



**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-2024-00837**

July 31, 2024

Adam Merrill  
Environmental Protection Specialist  
US Department of Transportation, Federal Aviation Administration  
2200 S. 216<sup>th</sup> Street  
Des Moines, Washington 98198

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens  
Fishery Conservation and Management Act Essential Fish Habitat Response for the Port  
of Portland Airfield and Airport Related Tenant Projects—Batch #1

Dear Mr. Merrill:

This letter responds to your April 16, 2024, 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 Federal Aviation Administration (FAA) 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 Biological Assessment (BA):

- Sections 1.0, 2.0, 3.0, 4.0 and 5.0 for the description of the proposed actions, and the action area;
- Sections 6.0 and 7.0 for species and habitat information; and,
- Section 8.0 for effects of the proposed actions.

The FAA and the Port of Portland (Port) reached out for early coordination with NMFS in January of 2024, to discuss multiple upcoming maintenance projects located at Portland International Airport (PDX), Hillsboro Airport (HIO), and Troutdale Airport (TTD). Because many of the proposed maintenance projects were similar in nature and expected to have similar effects to ESA listed species, NMFS suggested completing the consultation in batches.



The first batch of projects, which are considered in this Opinion, include two projects located at HIO, and three projects located at PDX. NMFS worked closely with the FAA and the PoP to develop the BA for the five proposed maintenance projects, and participated in several meetings throughout January and February to discuss questions and review drafts of the BA. On April 16, 2024, the FAA submitted their formal consultation request with the final BA. NMFS reviewed the BA and determined that the information provide was sufficient to initiate consultation on May 1, 2024.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on May 6, 2024 (89 Fed. Reg. 24268). We are applying the updated regulations to this consultation. The 2024 regulatory changes, like those from 2019, were intended to improve and clarify the consultation process, and, with one exception from 2024 (offsetting reasonable and prudent measures), were not intended to result in changes to the Services' existing practice in implementing section 7(a)(2) of the Act. 89 Fed. Reg. at 24268; 84 Fed. Reg. at 45015. We have considered the prior rules and affirm that the substantive analysis and conclusions articulated in this biological opinion and incidental take statement would not have been any different under the 2019 regulations or pre-2019 regulations, except we note that we have included offsetting reasonable and prudent measures in the incidental take statement (an option that was not included in the section 7 regulations prior to 2024).

The FAA proposes to provide funding to the Port to complete five airfield maintenance and improvement projects located at HIO and PDX. The five proposed projects include one or more of the following actions, which are likely to impact stormwater management; thus, for those projects that would increase impervious surface and/or reconstruct impervious surface, the primary route of effect for ESA species and designated critical habitat is stormwater runoff:

- New taxiway construction
- Installation of vegetated filter stripes for stormwater treatment
- Reconstruction of existing taxiways
- Removal of existing taxiways
- Expansion of existing taxiways

The following table (Table 1.) provides a summary of each project's impervious surface actions as well as the primary stormwater treatment BMP.

**Table 1.** Estimated maximum totals of reconstructed, new, and removed impervious surface areas for each of the five proposed projects.

Airport	Project Name	Impervious Surface (acres)			Primary Treatment BMP
		Reconstructed, Existing Impervious Area	New Impervious Area	Removed Impervious Area	
HIO	Crossfield Taxiway K	1.31	2.07	1.01	Vegetated filter strips
	Taxiway B Reconstruction	3.21	0.16	0.33	Vegetated filter strips
PDX	Taxiway A West	5.40	2.50	2.60	Regional Facility
	Taxiway K West	11.20	0.00	0.00	Regional Facility
	Maintenance, Repair and Overhaul Facility	1.30	8.00	0.00	Tenant BMP that complies with PDX Stormwater DSM
Totals		22.42	12.73	3.94	

Section 3.1 of the BA provides detailed descriptions for each of the five projects and is adopted here by reference as well as sections 3.2 and 3.3 which provide a description of the planned stormwater treatment and management.

