0.5 mile north of the marina. About half the Oakland Bay shoreline shows surf smelt spawning beaches. A large herring breeding area is in Hammersley Inlet approximately five miles east along the shoreline, where the inlet meets the Pickering Passage (Northwest Environmental Consulting, LLC 2021). Forage fish support the ecology of Puget Sound and are an essential prey species for many ESA-listed species or support other prey species that are consumed by larger mammals such as SRKWs. The removal of hard armoring and adding beach nourishment gravels will improve nearshore conditions at the site and may increase habitat availability for surf smelt spawning in the area. The work will be completed during the surf smelt work window or surf smelt spawning surveys will be completed to avoid disturbances during surf smelt spawning activity per WDFW guidelines (Northwest Environmental Consulting, LLC 2021).

The proposed floats will include nighttime illumination. The project will use low wattage, warm lighting and shades to project light onto the walkways. Moored boats may contribute to lighting, but this is expected to be brief and intermittent. The effects of illumination are expected to be

minimal, as other, brighter sources of light pollution exist in the action area. These effects are expected to be discountable.

Overwater structures shade waters, which reduces benthic productivity, delays salmonid migration, and increases predation risks. The creation or expansion of these structures can introduce physical migration obstacles and create cover for predatory species. Consequently, juvenile and adult fish must expend additional energy to navigate around these structures during migration. The project will result in a net increase in overwater coverage. The configuration will remove 538 square feet of solid shade and replace it with 966 square feet of grated float that will be placed over the new concrete boat ramp. This will result in 1,504 square feet of direct shading removal in the upper shore zone. Shading of the Lower Shore Zone will be slightly increased by three square feet. The majority of the new shading impacts will occur in the Deep Shore Zone with an increase of 26,952 square feet. The effects of the overwater structures are expected to result in incidental take of salmonids.

Effects on Critical Habitat

Critical habitat for PS Chinook salmon occurs within the action area. PS steelhead do not have nearshore or marine habitat areas designated as critical. NMFS reviews effects on critical habitat affected by a proposed action by examining how the PBFs of critical habitat will be altered, and the duration of such changes, and the influence of these changes on the potential for the habitat to serve the conservation values for which it was designated.

Summary of the effects of the action on salmon critical habitat PBFs in the action area:

1. Estuary areas
 - a. Forage – Short-term reduction in forage due to sediment remediation, and construction activities. Enduring loss of some forage production due to overwater structures and shoreline modification. Loss of forage quality and quantity due to introduction of contaminants from stormwater. Improved production of forage from habitat enhancement activities including wetland restoration and beach nourishment (improved quality forage fish spawning habitat).
 - b. Free passage –Lengthening of migration pathways in nearshore areas due to the repair, replacement, or construction of new overwater structures. Temporary disruption of free passage due to underwater noise from pile driving and construction.
 - c. Natural cover – Loss of natural cover resulting from suppression of SAV due to over- and in-water structures.
 - d. Salinity – no effect
 - e. Water quality – Temporary water quality degradation, including increased turbidity, due to construction activities. Reduced dissolved oxygen and resuspension of contaminated sediments from construction activities. Improved long term water quality resulting from reduced power boat operations over beach sediments.
 - f. Water quantity – no effect
2. Nearshore marine areas

- a. Forage – Short-term reduction in forage due to sediment remediation, and construction activities. Enduring loss of some forage production due to overwater structures and shoreline modification. Improved production of forage from habitat enhancement activities including riparian restoration and beach nourishment (improved quality forage fish spawning habitat).
- b. Free passage –Lengthening of migration pathways in nearshore areas due to the repair, replacement, or construction of new overwater structures. Temporary disruption of free passage due to underwater noise from pile driving and construction. Construction of new or repair and replacement of overwater and in-water structures degrade this PBF by creating migration barriers.
- c. Natural cover – Loss of natural cover resulting from suppression of SAV due to over- and in-water structures.
- d. Water quantity – no effect
- e. Water quality – Temporary water quality degradation, including increased turbidity, due to construction activities. Reduced dissolved oxygen and resuspension of contaminated sediments from construction activities. Improved long term water quality resulting from reduced power boat operations over beach sediments.

