

Supplement Analysis
for the
Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment
(DOE/EA 2126/SA-47)

Eagle Valley Ranch Habitat Improvement Project, Subreach 1,
Adaptive Management Project

Bonneville project number 2010-072-00
Bonneville contract number 84063 rel. 3

Bonneville Power Administration
Department of Energy



Introduction

In June 2020, BPA analyzed the effects of the Eagle Valley Ranch Habitat Improvement Project, Subreach 1 Project in the Lemhi Valley River and Floodplain Restoration Projects EA (DOE/EA-2133) (Lemhi EA), which analyzed the effects of river and floodplain habitat restoration actions from a number of projects in the mainstem and tributaries of the Lemhi River in eastern Idaho. In December 2020, Bonneville Power Administration (BPA) and the Bureau of Reclamation completed the Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment (DOE/EA 2126) (Programmatic EA). The Programmatic EA analyzed the potential environmental impacts of implementing habitat restoration actions in the Columbia River Basin and its tributaries. The effects analysis in the Programmatic EA is similar in its assessment of the effects of the Eagle Valley Ranch Habitat Improvement Project as the Lemhi EA, but more comprehensive in that it covers more restoration actions. Subsequent projects in the Lemhi Valley have therefore been assessed within the effects analysis of the Programmatic EA.

Consistent with the Programmatic EA, this SA analyzes the effects of the Eagle Valley Ranch Habitat Improvement Project, Subreach 1, Adaptive Management Project (Adaptive Management Project), a portion of which BPA is proposing to fund. BPA would provide funds to the Idaho Department of Fish and Game (IDFG) to implement specific restoration actions in the Lemhi River Valley in Lemhi County, Idaho, consistent with those assessed in the Programmatic EA. The Adaptive Management Project would modify some river restoration features constructed in the Eagle Valley Ranch Habitat Improvement Project, Subreach 1 Project (Subreach 1) in 2022 to reduce the likelihood of ice dam formation at those constructed features and to construct side channels to serve as overflow and bypass channels for floodwaters that may accumulate behind ice dams wherever they might form in the upper reaches of the Adaptive Management Project area.

During the winter of 2022-2023 (Winter 2023) at least two ice dams formed within the Subreach 1 project area, contributing to upstream ice and water accumulation. These ice dams (including one lasting from December 23, 2022, through December 24, 2022, and a second lasting from January 30, 2023 through approximately February 3, 2023) appear to have sufficiently blocked the river channel to cause accumulation of ice and water, forcing water over the river banks and contributing to undesirable flooding upstream of the Adaptive Management Project area.

This SA analyzes the site-specific impacts of the Adaptive Management Project—including modifying

features of the Subreach 1 project and constructing side channels—to determine if it is within the scope of the Programmatic EA’s analysis. It also evaluates whether the Adaptive Management Project presents significant new circumstances or information relevant to environmental concerns that were not addressed by the EA. The findings of this SA determine whether additional National Environmental Policy Act (NEPA) analysis is needed pursuant to 40 Code of Federal Regulations (C.F.R.) § 1502.9(d) and 10 C.F.R. § 1021 *et seq.*

Proposed Actions

The Adaptive Management Project is located approximately 8.3 miles southeast of the town of Salmon, Idaho, between river miles 12 and 13 of the Lemhi River.

The Adaptive Management Project would construct new side channels and modify previously installed fish habitat structures and features to minimize their potential for trapping ice while maintaining habitat improvement value for anadromous fish. Ice typically forms as frazil¹ in the Lemhi River above the Adaptive Management Project area and then flows down through the Adaptive Management Project area. Though the original project design was consistent with current development regulations, the large volume of incoming frazil ice and its interaction with surface ice development through the Adaptive Management Project area in Winter 2023 exceeded the original project design. The goal of the Adaptive Management Project is to use the information gained from the flood events Winter 2023 to reduce the potential for future ice dams to form within the upper portion of the Subreach 1 project area, even at similarly extreme ice flows, and provide additional channels to increase conveyance of any resulting floodwaters from ice dams while maintaining the aquatic habitat benefits achieved by the Subreach 1 project.

