



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
800 E. Park Blvd, Plaza IV, Suite 220
Boise, Idaho 83712

Refer to NMFS No: WCRO-2021-02116

January 12, 2022

Michelle Walker
Chief, Regulatory Branch
U.S. Army Corps of Engineers, Seattle District
P.O. Box 3755
Seattle, WA 98124-3755

Re: Endangered Species Act Section 7(a)(2) Concurrence and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Chief Joseph Wildlife Area Access Road Repair, Joseph Creek (HUC1706010606), Asotin County, Washington.

Dear Ms. Walker:

On July 26, 2021, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the subject action, to be authorized under Section 404 of the Clean Water Act (CWA) by the U.S. Corps of Engineers (Corps), is not likely to adversely affect (NLAA) listed species or critical habitats designated under the Section 7 of the Endangered Species Act (ESA). Upon review of the Biological Assessment (BA), NMFS did not concur with the NLAA determination; specifically, the action has the potential to harass or harm juvenile Snake River Basin (SRB) steelhead. After communication with Corps staff, on October 7, 2021, the Corps agreed to move the proposed action forward under formal consultation and with the likely to adversely affect (LAA) determination for SRB steelhead. Therefore, NMFS will proceed with formal consultation pursuant to section 7(a)(2) of the ESA with the determination that the proposed action will be LAA SRB steelhead. NMFS has also determined that the action, and associated BA, qualified for our expedited review and analysis (i.e. condensed biological opinion) because it met our screening criteria and contained most of the required information on and analysis of, your proposed action and its potential effects to listed species and designated critical habitat. Specifically, we have adopted the information and analyses provided in sections 1.0 through 5.5 of the BA. The following document is a condensed biological opinion for SRB steelhead. Additionally, this letter documents NMFS's concurrence with the Corps determination that the action is NLAA Snake River (SR) spring/summer Chinook salmon and SR fall Chinook salmon or their critical habitats.

Thank you also for your request for consultation pursuant to the essential fish habitat (EFH) provisions in Section 305(b) of the Magnuson–Stevens Fishery Conservation and Management Act [16 U.S.C. 1855(b)] for this action. After reviewing the proposed action, we agree with your conclusion that the action would not adversely affect EFH. Therefore, we are hereby concluding EFH consultation.



Consultation History

NMFS received a BA along with a request to initiate informal consultation from the Corps on July 26, 2021. Upon initial review of the BA, NMFS corresponded by phone with the Corps seeking clarification of the proposed fish exclusion procedures, which was needed for the NLAA concurrence. The Corps submitted an updated BA on August 3, 2021; however, conflicting language regarding fish exclusion procedures still existed in the BA. NMFS emailed the Corps on August 5, 2021 providing highlighted segments of the updated BA that contained conflicting fish exclusion language. NMFS received the clarifying information via a final BA that was emailed on August 9, 2021. Through subsequent analysis of fish distribution, timing, and the proposed exclusion techniques, we determined individual steelhead could be adversely affected. On October 7, 2021, NMFS communicated to the Corps that the actions were LAA SRB steelhead and formal consultation was initiated on that date.

After reviewing the initial consultation request and final BA, we adopted the information and analyses the Corps provided or referenced, but only after NMFS's independent, science-based evaluation confirmed they meet our regulatory and scientific standards. We adopt by reference here sections 1.0 through 5.5 of the Chief Joseph Wildlife Area – Access Road Repair Asotin County, Washington BA, File No. 3730-179-00, including the Federal Action (section 1.0), Listed Species (section 1.3), Environmental Baseline (section 4.0), and the Effect of the Action (section 5.0). The referenced BA, we have adopted, is available in its entirety in our official project record, available at NMFS Boise Office or by contacting Todd Andersen (todd.andersen@noaa.gov). This document may also be accessed by contacting David Moore, Biologist/Soil Scientist in the Spokane Regulatory Field Office at (206) 316-3166, or by email at david.j.moore@usace.army.mil. NMFS supplemented this CORPS analysis with additional discussion regarding effect pathways for fish-exclusion activities and rearing critical habitat (see *Effects of the Action*, below).

BIOLOGICAL OPINION

Proposed Action

The Washington Department of Fish and Wildlife (WDFW) proposes to create a long-term solution to address ongoing erosion along the right (eastern) bank of a side channel of Joseph Creek (Figure 1). The creek is adjacent to a road that provides access to the WDFW Wildlife Area (WLA) Headquarters Building as well as public access to the Chief Joseph WLA.

Using a bioengineering approach, the proposed project design would provide erosion control along the Green Gulch access road and Joseph Creek (Section 2.0 of the BA). This proposal includes the installation of a wooden crib wall structure below the ordinary high water mark (OHWM) to prevent further loss of the eroding streambank. A crib wall is comprised of stacked logs with each layer perpendicular to adjacent layers. Root wads are incorporated to buffer high water velocities and provide cover for fish. The voids in the crib wall are filled with a cobble or soil mix.



