



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
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October 10, 2022

Joseph Rausch
District Ranger
Okanogan–Wenatchee National Forest
Cle Elum Ranger District
803 W. 2nd Street
Cle Elum, WA 98922

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson–Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Taneum Restoration Project, Taneum Creek, HUC 1703000105, Kittitas County, Washington.

Dear Mr. Rausch:

This letter responds to your April 13, 2022, 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 contained all required information on, and analysis of, your proposed action and its potential effects to ESA-listed species and designated critical habitat.

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. As a result, the 2019 regulations are once again in effect, and we are applying the 2019 regulations here. For purposes of this consultation, we considered whether the substantive analysis and conclusions articulated in the biological opinion and incidental take statement (ITS) would be any different under the pre-2019 regulations. We have determined that our analysis and conclusions would not be any different.

We reviewed the Forest Service’s 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 met our regulatory and scientific standards. We adopt by reference the following sections of the Forest Service’s Biological Assessment (BA): Project Action, Design Criteria and Best Management Practices (BMP), Aquatic Species Considered, Environmental Baseline and Action Area, the Effects on Listed Species and Critical Habitat, and the Reasonably Foreseeable Future Actions sections.



The Forest Service submitted a consultation initiation package, including a BA, to NMFS on April 13, 2022. The BA and consultation request included all information necessary to initiate consultation; therefore, consultation was initiated that date.

As described in the BA, the Cle Elum Ranger District of the Okanogan–Wenatchee National Forest proposes to harvest timber both commercially and non-commercially, reduce fuels through prescribed fire, manage and maintain roads, and repair the North Fork Taneum bridge. We considered, under the ESA, whether or not the proposed action would cause any other activities and determined that it would not.

We examined the status of Middle Columbia River (MCR) steelhead, which 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 the function of the physical and biological features essential to the conservation of the species that create the conservation value of that habitat. The Aquatic Species Considered section of the BA (pages 92–97) describes the status of the species and critical habitat; however, since the submission of the BA more recent information has become available. The 2022 5-year Review: Summary and Evaluation of Middle Columbia River Steelhead (NMFS 2022) was published in July 2022 and the Biological Viability Assessment Update for Pacific Salmon and Steelhead Listed under the Endangered Species Act: Pacific Northwest (Ford 2022) was published in January of 2022. These documents are adopted here to describe the status of MCR steelhead and its critical habitat. Major risk factors that limit MCR steelhead recovery include reduced quality and quantity of freshwater habitat, predation, regulatory mechanisms that fail to adequately protect habitat, ocean conditions, hatchery fish, and climate change.

“Action area” means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). The action area is described in the Environmental Baseline and Action Area section (pages 99–102) of the BA, adopted here.

The “environmental baseline” refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultations, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency’s discretion to modify are part of the environmental baseline (50 CFR 402.02). The Environmental Baseline and Action Area section (pages 98–125) of the BA describes the Environmental Baseline and is being adopted here.

The action area supports rearing, migration, and spawning of MCR steelhead from the Upper Yakima population. The Upper Yakima population is within the Yakima River Major Population Group (MPG), one of four MPGs of MCR steelhead. We expect juvenile steelhead to be present in Taneum Creek year round. Adult steelhead spawn in the spring and then die or move

downstream into the mainstem Yakima River. After adults spawn, the eggs remain in the gravel to early July, when steelhead emerge from the spawning area and become more mobile. The immediate area around the North Fork Taneum Creek bridge is not suitable for steelhead spawning and is considered primarily juvenile rearing habitat. However, downstream of the bridge, there is potential steelhead spawning habitat, although no adult steelhead or eggs will be present during the project's in-water work window. Important physical and biological features (PBF) in the action area include water quantity and quality, substrate, floodplain connectivity, forage, natural cover, freedom from obstruction, and excessive predation. The ability of critical habitat within the action area to support the PBFs is primarily limited by simplified instream habitat, loss of large wood, and impairment of natural channel migration processes.

