



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

Refer to NMFS No.:
WCRO-2021-02180

February 21, 2023

William D. Abadie
Chief, Regulatory Branch
U.S. Army Corps of Engineers — Portland District
P.O. Box 2946
Portland, Oregon 97208-2946

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Tillamook County Gallagher Slough Dredging and Excavation Project (NWP-2020-66)

Dear Mr. Abadie:

This letter responds to your August 31, 2021, request for initiation of consultation with the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act (ESA) for the subject action. Your request qualified for our expedited review and analysis because it met our screening criteria and contained all required information on, and analysis of, your proposed action and its potential effects to listed species and designated critical habitat.

We reviewed the U.S. Army Corps of Engineers, Portland District's (Corps) consultation request and related initiation package. Where relevant, we have adopted the information and analyses you have provided and/or referenced but only after our independent, science-based evaluation confirmed they meet our regulatory and scientific standards. We adopt by reference the following sections of the BA:

- Section I. for the description of the proposed action, and the action area;
- Section II. for species and habitat information; and,
- Section III. for the effects of the proposed action.

The Corps submitted the BA for this proposed action on August 31, 2021. NMFS reviewed the BA and determined the information provided was sufficient to initiate consultation on November 15, 2022.

On July 5, 2022, the U.S. District Court for the Northern District of California issued an order vacating the 2019 regulations that were revised or added to 50 CFR part 402 in 2019 ("2019 Regulations," see 84 FR 44976, August 27, 2019) without making a finding on the merits. On September 21, 2022, the U.S. Court of Appeals for the Ninth Circuit granted a temporary stay of the district court's July 5 order. On November 14, 2022, the Northern District of California issued an order granting the government's request for voluntary remand without vacating the 2019 regulations. The District Court issued a slightly amended order two days later on November 16, 2022. As a result, the 2019 regulations remain in effect, and we are applying the 2019 regulations here. For purposes of this consultation and in an abundance of caution, we

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considered whether the substantive analysis and conclusions articulated in the biological opinion and incidental take statement would be any different under the pre-2019 regulations. We have determined that our analysis and conclusions would not be any different.

The Corps is proposing to issue a Clean Water Act 404 permit to the Sunset Drainage District (Applicant) for dredging and excavation of approximately 7,300 cubic yards of sediments and riparian vegetation below the ordinary high-water mark of 3,800 linear feet of Gallagher Slough, to improve drainage for farmlands. The project also proposes to grade or place approximately 7,000 cubic yards of native fill materials below the ordinary high-water mark of 3,800 linear feet of Gallagher Slough by pulling the excavated materials up the bank of the slough, on the farmed side, and on top of existing driveways. The excess excavated materials would be placed outside of the slough and incorporated into the farmed soils. In-channel work will occur during the summer low-flow season recommended by Oregon Department of Fish and Wildlife (ODFW) from July 1st to September 15th. Brush and woody material would be removed using an excavator in a manner that would not destabilize the banks. Equipment would operate from the top of the bank using long arm equipment to reach into the slough and excavate the material. Work would begin at the top end of the slough and work towards the confluence of the Nehalem River in order to prevent discharge downstream of the project area (BA, Section I., B.).

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.

Section I. C. of the BA describes the overlap between areas impacted by the proposed project and the range of ESA listed salmon and their designated critical habitats in the Oregon Coast (OC) recovery domain. The project action area is also designated EFH for Pacific Coast salmon. Section II. of the BA discusses the status of Oregon Coast (OC) coho (*Oncorhynchus kisutch*) and their critical habitat and is being adopted here. Subsequent to NMFS' receipt of the BA and initiation of ESA section 7 consultation, the 2022, 5-year status review for OC coho salmon was completed (NMFS 2022). This status review represents the most recent scientific information available regarding population status of the ESU, including the Nehalem independent population, which is one of several populations within the North Coast Biogeographic Stratum. There is currently a moderate to high level of certainty that the North Coast Biogeographic Stratum is persistent/sustainable, with the Nehalem independent population having a moderate to high confidence of meeting persistence and sustainability criteria. There have been numerous population-specific protective and restoration actions since the 2016 5-year review; however, some of the habitat concerns for the Nehalem population continue to be: Insufficient stream juvenile rearing habitat complexity, poor water quality from high temperatures and agricultural runoff, and loss of beaver pond habitat. The areas of habitat concern for all populations of the North Coast Biogeographic Stratum include 1) Floodplain habitat conversion to low gradient valley agricultural uses; 2) Inadequate riparian conditions on forest timber lands; and 3) Degradation of upper estuarine and freshwater juvenile rearing habitat areas. (NMFS 2022).

