

**Supplement Analysis
for the
Columbia River Basin Tributary Habitat Restoration
Programmatic Environmental Assessment
(DOE/EA-2126/SA-63)**

**Kenney Creek Restoration Project
Bonneville project number 2010-072-00
Bonneville contract number 84063 REL 18**

Bonneville Power Administration
Department of Energy



Introduction

In December 2020, Bonneville Power Administration (Bonneville) 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.

Consistent with the Programmatic EA, this SA analyzes the effects of the Kenney Creek Restoration Project (project). The project would implement many of the specific restoration actions assessed in the Programmatic EA in the Lemhi River watershed in Lemhi County, Idaho. The objectives of the project are to increase instream habitat diversity; reduce water temperatures; and improve riparian and floodplain vegetative diversity for the benefit of Endangered Species Act-listed salmonids.

The SA analyzes the site-specific impacts of the project to determine if they are within the scope of the analysis considered in the Programmatic EA. This SA also evaluates whether the proposed project presents substantial new circumstances or information about the significance of the adverse effects that bear on the analysis and that were not addressed by the Programmatic 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.

Proposed Activities

Bonneville along with the NOAA Fisheries Pacific Coastal Salmon Recovery fund proposes funding the Lemhi Soil and Water Conservation District (District) to complete the project located on private property along the Lemhi River (between river miles 19.8 and 18.8) and between Highway 28 and Lemhi Road, approximately 6 miles southeast of Baker, Idaho, in Lemhi County (Figure 1). The proposed restoration involves the eastern bank and eastern floodplain of the Lemhi River. The proposed actions would directly impact approximately 2 acres. The project would improve secondary channel and floodplain interactions by excavating a side channel, create habitat using instream structures, and increase cover and shade by planting in riparian and wetland areas.

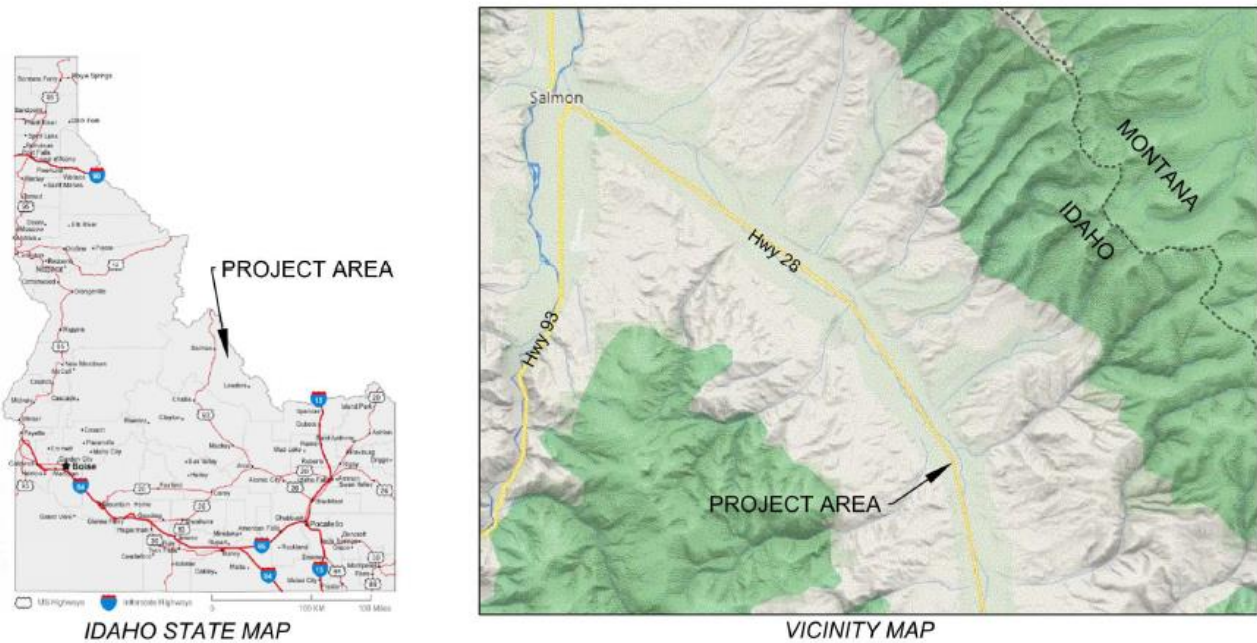


Figure 1. Location of proposed action.