Figure 1. Photograph looking downstream at the side channel eroding stream bank and access road to the Chief Joseph Wildlife Area. The side channel rejoins the main channel at the end of the gravel bar.

Willow stakes are planted in the top of the structure to provide additional structure and stability, overhead stream cover, and shading to the stream. This structure will be 50 feet long, 9 feet wide, and 9 feet in depth, and protruding into the current stream channel. 120 square feet of fill material will be placed below OHWM (Figure 2) and the footprint of fill material above OHWM will be 161 square feet.

Section 2.2 of the BA describes the construction equipment and materials used for project implementation. An excavator, backhoe and other equipment will be used to remove existing wood and embankment material and install the wood crib wall structure. No machinery will work below the OHWM; however, machine attachments (e.g. excavator bucket) will be used for proposed work below the OHWM. Sediment and erosion control measures will be implemented for all phases of construction. Construction of the project will be timed to coincide with the approved in-water work window associated with the WDFW Hydraulic Project Approval (HPA). The in-water work window for the project is July 16 through August 15. This work window is designed to reduce impacts to listed salmonids. In addition to the in-water work window, construction best management practices (BMPs) and temporary sediment and erosion control measures will be utilized during the project to avoid impacts to ESA-listed species and designated critical habitat.

Impact minimization measures outlined in the BA (section 2.4) also include equipment staging and materials storage, equipment inspection and cleaning, debris removal, waste disposal, and a Spill Prevention Control (SPC) Plan.