The Adaptive Management Project would achieve these goals by increasing flow velocities in the main channel through the Adaptive Management Project area, increasing the river’s access to low-elevation channels (swales) to increase conveyance capacity for overflowing water and ice during high flows, and increasing the conveyance capacity of the floodplains for moving ice during flood flows across those floodplains. See Appendix A for project element mapping.

1: Flow velocities within the main channel would be increased by:

- realigning and straightening approximately 1,400 feet of river channel in strategic locations (with constructed riffles throughout) to increase slope and flow velocities;
- modifying seven large wood structures by cutting off pieces above low flow elevation to a two-foot maximum extension from the bank (wood structures in the river below low-flow elevation would remain as is) along over six hundred feet of riverbank to reduce development of solid ice cover and reduce the potential for frazil ice accumulation at the structures; and
- reduce cross sectional area and increase flow velocities by reducing pool depths at river bends in the realigned channel.

2: Increased access to overflow swales would be accomplished by constructing linear swales (side channels) connected to the river at elevations that would start flowing water prior to the river overflowing its banks and flowing onto the floodplain. These channels would receive flood flows if ice dams form and would be designed to route those flows around the potential jam locations prior to excessive buildup of ice and water. This would reduce flood risk to properties upstream of the Subreach 1 project area. Six of these channels totaling almost 5,000 feet would be constructed. Riffles

¹ This type of ice forms in fast-moving turbulent water when air temperatures are typically below 14°F as sediment interacts with supercooled water forming ice in disk-shaped crystals that are entrained throughout the water column. These disks are transported downstream and start collecting together turning into the “slush” known as frazil ice.

would be constructed in about ¼ of the length of these swales to control slope and water velocity.

3: Increased floodplain conveyance capacity for ice movement would be achieved by removing six large deer and elk enclosures (over 2,700 feet of fence line that could accumulate frazil ice and create ice dams) that were installed in the Subreach 1 project to protect vegetation.

The Adaptive Management Project would occur along 2,800 feet of the Lemhi River and encompass about 20 acres. The staging area for construction needs would require about 2.3 of those acres. Approximately 4,700 feet of temporary access roads and two temporary bridges would be constructed.

The top six inches of organic topsoil would be salvaged from new side channel excavation areas and stockpiled for use in final contouring and restoration of the Adaptive Management Project site. All staging areas and temporary access routes as well as compacted areas within the mapped limits of disturbance would be de-compacted by ripping to a depth of eight inches with a tractor-mounted toothed ripper to loosen and aerate the soil but leave organic matter on the surface.

Willows would be planted as brush banks (live cuttings placed horizontally in excavated trenches along riverbanks parallel to the flow) along 280 linear feet of the main and side-channel riverbanks. Willows would also be planted as willow baffles (live cuttings placed vertically in excavated trenches on the floodplain perpendicular to overland flows) along 4,050 linear feet in hundreds of six- to eight-foot-long excavated trenches).

Upon construction completion, the Adaptive Management Project area would be reseeded with seed mixes specific to streambanks, wetlands, riparian areas, or uplands and would be treated for invasive plants.

The Adaptive Management Project would take place in the fall and early winter of 2023-2024.

Funding the Adaptive Management Project would reduce frazil ice flood risk and would benefit Snake River spring/summer Chinook salmon, Snake River Basin steelhead, and bull trout and thereby fulfill commitments under the 2020 National Marine Fisheries Service Columbia River System Biological Opinion (2020 NMFS CRS BiOp) and support commitments specified in the 2020 U.S. Fish and Wildlife Service Columbia River System Biological Opinion (2020 FWS CRS BiOp), while also supporting ongoing efforts to mitigate for effects of the Federal Columbia River Power System (FRCPS) on fish and wildlife in the mainstem Columbia River and its tributaries pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), 16 U.S.C. 839 *et seq.* These actions also support BPA's commitments to the State of Idaho in the Columbia River Fish Accord, as amended.