“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 3,800 linear feet of Gallagher Slough up to the confluence of Nehalem River, where a tide gate is located beneath Highway 101, as well as all upland, riparian, and aquatic resource areas where approximately 7,000 cubic yards of material would be dispersed (BA, Section I., C.).

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). See section II. subsections B. and C. that describe the environmental baseline at the time of BA drafting and is being adopted here.

Under the ESA, “effects of the action” are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (see 50 CFR 402.17). In our analysis, which describes the effects of the proposed action, we considered 50 CFR 402.17(a) and (b).

The BA provides a detailed discussion and comprehensive assessment of the effects of the proposed action in Section III. of the initiation package, 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.

“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. See section III. subsection A. that describes 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.

As described in Sections II and III of the BA, OC coho salmon likely exist in the action area in small numbers. OC coho have been listed as Threatened effective June 20, 2011 (NMFS). The recovery plan reference is 2016a and the Most recent status review was NMFS 2022. This ESU is comprised of 56 populations including 21 independent and 35 dependent populations. The Nehalem independent population is most likely to be directly impacted by the effects of the proposed action. The last status review indicated a moderate risk of extinction (NMFS 2022). 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. Factors limiting recovery of OC coho include, reduced amount and complexity of habitat like connected floodplain habitat, degraded water quality, blocked and/or impaired fish passage, long-term habitat protection, and changes in ocean conditions. The proposed action will contribute to these factors by adversely affecting critical habitat and potentially disturbing or harming individual fish, most likely from the Nehalem independent population. Climate change is likely to amplify these habitat conditions in the future, particularly increased water temperatures and sea level rise.

The applicant has included several measures in the proposed action to minimize effects to ESA-listed species including: 1) Channel Reconstruction- Constructing geomorphically appropriate stream channel and inner low tide channel within a watershed and reach context; 2) All equipment will be operated from the top of the bank to reach into Gallagher Slough to excavate the soil, brush, and debris materials during low tide in the dry summer months; 3) Work would begin in the northern reach where the channel is 80-97% silted in and progressively work downstream to minimize discharges; 4) Design the project to restore elevation, width, gradient, length, and roughness in a manner that closely mimics natural contours typically associated with that stream type; 5) Remove nonnative fill material from the channel to an upland site; 6) Loosen compacted soil once overburden material is removed; 7) Construction of the streambed will be based on an ecological approach to providing passage for aquatic organisms at road-stream crossings; and 8) Immediately upon completion of the new channel construction, the contractor will survey the project and provide as-built data, which would be supplied to NMFS for review.

The proposed action will, as described above, result in temporarily degraded water quality from sediment plumes and construction disturbance, causing injury or harm to a small number of OC Coho; however, the number of fish expected to be present in the action area during construction is small due to the in-channel work occurring during the dry summer months. The long-term effects of the proposed action will ultimately improve floodplain connectivity, water quality, riparian conditions, and streambank conditions in the action area. The number of fish that are likely to be injured or killed due to the proposed action are too few to cause a measurable effect on the long-term abundance or productivity of the affected population or to appreciably reduce the likelihood of survival and recovery of the species. Therefore, the proposed action will not further reduce the productivity or the likelihood of survival of the affected populations of ESA-listed species, even when combined with the environmental baseline and additional pressure from cumulative effects and climate change.