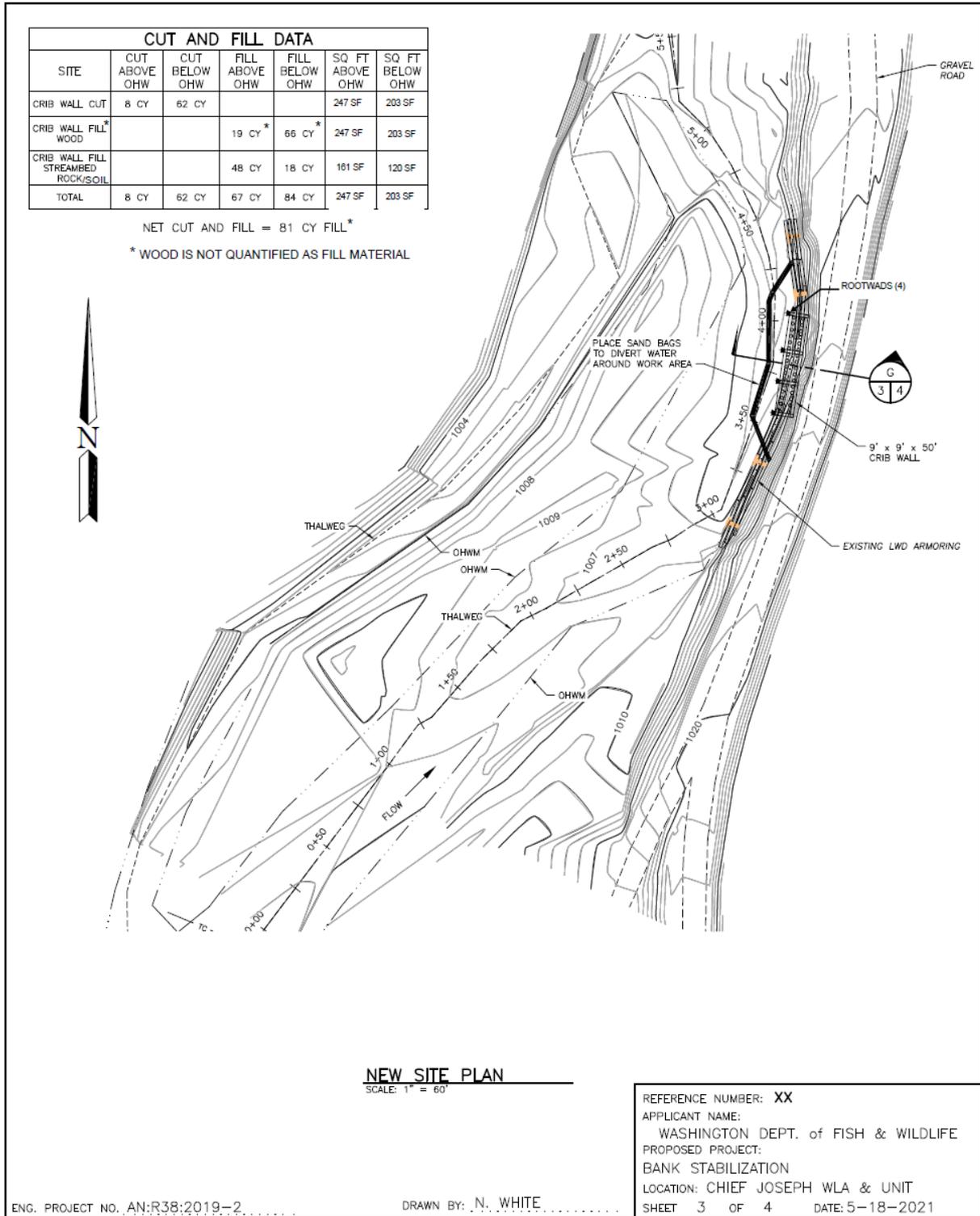


Figure 2. Plan view of the proposed crib wall structure within the Joseph Creek stream channel, Asotin County, WA.

Fish Exclusion Procedures

The active work area is located in a side channel of Joseph Creek (see Figure 1) and will be approximately 100 feet long and 12 feet at the widest point (measured at OHWM). Water depth is not anticipated to be more than 12 inches deep within the work area. A WDFW Environmental Planner will be present on site during the fish exclusion procedures, which will take place prior to any equipment working in water. Fish will be removed and excluded from the work area using the following technique as described in Section 5.2 of the BA:

- A block net (1/8-inch mesh) will be placed upstream of the work area to prevent fish from moving into the work area.
- Two people will use a seine net (1/8-inch mesh) to herd fish out of the work area. Starting at the upstream block net, the seine will be worked along the bottom of the side channel in a downstream direction to the downstream boundary of the work area. The seine will then be anchored and used as a block net to prevent any fish from entering the work site.
- Within the seined channel, a sandbag cofferdam will be installed by hand to dewater the toe of the streambank where the crib wall will be installed; the cofferdam will to be left in place for the duration of in-water work while excavating and installing the crib wall structure.
- The downstream end of the cofferdam will be left open so that any remaining fish will be herded out of the work area. Two people, on each edge of the inside of the cofferdam exclusion, will use a seine net (1/8-inch mesh) to push any remaining fish downstream and out of the cofferdam exclusion area. This will occur at least three consecutive times and until no fish are visibly present within the excluded cofferdam. The cofferdam will be fully enclosed and the upstream and downstream block nets will be removed. The coffered area will then be dewatered.

Status of Species and Critical Habitat

We examined and considered the status of the species (BA section 4.4.2) for SRB steelhead to inform the description of the species' "reproduction, numbers, or distribution" as described in 50 CFR 402.02. We also examined and considered the condition of critical habitat throughout the designated area and the function of the physical or biological features essential to the conservation of the species that create the conservation value of that habitat (BA section 5.4).

Joseph Creek is designated critical habitat for SRB steelhead. Both adult and juvenile life stages use the main channel as a migration corridor (BA section 4.4.2). The BA also states that juveniles may utilize Joseph Creek, within the project area, for rearing; however, high water temperatures likely limit utilization by juvenile steelhead during the work window. During the winter and spring months, juvenile SRB steelhead may utilize the side channel areas of Joseph Creek. During the summer months, and the proposed July 16 to August 15 work window, mean daily water temperatures often exceed 68°F with daily maximum temperatures averaging 76°F. The optimal water temperatures for rearing steelhead range from 53-64°F, and sustained temperature above 77°F is lethal.

“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, therefore, includes the spatial extent of all direct, indirect, interrelated and interdependent effects of the project. The action area includes aquatic habitat within Joseph Creek and the adjacent bank riparian area and access road (BA section 3.2). The part of the action area below water surfaces is the stream section starting where the upstream block net is set, extending down through the work area, and ending approximately 300 feet below the work area, accounting for the expected extent of turbidity. Sediment, both suspended and deposited, is the pathway of effect that will have the greatest extent (i.e., covers the largest area) compared to other potential pathways of effect (e.g., 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). Section 4.0 of the BA describes the environmental baseline, including recent alterations of the action area.

Baseline conditions in the action area have been shaped by decades of livestock grazing, fire, road construction, hunting, fishing, camping, etc. Streambed sediments within the project area consist primarily of cobbles and riparian vegetation consists primarily of invasive Himalayan blackberry. Although riparian habitat within the project site is degraded, riparian habitat within other parts of the action area includes dense overhanging native riparian vegetation that provide rearing, forage and refuge habitat for salmonids. Native riparian vegetation within the action area includes alder and cottonwood canopy with red osier dogwood. Due to high water temperatures, the Oregon Department of Environmental Quality has listed Joseph Creek 303(d) impaired for fish and aquatic life.