Environmental Effects

The implementation of the Adaptive Management Project requires the use of a bulldozer, an off-road dump truck, and a small and medium-sized track-hoe for shaping swales, moving soil and gravel, and constructing riffles. All of these actions would disturb and displace soil in and along the river, damage vegetation, create noise, produce vehicle emissions, and temporarily increase vehicle traffic and human activity in the Adaptive Management Project area. The typical effects associated with the environmental disturbances created by the Adaptive Management Project are described in Chapter 3 of the Programmatic EA and summarized in this document.

Below is a description of the potential site-specific effects of the Adaptive Management Project and an assessment of whether these effects are consistent with those described in the Programmatic EA. Because the Adaptive Management Project is designed to minimize flood risk and improve both aquatic and riparian habitats for the long term, the adverse effects from soil and vegetation disturbance and human and mechanical activity, as detailed below, would be short-term only.

1. *Fish and Aquatic Species*

The effects of using construction equipment in and along the Lemhi River are consistent with the analysis in Section 3.3.1 of the Programmatic EA ("*Fish and Aquatic Species*"). Section 3.3.1.3 of the Programmatic EA describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and highly beneficial long-term effects.

Three species listed under the Endangered Species Act are present in the Adaptive Management Project area: Snake River spring/summer Chinook salmon (part of the Upper Salmon Major Population Group), Snake River steelhead (part of the Salmon River Major Population Group), and bull trout. The State of Idaho lists these species, respectively, as "critically imperiled," "imperiled," and "not rare and apparently secure."² No other state or federally listed species are present. BPA completed Endangered Species Act consultation on the effects of Subreach 1 on these species using BPA's "Habitat Improvement Program" (HIP) programmatic consultation (Project Notification Form 2023002). Under that consultation actions such as the Subreach 1 project were determined likely to adversely affect these species and their designated critical habitat in the short term, but would not likely result in jeopardy to the species or result in destruction or adverse modification of their designated critical habitat. The Adaptive Management Project's proposed actions were determined to be within the scope of the original ESA consultation for the Subreach 1 project and the Adaptive Management Project's effects would also be within the range of effects on fish considered in the HIP consultation. Following discussion with the National Marine Fisheries Service, additional consultation under ESA was therefore not re-initiated.

The short-term adverse effects of the Adaptive Management Project would include exposing, displacing, reconfiguring, or compacting earth with mechanized equipment along the Lemhi River, likely causing moderate, temporary sediment discharges, primarily from the introduction of first-time flows into newly-constructed channels and riffles. These impacts would be minimized because new excavations would be accomplished "in the dry" with no exposure to stream flows wherever possible while applying conservation measures from BPA's Habitat Improvement Program's ESA consultation and mitigation measures from the Programmatic EA. The amount of sediment discharged would be consistent with amounts that fish and other aquatic species typically encounter in their natural environment, as evaluated in Section 3.3.1.2.1 of the Programmatic EA, and would have a low potential for triggering the behavioral and physiological effects from elevated water temperatures as described therein.

Movement, sounds, and vibrations from construction-related human and mechanical activity would likely temporarily disturb and displace fish and aquatic organisms from their preferred habitats for the duration of the respective disturbances. New channels would be constructed in the dry (in upland areas outside of existing stream channels), but some work in existing channels would require worksite isolation. Worksite isolation involves damming off an area within a stream so that water flows around the work area while still remaining in the channel. Worksite isolation could also be the damming of the entire channel and redirecting flows temporarily into another channel to allow work across the entire isolated channel. Both types would be applied in this action.

Fully dewatered channels would require fish capture and relocation ("fish salvage") to free-flowing portions of the river prior to complete dewatering. Fish salvage involves electro-shocking, capture, and handling to relocate the fish. This is stressful for individual fish, but less so than stranding the fish without water. Fully dewatering a stream would also likely kill aquatic organisms (e.g., invertebrates) not able to be salvaged or themselves able to survive the temporary dewatering. The anticipated amount of this activity and aquatic species disturbance is consistent with the analysis in Section 3.3.1.2.1 of the Programmatic EA.

