



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
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Refer to NMFS No: WCRO-2022-01410

<https://doi.org/10.25923/p5p5-tx69>

September 28, 2022

Ralph J. Rizzo
Division Administrator
Federal Highway Administration
Suite 501 Evergreen Plaza
711 South Capitol Way
Olympia, WA 98501

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson–Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the City of Union Gap’s 10th Avenue South Bridge Replacement Project, Wide Hollow Creek, HUC 17030003, Yakima County, Washington

Dear Mr. Rizzo:

This letter responds to your June 8, 2022 letter requesting 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 package also included a biological assessment (BA) which 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 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 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 Federal Highway Administration’s (FHWA) consultation request and related initiation package. Where relevant, we have adopted the information and analyses you have provided and/or referenced, but only after our independent, science-based evaluation confirmed they meet our regulatory and scientific standards. We adopt by reference the following sections



of the FHWA's BA: Project Description (i.e., Proposed Action; pages 5–11), Action Area (pages 12–14), Species and Habitat Information (pages 15–17), Environmental Setting/Baseline (pages 18–23), and Analysis of Effects (pages 24–28).

As described in the BA, the FHWA proposes to replace the structurally deficient and functionally obsolete bridge on South 10th Avenue over Wide Hollow Creek in the city of Union Gap, Washington. The proposed project will include removal of the existing bridge superstructure and abutments, and construction of a new pre-stressed precast concrete bridge consisting of two 15-foot travel lanes, one 5-foot bike lane, and new sidewalks. Road construction will be limited to the immediate bridge approaches to match the existing street width. The new bridge will be wider and have an increased load limit able to accommodate future traffic demands. Due to advanced deterioration in one of the bridge girders, loads on the existing bridge are restricted to 10 tons, which means fire trucks and other emergency response vehicles can no longer cross the bridge on South 10th Avenue. The load restrictions delay response time for emergency services within portions of the South Broadway Area. The current bridge has no flow control or treatment of stormwater. As described in the BA, the proposed action includes curb and gutter structures, catch basins, and infiltration trenches to control flow and treat 100% of the stormwater.

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 Species and Habitat Information section of the biological assessment describes the status of the species and critical habitat; however, since the submission of the biological assessment 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 biological assessment identifies the action area as a 1,700-foot radius extending from the proposed project footprint and is based on the extent of noise from construction activities. The action area includes Wide Hollow Creek and those portions of the channel that will be dewatered, areas potentially affected by temporarily reduced flows, increased turbidity, and noise.

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 Setting/Baseline section of the BA describes the environmental baseline and is adopted here. In summary, Wide Hollow Creek within the action area is highly impacted by urbanization; the creek has been channelized with additional constriction in the area under the bridge. Due to residential and commercial development, the historic floodplain has been lost and the riparian area is limited to a narrow band of vegetation. Riparian vegetation is dominated by non-native crack willow (*Salix fragilis*) that has replaced more functional native vegetation. Crack willow diminishes floodplain function and has a root system that can accelerate bank erosion.

Historical records indicate MCR steelhead presence in Wide Hollow Creek so the action area may support rearing and migration of MCR steelhead from the Naches population. However, spawning habitat is limited throughout the creek due to irrigation conveyance, return flows, and surrounding urban development. The Naches population is within the Yakima River Major Population Group (MPG), one of four MPGs of MCR steelhead. Important physical and biological features (PBFs) 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 in the action area to support MCR steelhead is primarily limited by effects from dredging, channelization, agricultural practices (i.e., overgrazing, irrigation conveyance), and degraded water quality.

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 Analysis of Effects section, and is adopted here. NMFS has evaluated this section and after our independent, science-based evaluation, determined it meets our regulatory and scientific standards.

An unknown number of juvenile steelhead from the Naches population will be affected by fish salvage and dewatering within a 3,800 square foot area of Wide Hollow Creek. Most of the steelhead that will be present are expected to move to areas that will not be dewatered or to be captured and released safely during fish rescue. A minority of fish present in the area are expected to die by evading rescue and suffocating in the dewatered area, or to be injured or killed as a result of fish rescue efforts.

The ability of critical habitat in the action area to support steelhead rearing will be impaired by: (1) temporarily decreasing rearing capacity via the water quantity PBF; (2) temporary increased turbidity within 100 feet of the in-water work area via the water quality PBF; and (3) replacing

approximately 82 linear feet of already altered streambank with riprap via the natural cover PBF. The water quality PBF is currently impaired by untreated stormwater return at the bridge site. However, the proposed action includes treatment of 100% of stormwater from the bridge which will effectively filter out stormwater pollutants, including 6PPD-quinone, and result in improved water quality in the action area.

“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. The Cumulative Effects section of the biological assessment describes cumulative effects and 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.

Because the proposed project will conduct work during the in-water work window of July 1 to August 31, migrating and spawning adult steelhead will not be present in the action area during in-water work. Summer water temperatures in Wide Hollow Creek exceed 16°C; however, we do anticipate that small numbers of juvenile steelhead will be present in the action area. The proposed action is expected to kill or injure a small number of juvenile steelhead during dewatering and fish rescue. Juveniles may also be trapped 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). Juveniles that are successfully rescued or flee the work area volitionally are expected to find abundant similar habitat nearby. The replacement of a poor habitat quality section of streambank with riprap is expected to have minimal long-term impacts to juvenile steelhead rearing. The proposed action implements stormwater treatment where none currently exists; therefore, water quality should be improved in the action area.