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 the Effects on Listed Species and Critical Habitat section (pages 126–131), and is adopted here. NMFS has evaluated this section and after our independent, science-based evaluation, determined it meets our regulatory and scientific standards.

The Forest Service proposes to repair a bridge over the North Fork Taneum Creek. In the BA, the Forest Service found that only juvenile MCR steelhead will be negatively affected by project activities. Other activities that are part of the Taneum Restoration Project such as timber harvest and the use of prescribed fire would be far enough from fish-bearing streams that they are not expected to harm individual steelhead or have negative effects on instream habitat.

Likely effects on juveniles include the following:

- Construction activities will limit access to approximately 600 square feet of juvenile rearing habitat during a few weeks between July 16 to October 15 for a single year.
- Small numbers of juvenile steelhead will be handled during electrofishing fish salvage and transfer to an area not affected by project activities.
- Young-of-year steelhead will be difficult to remove during dewatering and small numbers that are not salvaged will be injured or killed during project activities (e.g., little or no water, crushing from excavation and fill placement activities).
- Small numbers of steelhead juveniles will be exposed to a minor and short-term increase in turbidity up to 300 feet downstream of the in-water work site between July 16 to October 15 for a single year. Up to 21,000 square feet of understory riparian vegetation will be impacted at the bridge site, slightly reducing forage for a period of weeks to a month. All vegetation removed will be stockpiled and used for post-project remediation at the bridge site.

Only a few juvenile steelhead (less than 20) from one cohort of the Upper Yakima population of MCR steelhead will be affected by in-water construction activities. The small size of the in-water work area (600 square feet), proposed dewatering and fish salvage activities, and short duration of in-water activities (a couple of weeks) will limit the effects to no more than 20 juvenile MCR steelhead. In addition, juvenile fish from two cohorts will experience localized reductions in forage from understory vegetation removal.

The function of the PBFs of critical habitat in the action area (juvenile rearing areas) will be temporarily (weeks to a month) impaired by reduced access and decreased water quality. The understory riparian vegetation will take longer to recover, on the scale of 1 to 5 years, which will reduce the amount of forage available to juvenile steelhead.

“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. We were not able to identify any additional cumulative effects not already discussed in the Reasonably Foreseeable Future Actions section (pages 105–106) of the BA. That section is adopted here.

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 North Fork Taneum Creek bridge repair and construction-related activities will result in up to 20 juvenile steelhead being harmed due to fish handling during fish salvage. A few juveniles (included in the 20) will also be killed in the isolated worksite, where they will be susceptible to other effects (e.g., little or no water, crushing from excavation and fill placement activities, and exposure to suspended sediments and elevated turbidity). These effects will be a one-time occurrence. In addition, juvenile fish from two cohorts will experience localized reductions in forage from understory vegetation removal. Other activities that are part of the Taneum Restoration Project are not expected to cause adverse effects. In the context of the Upper Yakima population, which has an average abundance of a few hundred adult steelhead, the loss of this small number of juveniles from a single cohort will not meaningfully affect the abundance or productivity of the population and will have no effect on its spatial structure or diversity. The likelihood of persistence and recovery potential of the Yakima River MPG will not be affected because none of the component populations will meaningfully be affected. Similarly, the likelihood of persistence and recovery potential of MCR steelhead as a whole will not be affected because we expect no change in the viability status of the Yakima River MPG.

The proposed action will reduce forage, natural cover, and water quality PBFs in juvenile rearing and migration habitat in the North Fork Taneum Creek. The proposed action will dewater 600

square feet of stream, remove up to 21,000 square feet of understory riparian vegetation, and create short-term pulses of turbidity up to 300 feet downstream from the bridge repair work area. Temporary impairment of the ability of the PBFs in this location to support juvenile rearing will not meaningfully affect its ability to support recovery of the DPS. Therefore, the action will not affect the conservation value of critical habitat at the scale of the designation.