² State of Idaho "Species Conservation Status" website at:

<https://idfg.idaho.gov/species/taxa/list?category=5&usesa%5B%5D=Endangered&srnk=2&grnk=All&sgcn=All>

The Adaptive Management Project's long-term beneficial effects would include creation of more rearing and over-wintering habitats by maintaining and adding new side channels, riffles, and pools in and along the river in the process of reducing flood risk, and enhancement of in-stream habitat complexity over time by providing lower-velocity side channels. . The effect on fish and other aquatic species from the Adaptive Management Project would be low considering both the action's short-term adverse effects and long-term beneficial effects. This is consistent with the analysis in Section 3.3.1.2.2 of the Programmatic EA.

2. Water Resources

The effects of using construction equipment in and along the Lemhi River are consistent with the analysis in Section 3.3.2 of the Programmatic EA ("*Water Resources*"). Section 3.3.2.3 of the Programmatic EA describes overall low water quality impacts after considering moderate short-term adverse effects and highly beneficial long-term effects. There would be no effect on water quantity, as this project would make no water withdrawals, but there could be increased groundwater recharge since the connection between surface flows and the floodplain would be increased over both space and time.

Overall, the Adaptive Management Project would cause temporary sediment discharges by introducing flows across exposed soils in areas with newly constructed channels and riffles. Restoration actions would disturb lengths of stream or riverbank consistent with the type and scale of activities assessed in the Programmatic EA, and the sediment produced from these restoration actions is not anticipated to be greater than what occurs naturally during annual high-flow events. As in the Programmatic EA, these are short-term effects which would be mitigated with various measures, including high-pressure washing of fine material into newly constructed riffles, gradual introduction of flows into new channels, and protection of existing vegetation and revegetation when the Adaptive Management Project is complete. The long-term effects of the Adaptive Management Project, however, would include increased capability for the river and floodplain to effectively manage its frazil ice and sediment loads during high-flow and flood events, and reduced stream temperatures as a result of improved stream form, instream habitat structure, and increased riparian vegetative cover. These long-term beneficial effects are consistent with those described in the Programmatic EA.

3. Vegetation

The effects of using construction equipment in and along the Lemhi River are consistent with the analysis in Section 3.3.3 of the Programmatic EA ("*Vegetation*"). Section 3.3.3.3 of the Programmatic EA describes overall moderate impacts to vegetation after considering moderate short-term adverse effects and highly beneficial long-term effects. No plant species listed by the State or Federal governments as endangered, threatened, or of concern are present within the Adaptive Management Project area.

The Adaptive Management Project would produce impacts consistent with those described in the Programmatic EA for large-scale earthmoving during the creation of new channels and constructed riffles. Earth-moving actions required to construct new channels would entirely eliminate woody and herbaceous vegetation wherever they occur. The Adaptive Management Project would impact approximately seventeen acres by excavation of these new channels in areas not previously disturbed by the Subreach 1 project. The scale of these actions would be less than that assessed in Section 3.3.3.2 of the Programmatic EA in ("*Environmental Consequences for Vegetation*"). All impacted areas would become either waterways or would be revegetated by seeding and planting of native species. As described in the Programmatic EA, the short-term adverse effects would be temporary and moderate, but the long-term impacts would be beneficial. Taken together, the overall level of effect would be moderate.

4. Wetlands and Floodplains

The effects of using construction equipment in and along the Lemhi River are consistent with the analysis

in Section 3.3.4 of the Programmatic EA (*“Wetlands and Floodplains”*). Section 3.3.4.3 of the Programmatic EA describes overall low impacts to wetlands and floodplains after considering short-term adverse effects and beneficial long-term effects.

By design, all of the proposed construction activities would occur in riparian wetlands and floodplains. All work would thus require, and IDFG would obtain, permits issued by the US Army Corps of Engineers under Section 404 of the Clean Water Act before ground-disturbing actions could begin.