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 OC coho or destroy or adversely modify its designated critical habitat.

INCIDENTAL TAKE STATEMENT

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

Amount or Extent of Take

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

- Stress or death from handling during capture and release for work area isolation.
- Fish disturbance during construction, which may alter normal patterns of rearing behavior in the action area, and by reducing benthic forage sources in a manner that could impair survival and growth of some exposed juveniles.
- Exposure to increased suspended sediment.

Take in the form of injury or harm from these causes cannot be accurately quantified as a number of fish. The distribution and abundance of fish within the action area cannot be predicted based on existing habitat conditions, and because of temporal and dynamic variability in population dynamics in the action area, nor can NMFS precisely predict the number of fish that are reasonably certain to respond adversely to habitat modified by the proposed action. When NMFS cannot quantify take in numbers of affected animals, we instead consider shifts to the likely extent of changes in habitat quantity and quality to indicate the extent of take.

NMFS expects a maximum of 3,800 linear feet of Gallagher Slough that will be impacted and also be occupied by juvenile OC coho, to be disturbed during construction and work area isolation. The proposed action may require potential fish handling to remove fish from the isolation work area. We identify this surrogate measure for adverse effects on fish, as take cannot be accurately quantified as number of fish to be harmed. However, fish handled during the proposed action will be monitored, logged, and reported so that no more than 5% are seriously injured or killed.

For harm associated with disturbance from construction, removal of access to forage species, and death due to entrainment: the area of the river used by ESA-listed salmonids as habitat that will be disturbed by dredging and cover layer placement. Specifically, the anticipated take will be exceeded if the final dredge area exceeds 7,300 cubic yards, or 3,800 linear feet of Gallagher Slough. This take indicator operates as an effective reinitiation trigger because the Corps has authority to conduct compliance inspections and to take actions to address non-compliance, including post-construction (33 CFR 326.4).

For harm associated with an increase in suspended sediment plumes: the anticipated take will be exceeded if increased suspended sediment from dredging or cover layer placement causes suspended sediment plumes 300 feet from the boundary of construction activities, as measured in nephelometric turbidity units (NTUs), to exceed 5 NTU over the background level for two consecutive monitoring intervals. This take indicator operates as an effective reinitiation trigger because the Corps has authority to conduct compliance inspections and to take actions to address non-compliance (33 CFR 326.4).

Effect of the Take

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

Reasonable and Prudent Measures

“Reasonable and prudent measures” are measures that are necessary or appropriate to minimize the impact of the amount or extent of incidental take (50 CFR 402.02).

The Corps shall require the applicant:

1. Minimize incidental take associated with project construction by ensuring that all BMPs described in the proposed action and this Opinion are implemented and reported, as appropriate.
2. Ensure completion of a monitoring and reporting program to confirm that the take exemption for the proposed action is not exceeded, and that the terms and conditions in this incidental take statement are effective in minimizing incidental take. The report will be submitted to NMFS no later than 60 days after the completion of each dredging event.

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 Corps and applicant have a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this ITS (50 CFR 402.14). If the entity to whom a term and condition is directed does not comply with the following terms and conditions, protective coverage for the proposed action would likely lapse.