The Grande Ronde/Imnaha steelhead Major Population Group of SRB steelhead is tentatively rated as achieving viable status given that one population (Joseph Creek) is Highly Viable, the Upper Grande Ronde population meets the criteria for Viable, and the remaining two populations are provisionally rated as Maintained. The Joseph Creek population is the only population affected by the proposed action. The Joseph Creek steelhead population’s overall viability rating is highly viable, with abundance/productivity (A/P) rating at a very low risk and a spatial structure and a diversity rating of low risk.

The physical and biological features (PBF) of steelhead critical habitat most likely to be affected by the proposed action include water quality (turbidity and possible toxic chemicals), substrate, natural cover, and freedom from artificial obstructions. Modification of these PBFs may affect freshwater rearing, or migration in the action area. Proper function of these essential features is

necessary to support successful adult and juvenile migration, rearing, and the growth and development of juvenile fish.

Effects of the Action

Under the ESA, “effects of the action” are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (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 assessment of the fish exclusion, noise, and water quality (sediment and chemical contamination) effects of the proposed action in Section 5.0 of the initiation package. With exceptions noted below, the Corps’ analysis is adopted here (50 CFR 402.14(h)(3)). Although the effects analysis in the BA provides the key information, NMFS does not agree with the conclusion the Corps drew that the effects are insignificant. In section 5.3 of the BA, it is stated “*Because of the life history of listed salmonids present within the action area, which may remain in Joseph Creek at any time of year, it cannot be guaranteed that no listed individuals will be present during these activities.*” While NMFS agrees that, the proposed activities to limit the likelihood of encountering juvenile steelhead (e.g. the proposed work window) are valid, if steelhead (particularly young-of-the-year) are present during fish exclusion and construction activities, implementing the project could result in injury or mortality to individual fish. The effect pathways of injury or mortality associated with construction activities were not addressed in the BA and thus are discussed below.

Implementation of the proposed action has the potential to affect steelhead by directly disturbing the fish with construction equipment and activities (e.g. noise), exposing fish to toxic chemicals, creating temporary plumes of suspended sediment, causing fish to flee or become stranded when isolating or dewatering the work site, and possible crushing, impinging, or entraining fish by construction activities. Potential alterations to critical habitat include; temporary water quality degradation; effects on instream and edge cover from conversion of a portion of the stream channel to riparian habitat (i.e. extending the existing bank into the current channel), sedimentation of stream substrate, and temporary obstruction of fish passage with block nets.

The summaries of each type of effect below are provided to supplement the analysis in the BA. While the BA explained the types and physical dimensions of project effects, it appeared to assume that steelhead would not be in the area (given the work window) or that fish exclusion would be 100 percent effective and the process would not harm any fish. However, NMFS assessed that there is more than a negligible likelihood juvenile steelhead will be present, especially at the start of the work window, when the fish exclusion activities are implemented and when stream temperatures may not be so high as to preclude steelhead presence. Also, because steelhead spawning is known to occur upstream of this area, it is possible some of the fish present would be very small, recently emerged fish. With those things in mind, below NMFS briefly reviews and adds to the effects analysis in the BA.

In-air construction noise may permeate the surrounding terrestrial environment at and adjacent to the work; however, there will be very limited in-water noise generated by the project. Furthermore, the work area will be isolated from Joseph Creek during construction, further reducing construction noise extending into the aquatic environment. Fish may move short distances temporarily in response to the noise; however, suitable habitat is abundant in nearby reaches and such responses are not expected to adversely affect the rearing of juvenile fish at this site.

Equipment staging and materials storage will be located in an area away from the stream. A Spill Prevention Control and Countermeasure (SPCC) Plan will be prepared, approved and implemented by the contractor. The plan will be site-specific and cover the project scope of work. Equipment used for this project shall be free of external petroleum-based products while the work is performed around the water. Equipment shall be checked daily for leaks, and any necessary repairs shall be completed prior to commencing work activities adjacent to the creek. Heavy equipment shall be washed free of deleterious material prior to commencement of work. All debris resulting from construction shall be removed from the project area and prevented from entering the water. With successful implementation of the proposed SPCC, the likelihood and level of effect from chemical contamination is expected to be very low and is not likely to cause injury, harm, or behavioral changes to juvenile steelhead in the action area.