The Adaptive Management Project would modify previously restored river and wetland habitats to improve their ability to transport frazil ice and maintain high flows on the property’s floodplain. The actions would maintain wetland and floodplain habitats and functions, albeit in a different configuration than previously, and would prevent the need for more highly engineered and hard-scaped flood control actions that would be less protective of those habitats and functions. There would be adverse impacts in the short term, but wetland conditions and floodplain function would be maintained following Adaptive Management Project completion.

Consistent with the Programmatic EA, there would be long-term beneficial effects on floodplains from implementation of the Adaptive Management Project. There would be increased connectivity among the existing and new channels and their adjacent floodplains from constructed swales, side channels, and riffles. These would maintain an effective connection between the river and the floodplain. Floodplain grading and willow baffle placement would improve capture and desired deposition of sediment. This level of effect would be low, as stated in the Programmatic EA.

5. Wildlife

The effects of using construction equipment in and along the Lemhi River are consistent with the analysis in Section 3.3.5 of the Programmatic EA (*“Wildlife”*). Section 3.3.5.3 of the Programmatic EA describes overall low impacts to wildlife after considering short-term adverse effects and beneficial long-term effects. No wildlife species listed under the Endangered Species Act or by the State of Idaho are present within the Adaptive Management Project area.

The Adaptive Management Project would have short-term impacts on wildlife habitats as described in Section 3 (*“Vegetation”*) above. Habitat for nesting birds and hiding cover for big game, has already been impacted by the Subreach 1 project and has yet to be reestablished; therefore, these habitats would not be impacted further by the Adaptive Management Project. Nor would there be concern for disruption of nesting birds since Adaptive Management Project actions would occur outside of the nesting season. The primary impact of the Adaptive Management Project would be the disturbance and displacement of animals from winter habitats near the onset of winter.

Adaptive Management Project actions would disturb, and thereby displace, animals from the Adaptive Management Project area. This would happen on big game winter range in the late fall and early winter—the time when big game begin concentrating in these habitats. The stress of disturbance and displacement, however, would not be occurring at a time when body conditions are poor (as they would be at the end of winter) and the duration of activities would be only about three to four weeks: long enough for most animals to habituate to the activity (which would lower the stress), but not so long as to preclude use of the habitat for most of the winter. The number of acres affected would also be small in proportion to the abundance of winter range habitats in the Lemhi River floodplain above and below the Adaptive Management Project area. Animals would have space to effectively avoid the Adaptive Management Project area, and while individual animals may be affected, the scale of disruption, given the available habitat across the landscape would be too small and too short of duration to adversely affect local populations. In the long term, the affected area would support as much productive winter range, riparian,

wetland, and aquatic habitats as the improved Subreach 1 project area would have originally, though in a different configuration. Considering both long- and short-term effects, the overall effect on wildlife would be low, as stated in the Programmatic EA.

6. *Geology and Soils*

The effects of using construction equipment in and along the Lemhi River are consistent with the analysis in Section 3.3.6 of the Programmatic EA ("*Geology and Soils*"). Section 3.3.6.3 of the Programmatic EA describes moderate impacts to geology and soils.

The Adaptive Management Project would produce impacts consistent with those described in the Programmatic EA for large-scale earthmoving during creation of new swales (side channels) and constructed riffles. The scale of these actions (20 acres) would be less than that assessed in the Programmatic EA and the impacts to soil would be mitigated by minimizing the area of impact during operations, salvaging and re-spreading topsoil, ripping compacted soils, and applying erosion control measures. The level of effect from heavy equipment operation within the 20 acres would be moderate to high in the short term, but in the long term, the Adaptive Management Project would maintain connectivity of the Lemhi River with its floodplain. This would provide for sediment capture, vegetation diversity, and improved groundwater infiltration, all of which would restore and improve the soil conditions disrupted during construction. Considering both short-term and long-term effects, the overall effect would be moderate as described in the Programmatic EA.