Project Impact Offsets

For this consultation, NMFS evaluated the project elements in the Puget Sound Nearshore Habitat Conservation Calculator to determine whether proposed mitigation measures would be appropriate to offset the impacts within Oakland Bay. The NOAA Mitigation Policy for Trust Resources (Policy) (NOAA 2022) outlines the principles that should be used to evaluate mitigation proposals. The Policy emphasizes (a) use of best available science, (b) compensatory mitigation offset the impacts to NOAA trust resources in full, and (c) projects are evaluated using a holistic landscape and/or seascape approach. Given that the input and output models equaled zero, the proposal would sufficiently offset the impacts to the species evaluated in this Opinion.

Cumulative Effects

“Cumulative effects” are those effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation (50 CFR 402.02). Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. The Shelton waterfront has supported a mix of recreational boating and commercial activities since its founding. The proposed project supports the continued use of these activities while reconfiguring and expanding the marina. Restoration activities will also be conducted to improve the habitat. The reconstructed marina will not introduce additional boating to Puget Sound. The cumulative effects are detailed in the BA (Northwest Environmental Consulting, LLC 2021), hereby incorporated by reference.

Integration and Synthesis

The Integration and Synthesis section is the final step in our assessment of the risk posed to species and critical habitat as a result of implementing the proposed action. In this section, we add the effects of the action to the environmental baseline and the cumulative effects, taking into account the status of the species and critical habitat, to formulate the agency's biological opinion as to whether the proposed action is likely to: (1) Reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing its numbers, reproduction, or distribution; or (2) appreciably diminish the value of designated or proposed critical habitat as a whole for the conservation of the species.

Puget Sound (PS) ESU Chinook salmon and PS DPS steelhead are threatened based on declines from historical levels of abundance and productivity, loss of spatial structure and diversity, and an array of limiting factors in habitats. All PS Chinook salmon populations continue to remain below the TRT (Technical Recovery Team) planning ranges for recovery escapement levels, and most remain below the spawner-recruit levels necessary for recovery. Productivity remains low in most populations. Viability of PS steelhead has improved somewhat since it was concluded that the DPS was at very low viability. Increases in spawner abundance were observed in a number of populations in recent years (Ford 2022). However, there were declines for summer- and winter-run populations in the Snohomish River basin, and all summer-run steelhead populations in the Northern Cascades MPG (Multiple Population Grouping) are likely at a high demographic risk.

To this context we add the project effects, which will affect individuals of PS Chinook salmon and PS steelhead. PS steelhead and Chinook salmon populations affected by the action are performing poorly, with a 29% decline in natural spawners of steelhead in the 2015-2019 reporting period and less than 1% increase in the Chinook salmon populations in the same period (Ford 2022). PS steelhead and PS Chinook salmon will be affected over time by cumulative effects, some positive, as recovery plan implementation and regulatory revisions increase habitat protections and restoration, and some negative, such as environmental variation and unregulated or difficult-to-regulate sources of environmental degradation persist or increase.

We consider how the proposed action's impact on individuals would affect the listed species at the population and ESU/DPS scales. Project effects include possible death, injury, and sublethal responses. Exposure to turbidity and contaminated sediments, including creosote, can trigger sublethal, latent health effects that may diminish individual fitness and survival within a small subset of the current fish population. Individuals of future cohorts of all listed species may be affected from exposure to degraded water quality and contaminated prey species. Adverse effects from degraded water quality and contaminated prey species will return to background levels over approximately ten years, at which point contaminants from the action have either dissipated to near background levels over time or degraded with weathering. The fraction of any cohort adversely affected by latent health effects (reduced fitness) from the proposed action is difficult to document. This difficulty is due to the delayed nature of its consequences (death, failure in homing, reproductive failure). Additionally, when considering cumulative effects and environmental variation, population declines are likely in the foreseeable future. However, it is not currently possible to attribute any portion of the decline directly to the proposed action.

The proposed action would adversely affect the PBFs of critical habitat for the salmon considered in this Opinion. Impacts to the migration PBF related to long-term use of the marina would diminish the function of this PBF within the action area. Additionally, impacts to the forage PBF would be temporarily diminished due to pile driving activities. This project supports continued recreational and commercial boating uses. The reconstructed marina replaces these facilities with more environmentally effective materials and safer facilities. The reconstructed marina will not introduce additional boating to Puget Sound. The proposed project is not expected to appreciably diminish the value of this habitat for the designated species.