Approximately 7,600 cubic yards of material would be excavated over approximately 750 feet to create the side channel. Sod and topsoil from wetland areas would be stripped and saved prior to excavation and placed along the channel margins of the new side channel. Excess excavated material would be disposed of in the spoils area or used for wood structure stabilization.

Wood structures would be installed along the newly excavated side channel and at the confluence of the side channel and the Lemhi River. Structures would be secured with backfill material only. Excavated topsoil and sod would be conserved and placed on top of banks after installation.

One channel split jam would be installed along the bank at the start of the side channel and would consist of 25 logs greater than 20 feet in length. Logs would be partially buried in the bank and willow clumps would be planted on top. Approximately 16 bank habitat log structures would be installed in the side channel. These would be made of four logs, greater than 20 feet in length, partially buried into the bank with willow clumps planted on top. In six of the structures, an additional log would be placed perpendicular to the other logs to be used as a footer. Approximately 10 logs greater than 15 feet in length would be used as backwater wood structures. These logs would be placed individually or in pairs in the excavated side channel.

The side channel would be planted throughout with containerized native shrubs. Plants would be protected by temporary wildlife exclusion wire fencing. A temporary irrigation system would be set up to ensure adequate survival of containerized plants through the first growing season. The system would consist of a pump, sprinkler heads, and hose to connect components.

Project construction would take place within the approved in-water work window with revegetation planting and protective fencing installation occurring during construction, in the fall, or the following spring.

Site access, staging, and sequencing would be implemented in accordance with conservation measures and terms and conditions outlined in Bonneville's Fish and Wildlife Habitat Improvement Program (HIP) Biological Opinions. Construction access would mainly be on Lemhi Road. Temporary access routes (approximately 0.6 mile in total), a staging area (approximately 0.4 acre), and a spoils area (approximately 1.2 acres) would be on private land mainly used for agriculture/grazing. Temporary access routes would use existing farm roads when available. Any routes through wetland areas would use best management practices to protect the wetland, including laying down non-woven geo-textile road fabric and a minimum 1-inch layer of wood chips. All materials would be removed at project completion and wetland areas returned to pre-existing grades. Temporary coffer dams would be used to isolate work areas from active river flows to reduce turbidity impacts. Fish within isolated work areas would be salvaged by experienced and permitted personnel before construction in those areas begins. Erosion and sediment controls would be installed and maintained throughout construction and until all disturbed soils are revegetated or stabilized. Work would require the use of heavy equipment such as excavators, dump trucks, and haul trucks. To limit impacts and maintain native vegetation adjacent to newly excavated side channels, the project would only use small equipment in the forested riparian area.

The District would monitor the effectiveness of the actions for several years after construction is complete. If failures in system function, structure function and integrity, or risks to infrastructure, riverscape processes, or fish passage occur, the District would implement adaptive management procedures. These procedures would include installation of new structures of the same type originally installed (not to exceed two per year) and/or modification of structures (not to exceed the addition of more than 20% of materials used during original construction of the structure). The District would also implement adaptive management procedures if there were low survival or establishment of native vegetation in restored areas.

Funding this project would benefit Snake River Chinook salmon (*Oncorhynchus tshawytscha*), Snake River Basin steelhead (*O. mykiss*), and bull trout (*Salvelinus confluentus*) and would fulfill commitments under the 2020 National Marine Fisheries Service Columbia River System Biological Opinion (2020 NMFS CRS BiOp) and the 2020 U.S. Fish and Wildlife Service Columbia River System Biological Opinion (2020 USFWS CRS BiOp). These actions also support Bonneville's commitments to the State of Idaho in the Columbia River Fish Accord, as amended, while also supporting ongoing efforts to mitigate for effects of the Federal Columbia River Power System 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. (USC) 839 et seq.).

