

Midway-Benton No. 1 Transmission Line Rebuild Project

U.S. Department of Energy

Mitigation Action Plan DOE/EA-1912

Summary

This Mitigation Action Plan (MAP) is part of the Finding of No Significant Impact (FONSI) for the Midway-Benton No. 1 Transmission Line Rebuild Project. The Proposed Action would replace the approximately 28.2-mile-long, 115-kilovolt (kV) Midway-Benton No. 1 transmission line and approximately 11 miles of the 115-kV Benton-Othello No. 1 transmission line between the existing Midway and Benton Substations, located on the Handford Site in Benton County, Washington.

This MAP is for the Proposed Action and includes all of the integral elements and commitments made in the Environmental Assessment (EA) to mitigate any potential adverse environmental impacts.

The Bonneville Power Administration (BPA) and its contractor are responsible for implementation of mitigation measures during various phases of the Proposed Action. BPA and its contractors would remove old wood-pole structures and replace them with new wood-pole structures and associated hardware either in place or along the reroute segment. To ensure that the contractor will implement mitigation measures, the relevant portions of this MAP will be included in the construction contract specifications developed for the project. This will obligate the contractor to implement the mitigation measures identified in the MAP that relate to contractor responsibilities during construction and post-construction.

If you have general questions about the project, contact the Project Manager, Erich Orth, at 360-619-6559. If you have questions about the MAP, contact the Environmental Project Manager, Katey Grange, at 503-230-4047. This MAP may be amended, if revisions are needed due to new information or if there are any significant project changes.

Consultation Related to Mitigation Measures

BPA sent a copy of the Preliminary EA to U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA-Fisheries), U.S. Army Corps of Engineers (COE), U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (Ecology) for review. BPA did not receive any comments from any of these entities.

The Proposed Action would have no effect on Endangered Species Act-listed species that are managed by the USFWS or NOAA-Fisheries. Further, the Proposed Action would have no effect on water resources under COE jurisdiction.

As part of the National Historic Preservation Act (NHPA) Section 106 consultation process, BPA completed a cultural resources assessment of the Area of Potential Effect (APE) in April and May of 2012, with an amendment report to address additional potential material yards and stringing areas in August of 2012. BPA consulted with the following tribes: Confederated Tribes of the Colville Indian Reservation, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes and Bands of the Yakama Nation, Nez Perce Tribe, and Wanapum Band. Consultation with these tribal organizations and the Washington State Department of Archaeology and Historic Preservation was initiated in October of 2011. BPA met at least monthly with members of the Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes and Bands of the Yakama Nation, Nez Perce Tribe, and Wanapum Band from August 2011 through October 2012. Further, BPA met with each of the previously-mentioned tribal council or cultural subcommittees to present the project between February and June of 2012.

BPA made a finding of adverse effect on cultural properties. BPA, in coordination with Washington State Department of Archaeology and Historic Preservation, Advisory Council on Historic Preservation, consulting tribes, and U.S. Department of Energy-Richland developed a Memorandum of Agreement for project impacts to cultural resources that was signed by BPA on December 6, 2012. BPA expects the Washington State Department of Archaeology and Historic Preservation, U.S. Department of Energy-Richland, Advisory Council on Historic Preservation, Confederated Tribes and Bands of the Yakama Nation, the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, and the Wanapum Band to sign the MOA in December 2012.

Mitigation Measures

The following minimization and mitigation measures have been identified to reduce potential impacts associated with the Proposed Action.