Overall, the proposed action's increment of take, when added to the baseline, and considering the status of the species is not large enough to discernibly alter current abundance and productivity. Additionally, the project includes actions that implement best management practices minimizing the adverse effects of the action. Therefore, the proposed action is unlikely to reduce the survival and recovery of a listed species or appreciably diminish the value of designated or proposed critical habitat.

After reviewing and analyzing the current status of the listed species and critical habitat, the environmental baseline within the action area, the effects of the proposed action, the effects of other activities caused by the proposed action, and cumulative effects, it is NMFS' biological opinion that the proposed action is not likely to jeopardize the continued existence of PS steelhead or PS Chinook salmon, or destroy or adversely modify the designated critical habitat of PS Chinook salmon.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined by regulation to include significant habitat modification or degradation that actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering (50 CFR 222.102). "Harass" is further defined by guidance as to "create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." "Incidental take" is defined by regulation as takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency or applicant (50 CFR 402.02). Section 7(b)(4) and section 7(o)(2) provide that taking that is incidental to an otherwise lawful agency action is not considered to be prohibited taking under the ESA if that action is performed in compliance with the terms and conditions of this ITS.

Amount or Extent of Take

In the biological opinion, NMFS determined that incidental take is reasonably certain to occur as follows:

1. Take in the form of injury to juvenile and adult ESA-listed PS Chinook salmon and PS steelhead because of noise generated from pile driving activities: The extent of take is 400 feet from the pile driving and number of piles to be inserted. Hydroacoustic effects from vibratory pile driving will reach the behavioral threshold for salmonids. These surrogate indicators for take are causally linked to hydroacoustic impacts. The distance for behavioral effects extends out an estimated 400 feet from the pile driving and can be directly documented during project implementation. The number of piles to be inserted is linked to the frequency of and magnitude of disturbance.
2. Take in the form of injury to juvenile and adult ESA-listed PS Chinook salmon and PS steelhead from increased turbidity during in-water construction: The extent of take is the area of in-water construction activities plus the turbidity plume that is estimated to extend a distance of 200 radial feet from the point of work. This surrogate indicator can be directly documented and is causally linked to incidental take.
3. Take in the form of harm to juvenile ESA-listed PS Chinook salmon and PS steelhead from altered predator/prey dynamics and migration disruptions due to overwater shading: The extent of take is the size of the overwater structures (27,903 square feet). This metric can be directly documented and is causally related to incidental take by altered predator/prey dynamics and migration disruptions because a larger shaded area would increase the suitability of the area to predacious fish and more significantly alter fish migratory pathways.
4. Take in the form of injury to juvenile ESA-listed PS Chinook salmon and PS steelhead from creosote and PAHs: The extent of take is the area of pile removal plus two meters radially from the point of work. This metric can be directly documented and is causally related to incidental take.

Effect of the Take

In the biological opinion, NMFS determined that the amount or extent of anticipated take, coupled with other effects of the proposed action, is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

“Reasonable and prudent measures” refer to those actions the Director considers necessary or appropriate to minimize the impact of the incidental take on the species (50 CFR 402.02).

1. Minimize take associated with underwater sound from pile driving activities. Prepare and provide NMFS with a report from the Marine Mammal Monitoring Plan.
2. Minimize take associated with elevated turbidity and mobilized contaminants.
3. Prepare and provide NMFS with a report describing incidental take of listed species at the end of the project. Ensure the take exemption for the proposed action is not exceeded and that the terms and conditions in this incidental take statement are met.
4. Minimize take associated with overwater shading.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the federal action agency must comply (or must ensure that any applicant complies) with the following terms and conditions. The USACE or any applicant has a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this ITS (50 CFR 402.14). If the entity to whom a term and condition is directed does not comply with the following terms and conditions, protective coverage for the proposed action would likely lapse.