Environmental Effects

The implementation of this project requires the use of construction crews and equipment which would disturb and displace soil in and along the streams; damage vegetation; produce noise and vehicle emissions; and temporarily increase vehicle traffic and human activity in the project area. Chapter 3 of the Programmatic EA, as summarized in relevant parts below, discusses typical environmental disturbances and impacts stemming from habitat restoration in the Columbia River basin. Below is a description of the potential site-specific effects of the project and an assessment of whether these effects are consistent with those described in the Programmatic EA.

1. Fish and Aquatic Species

The effects of using mechanized equipment and manually working in and along the Lemhi River are consistent with the analysis in the Programmatic EA, Section 3.3.1 ("Fish and Aquatic Species"), which

describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term improvements.

Three species listed under the ESA are present in the project area: Snake River Chinook salmon, Snake River Basin steelhead, and bull trout. No other ESA-listed or state-listed species are known to be present within the project area. Bonneville completed ESA consultation on the effects of the project's actions on these species in its HIP programmatic ESA consultation, which found that such actions would likely 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 short-term adverse effects of the project would expose, displace, reconfigure, or compact earth using mechanized equipment along the Lemhi River. It would likely create conditions where small amounts of sediment could be released for short periods of time. The amount of sediment anticipated from the project would be moderate because there would be some instream excavation (for the construction of habitat structures and opening of the side channel in the mainstem Lemhi). Work areas would be isolated from flows and other mitigation measures as detailed in the Programmatic EA would be applied. There would, however, be no large-scale dewatering/rewatering of entire river or stream channels for complete reconstruction. The new side channel would be constructed "in the dry" after isolating the area between the start of the side channel and the Lemhi River. Though the amount of sediment discharged would be elevated, turbidity levels would be below levels harmful to fish and at durations not anticipated to cause harm as evaluated in Section 3.3.1.2.1 of the Programmatic EA (*"Short-Term Effects to Fish and Aquatic Species from Construction Activities"*).

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 disturbance. The project area has limited vegetation that would screen human activity during work activities within and along the river. Some work sites would require isolation with coffer dams but would generally dewater only a portion of the stream rather than damming the entire width. Fish trapped in isolated areas would need to be salvaged and relocated to free-flowing portions of the river. Fish salvage involves electro-shocking, capture, and handling to relocate the fish. This is stressful for individual fish but avoids leaving the fish stranded in a dewatered location. The anticipated amount of activity and aquatic species disturbance is consistent with the analysis in Sections 3.1.3.1 and 3.3.1.2.1 of the Programmatic EA (*"Dewatering for Instream Work"* and *"Short-Term Effects to Fish and Aquatic Species from Construction Activities,"* respectively), which disclosed direct, harmful, and sometimes fatal impacts to aquatic species, including displacement of fish from their preferred habitat during periods of movement, sounds, and vibrations from human and mechanical activity.

The project's long-term beneficial effects include the creation of more complex habitats in streams and riparian areas through the addition of a new side channel, wood structures, and riparian vegetation; reduction of long-term sediment inputs by streamside stabilization and streamside plantings; and the enhancement of instream habitat complexity over time by providing low velocity areas with overhanging vegetation using bank habitat log structures in the side channel. These beneficial effects are consistent with the analysis in Section 3.3.1.2.2 of the Programmatic EA (*"Effects to Fish and Aquatic Organisms unique to the Categories of Action"*).

2. Water Resources

The effects of using mechanized equipment and manually working in and along the Lemhi River are consistent analysis in Section 3.3.2 of the Programmatic EA (*"Water Resources"*), which describes overall

low water quality impacts after considering moderate short-term adverse effects and beneficial long-term effects. There would be no effect on water quantity from water withdrawals. There would, however, be the potential for increased recharge of groundwater since the connection between surface flows and the floodplain would be increased over both space and time.

