



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

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January 23, 2026

Yamilee Volcy
Acting Division Administrator
Federal Highway Administration – Washington Division
711 Capitol Way South, Suite 501 Evergreen Plaza
Olympia, Washington 98501-1284

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson–Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the South 360th Street at Military Road South Intersection Improvement Project #1131235

Dear Mr. Rizzo:

This letter responds to your August 22, 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 Highway Administration (FHWA) 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 Biological Assessment (Harris 2024) we have incorporated by reference and where that information is being incorporated. A copy of the biological assessment (BA) can be obtained from the Interior Columbia Basin Office in Boise, Idaho.

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 Pacific Coast Salmon Fishery Management Plan. A complete list of EFH conservation recommendations (EFH CRs) are provided in the EFH Conservation Recommendations section near the end of this document.



Consultation History

The FHWA submitted a biological assessment (BA; Harris 2024) to the NMFS Oregon-Washington Coastal Office on August 22, 2024. Given staffing constraints, this project was not assigned to a biologist until it was transferred to the NMFS Interior Columbia Basin Office on September 25, 2025. Consultation was held in abeyance for 43 days due to a lapse in appropriations and resulting government shutdown. Consultation resumed on November 13, 2025. On November 20, 2025, NMFS sent a letter to FHWA confirming initiation of formal consultation on August 22, 2024.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on May 6, 2024 (89 FR 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 ESA (89 FR 24268; 84 FR 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).

Proposed Action

King County Department of Local Services, Road Services Division is planning to construct a new single-lane roundabout at the intersection of South 360th Street and Military Road South. The project will include widened shoulders and sidewalks for non-motorized use, pedestrian splitter islands, crosswalks, signs, and illumination. The project also includes utility relocations, drainage improvements, roadside restoration, and water quality treatment. The treatment will consist of two stormwater wetlands, two bioswales, and wetland buffer enhancement activities. King County will receive funding from the Federal Highway Administration. A Clean Water Act Section 404 authorization from the U.S. Army Corps of Engineers will also be secured prior to project implementation. We adopt by reference Section 1.3 Project Description (pages 1-14) of the BA (Harris 2024). In summary:

- This project anticipates achieving Level 2 flow control [historic site conditions that limit the amount of time that erosive flows generate sedimentation in drainage systems (King County 2024)] with the development of two stormwater wetlands and two bio-infiltration swales.
- The project will require the felling of 77 trees, most of which will be removed to accommodate construction of the two stormwater wetlands.
- This project will increase the amount of traffic at this intersection, but does not anticipate increases of development throughout the area.
- This project will increase the amount of Pollution-Generating Impervious Surface (PGIS) by 0.61 acres.

- The revised intersection will have four Threshold Discharge Areas (TDAs) for removing stormwater from the area. The amount of PGIS in each TDA varies as: TDA 1 = 0.18 acres; TDA 2 = 0.42 acres; TDA 3 = 0.01 acre; and TDA 4 = 0.01 acre.
- All of the stormwater discharge will collectively flow southwesterly to Fivemile Lake, then to Trout Lake, then south to Jovita Creek, and eventually to the White River, the Puyallup River, and finally to Puget Sound.
- Stormwater from the TDAs will flow through a variety of wetlands, ditches, and vegetated areas before reaching the open surface flow at Fivemile Lake. The distances of stormwater flows vary as: TDA 1 = 1,931 feet; TDA 2 = 4,656 feet; TDA 3 = 3,263 feet; and TDA 4 = 4,479 feet.

BIOLOGICAL OPINION

Status of Species and Designated Critical Habitat.

This opinion examines the status of each species that is likely to be adversely affected by the proposed action. The status is determined by the level of extinction risk of the listed species based on documented recovery plans, status reviews, and listing decisions. This informs the description of the species' likelihood of both survival and recovery. This also helps inform the description of the species' "reproduction, numbers, or distribution" as described in 50 CFR 402.02. This opinion also examines the condition of designated critical habitat throughout the designated area and discusses the function of the physical or biological features (PBFs) essential to the conservation of the species that create the conservation value of that habitat. We adopt by reference Section 2.0 Status of Species and Critical Habitat in the Action Area (pages 15-26) of the BA (Harris 2024).