Mitigation Action Plan Table

Environmental Resource	Mitigation
Land Use and Transportation	<ul style="list-style-type: none"> • Reduce access road widths to 14-foot-wide, or less, to the extent possible. • Revegetate disturbed areas, with native seeds and plants, after the conclusion of construction, with the exception of those areas required to remain clear of vegetation to ensure the safety of the transmission line and access to the structures and in previously-cleared staging areas. • Keep construction activities and equipment clear of U.S. Department of Energy’s Richland Operations Office (DOE-RL) access roads, to the extent possible. • Use water trucks or other measures to minimize fugitive dust during project construction. • Coordinate the routing and scheduling of construction traffic with DOE-RL staff. • Publicize road closures and traffic delays to minimize impacts to traffic. • Employ traffic-control flaggers and post signs warning of construction activity and merging traffic, when necessary, for short interruptions of traffic.
Geology and Soils	<ul style="list-style-type: none"> • Minimize the project ground disturbance footprint, particularly in areas prone to erosion (i.e., sandy soils). • Limit the amount of time soils are left exposed. • Design roads to limit water accumulation and erosion; install appropriate access road drainage (ditches, water bars, cross drainage, or roadside berms) to control and disperse runoff. • Develop revegetation strategies, including soil preparation as necessary, using site-specific methods developed for use within the Hanford Site.
Vegetation	<ul style="list-style-type: none"> • Cut or crush vegetation rather than blade in areas that would remain vegetated to maximize the ability of native plants to resprout. • Prepare soils if needed prior to seeding. • Collaborate with the DOE-RL to determine and carry out the best control measures deemed locally effective for weed control during construction and over the life of the line. • Conduct invasive weed surveys prior to and following construction to determine potential weed spread and appropriate corrective actions. • Where possible, treat identified infestations prior to construction either manually, mechanically, and/or chemically. • Air- or water-pressure wash vehicles and other equipment that have been in weed infested areas at established blow or wash stations upon leaving the infested areas to prevent spreading weeds to uninfested areas during construction. • Monitor and treat existing and new infestations during construction on a minimum annual basis and for 3 years after construction. • Use weed-free mulch, if mulch is used for erosion control. • Equip all vehicles with basic fire-fighting equipment, including extinguishers and shovels to prevent fires that could encourage weed growth. • Reduce access road widths to 14-foot-wide or less (instead of a maximum of 20 feet) to the extent possible. Reduce road width within Levels III and IV vegetation (e.g., 12-foot-wide maximum) as much as possible. • Reduce construction footprint to 50-feet by 50-feet instead of 50-feet by 100-feet or 100-feet by 100-feet in Levels III and IV habitat types, as much as possible. • Make BPA contractors aware of the locations of sensitive plants identified in the preconstruction botanical survey and establish site-specific avoidance strategies during construction. • Develop a soil and vegetation restoration plan prior to construction in coordination with DOE-RL and other interested parties. • Catalog all individual plants and clusters of special-status plant species that cannot be avoided and include in the soil and vegetation restoration plan measures to replace at least as many individual plants as were lost.

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	<ul style="list-style-type: none"> • Use seed and rooted planting materials in accordance with Section 7.7.2 of the <i>Hanford Site Biological Resources Management Plan</i> (DOE-RL 2001) that (1) represent a broad community (shrubs, forbs, grasses) and include species of plants that have cultural significance to the tribes, (2) are native to the Hanford Site, and (3) are the appropriate specific genetic or ecotypic derivation for the Hanford Site. • Implement restoration or stabilization actions as soon as is reasonably possible after ground disturbing activities. • Develop a plan, in cooperation with DOE-RL and other interested parties, to support off-site restoration projects that would compensate for long-term or permanent sensitive vegetation loss, if needed.
Wildlife	<ul style="list-style-type: none"> • Minimize the project ground disturbance footprint, including access road widths, particularly in special-status areas, which can include shrub-steppe. • Reseed disturbed areas. • Prepare for fire control to protect habitats. • Plant native shrubs, such as big sagebrush, to replace shrub cover temporarily lost during construction. • Reseed disturbed areas after construction and regrading are complete, at the appropriate time period for germination, with a seed mix recommended by DOE-RL and other Hanford land management agencies and in consultation with other interested parties, as appropriate. • Avoid construction or other disturbance within 0.6 mile of active or potentially active ferruginous hawk nest sites from March 1 through August 1. • Avoid all historic ferruginous hawk nest site locations after March 1 until it is certain a particular location will not be used for nesting that breeding season. • Develop a nest site protection plan that addresses construction-related impacts on Swainson’s and red-tailed hawks, burrowing owl, long-billed curlew, and other bird species. • Continue to advise transmission maintenance crews on an annual basis of the occurrence (general and/or specific locations), seasons of use, and sensitivity of nesting migratory birds, raptors, and other special-status species that could be adversely affected by maintenance activities. These crews will incorporate this information into their maintenance planning and schedules to minimize adverse impacts on sensitive species. • Minimize and, if practicable, avoid disturbance of potential snake hibernaculum.
Water Resources	<ul style="list-style-type: none"> • Prepare and implement, in coordination with DOE-RL, Spill Prevention and Response Procedures to prevent and contain accidental spills, including notification procedures. • Locate refueling and servicing operations where spilled material cannot enter natural or manmade drainage conveyances (e.g., ditches, catch basins, ponds, wetlands, streams, and pipes). Use pumps, funnels, absorbent pads, and drip pans when fueling or servicing vehicles.
Visual Quality	<ul style="list-style-type: none"> • Site all construction staging and storage areas away from locations that would be clearly visible from sensitive scenic areas, as much as practical. • Implement construction site maintenance and clean-up and keep construction areas free of debris. • Reseed disturbed areas.
Cultural Resources	<ul style="list-style-type: none"> • Restrict work areas, such as through the installation of exclusion fencing and matting, to avoid disturbance to cultural resource sites. • Employ tribal monitors to be present during all ground-disturbing activities with the potential to affect cultural resources. • Implement BPA’s Unanticipated Discovery Procedure for cultural resources. This procedure provides that: should ground-disturbing activities reveal any cultural materials (e.g., structural remains, Euro-American artifacts, or Native American artifacts), all activities in the vicinity of the find would cease. The BPA archaeologist, the Washington Department of Archaeology and Historic Preservation, and affected tribes would be