Water quality will be more appreciably affected by project turbidity. Elevated turbidity due to suspension of sediments is expected during work area isolation (cofferdam construction) and following removal of the cofferdam. Water quality is expected to return to baseline conditions immediately following completion of construction. Increased turbidity is anticipated to affect the project area and extend up to 300 feet downstream from the construction limits, causing potential sub-lethal effects to steelhead. Turbidity may increase physiological stress, resulting in physical injury (e.g., gill abrasion), and potentially displace rearing juvenile fish. In-water construction work will be limited to the approved in-water work window for the project. This measure should limit the number of steelhead exposed to the expected temporary increases in turbidity. With appropriate BMPs in place and adherence to the approved in-water work window for fish protection, the effect on water quality is expected to extend up to 300 feet downstream of the work site over a period of several hours while the cofferdam is installed and then removed. The work site is located in a side channel that joins the main channel approximately 100 feet downstream of the cofferdam. The main channel provides refugia from sediment plumes and contains similar habitat to the side channel; therefore, the likelihood of injury or harm to displaced juvenile fish from elevated turbidity is expected to be very low.

In-water work, including fish exclusion efforts, will be restricted to the approved work window, which is July 16 through August 15. Restricting the fish exclusion methods (strictly herding with seine) and using the work window help reduce but do not eliminate the possibility of encountering listed salmonids during the project. As noted above, NMFS assumes some juvenile steelhead, including young of the year, could be present. The project work site is located in a relatively shallow side channel (typically < 12 inch depths during summer) and displaced fish would have abundant similar habitat in adjacent areas. If listed fish are present, injury or mortality from setting the block net and sweeping the seine through the reach is unlikely. Fish

would flee downstream either to similar habitat or (for some young) burrow into the substrate and get under the net. The disturbance would be temporary and unlikely to harm the fish.

Fish exclusion techniques may not be entirely successful, especially for newly emerged steelhead fry. Rather than flee during fish exclusion activities, fry may burrow into the substrate. Furthermore, the mesh size used (1/8 inch) and gaps in the sandbag cofferdam may not preclude fry from re-entering the work site. If initial fish exclusion activities fail to remove all steelhead from the work area (particularly possible with young of the year fish that hide in the substrate), then the subsequent activities of coffer damming, three pass seining, and dewatering could injure or kill fish. Fish could be harassed, entrained, impinged on equipment or structures, or stranded on the dewatered streambed. Fish that are present in the work area could become trapped in the bucket of the excavator during excavation of in-water substrates. If juvenile fish are present, they could possibly be crushed within the substrate while excavation occurs. The proposed period of in-water work (July 16 – August 15) has high stream temperatures in this area and will likely limit the number if not preclude juvenile steelhead from the action area. To estimate numbers of fish adversely affected, and probably erring toward an overestimate, we developed estimates of juvenile fish based on area-specific data, and assumed the 1+ age fish would be effectively excluded whereas the young-of-the-year or fry would not (see below).

In August of 2006, WDFW completed electrofishing surveys in five sections of lower Joseph Creek; the mean density for rainbow trout or steelhead was 0.14 fish/100 m². The steelhead sampled by WDFW were all age-1+ and ranged in size from 118-187 mm. We applied that density estimate to the active work area (100 feet long and 12 feet wide or 111 m²) and estimated there would be one age 1+ steelhead within the area at the time of implementation. The age-1+ steelhead would likely flee the work site and not be harmed during fish exclusion activities.

The 2006 WDFW surveys of this area did not capture any young-of-the-year steelhead. However, newly emerged fry are small and harder for netters to see and capture during electrofishing surveys. In addition, fry are often overlooked by netters as they have a tendency to focus on larger fish and operators tend to skip the shallow margins where fry are often located. Therefore, we also estimated the number of fry that could be present in the work area. Cottonwood Creek, a tributary that enters Joseph Creek approximately 2.5 miles upstream of the work site, contains the nearest documented steelhead spawning (the next nearest is over 30 miles upstream in Joseph Creek). In 2016, there were 24 steelhead redds counted in Cottonwood Creek. We took the average steelhead fecundity and egg to fry survival rate and estimated that Cottonwood Creek steelhead produce 34,618 fry. There is an estimated 15.8 miles of suitable rearing habitat from the Joseph Creek mouth up through the Cottonwood Creek watershed. If the fish were uniformly distributed across that whole area, there would be approximately 41 steelhead fry within the work site during construction activities. Assuming there could be more redds upstream when the project is implemented, and the fish are somewhat more concentrated in this area for some reason, we doubled the estimate—to a total of 82 steelhead fry. Because of their small size and limited development, steelhead fry tend to hide rather than flee like age-1+ fish. Therefore, we expect that the 82 fry present will be potentially injured or killed as a result of project activities.

The long-term impacts of the proposed action to habitat features, and thus to steelhead, are primarily altering bank and stream channel conditions. These habitat effects will occur within and adjacent to the proposed crib wall. Approximately 120 square feet of aquatic fill will occur within the footprint of the crib wall through the placement of the cobble or soil mix; there will also be 83 square feet of wood structure, for a total fill area of 203 square feet below the OHWM. Steelhead habitat will be altered through the installation of logs and root wads within the creek along the face of the crib wall.

