UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OR 97232-1274

Refer to NMFS No.:
WCRO-2021-03017

April 28, 2023

Rowena Defato
Regional Environmental Officer
Economic Development Administration
Seattle Regional Office
915 Second Avenue
Jackson Federal Building, Room 1890
Seattle, Washington 98174

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Marine Trades Industrial Park (North Cedar Street in Port Angeles, Washington)

Dear Ms. Defato:

This letter responds to your November 22, 2021 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 all required information on, and analysis of, your proposed action and its potential effects to listed species and designated critical habitat.

We reviewed the Economic Development Administration's (EDA) 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.

We adopt by reference the following sections of the Final Biological Evaluation (BE) for the Port of Port Angeles Marine Trades Infrastructure Park, dated June 7, 2021 (Shannon and Walters 2021):

- Sections 1.0 (Introduction), 2.0 (Project Description), 2.2 (Construction Methods), 2.3 (Project Schedule), Section 2.4 (Best Management Practices and Conservation Measures) for the description of the Proposed Action.
- Section 2.1 (Project Description) for the Action Area.
- Section 3.0 (Species Information, Critical Habitat, and Habitat in the Project Area) for the Environmental Baseline.
- Section 3.0 through 3.13.5 (Species Information) for the Status of the Listed Species and their Critical Habitats.
- Section 4.0 (Effects of the Project) for the Effects of the Action on Listed Species and their Critical Habitat.

We also adopt by reference the following sections of the Habitat Improvement Plan (HIP) for the Port or Port Angeles Marine Trades Industrial Park, dated October 26, 2022 (Waknitz 2022):

- Section 1 (Introduction and Summary), 2 (Project Description), 6 (Timing, Equipment, and Conservation Measures), 7 (Proposed Mitigation), and 8 (Site Protection Instrument) for the description of the Proposed Action.
- Section 4 (Baseline Conditions) for the Action Area and Environmental Baseline
- Section 5.0 (Impacts) for the Effects of the Action on Listed Species and their Critical Habitat.

We also adopt by reference the following segments from Section 2.5 of the Salish Sea Nearshore Programmatic Biological Opinion (SSNP) WCRO-2019-04086 (NMFS 2022) to supplement the BE and HIP Effects of the Proposed Action on Listed Species and their Critical Habitat section.

- Section 2.5 (Effects of the Action)
    - Water Quality (p157)
    - Stormwater Facilities and Outfalls (p172)
    - Noise from commercial and recreational vessel operation (p160)
    - Scour of nearshore areas from prop wash (p160)
    - Disrupted Shore Processes (p164) (associated with armoring around the outfall)
    - Habitat Enhancement Activities (p176)
    - Effects on Critical Habitat (p180) specifically:
        - Summary of the effects of the action on salmon critical habitat PBFs
        - Summary of the effects of the action on SRKW critical habitat PBFs
    - Effects on Listed Species (p184) pertaining to those affects listed above: water quality, outfalls, noise from vessel operation, scour from prop wash, disruption of shore processes, and habitat enhancement activities.

The BE and HIP are available with the administrative record on file, available at the NMFS Oregon Washington Coastal Office in Lacey, Washington. The SSNP biological opinion can be accessed online at https://media.fisheries.noaa.gov/2022-06/2022-06-29-ssnp-wcro-2019-04086.pdf. This biological opinion is available through NOAA Institutional Repository https://repository.library.noaa.gov/.