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

There are eight listed salmonid evolutionarily significant units (ESU), seven listed distinct population units (DPS), in addition to green sturgeon, southern resident killer whales (SRKW), and one proposed threatened species within the action area:

- Chinook Salmon – *Oncorhynchus tshawytscha*
  - Lower Columbia River ESU
  - Upper Columbia River ESU
  - Upper Columbia River Spring-Run ESU
  - Snake River Spring/Summer-Run ESU
  - Snake River Fall-Run ESU
- Chum Salmon – *Oncorhynchus keta*
  - Columbia River ESU
- Coho Salmon – *Oncorhynchus kisutch*

- Lower Columbia River ESU
- Sockeye Salmon – *Oncorhynchus nerka*
  - Snake River ESU
- Steelhead – *Oncorhynchus mykiss*
  - Lower Columbia River DPS
  - Upper Willamette River DPS
  - Middle Columbia River DPS
  - Upper Columbia River DPS
  - Snake River Basin DPS
- Pacific Eulachon – *Thaleichthys pacificus*
  - Southern DPS
- North American Green Sturgeon – *Acipenser medirostris*
- SRKW
- Sunflower Sea Star – *Pycnopodia helianthoides*\*

\*Proposed for listing as a threatened species under the ESA

The action area also includes critical habitat for all of the listed species, except the proposed sunflower sea star, for which critical habitat has not been proposed. Section 6.0 of the BA describes the status of ESA listed species and designated critical habitats and is being adopted here.

Finally, we 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.

“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). Section 5.0 of the BA describes the action area and is being adopted here. In summary, the action area in this case includes:

- The physical footprint of each of the proposed projects, which includes the limits of all proposed construction activities (the project site).
- The extend of terrestrial and/or underwater noise generated during upland construction activities.
- The anticipated extent of any temporarily elevated turbidity during project activities.
- The downstream extent to which effects associated with stormwater could potentially occur, which extends to the mouth of the Columbia River into the Pacific Ocean.
- The estimated extent of where salmonid species from the Columbia River may be available as prey for Southern Resident DPS killer whales (SRKW).

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 status of each species considered in this consultation varies considerably from very high risk of extinction, to moderate, to low risk of extinction. The environmental baseline is such that individual ESA-listed species in the lower Columbia River basin are exposed to reduced water quality, lack of suitable riparian and aquatic habitat, and restricted movement due to developed urban areas and land use practices that have limited access to historically available habitat. Many conditions in the baseline are understood to limit productivity, and specified as factors limiting productivity in a manner that impedes recovery. These stressors, as well as those from climate change, already exist and we consider these factors with the addition of any adverse effects produced by the proposed action. Section 7.0 of the BA describes the environmental baseline in detail and is being adopted here. In summary, the action area is part of a highly anthropogenically impacted corridor for migrating salmon, whose populations have continued to decrease or remain somewhat stable at low levels for many years. However, the aquatic habitats present in the action area continue to provide a wide range of important habitat functions for ESA-listed species.

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 BA provides a detailed discussion and comprehensive assessment of the effects of the proposed action in Section 8.0, and is adopted here (50 CFR 402.14(h)(3)). NMFS has evaluated this section and after our independent, science-based evaluation determined it meets our regulatory and scientific standards. The following section summarizes the effects analysis from the BA and supplements the analysis of stormwater effects on sunflower sea star.

Short term effects are primarily associated with the proposed upland construction activities at each airport. Effects may include increased turbidity, construction noise disturbance, and potential contaminant leaks from construction equipment use and storage. The long-term effects of the proposed actions on ESA-listed species and designated critical habitat are primarily associated with the alterations of water quality caused by stormwater runoff due to new and reconstructed impervious surface areas. The proposed action also includes stormwater management BMPs that would minimize adverse effects of stormwater runoff. Little is known about specific effects of toxic contaminants on sunflower sea stars, or how stress from exposure to such chemicals affects susceptibility to sea star wasting syndrome. Laboratory challenge tests have exposed larval stages of various marine invertebrates to hydrocarbons, heavy metals, pesticides, and other contaminants commonly found in stormwater runoff. Documented impacts range from developmental abnormalities to behavioral augmentation, and mortality is common at

concentrations as low as several parts per million (e.g., Hudspith et al. 2017, de Almeida Rodrigues et al. 2022). For juvenile and adult marine invertebrates, including sea stars and other echinoderms, a variety of sublethal behavioral and physiological effects from these toxic contaminants have been documented, but mortality is also possible. Suspended sediment in stormwater may also be a concern as sea stars that become covered by sediment may experience greater risk of wasting disease. Absent species-specific data for the sunflower sea star, ecologically and physiologically similar species can be used as proxies to state that stormwater runoff is likely to harm, injure, or kill sunflower sea stars, having the greatest effects during the larval life history stage.

“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. Section 8.5 of the BA provides a detailed discussion and assessment of the cumulative effects and is incorporated here by reference.

