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-2019-00706

January 22, 2021

Michelle Walker
Chief, Regulatory Branch
United States Army Corps of Engineers
Seattle District
P.O. Box 3755
Seattle, Washington 98124-3755

Re: Endangered Species Act Section 7 Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Collins Pier, Ramp and Float Replacement, and Bulkhead Repair Project, Mason County, Washington

Dear Ms. Walker:

This letter is in response to your June 4, 2019, request for Endangered Species Act (ESA) consultation with the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the ESA on the effects of the U.S. Army Corps of Engineers (COE) authorizing the above named action based on the COE's permitting authority under the Clean Water Act (Section 404).

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 COE's consultation request and Memorandum for the Services (MFS), and related initiation package, including a Biological Evaluation (BE) prepared by BioResources, LLC (February 11, 2019). Where relevant, we adopted the information and analyses provided in the BE, but only after our independent, science-based evaluation confirmed they meet our regulatory and scientific standards. We adopt by reference here the following sections of the BE:

- Sections 1.0 and 2.0 for the description of the proposed action, including the purpose and need;
- Section 3.0 for the description of the action area;
- Section 4.0 for the status of species and critical habitat;
- Section 5.0 for the environmental baseline; and
- Section 6.0 for the effects of the proposed action and cumulative effects.

We also adopt by reference additional clarifying information for the description of the proposed action and environmental baseline provided by the applicant via email on October 28, 2019 and December 2, 2019. All consultation documents are available on file at the NMFS Oregon Washington Coastal Office in Lacey, Washington. On October 28, 2019, NMFS initiated formal consultation for the proposed action.

"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 project site is located along the eastern shore of Lake Cushman in Mason County, Washington (47.45481 N, -123.21686 W; see MFS and Vicinity Map in Project Drawings provided in December 2, 2019 email). The action area is determined by the greatest extent of effects stemming from the project. In this case, this includes in-water areas 150 feet from in-water construction areas (areas below OHW) to account for the turbidity point of compliance for temporary mixing zones in lakes (WAC 173- 201A-200).

Designated critical habitat for Puget Sound (PS) Chinook salmon (designated 9/2/2005; 70 FR 52630) occurs within the action area (BE, Section 4.1). Likely adverse effects of the proposed action on critical habitat include the permanent habitat modification and displacement by the footprint of the posts, piles and bulkhead. Contrary to the BE, but in agreement with the MFS, we expect that this effect would be sufficient to reduce the capability of designated critical habitat to meet the biological requirements of listed species, and therefore to be 'likely to adversely affect' (LAA) critical habitat. Therefore, contrary to both the BE and MFS, we also anticipate that the proposed action would be LAA PS Chinook salmon (designated threatened on 6/28/2005; 70 FR 37160) occurring in the action area.

Although not currently present in the action area, nor addressed in the BE, we expect PS steelhead (designated as threatened 5/11/2007; 72 FR 26722) to occur in the action area over the life of the proposed permanent structures (50 years), based on fish supplementation and fish passage provisions for the Cushman Project (see Settlement Agreement for the Cushman Project, January 12, 2009[1]; and the NMFS' 2010 Supplemental Biological Opinion for the Settlement Agreement[2]). Due to the requirements of these agreements, the future presence of PS steelhead in Lake Cushman is reasonably certain to occur. Contrary to the NLAA determination in the MFS for PS steelhead, we anticipate that the permanent modification of habitat by proposed structures, similar to that of PS Chinook salmon, would be LAA PS steelhead occurring in the action area in the future. There is no designated critical habitat for PS steelhead in the action area.

We used information in BE Sections 3, 4, and 5, to examine the status of PS Chinook salmon, and the condition of habitat for PS Chinook salmon and steelhead throughout the designated area, including the function of the physical or biological features (PBFs) essential to the conservation of the PS Chinook salmon that create the conservation value of PS Chinook salmon critical habitat. We also considered information in the recovery plans for PS Chinook salmon (Shared Strategy for PS 2007[3]) and PS steelhead (NMFS 2019[4]) describing the status, presence, abundance, density or periodic occurrence of listed species and the condition and location of the species' habitat, including critical habitat.