We note below where we have supplemented information in the BE and HIP with our own data and analysis. While we partially adapt the BE analysis of the effects of the action, we believe the BE came to incorrect determinations of effects on listed species and their critical habitats and have provided additional analysis and reference to the SSNP, where applicable. Revised determinations are listed below:

Consultation History

NMFS received a request for consultation from EDA on November 22, 2021. Per NMFS recommendation for a more expedited consultation under the Salish Sea Nearshore Programmatic (SSNP), EDA and the applicant (Port of Port Angeles; Port) explored if the US Army Corps of Engineers (Corps) would be willing to assume the role of lead federal agency. Following a formal request for the Corps to assume the lead action agency, the Corps declined due to EDA's funding involvement on November 16, 2022. In a November 21, 2022 meeting of NMFS, EDA and Port employees, NMFS stated that a condensed biological opinion would be appropriate for this project. On November 22, 2022, the Port sent NMFS additional project

materials, including a Habitat Improvement Plan, a long-term Storm Water Pollution Prevention Plan, and a Conservation Calculator displaying a summary output of 0. NMFS confirmed the project's Final Nearshore Consultation Calculator was at 0 (0 Discounted Service Acre Years of long-term habitat loss) following the meeting, indicating no long-term net loss of overall habitat value at the site.

Formal consultation for the Marine Trades Industrial Park was initiated on December 2, 2022 following a phone call between Nissa Rudh (NMFS biologist) and Jesse Waknitz (Port of Port Angeles Environmental Manager).

On March 7, 2023, EDA requested NMFS to add formal consultation for Hood Canal Summer Run Chum (species) to the opinion.

Regarding ESA Section 7 Regulations

On July 5, 2022, the U.S. District Court for the Northern District of California issued an order vacating the 2019 regulations that were revised or added to 50 CFR part 402 in 2019 ("2019 Regulations," see 84 FR 44976, August 27, 2019) without making a finding on the merits. On September 21, 2022, the U.S. Court of Appeals for the Ninth Circuit granted a temporary stay of the district court's July 5 order. On November 14, 2022, the Northern District of California issued an order granting the government's request for voluntary remand without vacating the 2019 regulations. The District Court issued a slightly amended order two days later on November 16, 2022. As a result, the 2019 regulations remain in effect, and we are applying the 2019 regulations here. For purposes of this consultation and in an abundance of caution, we considered whether the substantive analysis and conclusions articulated in the biological opinion and incidental take statement would be any different under the pre-2019 regulations. We have determined that our analysis and conclusions would not be any different.

Proposed Action

The EDA proposes to partially fund, through grant assistance, the construction of a new ship building and repair facility for the applicant, the Port, at a vacant lot currently owned by the Port. The facility, called the Marine Trades Industrial Park, would encompass 17.3 acres of waterfront in Port Angeles at Lat/Long 48.122874, -123.440290. As of the time of this Biological Opinion, the EDA had already distributed these funds to the Port. However, the project is still in planning stages and funding was provided, in part, for design and planning. A Corps section 404 Clean Water Act (CWA) permit would also be required for this project. NMFS is therefore consulting with the EDA on the proposed Marine Trades Industrial Park receiving federal funding from the EDA, as well as permitting by the Corps, as the late arriving action agency.

The following summarizes the proposed action per Section 1, 2, 6, 7, and 8 of the HIP and Sections 1-2.4 of the BE: The Port would convert an existing vacant lot, adjacent to Port Angeles Bay, into a ship repair and building facility. The project would consist of primarily upland/riparian area activities, without a work window. This would include grading of the site, construction of an asphalt boat hoist access road, asphalt vehicle access road, asphalt work pad sites, gravel building pad sites, installation of upland utilities (water, sewer, and power), and the installation of the stormwater infrastructure to support industrial park development. Stormwater

infrastructure would include catch basins, piping, bioretention treatment and the replacement of an existing outfall to Port Angeles Harbor. This treatment facility would be sized to treat stormwater from the entire 16.9-acres of impervious surface at the project site up to the 50-year rain event. Three phases or cells of the treatment system include a pretreatment phase (pea gravel), a treatment phase (standard Washington State Department of Ecology (Ecology) stormwater compost and sand biofiltration mix) and a third polishing phase (up-flow through expanded shale and bio-char). The treated stormwater would then discharge at the shoreline through a repaired 30-inch diameter outfall, located in a rip-rap revetment, to Port Angeles Harbor (Strait of Juan de Fuca) at an elevation of +7.06 feet mean lower low water (MLLW). The outfall construction activities are planned for the 2024 in-water construction season. Outfall construction would occur during the in-water work window, July 15 through February 15. At the east side of the site, adjacent to the Valley Creek Pocket Estuary on the shoreline, 11,200 square feet of riparian zone restoration/planting would occur.