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: Not Likely to Adversely Affect Determinations.

Status of the Species. Table 1 provides a summary of listing and recovery plan information, status summaries and limiting factors for the Puget Sound Chinook salmon (PS Chinook salmon) evolutionarily significant unit (ESU) and Puget Sound steelhead (PS steelhead) distinct population segment (DPS). More information can be found in recovery plans and status reviews for these species.

Table 1. Listing classification and date, recovery plan reference, most recent status review, status summary, and limiting factors for each species considered in this opinion (NMFS 2025).

Species	Listing Classification and Date	Recovery Plan Reference	Most Recent Status Review	Status Summary	Limiting Factors
Puget Sound Chinook salmon	Threatened 6/28/05 (70 FR 37159)	Shared Strategy for Puget Sound 2007	NMFS 2017; Ford 2022	<p>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.</p>	<ul style="list-style-type: none"> 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	Threatened 5/11/07	NMFS 2019	NMFS 2017; Ford 2022	<p>This DPS comprises 32 populations. Viability has improved somewhat since the PSTRT concluded that the DPS was at very low viability, as were all three of its constituent MPG, and many of its 32 DIPs. 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 MPG, primarily among smaller populations. There were also declines for summer- and winter-run populations in the Snohomish River basin. In fact, all</p>	<ul style="list-style-type: none"> 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

Species	Listing Classification and Date	Recovery Plan Reference	Most Recent Status Review	Status Summary	Limiting Factors
				summer-run steelhead populations in the Northern Cascades MPG are likely at a very high demographic risk.	<ul style="list-style-type: none"> • Reduced habitat quality • Urbanization • Dikes, hardening of banks with riprap, and channelization

Acronyms: DIP - Demographically Independent Population, DPS - Distinct Population Segment, ESU - Evolutionarily Significant Unit, MPG - Multiple Population Group, PSTRT - Puget Sound Technical Recovery Team, and TRT - Technical Recovery Team.

Designated Critical Habitat. For most salmon and steelhead, NMFS's critical habitat analytical review teams (CHARTs) ranked watersheds within designated critical habitat at the scale of the fifth-field hydrologic unit code (HUC5) in terms of the conservation value they provide to each ESA-listed species that they support (NMFS 2025). The conservation rankings were high, medium, or low. To determine the conservation value of each watershed to species viability, the CHARTs evaluated the quantity and quality of habitat features, the relationship of the area compared to other areas within the species' range, and the significance to the species of the population occupying that area. Even if a location had poor habitat quality, it could be ranked with a high conservation value if it were essential due to factors such as limited availability, a unique contribution of the population it served, or is serving another important role. A summary of the status of critical habitats considered in this opinion is provided in Table 2, below.

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	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 mile 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.
Puget Sound steelhead	2/24/16, 81 FR 9252	Critical habitat for Puget Sound steelhead includes 2,031 stream miles. Nearshore and offshore marine waters were not designated for this species. There are 66 watersheds within the range of this DPS. Nine watersheds received a low conservation value rating, 16 received a medium rating, and 41 received a high rating to the DPS.

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 in this case includes two zones that encompass the extent of project-related effects: (1) the project area and (2) the zone of effects on water quality from stormwater discharge associated with the proposed action. The action area includes the entirety of the parcels in which the proposed action will occur, including stormwater discharge points that drain downstream to a tributary to the Puyallup River, and the Puyallup River, which then discharges to Puget Sound. Because the water quality zone of effects from stormwater constituents extends from the point of discharge downstream to Puget Sound, the action area extends from the immediate project site to Puget Sound. We incorporate by reference Section 1.5 Action Area (pages 15-17) of the BA (Harris 2024).

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). We incorporate by reference Section 3.0 Environmental Setting (pages 27-34) of the BA (Harris 2024).