1. The following terms and conditions implement reasonable and prudent measure 1:
 - a. Work Window. To minimize effects to juvenile salmonids, the applicant must limit all activities conducted below ordinary high water to the in-water work window of July 1 to September 15.
 - b. Notice to Contractors. Before beginning work, the applicant must provide all contractors working on site with a complete list of Corps permit special conditions, reasonable and prudent measures, and terms and conditions intended to minimize the amount and extent of take resulting from in-water work.
 - c. Minimize Impact Area and Duration. The applicant must confine construction impacts to the minimum area and duration necessary to complete the proposed action.
 - d. Turbidity. The applicant must conduct monitoring and reporting as described below. Monitoring must occur each day during daylight hours when in-water work is being conducted.
 - i. Representative background point. An observation must be taken every 2 hours at a relatively undisturbed area at least 600 feet up current from in water disturbance to establish background turbidity levels for each monitoring cycle. Background turbidity, location, time, and tidal stage must be recorded prior to monitoring down current.
 - ii. Compliance point. Monitoring must occur every 2 hours approximately 300 feet down current from the point of disturbance and be compared against the background observation. The turbidity, location, time, and tidal stage must be recorded for each sample.
 - iii. Compliance. Results from the compliance points must be compared to the background levels taken during that monitoring interval. Turbidity may not exceed and increase of 5 NTU above background at the compliance point during work.
 - iv. Exceedance. If an exceedance occurs, the applicant must modify the activity and continue to monitor every 2 hours. If an exceedance over the background level continues after the second monitoring interval, then work must stop and NMFS must be notified so that revisions to the BMPs can be evaluated.
 - v. If the weather conditions are unsuitable for monitoring (heavy fog, ice/snow, excessive winds, rough water, etc.), then operations must cease until conditions are suitable for monitoring.
 - vi. Copies of daily logs for turbidity monitoring must be available to NMFS upon request.
2. The following terms and conditions implement reasonable and prudent measure 2:
 - a. Reporting. The applicant must report all monitoring items to NMFS within 60 days of the close of any work window that had in-water work within it, including turbidity observations, length and width of dredged area, volume of sediment removed, and dates of initiation and completion of in-water work. The applicant must also report any exceedance of take covered by this opinion to NMFS

immediately. The report must include a discussion of implementation of the terms and conditions in #1, above.

- b. The applicant must submit monitoring reports to:

projectreports.wcr@noaa.gov

Attn: WCRO-2021-02180

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).

To offset adverse effects of the action (decreased forage), look for opportunities to increase and restore off-channel habitat within the Nehalem River.

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.

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 action area includes areas designated as EFH for Pacific Coast Salmon, specifically OC Coho. The Corps determined that the proposed action would adversely affect EFH as follows:

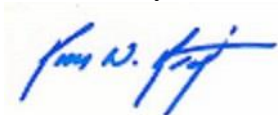
1. Short-term effect on fish passage due to water quality impairment and in-water work isolation.
2. Suspended solids may temporarily degrade water quality and increase contaminants.
3. Temporary loss of material and nutrients from the tidal riverine system.

Because the applicant has included measures to minimize effects of the action, no further recommendations are being provided.

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 contact Kailee McKinney, ESA Consultation Biologist, in the Oregon Washington Coastal Office at (503)872-2854 or Kailee.McKinney@noaa.gov if you have any questions concerning this consultation, or if you require additional information

Sincerely,

A handwritten signature in blue ink, appearing to read "Kim W. Kratz".

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

cc: Melody White, Corps Portland District
Kinsey Friesen, Corps Portland District

REFERENCES

- NMFS. 2018. Endangered Species Act Section 7 Programmatic Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Tidal Area Restoration Authorized, Funded, or Implemented by the Corps of Engineers, Federal Emergency Management Agency, and Federal Highways Administration, in Oregon and the Lower Columbia River, Portland, Oregon.
- NMFS. 2016. Final ESA recovery plan for Oregon Coast coho salmon (*Oncorhynchus kisutch*). <https://repository.library.noaa.gov/view/noaa/15986>.
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- Northwest Fisheries Science Center (NWFSC). 2015. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest.
- StreamNet. 2022. Query of StreamNet Mapper: All Fish Distribution within the Columbia River. Data accessed January 16, 2022 at: <https://psmfc.maps.arcgis.com/apps/webappviewer/index.html?id=3be91b0a32a9488a901c3885bbfc2b0b>.
- USACE (U.S. Army Corps of Engineers). 2021. Sunset Drainage District, Gallagher Slough Dredging and Excavation Project, Biological Assessment. Army Corps of Engineers, Portland District.