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 MCR steelhead or adversely destroy or 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). "Harass" is further defined by interim guidance as to "create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." "Incidental take" is defined by regulation as takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant (50 CFR 402.02). Section 7(b)(4) and section 7(o)(2) provide that taking that is incidental to an otherwise lawful agency action is not considered to be prohibited taking under the ESA if that action is performed in compliance with the terms and conditions of this ITS.

Amount or Extent of Take

In the opinion, NMFS determined that incidental take of juvenile MCR steelhead is reasonably certain to occur as follows: (1) harm occurring from handling during fish salvage, and (2) injury or death from other effects while being trapped in the isolated worksite (e.g., little or no water, crushing from excavation and fill placement activities, (3) exposure to suspended sediments and turbidity), and (4) clearing of 21,000 square feet of riparian understory.

Incidental Take from In-water Construction (Fish Salvage and Fish Trapped)

NMFS anticipates the proposed action will result in injury or death as a result of fish handling and from being trapped in the isolated worksite. Estimating the specific number of animals injured or killed by these effects is not possible because of the range of responses that individual fish will have, because the numbers of fish present at any time is highly variable, and it is not possible to observe the fish being injured or killed. While this uncertainty makes it difficult to quantify take in terms of numbers of animals injured or killed, our best estimate is that no more than a few juvenile steelhead will experience injury or death during in-water work. We anticipate locating and finding all potential injured or killed fish will be impossible and hard to track. However, the extent of habitat altered by disturbance is readily discernible and presents a reliable measure of the extent of take that can be monitored and tracked. Therefore, the estimated extent of habitat encompassed by in-water work represents the extent of take associated with injury and

death by fish handling and by being trapped in the isolated worksite. The proposed surrogates are causally linked to anticipated take because it describes conditions that will cause take due to in-water work. Specifically, NMFS will consider the extent of take exceeded if the proposed action results in dewatering of, or fish rescue within, more than 600 square feet of stream.

Incidental Take from Increased Turbidity

NMFS expects the proposed action will result in harm of juvenile steelhead by increased turbidity within and downstream of the in-water site. The duration of increased turbidity will only occur for a few weeks during the in-water work window between July 16 and October 15 in a single year. Some juvenile steelhead exposed to increases in turbidity may respond with temporary behavioral changes, including changes in feeding and movement that may lead to increased predation.

Estimating the specific number of animals harmed by increased turbidity is not possible because of the range of responses that individual fish will have, and because the numbers of fish present is highly variable both spatially and temporally. While this uncertainty makes it impossible to quantify take in terms of numbers of animals harmed, the extent of the permanent change in habitat to which fish will be exposed is readily discernible and presents a reliable measure of the extent of take that can be monitored and tracked.

The extent of habitat altered by increased turbidity disturbance is readily discernible and presents a reliable measure of the extent of take that can be monitored and tracked. Therefore, the estimated extent of habitat encompassed by increased turbidity represents the extent of take. The proposed surrogates are causally linked to anticipated take because it describes conditions that will cause take due increased turbidity. Specifically, NMFS will consider the extent of take exceeded if the proposed action results in increased turbidity greater than 300 feet downstream of the bridge site and increase turbidity outside of the in-water work window of July 16 to October 15.

Incidental Take from Understory Vegetation Removal

NMFS expects the proposed action will result in harm of juvenile steelhead by clearing understory riparian vegetation. NMFS expects the clearing of riparian vegetation to reduce the amount of forage available to juvenile steelhead for 1 to 5 years. Reducing forage is expected to harm steelhead by slowing their growth such that juveniles will remain vulnerable to a larger range of predators over a longer span of their lives, increasing the risk of predation.