Although the installation of the crib wall will narrow the side channel and reduce the amount of aquatic habitat by approximately 203 square feet, the installation of root wads along the face of the structure will improve available habitat by roughening the face of the structure and providing cover along the margins of the channel. Habitat benefits will include slowing flows to create pools that will provide refugia for steelhead in an area that currently experiences high velocities and little refuge. Slower flows caused by the root wads are also expected to retain stream sediment and other natural materials.

Permanent loss of aquatic habitat is limited to 203 square feet within an area that has previously eroded from the access road embankment. Within these 203 square feet, aquatic habitat will be converted to a crib wall structure intended to enhance adjacent aquatic habitat and stabilize the streambank to prevent further erosion towards the access road. The loss of aquatic habitat that had eroded from the access road fill embankment is very small in size, the channel narrowing and roughening will not negatively impact steelhead migrating through or rearing in the side channel, and instead will somewhat improve habitat for steelhead at the project site.

The action area includes designated critical habitat for SRB steelhead. The action as proposed has the potential to affect the following PBFs: water quality, substrate, natural cover, and freedom from artificial obstructions (Table 1). Any modification of these PBFs may affect freshwater spawning, rearing, or migration in the action area. Proper function of these PBFs is necessary to support successful adult and juvenile migration, adult holding, adult spawning, and juvenile rearing. All remaining PBFs would not be affected by the proposed action. Based on the anticipated project effects and the PBFs present within the project action area, the following effects on critical habitat PBF's are anticipated:

- As discussed above, given project BMPs for equipment, fuel, etc. effects from toxic chemicals on the water quality PBF will be avoided or minimized to extremely small amounts. However, water quality will be temporarily degraded during construction by increasing suspended sediment and turbidity during construction. The project site is located in a side channel approximately 100 feet upstream from its confluence with mainstem Joseph Creek. Turbidity pulses from cofferdam installation and removal will likely occur for no more than a few hours, will become mixed with the mainstem water, and likely become indistinguishable from background levels approximately 300 feet below the site. With appropriate BMPs in place and adherence to the approved in-water work window for fish protection, the effect on water quality is expected to be limited in size, occur no more than a few hours, and will not appreciably alter the function of this PBF in the action area.

Table 1. Types of sites, essential physical and biological features, and the species life stage each physical and biological feature supports.

Site	Essential Physical and Biological Features	Species Life Stage
Snake River Basin Steelhead^a		
Freshwater spawning	Water quality, water quantity, and substrate	Spawning, incubation, and larval development
Freshwater rearing	Water quantity and floodplain connectivity to form and maintain physical habitat conditions	Juvenile growth and mobility
	Water quality and forage ^b	Juvenile development
	Natural cover ^c	Juvenile mobility and survival
Freshwater migration	Free of artificial obstructions, water quality and quantity, and natural cover ^c	Juvenile and adult mobility and survival

^a Additional PBFs pertaining to estuarine, nearshore, and offshore marine areas have also been described for Snake River steelhead and Middle Columbia steelhead. These PBFs will not be affected by the proposed action and have therefore not been described in this opinion.

^b Forage includes aquatic invertebrate and fish species that support growth and maturation.

^c Natural cover includes shade, large wood, logjams, beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

- Approximately 203 square feet of side channel substrate at OHWM will be displaced by conversion of the streambed to streambank. The conversion of this narrow strip of channel along the bank into riparian habitat will increase water depth but decrease width of the side channel. The associated small amount of substrate area loss at the project site will not appreciably alter the function of the PBF in the action area. Substrate condition may somewhat improve with the addition of root wads along the channel, which will slow the stream flow to create pools, provide refugia and collect and retain sediment and natural materials. The root wads are expected to deepen the water and improve rearing and migration habitat. Increased turbidity from project activities will result in sediment deposition downstream of the in-water work area for a short time period during and immediately following in-water work. Fine sediment deposition in the action area is expected to occur over a small area and is likely to be transient, as seasonal increases in flow are expected to return the habitat to its previous level of function. The scale of impact will be minimal relative to the rearing habitat in the action area, and will not meaningfully change the conservation value of the substrate PBF in the action area.
- Riparian cover conditions will be temporarily impacted as a result of clearing for equipment access and bank stabilization work. This area, located above the OHWM, is small (247 square feet) and contains low quality riparian habitat primarily composed of invasive vegetation and bare dirt. Temporarily disturbed areas will be enhanced through installation of native willow stakes. The project willows and root wads will likely improve stream edge cover and PBF function at this small site over the long term.
- Installation of the cofferdam and block nets will affect the migration PBF in the action area since the work area will preclude fish from the site. However, the effect will be temporary and will not appreciably alter the PBF function in the action area because fish will still be able to migrate along the main channel of the creek.