Status of the Species and their Critical Habitat

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 discuss the function of the physical or biological features essential to the conservation of the species that create the conservation value of that habitat.

Table 1 in the BE shows ESA listed species likely to occur within the action area and critical habitat presence. NMFS expects the following species and critical habitats to be affected:

- Puget Sound (PS) Chinook salmon (*Oncorhynchus tshawytscha*) - species and critical habitat
- PS steelhead trout (*O. mykiss*) - species and critical habitat
- Hood Canal summer-run chum (HSRC) (*O. keta*) - species
- PS/Georgia Basin (GB) bocaccio (*Sebastes paucispinis*) - species
- PS/PS/GB yelloweye rockfish (*S. ruberrimus*) - species
- Southern resident killer whale (SRKW) (*Orcinus orca*) – species and critical habitat
- Humpback whale (*Megaptera novaeangliae*) – species

Action Area

"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 action area is described in Section 4 of the HIP and Section 2.1 of the BE. It includes the ship repair/building site, riparian planting area to the west of the site along the Valley Creek estuary, and the stormwater treatment area and associated outfall. A 100-foot buffer is added around the industrial site for long-term noise impacts associated with facility operation. Temporary water quality impacts during construction could extend up to 100 feet from the proposed outfall. To this action area, NMFS adds 1) the Port lift facility northwest of the project site, which ships would motor to and are lifted from the water for subsequent transport to the repair yard; and 2) the area of impact associated with stormwater discharge from the pipe. NMFS

estimates this as the area of which exposure to the stormwater effluent discharging from the culvert is likely, for listed species. We use a fate and transport approach to defining the action area and it is expected that exposure and species response would occur a relatively large distance away from the outfall location. Based on water and sediments (Zhang et al. 2016) to be affected by certain likely contaminants (PAHs, and 6PPD-Q, for example), we estimate that the action area is 1 kilometer (km) radially from the outfall (Law et al. 1997) in Port Angeles Harbor.

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 consequences to listed species or designated critical habitat from ongoing agency activities or existing 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 described in Section 4 of the HIP and Section 3.0 of the BE. The proposed building site is in an industrialized area. It is a former plywood mill in Port Angeles directly adjacent of Port Angeles Harbor (marine) and Valley Creek's confluence with the Harbor. The project site is largely concrete and gravel, with remnant structures, a rip-rap armored shoreline, and some vegetation (2 acres of mostly non-native species). A constructed ditch near the extant outfall routinely is inundated during high tides and sustains some wetland vegetation. The marine portion of the action area has been impacted by industrialization.

Four streams drain into Port Angeles Harbor near the project area: Tumwater Creek, Valley Creek, Peabody Creek, and Ennis Creek. Washington Department of Fish and Wildlife (WDFW) SalmonScape webapp (WDFW 2023) has documented presence of PS Chinook salmon in Ennis Creek, approx. 2 miles east of the project location. Tumwater Creek, Valley Creek (directly next to the project site), and Ennis Creek have documented PS summer and winter steelhead.

SRKWs have been sighted in the Strait of Juan De Fuca and likely also within the action area. Most documented sightings (65%) have occurred between June and September (Olsen 2019). While the quadrant map does not show if SRKWs were specifically sighted in Port Angeles Harbor, between 6-25 sightings have been documented in this 'quadrant' between 2011 and 2022. Herein, we assume that half of historic sightings have been within the harbor.

We supplement the BE baseline data with the following: The recovery strategy for the Strait of Juan De Fuca and Hood Canal in the 2019 NMFS Recovery Plan for Steelhead includes "Continue[d] cleanup and restoration to improve water quality in Port Angeles Harbor." In the 2022 Biological Viability Assessment Update for Pacific Salmon and Steelhead (Ford 2022), populations of ESA listed salmon near the action area are not specifically mentioned, but PS Chinook Salmon has extinction risk category of moderate, PS Chum has an extinction risk

category of moderate to low moderate, and PS Steelhead has an extinction risk category of moderate.