Estimating the specific number of animals harmed by clearing riparian vegetation is not possible because of the range of responses that individual fish will have, and because the numbers of fish present is highly variable both spatially and temporally. While this uncertainty makes it impossible to quantify take in terms of numbers of animals harmed, the extent of the permanent change in habitat to which fish will be exposed is readily discernible and presents a reliable measure of the extent of take that can be monitored and tracked.

The harm associated with clearing understory riparian vegetation near the North Fork Teanaway Bridge will persist for 1 to 5 years. Therefore, the harm from the vegetation removal is best represented by the extent of vegetation removal. We use the extent of understory vegetation removal because the amount of harm increases with the increased extent of riparian clearing.

Also, this clearly quantifiable measure can easily be measured to determine if take is exceeded. Specifically, NMFS will consider the extent of take exceeded if the overall amount of clearing of riparian vegetation removal exceeds 21,000 square feet along the North Fork Taneum River. Therefore, the area of vegetation removal represents the extent of take exempted from decreased forage.

These surrogates are measurable, and thus can be monitored and reported. For this reason, the surrogates function as effective reinitiation triggers.

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

The Forest Service shall minimize incidental take by:

- Monitoring the project to ensure that the measures and BMPs from pages 46-47 of the BA are meeting the objective of minimizing take and that the amount or extent of take is not exceeded.

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

1. The following terms and conditions implement RPM 1:
 - a. By the end of the calendar year during which the North Fork Taneum Creek bridge repair is completed, the Forest Service shall report monitoring items to include, at a minimum, the following:
 - i. Project identification:
 1. Project name: Taneum Restoration Project (WCRO-2022-00916).
 - ii. North Fork Taneum Creek bridge repair details:
 1. Square feet of stream that was de-watered and vegetation cleared.
 2. Turbidity monitoring results.

3. A description of any elements of the project that were constructed differently than depicted in the BA or this opinion.
 4. Number of *Oncorhynchus mykiss* smaller than 225 mm that were captured and released safely during fish salvage.
 5. Number of *O. mykiss* smaller than 225 mm that were injured or killed during fish salvage.
- b. If take is exceeded, contact NMFS promptly to determine a course of action.
 - c. The monitoring report should be delivered to:
crbo.consultationrequest.wcr@noaa.gov

Reinitiation of Consultation

Under 50 CFR 402.16(a): “Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service where 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 ITS 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.”

Essential Fish Habitat

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

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 600.0-5(b)]. The aquatic zone of impact includes habitats that have been designated as EFH for Pacific Coast salmon.

Freshwater EFH for Pacific Coast salmon within the action area consists of: (1) spawning and incubation, (2) juvenile rearing, (3) juvenile migration corridors, and (4) adult migration corridors. NMFS determined the proposed action would adversely affect EFH of Pacific salmon as follows:

- Approximately 600 square feet of benthic habitat would be disturbed during July 16 to October 15 over 1 year.
- Increases in turbidity within and up to 300 feet downstream of the North Fork Taneum Bridge during July 16 to October 15 over 1 year.
- Up to 21,000 square feet of riparian vegetation would be disturbed by construction activities, affecting forage production and availability to juvenile salmon for 1 to 5 years.

NMFS determined that measures included in the BA for the Taneum Restoration Project as part of the Endangered Species Act Consultation are sufficient to avoid, minimize, mitigate, or otherwise offset the impact of the proposed action on EFH.

The Forest Service 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 NMFS' Columbia Basin Branch.

Please direct questions regarding this letter to Justin Yeager Columbia Basin Branch, at (509) 899-2864 or justin.yeager@noaa.gov.

Sincerely,



Michael P. Tehan
Assistant Regional Administrator
Interior Columbia Basin Office

cc: Joe Serio, Cle Elum Ranger District
Gene Shull, USFS Wenatchee

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.
<https://doi.org/10.25923/kq2n-ke70>
- NMFS. 2022. 2022 5-year Review: Summary and Evaluation of Middle Columbia River Steelhead. NMFS. West Coast Region. 87 pp.