The status of MCR steelhead is generally poor, and is compromised within the action area as a result of regulation of the hydrograph by irrigation conveyance and agricultural and urban development which have simplified floodplains and aquatic habitats. Cumulative effects may cause a slight degradation of habitat conditions in the action area over the coming decades. A one-time loss of a small number of juveniles caused by the proposed action will not meaningfully affect the abundance or productivity of the Naches population, and will not affect their diversity or spatial structure. The likelihood of persistence and recovery potential of the 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 temporarily reduce the function of the water quantity PBF during the dewatering event. Two areas will be dewatered in sequence over a period of up to 2 months. In-water work will increase turbidity and impact the water quality PBF in Wide Hollow Creek for up to 100 feet downstream of the work area. Although rearing capacity will be reduced while the channel is dewatered, the proposed action includes excavation of the existing channel in the work area to increase the width to natural conditions and will result in a long-term increase in rearing capacity.

The existing habitat provides very little natural cover; the south streambank is steep with little undercut bank, while the north bank, also lacking undercut banks, is in residential areas that have been mostly cleared of woody plant species. The current bridge abutments, constructed with timbers, are located within the ordinary high-water mark and comprise approximately 42 feet of the streambank. The south abutment extends into the channel so no natural cover is present. The north abutment is within the floodplain and the adjacent streambank is primarily bare ground due to the absence of sunlight. Replacement of 82 linear feet of streambank with riprap will create a short-term loss of the natural cover PBF; however, the proposed action includes planting native willows along the streambank so the long-term effects to the natural cover PBF are expected to be small.

The short- and long-term effects will be manifest at the scale of the action area, and will not affect the quality or amount of critical habitat available at the scale of the designation. Thus, the action is also not likely to destroy or adversely modify designated critical habitat for MCR steelhead.

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 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). "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 incidental take statement (ITS).

Amount or Extent of Take

In the opinion, NMFS determined that incidental take of MCR steelhead is reasonably certain to occur as follows: capture, injury, and death resulting from dewatering, fish rescue, and in-water work activities. We anticipate that the proposed action is likely to result in capture, injury, and death to juvenile MCR steelhead caused by dewatering 3,800 square feet of Wide Hollow Creek. A small number of juvenile steelhead are anticipated to be injured or killed.

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. Poor quality habitat and high stream temperatures indicate that relatively few steelhead juveniles will be encountered in the action area. Hall-Griswold and Petrosky (1996) estimated 0.6 juvenile steelhead per 100 square foot in poor quality habitat; we anticipate approximately 23 juvenile steelhead will be present. 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 because 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 10 to 20 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 surrogate is 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 the de-watering of more than 3,800 square feet of stream.

The surrogates described above are measurable, and thus can be monitored and reported. For this reason, the surrogate function as effective reinitiation trigger.

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 FHWA shall minimize incidental take by:

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

- 1) The following terms and conditions implement RPM 1:
 - a) By the end of the calendar year following construction, the FHWA shall report monitoring items to include, at a minimum, the following:
 - i) Project identification:
 - (1) Project name: 10th Ave. South Bridge Replacement. (WCRO-2022-01410)
 - (2) FHWA contact person
 - ii) Construction details:
 - (1) Square feet of stream that was de-watered
 - (2) A description of any elements of the project that were constructed differently than depicted in the biological assessment or this opinion
 - b) If take is exceeded, contact NMFS promptly to determine a course of action.
 - c) All reports will be sent to NMFS at crbo.consultationrequest.wcr@noaa.gov.

Reinitiation of Consultation

As 50 CFR 402.16 states, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained or is authorized by law and if: (1) The amount or extent of incidental taking specified in the ITS is exceeded, (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion, (3) the agency action is subsequently modified in a manner that causes an effect on the listed species or critical habitat that was not considered in this opinion, or (4) a new species is listed or critical habitat designated that may be affected by the 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, 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)].

NMFS determined the proposed action would adversely affect EFH of Pacific salmon as follows:

- Dewatering 3,800 square feet of stream, short-term increases in turbidity, and replacing 82 feet of streambank with riprap.

NMFS determined that measures included in the biological assessment are sufficient to avoid, minimize, mitigate, or otherwise offsets the impact of the proposed action on EFH.

The FHWA must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH Conservation Recommendations [50 CFR 600. 920(l)].

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The biological opinion will be available through NOAA Institutional Repository at <https://repository.library.noaa.gov/welcome>. A complete record of this consultation is on file at NMFS' Columbia Basin Branch.

Please contact Todd Andersen, Snake Basin Office, (208) 366-9586, todd.andersen@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 "Michael P. Tehan".

Michael P. Tehan
Assistant Regional Administrator
Interior Columbia Basin Office

cc: Hans Purdom, WSDOT
Phil Nugent, WSDOT
Gary Martindale, Jr., FHWA
Cindy Callahan, FHWA

LITERATURE CITED

- 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>
- Hall–Griswold J., and C. Petrosky. 1996. Idaho Habitat/Natural Production Monitoring Part I, Annual Report 1995. Idaho Department of Fish and Game. IDFG 97-4, Project Number 91-73. Prepared for: U.S. Department of Energy, Bonneville Power Administration, Environment, Fish and Wildlife. Portland, Oregon.
- NMFS (National Marine Fisheries Service). 2022. 2022 5-year Review: Summary and Evaluation of Middle Columbia River Steelhead. NMFS. West Coast Region. 87 pp.