Ennis creek is identified in the WRIA 18 Salmon Recovery Plan as an urban stream with relatively pristine conditions and has stocks of multiple salmonids, all of which have increased in recent years following restoration activities (Washington State Recreation and Conservation Office 2022). Listed rockfish have not been documented in Port Angeles Harbor, but may exist in deeper waters and the juveniles may use the nearshore adjacent proposed development and existing outfall. Larval rockfish may be carried by currents into the action area, even if no adult listed rockfish are in the harbor. It is unknown if submerged aquatic vegetation (SAV) occurs next to the shoreline armoring on this site. If SAV is present, it likely is low density/coverage due to scouring impacts from the armoring, vessel traffic, dredging, and poor water quality within the harbor.

Effects of the Action on Listed Species and their Critical Habitat

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 (see 50 CFR 402.17). In our analysis, which describes the effects of the proposed action, we considered 50 CFR 402.17(a) and (b).

The EDA proposes to authorize the construction of a new boat repair/construction facility (marine trades industrial park). A more detailed discussion of effects is included in the Habitat Improvement Plan Section 5 (Impacts). The BE Section 4.0 (Effects of the Project) identifies several, but not all, of the effects listed below. Those identified include effects associated with 1) shoreline armoring, 2) riparian changes, and water quality. NMFS has added some additional effects to the analysis. Accordingly, the temporary and long-term effects of this proposed action are:

- Temporary decrease of shade, large woody debris recruitment, litter/organic matter inputs and habitat function due to elimination of riparian vegetation across the site. Species effects: decreased cover (increased predation), increase in water temperatures (increased metabolic stress), decreased terrestrial invertebrate input (reduced forage).
- Temporary localized water quality degradation associated with construction at the outfall, including the placement of rock and installation of the outfall splash pad. Species effects: increased predation of juvenile bocaccio in turbidity plume, gill abrasion, decreased forage due to area elimination.
- Long-term continued elimination of riparian habitat adjacent to Port Angeles Harbor due to the existence and use of the Marine Trades facility. Species effects: extended elimination of cover (increased predation), elevated water temperatures (diminished thermal refugia), and diminished terrestrial invertebrate input (reduced forage).
- Long-term effects associated with stormwater discharge from pollution generating impervious surface (PGIS) from the site. Species effects: chronic and acute harm associated with discharge of toxic substances present in stormwater (reduced survival).

- Long-term substrate scour leading to suppression of SAV associated with shoreline armoring repair at the outfall. Species effects: decreased forage and cover (increased predation).
- Long-term elimination of nearshore habitat due to the replacement of shoreline armoring associated with the outfall. Species effects: diminished rearing ability (reduced forage, cover) through direct inaccessibility of the nearshore.
- Long-term sound and disturbance in the nearshore caused by vessels entering and leaving the facility. Species effects: behavior changes that result in decreased foraging, area avoidance, gill abrasion due to turbidity.
- Long-term increase in shade, large woody debris recruitment, litter/organic matter inputs and habitat function due to planting of native riparian vegetation (11,200 square feet) adjacent to the Valley Creek confluence. Species effects: increased cover (decreased predation), decrease in water temperatures (more thermal refugia), and increased terrestrial invertebrate input (increased forage).

While several effects to species and critical habitat were identified in the project documents, we believe the BE came to incorrect determinations of effects on listed species and their critical habitats. Therefore, we supplement the effects on species and critical habitat by incorporating by reference Section 2.5 of the SSNP biological opinion WCRO-2019-04086 (NMFS 2022; sub-sections incorporated are listed on page 2 of this opinion), and with the following information.