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.

Each species considered in this opinion is listed as either threatened or endangered under the ESA, with the exception of the sunflower sea star which was proposed for listing in 2023 [88 FR 2023]. The status of each species varies considerably from very high risk of extinction, to moderate, to low risk of extinction. These species are listed under the ESA because of reductions in abundance from historic levels, low productivity, reductions in diversity and diminishment in spatial structure. These conditions are due in part to systemic degraded habitat as factors for decline and similarly are found in the baseline of the action area, where multiple anthropogenic changes exist. Contaminants/pollutants, water quality, and/or degraded freshwater habitat are all limiting factors for the species analyzed in this opinion, with the exception of SR-FR Chinook salmon, and will be affected by the proposed action. However, even SR-FR Chinook salmon migrate through areas of poor water quality and thus are exposed to those physical effects and consequences.

As discussed in section 8.0 of the BA, and briefly summarized above, the direct effects of upland construction activities are expected to be minimal, as there are no ESA-listed species or critical habitat located within the direct project footprints. BMPs will also be implemented during construction to minimize those effects. The proposed actions will; however, have permanent adverse effects on the ESA listed species and designated critical habitat in the action area due to increased amounts of impervious surfaces and discharge of treated stormwater runoff, which will contribute to water quality pollutants already present in the Lower Columbia River basin. The

proposed actions in total will reconstruct up to 22.42 acres of existing impervious area, create up to 12.73 acres of new impervious area, and remove approximately 3.94 acres of existing impervious area, resulting in up to 8.79 acres of net new impervious area. Stormwater treatment will be provided for all new and reconstructed impervious surfaces, and will be consistent with the design standards established in the applicable stormwater design manual for each airfield. The treatment standard is also consistent with the standards established in the Revised Standard Local Operating Procedures for Endangered Species to Administer Maintenance or Improvement of Stormwater, Transportation, and Utility Actions Authorized or Carried Out by the U.S. Army Corps of Engineers in Oregon (SLOPES V STU) (NMFS 2013). While permanent effects include lethal, sublethal, and behavioral responses to pollutants in stormwater discharge, the proposed actions should not result in appreciable modification of the baseline conditions for species survival, nor will the proposed actions result in effects that will detract from ongoing recovery efforts.

The sunflower sea star is proposed for listing throughout its range, and no data exists to suggest anything other than a single, panmictic population, so, to reach a determination of jeopardy, a proposed action would have to impact range-wide population dynamics. We are not currently aware of any habitat types or locations used by sunflower sea stars for mating or spawning, larvae are planktonic, and newly settles juveniles appear in a variety of habitats. We do not expect any single site-specific action to result in jeopardy, but broad-scale programmatic actions occurring over a substantial portion of the range might result in appreciable reductions in the number, distribution, or reproduction of sea stars.

Climate change and human development have and continue to adversely impact critical habitat creating limiting factors and threats to the recovery of the ESA-listed species considered in this Opinion. Climate change will likely result in a generally negative effect on stream flow and temperature. NMFS assumes that the environmental baseline is not meeting all biological requirements of individual fish of all 15 species. This is due to one or more impaired aquatic habitat functions related to any of the habitat factors limiting the recovery of the species in that area. Non-federal plans to mitigate climate change are largely unknown but may have localized benefits that extend to species and habitat within the Columbia River Basin as a whole. When these influences are considered collectively, we expect trends in habitat quality to remain flat or degrade gradually over time. This will, at best, further stress population abundance and productivity for the species affected by this consultation. In a worst-case scenario, we expect population abundance trends to decline. Likewise, we also expect the quality and function of habitat PBFs to remain flat or gradually decline over time. Retaining and restoring habitat complexity, access to climate refuges (both flow and temperature) and improving growth opportunity in both freshwater and marine environments are strongly advocated in the recent literature (Siegel and Crozier 2020).