Page 32 of the BA (Harris 2024) states the project area drains into Fivemile Lake (approximately 0.65 miles downstream from the project area), then to Trout Lake through a series of ditches and culverts. Trout Lake drains into Jovita Creek, which flows southeast for 1.6 miles to the Milwaukee Canal (also known as Mill Creek). At approximately 2.0 miles downstream from the project area is a fish barrier culvert on Jovita Creek flowing under South 384th Street. The Milwaukee Canal flows south for approximately 3.5 miles where it joins the White River at river mile 1.3. The White River joins the Puyallup River at river mile 10.4, then flows into Puget Sound at Commencement Bay in Tacoma.

The fish barrier culvert on Jovita Creek near South 384th Street has been identified by Washington Dept. of Fish and Wildlife as a barrier to spawning steelhead (WDFW 2025). Chinook Salmon fry have been documented in Milwaukee Canal (Ladley 2025).

PS Chinook salmon return to the White River starting in mid-May and run through the end of August. Spawning occurs in September and October (SSDC 2007). PS steelhead are predominantly winter-run which return to the White River in the fall, and typically spawn in the spring (NMFS 2019).

The fish barrier culvert on Jovita Creek is the nearest upper extent of designated critical habitat for steelhead within the downstream flow path of the project site. The White River is the nearest upper extent of designated critical habitat for PS Chinook salmon within the downstream flow path of the project site.

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.

Sections 4 Analysis of Effects (pages 34-38) and 5 Conclusions and Effects Determinations (pages 38-42), along with Appendix D (pages D1-D4) and Appendix E (pages E1-E7) of the BA (Harris 2024) provide a discussion and assessment of the proposed action, and are adopted here. We have evaluated this section and after our independent, science-based evaluation determined it meets our regulatory and scientific standards.

The construction activities of this project are not anticipated to have any immediate or direct impacts on ESA-listed species. We summarize the construction effects of the action to species from the BA as follows:

- The project will clear approximately 2.37 acres of existing vegetation. The project will require the felling of 77 trees, most of which will be removed to accommodate construction of the two stormwater wetlands.
- No in-stream work will occur. In-water work is limited to placement of fill within a small portion of three forested/shrub-scrub wetlands with seasonal hydrology which may result in an increase in turbidity if surface water is present at the time. In the event that surface water is present during construction, any turbidity would be short in duration and would be anticipated to extend less than 300 feet downstream through the wetlands, far short of any fish-bearing waters.
- Construction noise will not have any impact on ESA-listed salmonid species.
- There are no direct effects that are anticipated to impact ESA-listed species or their habitats, including designated Critical Habitat, because no suitable habitat or Critical Habitat for terrestrial ESA-listed species occurs in the project action area.

We summarize the potential delayed stormwater runoff effects of the action to species from the BA as follows:

- The biological assessment determined that the stormwater treatment provided by the project, combined with the natural treatment and dilution provided along the downstream flow path, is likely to significantly reduce the amount of 6PPD-q in the water column, potentially reducing its impact on ESA-listed salmonids and their prey.

- Somepalli and Andaluri (2025) found that removal strategies of 6PPD-q including Advanced Oxidation Processes, microbial degradation, and adsorption have demonstrated significant efficiency, but environmental factors contribute to various levels persisting.
- Johannessen et al. (2022) demonstrated that wetlands, bioswales and other treatment processes significantly reduce 6PPD-q from the water column. It is not yet fully known how long 6PPD-q remains contained in the treatment media, any rate of degradation into less lethal chemicals, and if subsequent rain events or floods can mobilize 6PPD-q back into the water column.
- Bioaccumulation of 6PPD-q is a serious concern for the long-term impacts on ecosystems and vulnerable species (Ihenetu et al. 2024)
- It is assumed that any increase in stormwater runoff from new PGIS that cannot be fully dispersed or infiltrated will result in an adverse impact to Chinook and steelhead, whether through direct toxicity or indirectly by affecting their prey.

The construction activities of this project are not anticipated to have any immediate or direct impacts on designated critical habitat. We summarize the potential delayed effects of stormwater runoff to the water quality physical and biological feature (PBF) of designated critical habitat from the BA as follows:

- This project will increase the amount of traffic at this intersection, but does not anticipate increases of development throughout the area which would further escalate the volume of traffic.
- A Highway Runoff Analysis was conducted to focus on potential increases of dissolved copper and dissolved zinc. The greatest distance along the downstream path needed to reduce dissolved copper below the biological threshold is: TDA 1 = 120 feet; TDA 2 = 520 feet; TDA 3 = 340 feet; and TDA 4 = 340 feet. The distance required to reduce dissolved zinc to below the biological threshold was less than one foot for all four TDAs.
- There is potential for 6PPD-q that is contained in the treatment media, and is not degraded into less lethal chemicals, to be mobilized back into the water column by subsequent rain events or floods.