Overall, this project would create short-term, localized sediment inputs from the impacts of using mechanized equipment along the river in the process of installing wood structures and opening the inlet to the side channel. There would also be localized sediment inputs when the side channel is rewatered, but impacts would be minimized by following HIP requirements for staged rewatering. Restoration actions would disturb lengths of stream or riverbank consistent with the analysis in Section 3.3.2.2.2.1 of the Programmatic EA (*"Sedimentation and Turbidity Effects"*), but resulting sediment discharges likely would not be greater than what occurs naturally during annual high-flow events. These would be short-term effects which would be lessened by the application of mitigation measures as detailed in Section 2.4 of the Programmatic EA (*"Mitigation Measures and Design Criteria"*). The long-term effects of this project, however, would be a decreased potential for unnatural sediment inputs; an increased potential of the floodplain to effectively manage its sediment loads; and a reduction of stream temperatures from 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 mechanized equipment and manually working in and along the Lemhi River are consistent with the analysis in Section 3.3.3 of the Programmatic EA (*"Vegetation"*), which describes overall moderate impacts to vegetation after considering moderate short-term adverse effects and highly beneficial long-term effects. There are no ESA-listed or state-listed plant species present in the project area.

This project is anticipated to produce impacts to vegetation consistent with or less than those described in the Programmatic EA. There would be no large-scale earthmoving with its associated vegetative loss. Project implementation, including excavation activities, structure installation, and establishment of staging areas and access routes would have moderate short-term impacts on vegetation. The project would directly impact approximately 2 acres, which is much less than is described in the Programmatic EA in Section 3.3.3.2, *"Environmental Consequences for Vegetation,"* which evaluated constructed features that could disturb up to 50 acres. Impacts to vegetation would be limited to some damage or elimination of herbaceous vegetation by construction equipment and human foot traffic (from which the vegetation would be anticipated to recover quickly naturally and via replanting). This level of effect would be low to moderate.

4. Wetlands and Floodplains

The effects of using equipment and manually working in and along the Lemhi River are consistent with the analysis in Section 3.3.4 of the Programmatic EA (*"Wetlands and Floodplains"*), which describes low overall impacts to wetlands and floodplains after considering high, short-term, adverse effects and highly beneficial long-term effects.

According to the National Wetlands Inventory, the project area contains forested-shrub riparian areas and palustrine emergent wetlands. No ground disturbing activities are proposed in wetlands. The project would employ conservation measures to protect wetlands in any areas requiring temporary access, including use of geo-textile road fabric and wood chips. These conservation measures would be removed at project completion and wetlands returned to pre-existing grade. Any work would be completed according to permits issued by the U.S. Army Corps of Engineers under the Clean Water Act.

The project would ultimately expand the acres that would be classified as wetlands by reconnecting the floodplain within the forested riparian areas that would be subjected to more inundation by excavating the new side channel. There would be adverse impacts in the short term, but improved wetland conditions would follow project completion.

This project is anticipated to have less impact than that described in the Programmatic EA. There would be less short-term adverse effects to floodplains and wetlands than described in the EA because there would be less extensive earth-moving and heavy equipment use would be limited to small areas of grading and fill rather than wholesale reshaping of floodplains and river channels as described in the EA. The Programmatic EA evaluated more extensive impacts to wetlands from the actions of larger and heavier construction equipment and complete dewatering and rerouting of rivers and streams.

Consistent with the Programmatic EA, there would be long-term beneficial effects from implementation of this project. There would be increased connectivity between the river and its floodplain from side channel creation and wood structure installation.

5. Wildlife

The effects of using construction equipment and manually working in and along the Lemhi River are consistent with the analysis in Section 3.3.5 of the Programmatic EA ("*Wildlife*"), which describes low impacts to wildlife after considering moderate-to-high short-term adverse effects and highly beneficial long-term effects.

No ESA-listed or state-listed wildlife species are known to exist within the proposed project area. The USFWS Information for Planning and Conservation (IPaC) tool lists the Canada lynx (*Lynx canadensis*), grizzly bear (*Ursus arctos horribilis*), and North American wolverine (*Gulo gulo luscus*), all ESA-listed Threatened, as having the potential to be in the project area. In addition, IPaC lists the monarch butterfly (*Danaus plexippus*), ESA-proposed Threatened, and Suckley's cuckoo bumble bee (*Bombus suckleyi*), ESA-proposed Endangered, as having the potential to be present in the project area. There are no critical habitats for ESA-listed or proposed species in the project area and no confirmed presence of any of the species in the project area. Due to current agricultural/grazing land use practices and nearby residences, it is unlikely these species would be present in the project area and the project would have no effect to ESA-listed wildlife species.