[1] Available at: https://www.mytpu.org/wp-content/uploads/cushman-dam-settlement-2009.pdf. Accessed September 13, 2020.
[2] NMFS Supplemental Biological Opinion and Essential Fish Habitat Consultation for the Cushman Hydroelectric Project, FERC Project Number 460, March 31, 2010.
[3] Shared Strategy for Puget Sound. 2007. Puget Sound salmon recovery plan. Volume 1, recovery plan. Shared Strategy for Puget Sound. Seattle.
[4] NMFS. 2019. ESA Recovery Plan for the Puget Sound Steelhead Distinct Population Segment (Oncorhynchus mykiss). National Marine Fisheries Service. Seattle, WA.

We used information in sections 5 and 6 of the BE to examine the "environmental baseline" and "cumulative effects," including the past and present impacts of Federal, State, or private actions and other human activities in the action area, the anticipated impacts of proposed Federal actions 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 (50 CFR 402.02). 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 also part of the environmental baseline.

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).

Section 6 of the BE provide a detailed discussion and comprehensive assessment of the effects of the proposed action, and are adopted here pursuant to 50 CFR 402.14(h)(3)(i). NMFS evaluated this section of the BE and after our independent, science-based evaluation, determined that it meets our regulatory and scientific standards. PS Chinook salmon are likely to be exposed to, and respond to long-term, permanent structure effects of the proposed action, as discussed in Section 6 of the BE. We anticipate that the long-term habitat effects of permanent structures would also similarly affect PS steelhead, but they are not expected to be present during proposed construction.

As described in Section 4 of the BE and information cited therein, individual PS Chinook salmon use the action area to complete part of their life-history requirements. Currently, individuals of a landlocked Lake Cushman population of PS Chinook salmon (upstream of Dam Number 1) migrate and rear in the action area, spawning upstream of the lake in the North Fork Skokomish River. The landlocked population is not considered a viable independent population of the PS Chinook salmon evolutionarily significant unit (ESU)[5], and thus they do not contribute to ESU population viability. With upstream and downstream passage provided at the Cushman dams in the future[6] [7], we expect migratory PS Chinook salmon that are part of the ESU, as well as PS steelhead, to migrate and rear in the action area.

Both species have declined due to numerous factors. One factor for decline that these species share is degradation of freshwater and estuarine habitat. Human development in the Pacific Northwest has caused significant negative changes to stream and estuary habitat across the range

[5] Ruckelshaus, M.H., K.P. Currens, W.H. Graeber, R.R. Fuerstenberg, K. Rawson, N.J. Sands, J.B. Scott. 2006. Independent populations of Chinook salmon in Puget Sound. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-NWFSC-78, 125 p.

[6] Settle Agreement for the Cushman Project, January 12, 2009. Available at: https://www.mytpu.org/wp-content/uploads/cushman-dam-settlement-2009.pdf. Accessed September 13, 2020.

[7] NMFS Supplemental Biological Opinion and Essential Fish Habitat Consultation for the Cushman Hydroelectric Project, FERC Project Number 460, March 31, 2010.

of these species. The status review update for Pacific salmon and steelhead[8] identified the following limiting factors for the recovery of PS Chinook salmon:

- Degraded floodplain and in-river channel structure;
- Degraded estuarine conditions and loss of estuarine habitat;
- Riparian area degradation 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
- Altered flow regime.