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. NMFS expects the cumulative effects of continued increases of vehicle traffic and associated pollutants in stormwater within the action area will continue to have a negative effect on the ESA-listed species considered in this opinion.

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.

The FHWA proposes to fund a King County project to improve the South 360th Street and Military Road intersection in order to lesson traffic congestion. Due to water quality effects from stormwater discharge, the action area includes the entirety of the parcels in which the proposed action will occur downstream to Puget Sound. The current level of vehicle traffic is already contributing a small level of contaminants to the action area through stormwater runoff. Those contaminants are currently having an unknown impact on ESA-listed salmon and steelhead, and designated critical habitat.

The construction activities of this project are not anticipated to have any immediate or direct impacts on ESA-listed salmon and steelhead, or to designated critical habitat. The potential impacts of this project are likely to be delayed, and persist long term, because of possible contaminants in ongoing stormwater runoff. While minimal, any increase in stormwater runoff from new PGIS that cannot be fully dispersed or infiltrated will result in an adverse effect to individuals of PS Chinook salmon of the White River and Puyallup River populations, and PS steelhead of the White River and Puyallup River demographically independent populations (DIP). This could be through direct toxicity or indirectly by affecting their prey. Likewise, there is potential for 6PPD-q that is contained in the treatment media, and is not degraded into less lethal chemicals, to be mobilized back into the water column by subsequent rain events or floods and adversely affect the water quality PBF of designated critical habitat.

It is reasonably certain that additional development will occur within or adjacent to the Action Area in the future. It is also assumed that other future development within the terrestrial portion of the Action Area would include some amount of PGIS. We cannot quantify the potential increase in PGIS associated with future development in the terrestrial portion of the Action Area, it is reasonably certain that it will result in increased stormwater runoff and increased pollutant loading to fish-bearing waters within the Action Area. Individuals of these populations will continue to suffer adverse effects from the discharge of untreated impervious surface runoff into streams within the project area over the life of the project.

Both PS Chinook salmon and PS steelhead are currently classified as threatened. The populations of both species in the action area are extremely small, and their recovery is threatened due to reduced or eliminated access to historically important habitats, compounded by degraded conditions in available habitats resulting from various land use activities. Given the few individuals affected in each population, we do not expect the exposure will alter the productivity of the populations, and thus we do not expect to see changes in productivity at the Major Population Group (MPG) scale. Thus, we expect the proposed action will not alter the survival or recovery of the PS Chinook salmon ESU or PS steelhead DPS.

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 or destroy or adversely modify their designated critical habitats.

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 this biological opinion, NMFS determined that incidental take is reasonably certain to occur from direct exposure to contaminants in stormwater runoff, including heavy metals, and 6PPD-q.

We cannot estimate the number of PS Chinook salmon or PS steelhead that would be exposed to stormwater contaminants, nor can we estimate the number of PS Chinook salmon or PS steelhead that would experience adverse effects from reduced prey base and exposure to stormwater with any meaningful level of accuracy. In such circumstances, NMFS provides an "extent of take" which is based on an observable aspect of the proposed action causally related to the harm.

In this case, the extent of take is 1.64 acres of PGIS (1.02 acres of replaced existing and 0.62 acres of new). This extent is easily observable, and is causally related to the source of harm, as a larger impervious area would contribute more stormwater runoff and that increased volume would increase both the area affected and load of contaminants, exposing more individuals of the listed species and their prey. Re-initiation shall be triggered if PGIS in excess of that described in the proposed action is constructed.

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 when the reasonable and prudent alternatives are implemented.

Reasonable and Prudent Measures.

The “reasonable and prudent measures” (RPMs) listed below are measures that are necessary or appropriate to minimize and/or monitor the impact of the amount or extent of incidental take (50 CFR 402.02).