- (1) The following terms and conditions implement reasonable and prudent measure 1:
 - a. USACE shall require the applicant to follow the Marine Mammal Monitoring Plan.
 - b. The applicant shall prepare and provide NMFS with a report from the Marine Mammal Monitoring Plan within 60 days of the completion of the in-water work season. The report should include dates and times when observations were conducted, dates and times when pile driving activities were conducted, dates and times when marine mammals were present at or within the monitoring zone, the behavior of marine mammals in the project area during construction, and dates and times when in-water construction activities were suspended due to presence of marine mammals within the monitoring zone.
 - c. All in-water work shall be performed between July 15 and February 15, when juvenile salmonids are less likely to be present.
 - d. No more than 124 steel piles, up to 18-inch diameter each, will be inserted to meet project needs.
- (2) The following terms and conditions implement reasonable and prudent measure 2:
 - a. The applicant shall make visual observations for turbid conditions while conducting in-water work activities. If turbidity creates a visible plume extending beyond the 200-ft. point of compliance, the applicant shall take corrective actions, such as modification of construction procedures, implementation or modification of engineering protocols, and suspension of operations until the plume no longer exceeds 200 ft.
- (3) The following terms and conditions implement reasonable and prudent measure 3:
 - a. Prepare and provide NMFS with a post-project report that includes:
 - i. The Marine Mammal Monitoring Plan report.
 - ii. The dates of any turbidity exceedances and the corrective measures taken to ensure future exceedances did not occur.
 - iii. Any observed incidental take of listed species.
 - iv. Dump receipts showing creosote timber removed and a photograph of the creosote timber on the dump scale. The receipt must show the weight of the timber in tons. If the creosote timber weighs less than 25 tons, additional conservation offsets may be needed.
 - v. Fish impact monitoring. While in-water work occurs, make regular visual surveys for distressed, injured, or dead fish. Collect dead specimens and have them identified by species. Include results in the report.

- vi. USACE shall ensure that the applicant submits these monitoring reports within 60 days of the completion of the in-water work season to:

ProjectReports.wcr@noaa.gov
 cc: david.price@noaa.gov, elizabeth.hartman@noaa.gov
 Reference Project Number: WCRO-2025-03104

- (4) The following terms and conditions implement reasonable and prudent measure 4:
 - a. The overwater structure will equal no more than 27,903 square feet.

Conservation Recommendations

Section 7(a)(1) of the ESA directs federal agencies to use their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Specifically, conservation recommendations are suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 CFR 402.02).

NMFS recommends that USACE work with the Shelton Yacht Club, the Squaxin Island Tribe, the South Puget Sound Salmon Enhancement Group, and local community and businesses to identify and prioritize opportunities to support the recovery of ESA-listed species and critical habitat in Oakland Bay through further restoration efforts. NMFS recommends that USACE encourage these stakeholders to use signs to educate the public on pollution from boating activities, ESA-listed species that may be found in the bay, and ways the public can contribute to the recovery of ESA-listed species.

Reinitiation of Consultation

Under 50 CFR 402.16(a): “Reinitiation of consultation is required and shall be requested by the federal agency where discretionary federal involvement or control over the action has been retained or is authorized by law and: (1) If the amount or extent of taking specified in the incidental take statement is exceeded; (2) If new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) If a new species is listed or critical habitat designated that may be affected by the identified action.”

NLAA DETERMINATIONS

We reviewed USACE’s consultation request document and related materials. Based on our knowledge, expertise, and your action agency’s materials, we concur with the action agency’s conclusions that the proposed action is not likely to adversely affect (NLAA) the following NMFS ESA-listed species and/or designated critical habitat: Southern Resident killer whale (SRKW) DPS (*Orcinus orca*) and its designated critical habitat.

The SRKW DPS, composed of J, K, and L pods, was listed as endangered under the ESA on November 18, 2005 (70 FR 69903). Although noise from project activities will be short in duration, it may reach the disturbance threshold for cetaceans. However, it is unlikely that SRKWs will be present in the action area. SRKWs have traditionally spent considerable time in the Salish Sea from late spring to early autumn, with concentrated activity in the inland waters of Washington State around the San Juan Islands (Shields et al. 2018a). They then move south into the Puget Sound in early autumn. While these are seasonal patterns, SRKW have the potential to occur throughout their range (from central California north to the Queen Charlotte Islands) at any time during the year. However, SRKW presence in Puget Sound has declined in recent years, likely due to the decreased abundance of Chinook salmon (Shields et al. 2018a) and increased presence of Bigg's (transient) killer whales (Shields et al. 2018b). There were only 15 sightings of SRKWs near Oakland Bay between 1990 and 2022, but none entered Hammersley Inlet or Oakland Bay (NMFS n.d.). There have been no recorded sightings of SRKWs in Oakland Bay since prior to 2000 (Orca Behavior Institute 2026).