During the recovery planning process, NMFS identified 10 primary pressures that were associated with the listing decision for PS steelhead and subsequent affirmations of the listing[9]:

- Fish passage barriers at road crossings;
- Dams, including fish passage and flood control;
- Floodplain impairments, including agriculture;
- Residential, commercial, industrial development (including impervious runoff);
- Timber harvest management;
- Water withdrawals and altered flows;
- Ecological and genetic interactions between hatchery and natural-origin fish;
- Harvest pressures (including selective harvest) on natural-origin fish; and
- Juvenile mortality in estuary and marine waters of PS.

As described in Section 5 and 6 of the BE, the environmental baseline within the action area is degraded by a host of anthropogenic changes. Because of the Cushman Dam Number 1, water levels in the lake can fluctuate up to 21 meters (69 feet), and periodically inundate up to 12 hectares (30 acres) of land surrounding the inlet to the reservoir (Lake Cushman). This can result in high water temperatures in the inlet during summer months. Additionally, as a result of fluctuating water levels exposing much of the shoreline during winter months, there is little to no aquatic vegetation in the nearshore, and the lakebed of the action area nearshore is steep and severely scoured. It is also unlikely that benthic organisms thrive in the nearshores areas of the lake. The shoreline of the action area is also highly modified by the existing shoreline stabilization structures (bulkhead) and overwater structures (pier, ramp and float).

As described in Section 6.1 of the BE, effects of proposed construction actions would be short-term (i.e. 60-day construction period), localized and minor, and we do not expect adverse effects to designated critical habitat or ESA-listed species. Construction would occur when Lake Cushman water levels are low (below the construction area) to minimize suspension of sediment (turbidity). We expect that any elevated turbidity levels resulting from heavy precipitation during

[8] NWFSC (Northwest Fisheries Science Center). 2015. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest.
[9] NMFS. 2019. ESA Recovery Plan for the Puget Sound Steelhead Distinct Population Segment (*Oncorhynchus mykiss*). National Marine Fisheries Service. Seattle, WA.

construction or by the first inundation of the site when lake water levels rise in the spring/summer would be localized and minor, and would not result in a measurable reduction in habitat quality, or conditions harmful to listed fishes.

As described in sections 2.3 and 2.4, best management practices would be implemented to reduce construction-related effects. These include:

- Preserving natural vegetation;
- Designated concrete washout area;
- Concrete handling practices to prevent input to surface waters;
- Silt fencing may be used downslope of construction areas to prevent sediment delivery to surface waters; and
- Construction would follow guidelines of the Hydraulic Project Approval permit from Washington Department of Fish and Wildlife.

To minimize effects of the proposed structures, conservation measures, as described in sections 2.3 and 2.4 of the BE, include the following:

- Pressure treated lumber would not be used;
- Overwater coverage would be reduced by 108 square feet;
- The decking of the pier, ramp and float would have grating installed (a minimum of 50% total, with 60% light penetration); and
- The new bulkhead would be 25 feet, compared to the original of 156-foot bulkhead being removed.

The proposed permanent (estimated life of 50 years) structures (bulkhead, riprap, posts and piles) would displace approximately 140 square feet of benthic habitat. This results in a small, localized reduction in available nearshore lake habitat for juvenile and adult PS Chinook salmon and steelhead for about half of the year, when water levels are high enough to inundate the project site. The loss/displacement of 140 square feet of benthic habitat would cause a small but permanent (50 years) reduction/ modification to available nearshore habitat for rearing and migration. This would also result in a slight reduction to forage where benthic and aquatic organisms are displaced.

The proposed shoreline armoring (bulkhead and riprap) is expected to result in reduced shallow water habitat along the shoreline (see NMFS 2017[10]; NMFS 2020[11]), which juvenile salmonids use for rearing and migration, particularly juvenile PS Chinook salmon, which are nearshore

[10] NMFS. 2017. Endangered Species Act Section 7(a)(2) Biological Opinion and Letter of Concurrence and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Integrated Restoration and Permitting Program (IRPP) for Lakes Washington and Sammamish. WCR-2016-5278. February 17, 2017.