7. *Transportation*

The effects of the Adaptive Management Project in and along the Lemhi River are consistent with the analysis in Section 3.3.7 of the Programmatic EA, ("*Transportation*"). Section 3.3.7.3 of the Programmatic EA describes low impacts to transportation.

The greatest effect of the proposed restoration actions on transportation would be increased congestion of local roads by vehicles transporting workers and equipment to project sites. The Adaptive Management Project would be only about 0.4 miles from State Highway 28 and adjacent to the Lemhi Road, but no Adaptive Management Project activities would be conducted from these roadways. No roads would be closed, temporarily blocked, or relocated. This level of impact would be low, as stated in the Programmatic EA.

8. *Land Use and Recreation*

The Adaptive Management Project would not affect land use or recreation. Land uses would not change; and public recreational opportunities on these private lands (of which there are none because the lands are not open to public use) would not change. This level of effect is consistent with that described in Section 3.3.8.3 of the Programmatic EA at, which states that land use practices underlying most project sites would not change.

9. *Visual Resources*

The Adaptive Management Project's effects in and along the Lemhi River are consistent with the analysis in Section 3.3.9 of the Programmatic EA ("*Visual Resources*"). Section 3.3.9.3 of the Programmatic EA describes low impacts to visual resources.

The Adaptive Management Project would implement restoration actions less than 0.5 mile from Idaho State Highway 28, but it would be at the same elevation as the highway with the sightline obstructed by the willow and cottonwood vegetation in the Lemhi River floodplain blocking much of the view. The Adaptive Management Project is, however, adjacent to a local road, the Lemhi Road, and construction activities would be fully visible to travelers along this route resulting in short-term visual impacts as

described in Section 3.3.9.2 of the Programmatic EA (“Environmental Consequences for Visual Resources”). Additionally, construction actions would temporarily result in bare soils that would be visible and likely detract from the otherwise pastoral scenery along this road, looking much like a plowed or mowed field until the newly planted grasses, forbs, and shrubs begin to visually restore the setting. Overall, this level of impact would be low and temporary, as stated in the Programmatic EA.

10. Air Quality, Noise, and Public Health and Safety

The effects of the Adaptive Management Project in and along the Lemhi River are consistent with the analysis in Section 3.3.10 of the Programmatic EA (“*Air Quality, Noise, and Public Health and Safety*”). Section 3.3.10.3 of the Programmatic EA describes low impacts to air quality, noise, and public health and safety.

The Adaptive Management Project would be located approximately nine miles (at the closest) from the town of Salmon, Idaho—a distance too great for noise, dust, or exhaust from construction activities to migrate and affect the residents during the few weeks of construction activities. No long-term source of emissions or noise would be created either. Safety impacts may result from workers sharing the roads when travelling to and from work sites, and from the potential visual distraction posed by construction work near the Lemhi Road to passing motorists. The Adaptive Management Project would have no potential to impact public safety infrastructure (e.g., roads and telecommunications) or to burden emergency services (e.g., police, fire, or ambulance).

This project would improve safety conditions in the local area by better channeling flood flows during ice-prone periods away from homes and other improvements and infrastructure.

This level of impact would be low, as stated in the Programmatic EA.

11. Cultural Resources

The effects of these restoration actions in and along the Lemhi River are consistent with the analysis in Section 3.3.11 of the Programmatic EA (“*Cultural Resources*”). Section 3.3.11.3 of the Programmatic EA describes low impacts to cultural resources because Adaptive Management Project construction would avoid cultural resources and the National Historic Preservation Act Section 106 consultation process would appropriately resolve any effects.

The Adaptive Management Project is located entirely within the Area of Potential Effect (APE) identified for the Subreach 1 project and includes the same types of actions. BPA conducted cultural resources surveys and completed consultations for the Subreach 1 project with the Idaho State Historic Preservation Office (SHPO) and three affected Tribes (the Shoshone Bannock Tribes of the Fort Hall Reservation, the Nez Perce Tribe of Idaho, and the Confederated Salish and Kootenai Tribes) for the areas potentially affected by the Subreach 1 project. Consultation on actions for the Subreach 1 project area was completed under two separate consultations, one in 2015 (for which no resources were identified in the Subreach 1 project area, and no effect was determined by BPA and concurred with by SHPO) and one in 2019.