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 the following species or destroy or adversely modify its designated critical habitat:

- Lower Columbia River Chinook salmon
- Upper Willamette River Chinook salmon
- Upper Columbia River spring-run Chinook salmon
- Snake River spring/summer-run Chinook salmon
- Snake River fall-run Chinook salmon
- Columbia River chum salmon
- Lower Columbia River Coho salmon
- Snake River sockeye salmon
- Lower Columbia River steelhead
- Middle Columbia River steelhead
- Upper Columbia River steelhead
- Upper Willamette River steelhead
- Snake River Basin steelhead
- Southern DPS eulachon
- Southern DPS of green sturgeon
- Sunflower sea star

## **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 because some individuals of salmon, steelhead, green sturgeon, eulachon, and sunflower sea stars in the action area will be indirectly harmed due to habitat modification from stormwater runoff from impervious surfaces. Long-term adverse effects of the proposed actions will include reduced water quality due to increased impervious surfaces and stormwater inputs of heavy metals, suspended solids, petroleum hydrocarbons, excess nutrients, pesticides, 6PPD-quinone, and other trace pollutants. This habitat modification can significantly impair essential breeding, spawning, rearing, migrating, feeding, or sheltering behavioral patterns such that fish will be



injured or killed from the increase in pollution or will experience a reduction in fitness, growth or survival.

Accurately quantifying the number of fish, or sea stars harmed by these pathways is not possible because injury and death of individuals in the action area is a function of habitat quality, competition, predation, and the interaction of processes that influence genetic, population, and environmental characteristics. These biotic and environmental processes are highly variable and interact in ways that may be random or directional, and may operate across broad temporal and spatial scales. The precise distribution and abundance of fish within the action area, at the time of the action are not a simple function of the quantity, quality, or availability of predictable habitat resources within that area. Rather, the distribution and abundance of fish also show wide, random variations due to biological and environmental processes operating at much larger demographic and regional scales. Furthermore, there are no methods available to monitor this death and injury because it will occur throughout the year and after the proposed action has been completed. Therefore it is not practical or realistic to attempt to identify and monitor the number of fish or sea stars taken by the pathways described.

In cases such as this, where quantifying a number of fish and sea stars is not possible, we use take surrogates or take indicators that rationally reflect the incidental take caused by the proposed action. Here, the best available indicator for the extent of take is the following combination of stormwater facility inspection, maintenance, and recording actions, because those variables will determine whether the proposed stormwater treatment system continues to reduce the concentration of pollutants in stormwater runoff as designed, and thus reflect the amount of incidental take analyzed in the opinion. This indicator is appropriate for the proposed action because it has a rational connection to the release of stormwater pollutants that cause take of listed species.

1. Each part of the proposed stormwater system described in the proposed action, including the proposed vegetated filter strips must be inspected and maintained at least quarterly for the first three years, at least twice a year thereafter, and at least three times per water year (for the first three years) within 48- hours following a storm event with more than 1 inch of rain over a 24-hour period.
  - a. All stormwater must drain out of the vegetated filter strips within 24-hours after rainfall ends, and out of the constructed or expanded vegetated stormwater ditches within 48-hours after rainfall ends.
  - b. All stormwater system components must freely convey stormwater.
  - c. Desirable vegetation in the vegetated filter strips and constructed or expanded stormwater ditches must cover at least 80% of the facility within 3 years – excluding dead or stressed vegetation, dry grass or other plants, and weeds.

If the stormwater system is not inspected and maintained (as described in #1); if water ponds in the filter strips for longer than 24 hours, or in the constructed or expanded vegetated stormwater ditches for longer than 48 hours, after rainfall ends (#1a), stormwater is not conveyed freely through the system (#1b), or if desirable vegetation does not cover 80% of the filter strips and constructed or expanded stormwater ditches (#1c) and corrective action is not taken with respect

to #1a-c within seven days of a required inspection, the extent of take surrogate for stormwater will be exceeded.

The amount or extent of take in this ITS serves two functions: (1) it identifies the quantity of incidental take exempted for the action agency and applicant. In the case of a species without 4(d) protective regulations, such as the sunflower sea star, the exemption is not needed because incidental take is not prohibited; and (2) it serves as a check on NMFS's jeopardy analysis. The amount or extent of take identifies the anticipated level of take NMFS considered in reaching its conclusion that the proposed action will not jeopardize the continued existence of a listed species. If this level of take is exceeded, reinitiation of consultation is triggered to ensure that NMFS's no-jeopardy conclusion remains valid.

### **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). The following measures are necessary or appropriate to minimize the extent of incidental take of listed species from the proposed action:

1. The FAA will minimize take from exposure to stormwater pollutants associated with new and reconstructed impervious surfaces by ensuring that stormwater runoff produced by impervious surfaces of the PDX and HIO airports that are modified through the proposed actions are treated with stormwater facilities that are designed, constructed, operated, and maintained using the best available information on low impact development and best management practices for stormwater treatment and discharge; and
2. The FAA will minimize take by ensuring the completion of a monitoring and reporting program to confirm that the take exemption of the proposed action is not exceeded, and that the terms and conditions in this incidental take statement are effective in minimizing incidental take.