[11] NMFS. 2020. Endangered Species Act Section 7(a)(2) Biological Opinion and Letter of Concurrence and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Issuance of Permits for 39 Projects under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for Actions Related to Structures in the Nearshore Environment of Puget Sound. WCRO-2020-01361. November 9, 2020.

oriented during their outward migration from natal streams to the Pacific Ocean. This would result in reduced shallow water along the length of the proposed bulkhead (25 feet), thereby requiring juvenile salmonids to move through deeper water where they are more susceptible to encountering larger predatory fish. While the footprint of this habitat diminishment is small, due to the 50-year duration of its presence we expect that many PS Chinook salmon and PS steelhead will be exposed to it over time.

Shading of the nearshore by overwater structures also causes migration delays for juvenile PS Chinook salmon, which are nearshore-oriented (see NMFS 2017 and NMFS 2020). Juvenile PS Chinook salmon have been observed pausing at shade created by overwater piers, ramps and floats, before proceeding through or around the shaded area. When individual fish move to deeper water to avoid shaded areas, they are exposed to an increased risk of predation (i.e. larger predatory fish in deeper water). Delays to their migration also increases their risk of exposure to predators, particularly given the minimal aquatic vegetation and terrestrial riparian vegetation available as cover in Lake Cushman. We expect the shade created by the proposed overwater structures (pier, ramp and float) to thus increase predation of juvenile PS Chinook salmon.

The grating of the proposed overwater structures would permit some light penetration, reducing potential shade effects. The overwater footprint of the replacement pier, ramp and float (298 square feet) would also be within the footprint of the larger existing un-grated structures being replaced, reducing overwater coverage by 108 square feet. While this reduces potential shading effects, the replacement structure would retain some habitat disruption over the life of the structure.

The proposed replacement shoreline armoring (bulkhead and riprap) would result in the absence of riparian vegetation in some portions of the site (e.g., no vegetation on the proposed structure) for the life of the structure. The armoring results in reduced density of riparian vegetation compared to natural shorelines in the action area. Additionally, the bulkhead would increase the vertical and horizontal distance between the riparian vegetation along the top of the bank and the lake. Reduced riparian habitat quality reduces overwater cover for fish in the nearshore. It also reduces the recruitment of large woody debris that provide in-water cover.

A reduction in riparian vegetation would also result in reduced input of detritus and terrestrial insects, thereby causing a reduction to forage potential for juvenile PS Chinook salmon and steelhead (see Kahler et al. 2000[12]; Tabor et al. 2010[13]). Because the input of woody debris, detritus and terrestrial insects influences primary productivity and forage potential, effects are anticipated in the nearshore area immediately adjacent to the structures, as well as further out into the action area.

[12] Kahler, T., M. Grassley and D. Beauchamp. 2000. A Summary of the Effects of Bulkheads, Piers and Other Artificial Structures and Shorezone Development on ESA-listed Salmonids in Lakes. Prepared for City of Bellevue. Final Report. July 13, 2000.

[13] Tabor, R.A., K.L. Fresh, R.M. Piaskowski, H.A. Gearns and D.B. Hayes. Habitat Use by Juvenile Chinook Salmon in the Nearshore Areas of Lake Washington: Effects of Depth, Lakeshore Development, Substrate, and Vegetation. *North American Journal of Fisheries Management*, 31(4), pp. 700-713.

We anticipate reductions to forage and cover, as well as migration disruptions, to be localized to the areas adjacent to the proposed structures. When PS Chinook salmon and PS steelhead are exposed over the life of this project to these reductions in available habitat and habitat quality, it could harm a small number of juveniles rearing or migrating through the action area. This harm would occur in the form of predation (injury or death) or migration delay (interruption of an essential life history function.)