Cumulative Effects

“Cumulative effects” are those effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation (50 CFR 402.02 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. Within the action area, continued recreational activities, road maintenance, grazing, and water use are expected to occur. The population of Asotin County has increased 4.4 percent from 2010 to 2019. Based on the relatively small increase in population (Washington state increased 13.2 percent), it is likely that future activities in Joseph Creek will remain at levels that are roughly similar to what is currently experienced. Therefore, for our analysis NMFS assumes that future state and private actions and land uses will continue within the action area at roughly their current rate.

Integration and Synthesis

The Integration and Synthesis section is the final step in our assessment of the risk posed to species and critical habitat as a result of implementing the proposed action. In this section, we add the effects of the action to the environmental baseline and the cumulative effects, taking into account the status of the species and critical habitat, to formulate the agency’s biological opinion as to whether the proposed action is likely to: (1) Reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing its numbers, reproduction, or distribution; or (2) appreciably diminish the value of designated or proposed critical habitat as a whole for the conservation of the species.

Juvenile SRB steelhead could potentially be present in the action area during implementation of the project. There is no documented steelhead spawning in the stream reach where the proposed action is located; however, spawning occurs upstream and the work window coincides with the emergence and period soon after emergence of steelhead fry. Newly emerged fry might not be developed enough to be successfully excluded from the work site using the fish exclusion techniques (BA section 5.2); rather than flee they may burrow into the substrate. Furthermore, the mesh size used (1/8 inch) and gaps in the sandbag cofferdam may not preclude fry from re-entering the work site. While mean daily stream temperatures during the work window in this area can be near lethal levels for steelhead, NMFS assumes that juvenile steelhead may be present during some portion of the work window.

The potential project effects of noise, chemical contamination, suspended sediment (BA section 5.0) will be minimized using best management practices. The possibility of impingement or entrainment will be minimized by implementing the proposed fish exclusion procedure (BA section 5.2). If juvenile steelhead are present within the cofferdam enclosure during construction activities, it is likely some individual will be stranded or crushed. Based project fish exclusion measures and applying available data and estimates noted in the effects section, NMFS anticipates that 1+ age steelhead will not be trapped in the active work area, but a small number of newly emerged steelhead fry moving or rearing down through this reach could be injured or killed.

Within the SRB steelhead Distinct Population Segment, the Grande Ronde/Imnaha MPG is the only MPG potentially affected by the proposed action. The Grande Ronde/Imnaha steelhead MPG is tentatively rated as achieving viable status. The Joseph Creek SRB steelhead population, which is the only population affected by the proposed action, is rated as Highly Viable while the other populations are rated either Viable (one population) or maintained (two populations). The Joseph Creek population also has an A/P rating of very low risk and a spatial structure and diversity rating of low risk making it a strong component of the viability rating for the Grande Ronde/Imnaha MPG. It is expected that few steelhead juveniles will be exposed and adversely affected as a result of the proposed action. The single-season loss of 82 fry will not alter the highly viable status of the Joseph Creek population, and similarly will not change the viable status of the Grande Ronde/Imnaha MPG. Because we expect no change to the status of the Grande Ronde/Imnaha MPG, we do not think the implementation of the proposed action will change the survival and recovery of the SRB steelhead DPS. After reviewing and analyzing the current status of the listed species, 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 SRB steelhead.

The action area is designated critical habitat for SRB steelhead, providing migratory habitat for adult and juvenile steelhead as well as potentially providing winter and spring rearing habitat for juveniles; summer rearing habitat may be limited because of high temperatures. Suspended sediment generated from implementation of the action is expected to be minimal and have only a short-term and small effect on the water quality PBF. Stabilizing the eroding bank is expected to decrease sediment inputs in the action area and provide long-term benefits for the substrate PBF in this stream reach. Implementation of the action will result in the loss of 203 square feet of shallow side channel habitat with the installation of the crib wall. However, the crib wall is expected to result in improved steelhead habitat PBFs by deepening the side channel, slowing water velocities, providing instream and overhead cover, and improving the riparian condition. The short-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 SRB 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 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 this opinion, NMFS determined that the proposed action has the potential to result in incidental take of ESA-listed species, and that such take is due to exposure to excess turbidity or from injury or death as a result of harassment, stranding, or entrainment or impingement in the coffer-dammed area.

As detailed above in the effects section, take associated with harassment, entrainment or impingement, or stranding is limited to the small number of young of the year fish that would be in this reach and not effectively excluded by the fish exclusion technique. NMFS estimates that up to 82 young of the year steelhead could be present and injured or killed by the project.