The short-term effects from this project along the Lemhi River would be less than those analyzed in the Programmatic EA, because the planned restoration actions would have far less impact to soils and vegetation, and thus, to wildlife habitat. In the short term, human presence would cause sound and movement that temporarily disturbs or displaces local wildlife. Construction activities would destroy the habitats of small animals but would only temporarily displace medium-size or larger animals from their preferred habitats during construction, and they would likely re-occupy the site once human activity moved or ceased. Construction activities would occur in mid-to late summer, and would thus avoid disturbance to migratory bird nesting, which occurs in the spring. Abundant similar wildlife habitat is present adjacent to the project area, these effects would be limited in duration, and there would be no long-term negative changes to wildlife habitat. This level of effect would be low, as stated in the Programmatic EA.

6. Geology and Soils

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

The short-term effects from this project would be less than those analyzed in the Programmatic EA because the planned restoration actions here would have far less impact to soils. There would be no large-scale earthmoving, and thus, no widespread mixing of soil horizons or severe compacting of soils. Though heavy machinery would impact soils where fill and excavation would occur, these areas are generally small, widely spaced, and the project would be implemented with mitigation measures designed to reduce adverse effects, such as minimizing the area of impact and applying erosion control measures.

Long-term improvement to soils is expected once disturbed surfaces are re-seeded and riparian plantings are established and stabilize the soil surface. Long-term improvement to sediment transport and floodplain access within the project reach would restore natural sediment-forming processes.

7. Transportation

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

The main effect the proposed restoration action would have on transportation would be that vehicles transporting workers and equipment to the project site would be sharing local roads with other traffic. No roads would be closed; none would be temporarily blocked; none would be relocated. This level of impact would be low, as stated in the Programmatic EA.

8. Land Use and Recreation

Impacts to land use and recreation are consistent with the analysis in Section 3.3.8 of the Programmatic EA ("*Land Use and Recreation*"), which concludes that land use practices at underlying project sites would remain unchanged in most cases. Land uses would not change. The land is part of a conservation easement and would continue to be used for ranching and agricultural activities. There are no public recreational opportunities on this private land and that would not change.

9. Visual Resources

The effects of the proposed project in and along the Lemhi River is consistent with the analysis in Section 3.3.9 of the Programmatic EA Section 3.3.9 ("*Visual Resources*"), which describes low impacts to visual resources.

The proposed restoration action is approximately 0.25 mile from Highway 28 and within a forested riparian area, so it is expected that few highway travelers would see the project. The project would be most visible to nearby private landowners or those traveling along Lemhi Road, where crews would access the project area. As discussed above under "*Vegetation*," there would be no large-scale soil or vegetation disturbance (as was assessed for some projects in the Programmatic EA), and changes to the visual landscape would thus be minor, and nearly undetectable to most viewers. Road users and nearby landowners would see heavy equipment during construction and may see new wood structures and vegetation across the floodplain. After vegetation re-establishment, the project area would have a natural appearance and would not visually detract from the area.

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

The effects of the proposed 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*"), which describes low impacts to air quality, noise, and public health and safety.

The proposed restoration action is far from any major population center or public use area; thus, it would not have any potential to directly impact the public, other than when sharing the roads when workers travel to and from work sites. Air quality and noise would be affected by operations and emissions from the machinery to be used during placement of wood structures and excavation. No long-term source of emissions or noise would be created. Construction, transportation, and site-rehabilitation activities would temporarily elevate ambient noise levels at the construction site, and would likely be heard at nearby residences, including those directly across the river from the project area. However, there is a timber processing plant on the opposite bank at the downstream end of the project and construction noise from the project would not exceed the typical noise generated by the plant. Adequate signage and other routine safeguards would minimize risks to worker and public safety for the duration of construction and site restoration.