On December 9, 2019, BPA consulted with the Shoshone Bannock Tribes of the Fort Hall Reservation, the Nez Perce Tribe, the Confederated Salish and Kootenai Tribes, and SHPO on the effects of the Subreach 1 project based on an intensive cultural resource survey and exploratory subsurface shovel probing of the Area Potential Effect (APE). The inventory report identified four cultural resources within the APE, including two previously recorded (a late historic wood debris dump, and Old State Highway 28) and two newly identified (a remnant attempt to channelize the Lemhi River and an unnamed irrigation ditch). On December 24, 2019, Idaho SHPO concurred with BPA’s determination that the Subreach1 project would have no adverse effect to historic properties (SHPO Rev. No.: 2020-167). No response was received from the tribes.

As described in the Programmatic EA, the results of these consultations were that the actions in the Subreach 1 project Adaptive Management Project would not affect historic properties or would not adversely affect such properties if present. Since the Adaptive Management Project is located entirely within the Area of Potential Effect (APE) identified for the Subreach 1 project and includes the same types of actions, that same determination is applied. In the unlikely event that cultural material is inadvertently encountered during the implementation of this project, BPA would require that work be halted in the vicinity of the finds until they can be inspected and assessed by BPA, and in consultation with the appropriate consulting parties.

12. Socioeconomics and Environmental Justice

The effects of the Adaptive Management Project in and along the Lemhi River are consistent with the analysis in Section 3.3.12 of the Programmatic EA ("*Socioeconomics and Environmental Justice*"). Section 3.3.12.3 of the Programmatic EA describes low impacts to socioeconomics and environmental justice.

As described in the Programmatic EA, the Adaptive Management Project would not result in requirements for additional permanent employees or for individuals to leave the local area or relocate within it. This project would not affect housing availability for local populations, displace people, or eliminate residential suitability of lands being restored or near them. The Adaptive Management Project would generate short-term employment for those implementing the restoration actions and would provide small, short-term cash inputs to local businesses for fuel, equipment, and meals. This degree of effect would be low.

There are no environmental justice populations present that could be affected, as this project and their impacts are limited to the private lands on which they are located, and no offsite effects are anticipated that could impact environmental justice populations elsewhere.

13. Climate Change

The effects of the Adaptive Management Project in and along the Lemhi River are consistent with the analysis in Section 3.3.13 of the Programmatic EA ("*Climate Change*"). Section 3.3.13.3 of the Programmatic EA describes low impacts to climate change.

Due to the short duration of construction activities and the relatively small number of vehicles involved, project-related greenhouse gas emissions are anticipated to be low. The Adaptive Management Project would have a low level of effect on climate change from short-term emissions from motorized equipment operations during implementation of the restoration actions. Further, these emissions would be offset to some degree by the ameliorating effects of restored floodplain function, such as increased water table inputs, increased carbon sequestration in expanded and improved riparian wetlands, and decreased water temperatures from improved instream and riparian habitat conditions. The overall contribution to climate change and greenhouse gas production would be low, which is consistent with the Programmatic EA.

Findings

The types of restoration actions and the potential impacts related to the proposed *Eagle Valley Ranch Habitat Improvement Project, Subreach 1, Adaptive Management* project are similar to those analyzed in the *Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment* (DOE/EA 2126) and Finding of No Significant Impact. There are no substantial changes in the EA's Proposed Action and no significant new circumstances or information relevant to environmental concerns bearing on the EA's Proposed Action or associated impacts within the meaning of 10 C.F.R. § 1021.314 and 40 C.F.R. §1502.9(d). Therefore, no further NEPA analysis or documentation is required.