1. Minimize incidental take of PS Chinook salmon and PS steelhead associated with untreated stormwater discharge.
2. Track, monitor, and report on the proposed action to ensure the action is implemented as proposed.

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 FHWA 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 term and condition implements RPM #1:
 - a. Ensure the project does not exceed the design specifications and creates no more than 1.64 acres of new and replaced PGIS.
2. The following terms and conditions implement RPM #2:
 - a. Within 90 days of completion of the proposed action, the FHWA shall provide NMFS with an as-built report. The report shall include, at a minimum:
 1. The total number of days and the dates associated with in-water work;
 2. The total amount of untreated PGIS created.
 3. Post-construction stormwater treatment performance in relations to specifications outlined in Term and Condition 2 above.
 4. A description of any adaptive changes that occurred on-site, including the rationale for those changes and how they were implemented.
 5. Documentation of any BMP incidents that occurred during construction.
 - b. The as-built report will be sent to the NMFS Boise office via email – icbd.reports.wcr@noaa.gov – using the consultation tracking number “WCRO-2024-02083” and “As-Built Report” in the subject line.

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).

1. Require Environmental Awareness and Spill Kit Implementation Training for all personnel working at the project site. When all persons involved with the project activities are conscious of potential environmental issues, it increases attention to possibly harmful activities, and decreases additional incidental take.
2. Develop and implement a regular street sweeping maintenance schedule to remove tire particles and contaminants from the roadway. This prevents unnecessary contaminants from entering the natural drainage system.
3. Participate in a monitoring and reporting program, such as the Washington Department of Ecology Stormwater Action Monitoring (SAM), which monitors stormwater pollutants. The project's treatment facilities can be proposed to the SAM program as a preferred monitoring location to inform BMP effectiveness.

Re-initiation of Consultation.

Under 50 CFR 402.16(a): “Re-initiation of consultation is required and shall be requested by the federal agency or by the Service where discretionary federal agency 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.”

Not Likely to Adversely Affect Determinations.

We reviewed the FHWA 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 Southern Resident Killer Whale or its critical habitat.

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 Pacific Coast Salmon Fishery Management Plan (PFMC 2014) and provide EFH conservation recommendations below.

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 (PFMC 2014). Some projects occur within, or in the vicinity of areas designated as a habitat area of particular concern (HAPC) for various federally managed fish species within this 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. It has been determined that this project does not occur within or near any designated HAPCs, and is clear of this designation.

Adverse Effects on EFH

Based on the information provided in the BA (Harris 2024), NMFS determined the proposed action would adversely affect EFH for Pacific Coast Salmon as follows:

1. Water quality – The proposed action would cause long-term incremental adverse effects on this attribute. Over the life of the roundabout, treated and untreated stormwater would discharge residual levels of petroleum-based pollutants, metals, and other contaminants into the stormwater drainage system, flowing downstream through Jovita Creek, the White River, the Puyallup River and eventually to Puget Sound.
2. Prey availability – The proposed action would cause long-term low level chronic adverse effects on this attribute. Over the life of the roundabout, untreated stormwater would

provide a persistent source of contaminants that could be taken up by benthic invertebrates that are forage resources for juvenile Chinook salmon and steelhead. Prey communities exposed to the various contaminants in stormwater may be reduced in quantity, composition, and quality if they accumulate toxins.

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. Reduce the future stormwater contamination risk of the 1.64 acres of total PGIS. For example, consider adding additional landscaping or increasing the frequency of street sweeping.
2. Participate in a monitoring and reporting program, such as the Washington Department of Ecology Stormwater Action Monitoring (SAM), which monitors stormwater pollutants. The project site can be proposed to the SAM program as a preferred monitoring location to inform BMP effectiveness.

Statutory Response Requirement

As required by section 305(b)(4)(B) of the MSA, [insert agency name] 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 FHWA 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 Interior Columbia Basin Office in Boise, Idaho.

Please contact Phillip Buser, 208-477-1593 or phillip.buser@noaa.gov, if you have any questions concerning this consultation, or if you require additional information.

Sincerely,

A handwritten signature in blue ink that reads "Nancy L Munn".