The potential pathways of effect for SRKW as a result of the proposed action are underwater noise and diminished water quality related to construction, as well as prey availability due to impacts to PS Chinook salmon. The applicant will implement a Marine Mammal Monitoring Plan during vibratory pile driving to ensure that no SRKW or other ESA-listed marine mammals are exposed to underwater noise associated with construction (Northwest Environmental Consulting, LLC 2024). Monitoring activities will be conducted 20 minutes prior to and during all in-water pile driving. Pile installation or removal will not be initiated, or if initiated will be temporarily ceased, if SRKWs, humpback whales, unidentified whales, or ESA-listed marine mammals are present within the monitoring zone. Cessation of in-water pile driving will last until all listed marine mammals have moved outside the monitoring area. Therefore, it is extremely unlikely that SRKW would experience any adverse effects related to underwater noise or water quality during construction. Regarding prey availability, the Effects of the Action and Integration and Synthesis sections document the negligible annual reductions in PS Chinook salmon populations that would occur as a result of the proposed action. Given that these impacts would not be discernable on a population level, the proposed action would not meaningfully diminish prey availability for SRKW. NMFS therefore concurs that the proposed action is not likely to adversely affect SRKW.

ESSENTIAL FISH HABITAT RESPONSE

Thank you also for your request for essential fish habitat (EFH) consultation. NMFS reviewed the proposed action for potential effects on EFH pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

We have concluded that the action would adversely affect EFH designated under the Coastal Pelagic Species Fishery Management Plan, Pacific Coast Groundfish Fishery Management Plan, and Pacific Coast Salmon Fishery Management Plan. Therefore, pursuant to section 305(b)(4)(A) of the MSA, NMFS has provided EFH conservation recommendations below to avoid, minimize, mitigate, or otherwise offset those adverse effects.

Magnuson-Stevens Fishery Conservation And Management Act

Section 305(b) of the MSA directs federal agencies to consult with NMFS on all actions or proposed actions that may adversely affect EFH. Under the MSA, this consultation is intended to promote the conservation of EFH as necessary to support sustainable fisheries and the managed species' contribution to a healthy ecosystem. For the purposes of the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity", and includes the associated physical, chemical, and biological properties that are used by fish (50 CFR 600.10). Adverse effect means any impact that reduces quality or quantity of EFH, and may include direct or indirect physical, chemical, or biological alteration of the waters or substrate and loss of (or injury to) benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality or quantity of EFH. Adverse effects may result from actions occurring within EFH or outside of it and may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810). Section 305(b) of the MSA also requires NMFS to recommend measures that can be taken by the action agency to conserve EFH. Such recommendations may include measures to avoid, minimize, mitigate, or otherwise offset the adverse effects of the action on EFH (50 CFR 600.905(b)).

EFH Affected by the Proposed Action

The proposed project occurs within EFH for various federally managed fish species within the Pacific Coast Salmon Fishery Management Plan (FMP) (PFMC 2024a), Coastal Pelagic Species FMP (PFMC 2024b), and Pacific Coast Groundfish FMP (PFMC 2025).

Adverse Effects on EFH

In addition to the EFH analysis from the BA, NMFS determined the proposed action would adversely affect EFH as follows:

- In-water activities that have the potential to increase turbidity and temporarily diminish water quality;
- Temporarily increased underwater noise due to pile driving; and
- Altering habitat due to new overwater coverage, resulting in diminished prey opportunities, greater threats of predation, and impediments to migration.

These activities require conservation offsets to compensate for the loss of habitat quality in nearshore areas. These nearshore areas are EFH for multiple species. Although the offsets are intended to avoid the net-loss of habitat quality, the adverse effects still result from the activity categories identified above. The EFH recommendations below are intended to provide avoidance and minimization measures that go beyond the proposed action.

EFH Conservation Recommendations

NMFS determined that the following conservation recommendations are necessary to avoid, minimize, mitigate, or otherwise offset the adverse effects of the proposed action on EFH.