/s/ Robert W Shull

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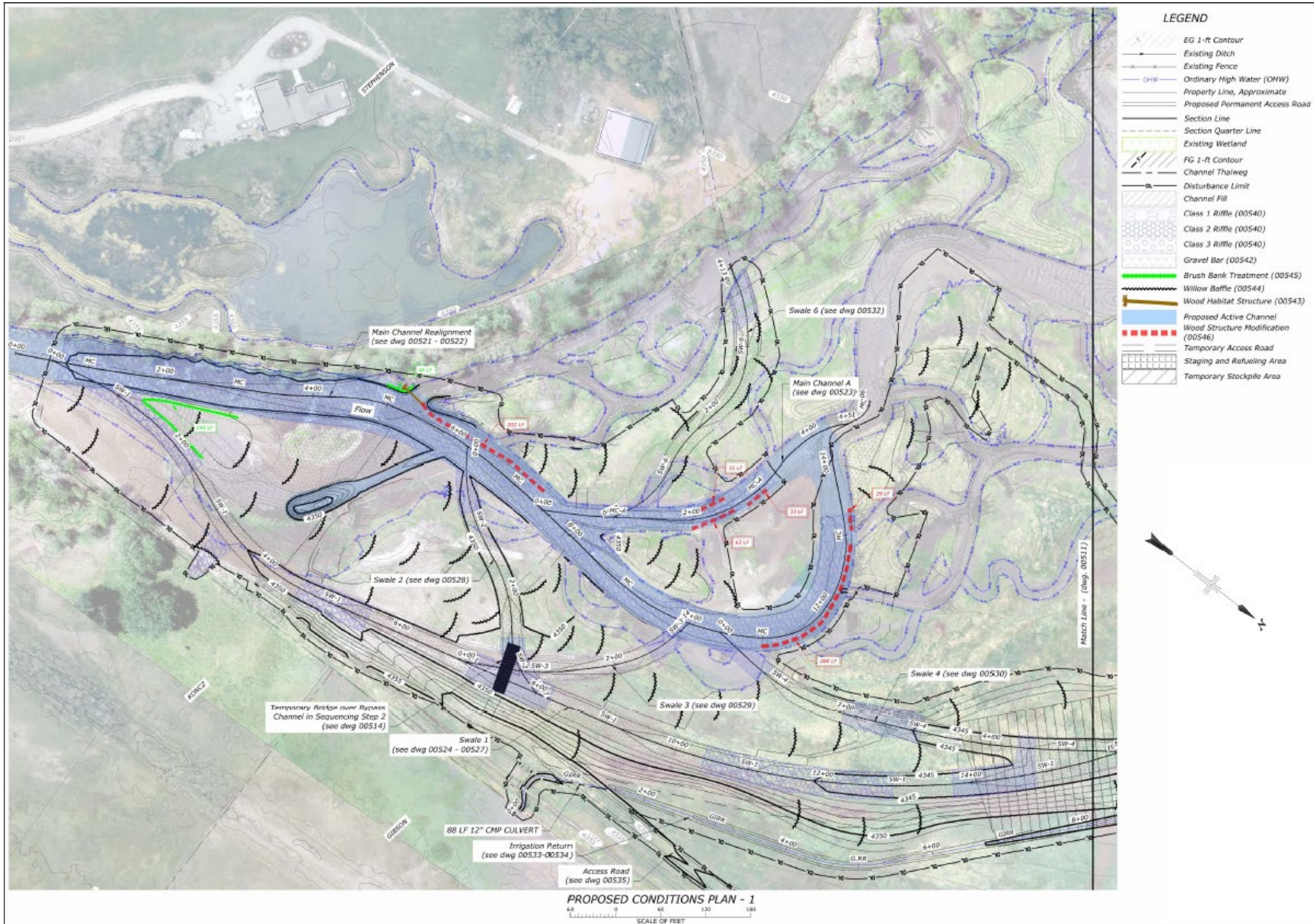
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Appendix A: Proposed conditions: Eagle Valley Ranch Habitat Improvement Project, Subreach 1, Adaptive Management, page 1



Proposed conditions: Eagle Valley Ranch Habitat Improvement Project, Subreach 1, Adaptive Management, page 2