The elimination of a natural riparian and beach through persistence of impervious and shoreline armoring at this site would reduce riparian habitat value for the relevant life of the proposed structures on site (assumed 40 years for upland structures and 50 years for the outfall). This would contribute to continued reduction in shade, large woody debris recruitment, litter/organic matter inputs and habitat function, and forage fish habitat in the action area. 11,200 square feet of riparian plantings would counter balance the elimination of current riparian vegetation on site and restore native species to the confluence of Valley Creek, an identified pocket estuary. Site vegetation changes and shoreline armoring were evaluated using the Puget Sound Nearshore Habitat Conservation Calculator V1.4, and a net 0 long-term loss (DSAYs) of nearshore habitat was calculated using the program. See the Final Conservation Calculator file within the project Habitat Improvement Plan, Appendix A. Though the action would still have adverse effects to listed species and their critical habitat, with the proposed conservation measures, the proposed action is expected to result in no long-term reduction to habitat quality for listed species in the action area.

PS Chinook salmon, and PS/GB bocaccio would be exposed to the short-term reduction in rearing conditions in the nearshore habitat during the period of increased turbidity and disturbance at the outfall, as well as decreased riparian vegetation during site clearing.

Though the proposed three-stage treatment would reduce introduction of contaminants into critical habitat, listed species would likely experience some water quality reduction associated with stormwater runoff from the site. The Ennis Creek populations of PS Chinook salmon, including PS resident Chinook salmon (non-migrants), and any other out or in-migrating Chinook salmon in the action area (Port Angeles Harbor) would be affected. Three local PS steelhead populations (Ennis Creek, Tumwater Creek, and Valley Creek) would also be affected during migration. Outmigrating HCSRC may enter the harbor, and thereby also be affected by

long-term impacts of the proposed action. SRKW would experience infrequent exposure to degraded water quality from site runoff and vessel use. SRKW would also experience trophic effects through harm to PS Chinook salmon, their main food source, a physical and biological feature of SRKW critical habitat. Through the prolonged use of the site for industrial activities, riparian ecological functions that contributed to estuarine features of critical habitat would continue to be eliminated for PS Chinook salmon. Juvenile and adult non-migrating PS Chinook salmon, migrating HCSRW juveniles and adults, larval PS/GB yelloweye rockfish, and larval juvenile PS/GB bocaccio rockfish present in the nearshore would experience all long-term impacts listed above.

Some long-term water quality effects would occur due to stormwater discharge from Pollution Generating Impervious Surface (PGIS) at this industrial site. The proposed three-stage stormwater treatment would greatly reduce, but not eliminate the level of contaminants in discharged stormwater. Via a fate and transport approach to effects evaluation, low concentrations of contaminants would affect the Ennis Creek populations of PS Chinook salmon, PS resident Chinook salmon (non-migrants), and out or in-migrating Chinook salmon, PS Steelhead, and HCSRC in the action area (Port Angeles Harbor). SRKW could experience infrequent exposure to degraded water quality and, through food-web interactions, have indirect exposure to chemicals in stormwater, such as metals, PAHs, PCBs, and 6PPD-quinone.

Contaminants from PGIS degrade water quality and have a wide range of adverse effects on the listed species. These are described in the SSNP biological opinion section 2.5. However, proposed on-site treatment is expected to minimize the stormwater impacts caused by the proposed action.

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 and 402.17(a)). 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. Materials in the initiation package did not address cumulative effects in the immediate project area. Therefore, NMFS relied on information in the US Census (2020) and a Cumulative Impacts Analysis for the City of Port Angeles' Shoreline: Strait of Juan de Fuca (2011) for cumulative effect information for the Strait of Juan de Fuca and Port Angeles Harbor. The City of Port Angeles has increased in population by 10% between 2010 and 2019 (20,229 as of 2019). We expect future population to increase at the same rate or higher. Concurrently, recreational and commercial use of the harbor would likely increase. Because the nearshore and former riparian areas are currently highly developed, it is not expected that these would undergo significant increased development. Overall land use surrounding Port Angeles may shift as new housing developments are created. This may cause increased runoff and changes in freshwater input patterns as well as upland habitat loss and fragmentation. A Shoreline Master Program (2021) is implemented by the city and ongoing efforts by Ecology and WDFW to restore and protect natural resources are expected to retain current ecological function of nearshore environments (no net loss) while restoring and protecting locations with high potential habitat value. Increased stormwater treatment and implementation of TMDLs would likely improve overall water quality in the harbor over time.