Nancy L. Munn, Ph.D.
Assistant Regional Administrator for the
Interior Columbia Basin Office

cc: William Witucki – FHWA
Cindy Callahan – FHWA
Melanie Vance - WSDOT

REFERENCES

Ford, M. J. (editor). 2022. Biological Viability Assessment Update for Pacific Salmon and Steelhead Listed Under the Endangered Species Act: Pacific Northwest. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-171.

Ihenetu, S.C., Q. Xu, Z.H. Khan, S.S. Kazmi, J. Ding, Q. Sun, and G. Li. 2024. Environmental Fate of Tire-Rubber Related Pollutants 6PPD and 6PPD-Q: A Review. Elsevier Environmenal Research.

Johannessen, C., P.Helm, B. Lashuk, V. Yargeau, and C. D. Metcalfe. 2022. The Tire Wear Compounds 6PPD-Quinone and 1,3-Diphenylguanidine in an Urban Watershed. Archives of Environmental Contamination and Toxicology. Volume 82, 171-179.

King County. 2024. King County, Washington Surface Water Design Manual. King County Department of Natural Resources and Parks. Seattle, WA.

Ladley, R. 2025. Puyallup Tribal Fisheries personal communication. November 2025.

NMFS (National Marine Fisheries Service). 2017. 2016 5-Year Review: Summary & Evaluation of Puget Sound Chinook Salmon Hood Canal Summer-run Chum Salmon Puget Sound Steelhead. [https: repository.library.noaa.gov/view/noaa/17015](https://repository.library.noaa.gov/view/noaa/17015).

NMFS (National Marine Fisheries Service). 2019. ESA Recovery Plan for the Puget Sound Steelhead Distinct Population Segment (*Oncorhynchus mykiss*). National Marine Fisheries Service. Seattle, WA.

NMFS. 2024a. Snake River spring/summer Chinook salmon, status of the species update, July 2024. On file at the National Marine Fisheries Service, Snake River Basin Office, Boise, Idaho. Also available at: <https://www.fisheries.noaa.gov/s3/2024-08/status-species-snake-river-spring-summer-chinook-salmon-july-2024.pdf>

NMFS. 2024b. Snake River fall-run Chinook Salmon, status of the species, July 2024. On file at the National Marine Fisheries Service, Snake River Basin Office, Boise, Idaho. Also available at: <https://www.fisheries.noaa.gov/s3/2024-08/status-species-snake-river-fall-chinook-salmon-jul-2024.pdf>

NMFS. 2024c. Snake River sockeye salmon, status of the species update, July 2024. On file at the National Marine Fisheries Service, Snake River Basin Office, Boise, Idaho. Also available at: <https://www.fisheries.noaa.gov/s3/2024-08/status-species-snake-river-sockeye-salmon-july-2024.pdf>

NMFS. 2024d. Snake River basin steelhead, status of the species update, July 2024. On file at the National Marine Fisheries Service, Snake River Basin Office, Boise, Idaho. Also available at: <https://www.fisheries.noaa.gov/s3/2024-08/status-species-snake-river-basin-steelhead-july-2024.pdf>

NMFS (National Marine Fisheries Service). 2025. Oregon Washington Coastal Office Species and Critical Habitat Status References, Updated. National Marine Fisheries Service. Portland, OR.

PFMC. 2014. Appendix A to the Pacific Coast Salmon Fishery Management Plan, as modified by Amendment 18. Identification and description of essential fish habitat, adverse impacts, and recommended conservation measures for salmon.

Somepalli, K., and G. Andaluri. 2025. Transformation Pathways, Detection, Removal, and Sustainable Alternatives of 6PPD and its Quinone Derivative (6PPDQ): A Comprehensive Review. KeAi Emerging Contaminants.

SSDC (Shared Strategy Development Committee). 2007. Puget Sound Salmon Recovery Plan, Vol. 1. Shared Strategy for Puget Sound, Seattle, WA.

Washington Department of Fish and Wildlife (WDFW). 2025. Washington State Fish Passage. Online at: <https://geodataservices.wdfw.wa.gov/hp/fishpassage/index.html>. Accessed: October 2025.