1. During pile removal and installation, encircle the pile with a silt curtain or containment boom that extends from the surface of the water to the substrate, where appropriate and feasible.
2. Drive piles during low tide periods when substrates are exposed, where appropriate and feasible. This minimizes the direct impacts to fish from sound waves and minimizing the amount of sediments resuspended in the water column.
3. Piles should be removed slowly through vibratory extraction to minimize turbidity, where appropriate and feasible. If vibratory extraction is not possible, piles should be removed via direct pull, clamshell removal, or cutting. Pulled piles should be placed in a containment basin to capture any adhering sediment immediately after the pile is initially removed from the water, where appropriate and feasible.
4. Any cross or transverse bracing for overwater structures should be placed above the plane of mean higher high water (MHHW), where appropriate and feasible, to avoid impacts to water flow and circulation. The footprint of the overwater structure should be minimized to the maximum extent practicable. Design structures should be oriented in a north-south direction, to the maximum extent practicable, to minimize persistent shading over the course of a diurnal cycle. The use of floats should be minimized to the maximum extent practicable and should be restricted to terminal platforms placed in deep water where appropriate and feasible.
5. When breakwaters are required, floating breakwaters are preferred. Encourage seasonal use of breakwaters.

Statutory Response Requirement

As required by section 305(b)(4)(B) of the MSA, USACE must provide a detailed response in writing to NMFS within 30 days after receiving an EFH conservation recommendation. Such a response must be provided at least 10 days prior to final approval of the action if the response is inconsistent with any of NMFS' EFH conservation recommendations unless NMFS and the federal agency have agreed to use alternative time frames for the federal agency response. The response must include a description of the measures proposed by the agency for avoiding, minimizing, mitigating, or otherwise offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with the conservation recommendations, the federal agency must explain its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects (50 CFR 600.920(k)(1)).

Supplemental Consultation

The USACE must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR 600. 920(l)).

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The biological opinion will be available through NOAA Institutional Repository [<https://repository.library.noaa.gov/welcome>]. A complete record of this consultation is on file at the Oregon/Washington Coastal Office in Lacey, WA.

Please direct questions regarding this letter to Elizabeth Hartman, California Central Valley Office, at (301) 427-8389 or elizabeth.hartman@noaa.gov.

Sincerely,

A handwritten signature in blue ink, reading "Kathleen Wells". The signature is fluid and cursive, with the first name "Kathleen" and last name "Wells" clearly distinguishable.

Kathleen Wells
Assistant Regional Administrator
Oregon-Washington Coastal Office

cc: LeeAnn Simmons, USACE

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Appendix A: Finalized Nearshore Habitat Conservation Calculator

Blue cells contain section headings.			
Orange cells describe information needed.			
Grey cells describe units requested for entry.			
Yellow cells indicate user entry fields.			
Green cells contain additional explanations, notes, and resource links.			
Maroon cells contain summary values.			
Action Agency Reference #	NWS-2021-668		
FWS or NMFS #	WCRO-2021-03513 / WCRO-2025-03104		
Project Name:	Oakland Bay Marina Improvements		
Prepared on and by: (Add each update)	Brad Thiele		
Puget Sound Nearshore Habitat Conservation Calculator			
	Version 1.7		3/26/2025
This tool determines long-term habitat impacts and benefits for projects in the Salish Sea nearshore. Details about the use of this Conservation Calculator can be found in the User Guide, FAQs, and training materials, which are all available on the			
Puget Sound Nearshore Habitat Conservation Calculator Webpage			
		Conservation Credits/Debits	DSAYs (Discounted Service Acre Years)
Overwater Structures	Debit	-505	-5.05
	Credit (includes creosote removal)	23	0.23
	Balance	-482	-4.82
Shoreline Armoring			0.00
	Credit from Armor Removal	185	1.85
	Credit from Crested Rock Removal		0.73
	Balance	258	2.58
Maintenance Dredging	Balance	0	0.00
Boatramps, Jetties, Rubble	Debit	0	0.00
	Credit	5	0.05
	Balance	5	0.05
Riparian Enhancement/Degradation	Balance	553	5.53
SAV Planting	Conservation Credit	0	0.00
Habitat Loss / Remaining Conservation Offsets Needed		0	0.00
Is this a standalone restoration project?*	No		
* Standalone restoration actions are actions that can be executed <u>outside</u> of a replacement or construction of new structures. They have no negative long term habitat impacts. A standalone restoration action solely restores or improves habitat functions. It does not introduce new or temporally extend adverse effects aside from construction-related effects. Standalone restoration projects include removal of a structure (that has adverse effects) without its replacement.			