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.

As described above, PS Chinook salmon, PS steelhead, HCSRC, PS/GB bocaccio, and SRKW use the action area to complete part of their life history requirements.

PS Chinook salmon have a moderate risk of extinction (Ford 2022). Identified limiting factors to recovery include: 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; and severely altered flow regime.

PS steelhead also have a moderate risk of extinction (Ford 2022). Identified limiting factors to recovery include continued destruction and adverse modification of habitat, widespread declines in adult abundance, and threats to diversity from hatchery steelhead stock.

PS/GB bocaccio also has a moderate risk of extinction (Tonnes et al. 2016) with limiting factors to recovery including over harvest, water pollution, climate induced changes to habitat, and small population dynamics.

SRKW have a high risk of extinction (NMFS 2022) with limiting factors to recovery including quantity and quality of prey, exposure to toxic chemicals, disturbance from sound and vessels, and risk from oil spills.

A factor for decline that all these species share is degradation of habitat. Human development in the Pacific Northwest has caused significant negative changes to stream and estuary habitat across the range of these species. Climate change is likely to exacerbate several of the ongoing habitat issues, in particular, increased summer temperatures, and decreased summer flows in the freshwater environment, ocean acidification, and sea level rise in the marine environment.

The baseline conditions include degradation of shore condition, riparian condition, and water quality. We add the project's proposed effects to the baseline:

This project will add temporary degrading conditions to water quality and forage.

This project would extend by 40 -50 years the current level of degraded nearshore conditions (the design-life of the vessel repair facility, the outfall, and shoreline stabilization structures).

The project would also improve riparian conditions on the east side of the site, adjacent to Valley Creek, and reduce the level of water quality impairment by adding stormwater treatment. This last element was assessed using the Puget Sound Nearshore Habitat Conservation Calculator, and that analysis provides assurance that this project would not contribute to overall continued degradation of baseline conditions and a loss of critical habitat for SRKW, PS Chinook salmon, or PS Steelhead. Despite some adverse exposure and response among listed individuals, the likelihood of survival or recovery of any of the listed species considered in this opinion would not be appreciably reduced.

Conclusion

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 Chinook salmon, PS steelhead, PS/GS Bocaccio, or SRKW, nor would it destroy or adversely modify PS Chinook salmon, PS steelhead, or SRKW designated critical habitat.

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). "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:

Take in the form of harm from elevated turbidity levels to juvenile and adult PS Chinook salmon (non-migrant) and juvenile PS/GB bocaccio during in-water construction of the outfall and associated rock and splash pad. Increased turbidity would occur for 2 weeks maximum within a 100-foot radius where increased nephelometric turbidity units (NTUs) above baseline will occur during outfall construction.

Take in the form of harm due to a temporary reduction in riparian habitat values to PS Chinook salmon, PS steelhead, and PS/GB bocaccio. Riparian vegetation reduction will temporarily

reduce shade, organic material inputs, and forage production that would harm to listed species. This source of harm is expected to last up 2 years, when the new riparian vegetation is expected to have sufficiently grown to reestablish these functions and benefits to Valley Creek. If plantings that fail to survive at 75 percent or greater within the 2 year period, the extent of take would be exceeded.