### **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 FAA 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 (stormwater management):
  - a. The project developer will be responsible for insuring installation, function and maintenance of the proposed stormwater facilities during construction as described in the proposed action.
  - b. Following construction, the Port or any successor in interest to the project developer will assume responsibility for maintenance of all of the system components per the manufacturers recommendations and as described in the BA and in the Port's stormwater management plans for PDX and HIO.
  - c. The Port will carry out the stormwater operation and maintenance plans as described in the BA including all provisions pertaining to: identification of responsible parties, inspection and maintenance schedule, and inspection and maintenance procedures. The Port will also keep and preserve a log of all maintenance activities.
2. The following terms and conditions implement reasonable and prudent measure 2 (monitoring and reporting):
  - a. The FAA shall submit the following reports to NMFS:
    - i. A project completion report within 60-days of completing construction for each of the five proposed activities, including:
      1. Project name;
      2. FAA contact person;
      3. Construction completion date.
    - ii. Three annual reports on stormwater facility operation and maintenance for three full years following construction, including the following information:
      1. Stormwater facility monitoring logs with:
        - a. The name of the employee or contractor for all inspections;
        - b. The date of each regular inspection, and any additional inspection made within 48-hours of storm events with greater than or equal to 1 inch of rain during a 24-hour period;
        - c. A description of any structural repairs or facility cleanout, e.g., sediment and oil removal and disposal, vegetation management, erosion control, ponding water, pests, trash or debris removal; and
        - d. An estimate of the percent cover of healthy vegetation in the filter strips and constructed or expanded stormwater ditches, including a description of any corrective action needed to ensure 80%
    - iii. Each of the above reports must be submitted to:  
[Projectreports.wcr@noaa.gov](mailto:Projectreports.wcr@noaa.gov)  
Attn: WCRO-2024-00837

## **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). No conservation recommendations are included with this Opinion.

## **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 the FAA’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 the following NMFS ESA-listed species and/or designated critical habitat:

- Southern Resident DPS Killer Whale

## **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 proposed actions would adversely affect EFH designated under the:

- Pacific Coast Salmon Fishery Management Plan (PFMC 2024);
- Pacific Coast Groundfish Fishery Management Plan (PFMC 2023), and;
- Coastal Pelagic Species Fishery Management Plan (PFMC 2019).

## **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 (PFMC 2014), Pacific Coast groundfish (PFMC 2005), and coastal pelagic species (PFMC 2019) Fishery Management Plans (FMP).

In addition, the project occurs within, or in the vicinity of the Columbia River estuary which is designated as a habitat area of particular concern (HAPC) for various federally managed fish species within the Pacific Coast Salmon FMP, Pacific Coast Groundfish FMP, and the coastal pelagic species FMP. HAPC are described in the regulations as subsets of EFH which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under the MSA; however, federal projects with potential adverse impacts on HAPC will be more carefully scrutinized during the consultation process.

### **Adverse Effects on EFH**

NMFS determined the proposed action would adversely affect EFH in freshwater and estuarine EFH quality, including the associated HAPCs, will be reduced by pollutants in stormwater runoff with episodic and permanent effects on water quality.

## **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:

- The FAA should implement RPM 1 above to minimize the delivery of stormwater pollutants to streams containing EFH for Pacific Coast salmon, Pacific Coast groundfish, coastal pelagic species, and HAPCs. Implementation of RPM 1 including the required Terms and Conditions will serve as EFH conservation measures.

## **Statutory Response Requirement**

As required by section 305(b)(4)(B) of the MSA, FAA 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 FAA 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/>]. A complete record of this consultation is on file at the Oregon Washington Coastal Office in Portland, Oregon.

Please direct questions regarding this letter to Kailee McKinney, ESA Consultation Biologist in the Oregon Washington Coastal Office at 503.872.2854 or [kailee.mckinney@noaa.gov](mailto:kailee.mckinney@noaa.gov).

Sincerely,



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Assistant Regional Administrator  
Oregon Washington Coastal Office

cc: Adam Merrill, Federal Aviation Administration  
Ilon Logan, Federal Aviation Administration  
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Michelle Hollis, Port of Portland  
Nick Atwell, Port of Portland

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