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	<p>notified immediately.</p> <ul style="list-style-type: none"> • The Inadvertent Discovery of Human Remains Procedure would also require crews to cease construction immediately within 200 feet of any human remains, suspected human remains, or any items suspected to be related to a human burial (i.e., funerary items, sacred objects, or objects of cultural patrimony) encountered during project construction. The area around the discovery will be secured and the Benton County Sheriff, the BPA archaeologist, the State Historic Preservation Officer, DOE-RL archeologist, and the affected tribes would be contacted immediately. All response processes would be coordinated with DOE-RL staff in accordance with the agreements and management plans for the Hanford Site. • Minimize construction footprints in areas containing identified ethnobotanical species of concern, where practical. • Minimize workspace footprints within traditional cultural property (TCP) boundaries, as much as practical. • Revegetate TCP disturbance areas with native seed and vegetation species, as developed through consultation with interested tribes and DOE-RL.
Air Quality and Climate Change	<ul style="list-style-type: none"> • Incorporate measures into a Fugitive Dust Control Plan, identified in consultation with DOE-RL, which would minimize dust in the dry, windy conditions at the Hanford Site. • Water or use palliatives on exposed soil surfaces in areas disturbed during construction. • Gravel access road surfaces in areas of sustained wind to reduce potential dust erosion. • Encourage construction personnel to travel at low speeds on access roads and at construction sites to minimize dust. • Reseed disturbed areas to prevent dust from erosion. • Shut down idling construction equipment, if feasible. • Ensure all vehicles are in compliance with applicable federal and state air quality regulations for tailpipe emissions. Certification that vehicles meet applicable regulations will be provided by contractors to BPA in writing. • Maintain and certify in writing that all construction equipment is in proper working condition according to manufacturer's specifications. • Locate all staging areas as close to construction sites as practicable to minimize driving distances between staging areas and construction sites. Locate staging areas in previously disturbed or graveled areas to minimize soil and vegetation disturbance where practicable. • Use the proper size of equipment for the job. • Use locally sourced rock for road construction, if possible.
Noise, Public Health, and Safety	<ul style="list-style-type: none"> • Ensure standard sound-control devices, including mufflers, are on all construction equipment and vehicles prior to and during construction. • If blasting is required, take appropriate safety measures and follow all applicable regulations, including obtaining an explosives permit from DOE-RL Fire Department and obtaining a Prohibited Article Pass from DOE-RL Security. Lock up or remove all explosives from work sites at the end of the workday. • All off road driving must adhere to the latest revision of the Fire Marshal Bulletin • Coordinate all helicopter landings daily with the Hanford Patrol. • Develop a helicopter refueling protocol, if needed. • Prepare and implement Spill Prevention and Response Procedures to prevent spills of hazardous materials and respond to emergency situations. • Prepare and maintain an on-site safety plan in compliance with state requirements. • Prepare for fire control. • Coordinate activities the Hanford Patrol and Hanford Fire Department. • Fuel all highway-authorized vehicles off-site to minimize the risk of fire. Fueling of construction equipment that is transported to the site via truck and is not highway authorized will be done in accordance with regulated construction practices and applicable laws. Helicopters will be fueled and housed at local airfields or at staging areas. • Ensure that BPA contractors flying helicopters prioritize public safety during flights. For

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	<p>example, establish flight paths to avoid populated areas or schools.</p> <ul style="list-style-type: none"> • Implement appropriate airport safety measures prior to construction. • Obtain appropriate Hanford excavation permits. • Report possible hazardous materials, toxic substances, or petroleum products discovered along the transmission line route that would pose an immediate threat to human health or the environment, including large dump sites, drums of unknown substances, suspicious odors, stained soil, etc. • Design, construct, and operate the new transmission line according to the National Electrical Safety Code. • Restore reception quality if there is radio or television interference due to the transmission lines.