Take in the form of harm to PS Chinook salmon, PS steelhead, PS/GB bocaccio, and SRKW due to long-term estuarine habitat elimination caused by the reconstruction of shoreline armoring associated with the stormwater outfall. The elimination is represented by 8 linear feet of shoreline armoring and an estimated (using Nearshore Calculator) 36.5 feet of nearshore habitat behind that armoring up to highest astronomical tide which will be inaccessible due to armoring – a total area of 292 square feet. Elimination of nearshore habitat landward of the armoring toe and would continue for the expected life of the structure, an assumed 50 years. Take in the form of injury or death of PS Chinook salmon, PS steelhead, PS/GB bocaccio, and take in the form of harm of SRKW from exposure to stormwater discharge from PGIS from the site. We use the proposed area of PGIS on site, 16.9 acres, and the proposed stormwater treatment system's capacity, defined in Post-Construction Stormwater Management Plan, Appendix B of the project Habitat Improvement Plan, as surrogate take indicators. Stormwater discharge would occur for the life of the outfall and PGIS, an assumed 50 years. Take would be exceeded if either the area contributing drainage increases or the stormwater treatment system is removed or reduced in its ability to meet its contaminant reduction standards.

Take in the form of harm of PS Chinook salmon, PS/GB bocaccio, harm to SRKW due to long-term substrate scour leading to suppression of SAV in the nearshore waterward of the proposed shoreline armoring repair and discharge flow at the stormwater outfall. This is represented by the structural life of the outfall, assumed to be 50 years, the diameter of the outfall, 30 inches, and the total discharge area, 16.9 acres.

Take in the form of harassment to PS Chinook salmon, PS steelhead, PS/GB bocaccio, and SRKW from long-term episodic noise caused by vessels entering and leaving the repair facility for the life of the vessel repair structures. Noise will be caused by the resulting traffic from the proposed boat repair work associated with 16.9 acre developed area – currently approximately 12 repair pads (locations) are proposed.

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" are measures that are necessary or appropriate to minimize the impact of the amount or extent of incidental take (50 CFR 402.02).

1. Ensure the continued function and effectiveness of the stormwater treatment on site.

2. Ensure the continued function and long-term success of the riparian plantings adjected to Valley Creek.
3. Ensure the completion of a monitoring and reporting program for the incidental take pathways above.

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 EDA or its funding recipient 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. The Port of Port Angeles (applicant) shall remain compliant with the Ecology Boat Yard General NPDES Stormwater Permit, as updated.
    b. The stormwater treatment system shall be maintained according to the facility specific Operations and Maintenance Manual and if repair or replacement is required, an equivalent treatment system or more robust system shall be installed.

2. The following terms and conditions implement reasonable and prudent measure 2:
    a. The Port of Port Angeles shall ensure that the total riparian planting area of coverage of at least 11,200 square feet is maintained at 75 percent survival for the first 2 years. A minimum of 50 percent survival is required thereafter, with dead plantings being replaced as needed to maintain this success rate.
    b. The Port shall also ensure that invasive species are removed as necessary from the planted area to prevent a conversion of natives to non-natives.

3. The following terms and conditions implement reasonable and prudent measure 3:
    a. The Port of Port Angeles shall provide to NMFS a copy of its NPDES authorization at (projectreports.wcr@noaa.gov, reference WCRO-2021-03017) within 90 days of completion of the proposed action.
    b. The Port shall provide to the same electronic address as-built documentation to confirm that the total PGIS does not exceed 16.9 acres and that stormwater treatment facilities were installed. The Port shall also provide NMFS site photos following the final design and construction of the facility.

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).

The following conservation recommendations are requested to be implemented by the applicant:

1. Design the final the site layout plan with an increased distance between the harbor and impervious surface/facility structures on the north side of the property to 20+ feet to provide an additional riparian buffer and such that eventual repair or replacement of the rip-rap armoring can be designed with a conversion to soft or hybrid armoring and include a buffer of riparian vegetation.
2. Work with appropriate authorities to establish a no-wake zone in Port Angeles Harbor adjacent to the proposed facility, around the outlet of Valley Creek, and around the location of the boat lift.
3. Utilize electric-powered repair equipment (lifts, fork lifts etc.) at the facility to reduce contaminants associated with the pollution generating impervious surface.
4. Incorporate green infrastructure on site to reduce impervious surface and improve infiltration such as rain gardens and green roofs. Include strips of native trees and shrubs between repair pads and around the facility to reduce the noise and stormwater runoff temperature.
5. Minimize night time light pollution (which can impede salmonid migration and increase predation) by choosing low wattage options for on-site lighting, pulling lighting landward from the shoreline as much as possible, and aiming lights down rather than flood lighting upwards (changing the light spectrum has not been found to reduce juvenile salmon's draw to lights/migration disruption).