11. Cultural Resources

The effects of this restoration action in and along the Lemhi River are consistent with the analysis in Section 3.3.11 of the Programmatic EA ("*Cultural Resources*"), which describes low impacts to cultural resources because cultural resources would be avoided by project construction and effects would be appropriately resolved through the National Historic Preservation Act Section 106 consultation process.

On May 12, 2023, Bonneville initiated consultation with the Shoshone Bannock Tribes of the Fort Hall Reservation, the Confederated Salish and Kootenai Tribes, the Nez Perce Tribe of Idaho, and Idaho State Historic Preservation Office (SHPO) on the effects of the Kenney Creek Restoration project area (BPA CR Project No.: ID 2023 018). An intensive cultural resource survey and exploratory subsurface shovel probing of the Area of Potential Effect (APE) was conducted. On December 9, 2024, Bonneville made a determination of no adverse effect to historic properties. On December 16, 2024, Idaho SHPO requested additional information. On February 7, 2025, an updated letter was sent to the consulting parties. On March 12, 2024, Idaho SHPO concurred with Bonneville's determination and concluded that the proposed work would have no adverse effect to historic properties (SHPO Project No.: 2025-112). No responses were received.

As described in the Programmatic EA, the results of this consultation were that the project would not adversely affect historic properties. In the unlikely event that cultural material is inadvertently encountered during the implementation of this project, Bonneville would require that work be halted in the vicinity of the finds until they can be inspected and assessed by Bonneville in consultation with the appropriate consulting parties.

12. Socioeconomics

The effects of this restoration project in and along the Lemhi River are consistent with the analysis in the Programmatic EA, "*Socioeconomics and Environmental Justice*," Section 3.3.13. The Programmatic EA, Section 3.3.13.3, describes low impacts to socioeconomics.

As described in the Programmatic EA, none of the restoration actions would generate a requirement for additional permanent employees and the actions would not result in a requirement for individuals to leave the local area or relocate within it. There would be no effect on housing available for local populations. This project would not displace people or eliminate residential suitability from lands being restored, or from lands near the restoration project site. The project would generate short-term employment for those directly 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.

13. Climate Change

The effects of this project in and along the Lemhi River are consistent with the analysis in Section 3.3.14 of the Programmatic EA ("*Climate Change*"), which describes low impacts to climate change. Due to the short duration of construction activities and the relatively small number of vehicles and equipment involved, project-related greenhouse gas emissions are anticipated to be low. This minimal contribution to climate change would be offset to some degree by the increased functioning of the floodplain including increased water table inputs, increased carbon sequestration in expanded and improved wetland habitats, and decreased water temperatures from improved instream and riparian habitat conditions.

Findings

Bonneville finds that the types of restoration actions and the potential impacts related to the proposed *Kenney Creek Restoration Project* have been examined, reviewed, and consulted upon and are similar to those analyzed in the *Columbia River Basin Tributary Habitat Programmatic EA* (DOE/EA-2126) and Finding of No Significant Impact. There are no substantial changes in the EA's Proposed Action and no substantial new circumstances or information about the significance of the adverse effects that bear on the analysis in the EA's Proposed Action or its impacts within the meaning of 10 C.F.R. § 1021.314 and 40 C.F.R. § 1502.9.1.¹ Therefore, no further NEPA analysis or documentation is required.

Jacquelyn Schei
Environmental Protection Specialist

Concur:

Katey Grange
NEPA Compliance Officer

¹ BPA is aware that the Council on Environmental Quality (CEQ), on February 25, 2025, issued an interim final rule to remove its NEPA implementing regulations at 40 C.F.R. Parts 1500–1508. Based on CEQ guidance, and to promote completion of its NEPA review in a timely manner and without delay, in this SA BPA is voluntarily relying on the CEQ regulations, in addition to DOE's own regulations implementing NEPA at 10 C.F.R. Part 1021, to meet its obligations under NEPA, 42 U.S.C. §§ 4321 *et seq.*