The entire action area is designated as critical habitat for PS Chinook salmon. As described in Section 6.1 of the BE, the proposed structures themselves would have long-term, direct effects on the quality and availability of habitat, including critical habitat for PS Chinook salmon. The Physical and Biological Features (PBFs) of PS Chinook salmon critical habitat in the action area include:

- Freshwater rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks; and
- Freshwater migration corridors free of obstruction and excessive predation with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

The direct long-term habitat effects of permanent structures would slightly diminish the availability and function of critical habitat serving multiple generations of PS Chinook salmon over the estimated 50-year life of the structures. As described above, we expect reductions to the cover and forage PBFs of rearing and migration habitat, as well as barriers to migration created by overwater structures. Therefore, we anticipate a minor but detrimental effect on the critical habitat quality for PS Chinook salmon within Lake Cushman. We expect these effects to be measurable for critical habitat under and adjacent to the proposed structures, but very small relative to total critical habitat for PS Chinook salmon in the action area and the broader area of Lake Cushman and the North Fork Skokomish River basin.

“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. Section 6.9 of the BE discusses cumulative effects and identifies continued population growth and development, global warming and over fishing as non-Federal activities reasonably certain to occur within the action area. We also expected recreational use of the lake (e.g. boating) to continue, and increase with population growth and development.

Integration and synthesis of information for the status of species, environmental baseline, effects of the action, and cumulative effects is the final step in our assessment of the risk posed to species and critical habitat as a result of implementing the proposed action. Here, 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 our 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.

In summary, the proposed action would have minor, localized habitat effects that would affect a small of area of critical habitat negatively for 50 years, and expose multiple individual fish to those poor habitat conditions. However the increment of detriment, both temporary and permanent, is insufficient to alter the conservation role of the habitat, and the response of the populations are expected to be minor and the number of fish injured or killed too small to meaningfully influence the VSP parameters of PS Chinook salmon or steelhead populations. The proposed action would not reduce the likelihood of survival and recovery of either species. The proposed action is also not likely to result in appreciable reduction in the value of designated PS Chinook salmon critical habitat for the conservation of the species. 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 and PS steelhead, nor destroy or adversely modify PS Chinook salmon 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. This ITS would be valid for PS steelhead if and when fish from this DPS are reintroduced to Lake Cushman.

Amount or Extent of Take

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

- Harm to juvenile PS Chinook salmon from increased predation risk as a result of fish being forced into deeper water where shallow-water habitat is reduced, and avoidance of shaded areas under overwater structures;

- Harm to juvenile PS Chinook salmon and future harm to PS steelhead from reduced habitat availability and forage; and
- Harm to juvenile PS Chinook salmon and future harm to PS steelhead from increased predation risk as a result of reductions to in-water and over-water cover.

The distribution and abundance of fish that occur within an action area are affected by habitat quality, competition, predation, and the interaction of processes that influence genetic, population, and environmental characteristics. These biotic and environmental processes interact in ways that may be random or directional, and may operate across far broader temporal and spatial scales than are affected by the proposed action. Thus, the distribution and abundance of fish within the action area cannot be attributed entirely to habitat conditions, nor can NMFS precisely predict the number of fish that are reasonably certain to be injured or killed if their habitat is modified or degraded by the proposed action. In such circumstances, NMFS cannot provide an amount of take that would be caused by the proposed action.

As all habitat pathways for harm are related to the presence of the proposed structures (pier, ramp, float, piles, riprap and bulkhead), the best available indicator for the extent of take by reduced forage, rearing and migration habitat from the proposed action is the footprint of all structures below the ordinary high water mark (OHWM; 738 feet) which can be observed and monitored by the features of the structures, such as the numbers and size.