Abundance of Joseph Creek steelhead since 1996 has remained above 1,000 spawners (NWFSC 2015). From 2000 through 2009, the 10-year geometric mean abundance of natural-origin spawners was 2,186. Recent analysis by the NWFSC (2015) indicates that population abundance has remained high. The 10-year (2005-2014) geometric mean abundance of natural-origin spawners was 1,839. Given mean smolt-to-adult return rates of 2.24 percent from 1996–2013 (Comparative Survival Study Annual Report 2020), the injury or loss of 82 steelhead fry in the Joseph Creek population would mean a one-time loss of less than one adult equivalent (0.03) returning to spawn.

Monitoring or measuring the number of steelhead actually harmed or killed from project activities is complicated because fry are very small; collecting and counting dead fry is not feasible because a relatively high number would be unaccounted for. Numerous dead fry would be buried in fill or float into crevices of the cofferdam and be missed; therefore, the number of affected fish is difficult to measure. Because of the difficulty of clearly defining the number of fish that could be affected by the proposed action, surrogate measures of take are necessary to establish a limit to the take exempted by this take statement. Estimated mortality for this action is confined to the coffer-dammed area and thus the size of the isolated work area is causally related to the amount of take predicted; consequently, the extent of the cofferdam is the best surrogate measure for incidental take. Therefore, the extent of take is the 1,200 square foot area of the cofferdam (measured at OHWM).

The extent of take allowed in the opinion is exceeded if:

1. The cofferdam extends beyond an area of 1,200 square feet, measured at OHWM.

The authorized take includes only take caused by the proposed actions within the action area as defined in this opinion. The extent of take is the threshold for reinitiating consultation. Should any of these limits be exceeded, the reinitiation provisions of the opinion apply.

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, destruction, or adverse modification of critical habitat.

Reasonable and Prudent Measures

“Reasonable and prudent measures” 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:

- Ensure that the coffer-dammed area (the surrogate) is no greater than 1,200 square feet.
- Ensure completion of a monitoring and reporting program to confirm that the Terms and Conditions in this Incidental Take Statement are effective in avoiding and minimizing incidental take from permitted activities.

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 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 reasonable and prudent measure 1: the Corps shall inspect the work site daily, prior to initiation of work, to ensure isolation is maintained.
2. The following terms and conditions implement reasonable and prudent measure 2: submit a post-project report, providing the information requested above and confirming the successful application of all terms and conditions of this by April 15 of the year following project completion to the Snake Basin Office email: nmfswcr.srbo@noaa.gov.

Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Specifically, conservation recommendations are suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 CFR 402.02).

1. The Corps should monitor daily water temperature and fish presence in the action area during in-water construction to provide scientific data to inform future Joseph Creek consultations.

Reinitiation of Consultation

This concludes formal consultation for the Chief Joseph WLA Road Repair Project.

Reinitiation of consultation is required and shall be requested by Corps 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.

The amount of take will be considered exceeded if more than 82 steelhead fry or any plus one age steelhead are found dead in the work site, or if turbidity is visible more than 300 feet downstream of the work site.

Not Likely to Adversely Affect Determination

This document also responds to your July 26, 2021 request for concurrence from NMFS pursuant to Section 7 of the ESA for the subject action. Your request qualified for our expedited review and concurrence because it met our screening criteria and contained all required information on your proposed action and its potential effects to ESA-listed species and designated critical habitat.

We reviewed the Corps consultation request document and related materials. Based on our knowledge, expertise, and the materials you provided, we concur with your conclusions that the proposed action is not likely to adversely affect SR spring/summer Chinook salmon, SR fall Chinook salmon, or their critical habitats.

Spring/summer Chinook salmon use the Grande Ronde River as a migration corridor only. There is no documented or historical information indicating spring/summer Chinook salmon utilization of Joseph Creek. Fall Chinook salmon spawning is documented in the Grande Ronde River near the confluence of Joseph Creek. The action area is located approximately two miles upstream from the confluence; it is unlikely that sediment generated from project activities would be transported to the confluence given the low flows generally experienced during the work

window. In addition, temperatures in the Grande Ronde River during the work window are likely lethal to salmon; therefore, it is not expected that salmon would be in the river at the time of the proposed action, and thus all effects are discountable.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by the Corps or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law, and: (1) the proposed action causes take; (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 concurrence letter; or, (4) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16).

This concludes the ESA portion of this consultation. Please direct questions regarding this letter to Todd Andersen, Northern Snake Branch at (208) 366-9586 or todd.andersen@noaa.gov.

Sincerely,



Michael P. Tehan
Assistant Regional Administrator
Interior Columbia Basin Office

cc: D. Moore – Corps
M. Lopez – Nez Perce Tribe
G. James - Confederated Tribes of the Umatilla
K. Sarensen - USFWS