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by EDA or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) the amount or extent of incidental taking specified in the ITS is exceeded, (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) 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 this biological opinion; or if (4) a new species is listed or critical habitat designated that may be affected by the identified action.

ESSENTIAL FISH HABITAT

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was conducted pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

Essential Fish Habitat Affected by the Project

The environmental effects of the proposed action may adversely affect EFH for Pacific Coast salmon, Pacific Coast groundfish and coastal pelagic species, all of which are present in the action area. The action area also contains Habitat Areas of Particular Concern (HAPC) for Pacific Coast salmon and Pacific Coast groundfish. Adverse effects to EFH include:

1. Continued elimination of nearshore estuarine habitat through the replacement of shoreline armoring.
2. Water quality degradation by short-term elevated levels of turbidity during construction of the outfall.
3. Degradation of water quality due to the discharge of stormwater effluent for the life of the PGIS.
4. Reduced SAV due to scour associated with shoreline armoring, and scour from outfall flow velocity during storm events.
5. Decreased quality in EFH due to noise caused by vessel traffic.
6. Temporary decreased riparian functionality due to removal of on-site vegetation, diminishing the estuary HAPC.

Though these elements would result in adverse effects to EFH, the proposed 11,400 square feet of riparian planting adjacent to Valley Creek would result in a long term improvement to EFH and the HAPCs of Thermal Refugia (Salmon), and Estuaries (Salmon and Groundfish). Additionally, stormwater treatment on site would dramatically decrease the number of toxic substances that are discharged into the Harbor from PGIS at the boat repair site.

Essential Fish Habitat Conservation Recommendations

The following conservation recommendations are requested to be implemented by the applicant:

1. Design the final the site layout plan with an increased distance between the harbor and impervious surface/facility structures on the north side of the property to 20+ feet to provide an additional riparian buffer and such that eventual repair or replacement of the rip-rap armoring can be designed with a conversion to soft or hybrid armoring and include a buffer of riparian vegetation.
2. Work with appropriate authorities to establish a no-wake zone in Port Angeles Harbor adjacent to the proposed facility, around the outlet of Valley Creek, and around the location of the boat lift.
3. Utilize electric-powered repair equipment (lifts, fork lifts etc.) at the facility to reduce contaminants associated with the pollution generating impervious surface.
4. Incorporate green infrastructure on site to reduce impervious surface and improve infiltration such as rain gardens and green roofs. Include strips of native trees and shrubs between repair pads and around the facility to reduce the noise and stormwater runoff temperature.
5. Minimize night time light pollution (which can impede salmonid migration and increase predation) by choosing low wattage options for on-site lighting, pulling lighting landward from the shoreline as much as possible, and aiming lights down rather than flood lighting

upwards (changing the light spectrum has not been found to reduce juvenile salmon's draw to lights).

Fully implementing these EFH conservation recommendations would avoid or minimize the adverse effects for Pacific Coast salmon, Pacific Coast groundfish, and coastal pelagic species.

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 would be available through NOAA Institutional Repository https://repository.library.noaa.gov/ A complete record of this consultation is on file at the NMFS Oregon Washington Coastal Office, Central Puget Sound Branch in Lacey, Washington.

Please contact Nissa Rudh at Nissa.Rudh@noaa.gov or 360-701-9699 if you have any questions concerning this consultation, or if you require additional information

Sincerely,

Kim W. Kratz, Ph.D
Assistant Regional Administrator
Oregon Washington Coastal Office

cc: Jesse Walknitz, Port of Port Angeles Environmental Manager
Chris Hartman, Port of Port Angeles
Mary Rudokas, Economic Development Administration
U.S. Army Corps of Engineers ESA Team inbox

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