The total proposed footprint (on the substrate) of the post, piles, riprap and bulkhead below the OHWM is 140 square feet. The total length of the proposed bulkhead is 25 feet. The total overwater surface area of the proposed pier ramp and float is 298 square feet. These take indicators act as effective reinitiation triggers because it is reflective of the likely take pathway associated with the action, is proportional to the anticipated amount of take, and are the most practical and feasible indicators to measure. Any exceedance of these indicators (a structural benthic footprint of posts, piles, riprap and bulkhead of more than 140 square feet, a bulkhead length of over 25 feet; and total overwater coverage of the pier, ramp and float of over 298 square feet) for extent of take will trigger the reinitiation provisions of this opinion. Although this surrogate is somewhat coextensive with the proposed action, it nevertheless serves as an effective reinitiation trigger because it can be readily monitored and if exceeded, the COE can seek compliance post construction.

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

The COE shall:

1. Monitor the construction to ensure that it conforms to all design specifications and implements best management practices.

Terms and Conditions

The terms and conditions described below are non-discretionary, and the EPA or any applicant must comply with them in order to implement the RPMs (50 CFR 402.14). The EPA 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 reasonable and prudent measure 1:

    a. Reporting. The applicant must report to jeff.vanderpham@noaa.gov and projectreports.wcr@noaa.gov all monitoring items within 60 days of project completion, including:

        i. As-built documentation to demonstrate the benthic footprint of all structures below OHWM, the surface area of the overwater structure, and the length of the bulkhead do not exceed the originally proposed design; and
        ii. Verification that all proposed BMPs and conservation measures were implemented.

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 COE should identify and implement nearshore habitat enhancement or restoration activities in the Lake Cushman Basin, including the action area, or elsewhere in the North Fork Skokomish River watershed that:

- Improve the quality of riparian habitat to increase cover and forage for juvenile migration and rearing; and
- Remove old in-water structures such as docks, piles and bulkheads that are no longer in use.

Please notify NMFS if the COE or the applicant carries out this recommendation so that we will be kept informed of actions that are intended to improve the conservation of listed species or their designated critical habitats.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by [name of action agency] 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.

MAGNUSON STEVENS ACT ESSENTIAL FISH HABITAT CONSULTATION

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. The proposed action and action area for this consultation are described in the Introduction to this document. The action area includes areas designated as EFH for various life-history stages of Pacific Coast salmon. Based on information provided by the action agency and the analysis of effects presented in the ESA portion of this document, NMFS concludes that proposed action will have adverse effects on EFH designated for Chinook and coho salmon. These effects include a long reduction in habitat availability, reduced cover and forage, and increased predation risk as a result of proposed permanent structures below the OHWM of Lake Cushman.

EFH conservation recommendations include:

1. Habitat Enhancement: The COE should recommend that the applicant identify and implement nearshore habitat enhancement or restoration activities in the Lake Cushman Basin or elsewhere in the North Fork Skokomish River watershed that:
    a. Improve the quality of riparian habitat to increase overwater cover and forage for juvenile migration and rearing; and
    b. Remove old in-water structures such as docks, piles and bulkheads that are no longer in use.

Fully implementing these EFH conservation recommendations would protect, by avoiding or minimizing the adverse effects described previously, designated EFH for Pacific Coast salmon.

As required by section 305(b)(4)(B) of the MSA, the EPA 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 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)).

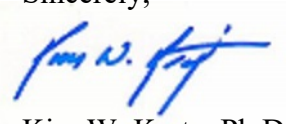
In response to increased oversight of overall EFH program effectiveness by the Office of Management and Budget, NMFS established a quarterly reporting requirement to determine how many conservation recommendations are provided as part of each EFH consultation and how many are adopted by the action agency. Therefore, we ask that in your statutory reply to the EFH portion of this consultation, you clearly identify the number of conservation recommendations accepted.

The EPA 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 Lacey, Washington.

Please direct questions regarding this letter to Dr. Jeff Vanderpham, jeff.vanderpham@noaa.gov, (360) 999-8060, in the Oregon Washington Coastal Office in Lacey, Washington.

Sincerely,



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

cc: Jason Sweeney, COE,
Caralyn Valdeman, Integrated NW Construction, LLC,