

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Umatilla Fish Hatchery Routine Well Maintenance and Well Replacement Project

Project No.: 1989-035-00

Project Manager: Eric McOmie, EWU-4

Location: Morrow County, OR

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.3 Routine Maintenance; B1.18 Water Supply Wells

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to provide funding to the Oregon Department of Fish and Wildlife to conduct routine well maintenance of existing wells and to install a replacement well located on the U.S. Fish and Wildlife Service's (USFWS) Umatilla National Wildlife Refuge (hereinafter referred to as Refuge) in Morrow County, Oregon. The proposed activities are intended to address water availability issues for ongoing operations at the Umatilla Fish Hatchery that support production of spring and fall Chinook salmon and summer steelhead. Umatilla Fish Hatchery has been in operation since 1991 and no changes in fish production are proposed.

The Oregon Water Resource Department (OWRD) issued a water right certificate in 1992 for the combined use of four vertical wells to serve the Umatilla Hatchery and three of these wells (Wells 2, 3, and 4) are located on the USFWS' Refuge property. This project would also include an amendment to the existing OWRD water right certificate to change the location of the Well 4 point of diversion to be the location of replacement Well 5; however, the combined water withdrawal quantity for all wells would remain unchanged. To the extent possible, proposed work would take place outside of the fall migration and waterfowl hunting seasons.

These actions would support BPA's commitments to the Confederated Tribes of the Umatilla Indian Reservation under the 2020 Columbia River Fish Accord Extension agreement, while also supporting ongoing efforts to mitigate for effects of the FCRPS 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.).

Routine Well Maintenance

Proposed routine maintenance of existing wells would include investigating the condition of one or more existing wells with subsequent well rehabilitation, as needed approximately every 3 to 5 years. The well would be assessed by removing the pump with a boom crane and lowering a camera to assess the condition. Survey findings would be used to confirm the best method of well rehabilitation, which may include the following: specific capacity testing with airlift (multiple tests); well brushing with nylon brush; well bottom cleaning with bailing tool; impulse generation with simultaneous airlifting (i.e., repeated instantaneous releases of high-pressure gas impulses inside

the well); pump repair (e.g., replace check valve); and pump reinstallation. Subsequent to rehabilitation, a pumping test would be conducted for up to 52 hours in duration at each rehabilitated well. Discharge materials (e.g., sand) would be collected in containers and deposited at the hatchery facility for future use.

Heavy equipment consisting of a truck-mounted crane, portable generator, flatbed trailer, and horse trailer would be transported to the site, and driven across a grassy area to the designated well location. Equipment and vehicles used during rehabilitation would be cleaned prior to entering the site to prevent accidental introduction of invasive species (e.g., weeds). Vehicles and equipment accessing the site would not park on or drive over tall, dry vegetation during dry periods in order to prevent accidental wildfire starts. Well maintenance activities are anticipated to take approximately one week per well.

Well Replacement

Proposed project activities would include the establishment of a replacement well (Well 5) and new electrical vault, along with associated equipment such as a new pump, water piping and electrical wire, connecting the new infrastructure to an existing well's piping and electrical system. The existing well (Well 4) and associated electrical vault would be decommissioned once the new well is installed and operational. Applicable Oregon well construction and decommissioning standards (Oregon Administrative Rules 690-200 through 690-240) would be implemented. The project area would be accessed via existing roads.

The dimensions of the new well would be essentially the same as the existing well and would be approximately 95 feet in depth with a 20-inch-diameter steel wall casing for the upper 60 feet and steel screen for the lower 35 feet. The new well pump would have essentially the same pump rate. Heavy equipment consisting of a truck-mounted well drill rig and digger (e.g., skid steer, bucket backhoe) would be transported to the site, and driven across a grassy area to the designated well location (approximately 25 – 100 feet south of the existing Well 4).

Following drilling activities, the new well would be tested to confirm the new well's field design flow, drawdown, and performance during a sustained operation. The water discharged from the temporary pump would be discharged on the ground adjacent to the well head. If testing indicates the well meets performance criteria, permanent pump, associated equipment, and infrastructure (water piping and electrical connections) would be installed. In the event performance does not meet criteria, drilling and testing procedures would be repeated at up to two additional sites; all locations drilled would be within approximately 25 – 100 feet south of Well 4 following the same approach as described above.

A new concrete electrical vault with metal roof (up to approximately 10 feet long by 10 feet wide by 9 feet high) would be installed adjacent to or over the new well. To accommodate the electrical vault installation, up to a 10-foot-long by 10-foot-wide by 4-foot-deep area would be dug using heavy equipment (e.g., skid steer, bucket, backhoe). To connect the new well with the existing water piping and electrical system, one or two trenches would be dug using heavy equipment (e.g., skid steer, bucket, and backhoe). Each trench would measure up to 100 feet long by 3 feet wide by 6 feet deep for placement of the water piping and the electrical wire conduit.

The existing Well 4 would be decommissioned per the Oregon Water Resource Department's well abandonment standards (i.e., covered by watertight cap or seal, or filled with cement or bentonite). Any pump, wiring, or debris in the well would be removed and disposed of at an approved waste facility before abandonment material is placed.

To the extent possible, all ground disturbed would be returned to pre-construction condition. Soil

removed during excavation would remain on site and be discharged adjacent to excavation areas and then spread over the ground surface and/or used as material to fill in Well 4's existing electrical vault. Disturbed areas would be recontoured and seeded with a locally-appropriate, weed-free, native seed mix (e.g., needle and thread grass, Indian ricegrass, and Sandberg bluegrass). Standard erosion and sediment control best management practices (e.g., silt fences, placing straw, etc.) would be implemented as needed. Equipment and vehicles used during construction would be cleaned prior to entering the site to prevent accidental introduction of invasive species (e.g., weeds). Vehicles and equipment accessing the site would not park on or drive over tall, dry vegetation during dry periods in order to prevent accidental wildfire starts. Combined project activities (i.e., mobilization/demobilization, well and electrical vault installation, well testing, and installation of permanent pump, water piping, and electrical wire) are anticipated to take approximately 4-8 weeks.

Findings: In accordance with Section 1021.410(b) of the Department of Energy's (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

- 1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
- 2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
- 3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Carolyn Sharp
Carolyn Sharp
Environmental Protection Specialist

Concur:

/s/ Katey C. Grange June 27, 2022
Katey C. Grange Date
NEPA Compliance Officer

Attachment(s): Environmental Checklist

Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

Proposed Action: Umatilla Fish Hatchery Routine Well Maintenance and Well Replacement Project

Project Site Description

The existing wells (Well 2, 3, and 4) are located on federal land managed by the USFWS approximately 3.3 miles northwest of the City of Irrigon, OR (Township 5 North, Range 26 East, Sections 15 and 16). The replacement Well 5 would be located up to 100 feet south of Well 4 and approximately 2,000 feet south of the Columbia River in an unpaved area adjacent to an existing road (County Road 930), situated between the road and agricultural fields. Access to all wells is provided per a Right-Of-Way (ROW) Permit issued March 15, 1992 (as amended May 25, 2022), per the Bonneville Power Administration--U.S. Fish and Wildlife Service Cooperative Agreement for Umatilla Hatchery/Umatilla Refuge Coordinated Operations of May 29, 1990. The wells have been authorized for use under an OWRD water right certificate since 1992.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No with Conditions

Explanation: The BPA archaeologist initiated a Section 106 consultation process with the Oregon State Historic Preservation Office (SHPO), Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO), U.S. Fish and Wildlife Service (USFWS), Confederated Tribes of the Umatilla Indian Reservation (CTUIR), and Nez Perce Tribe on May 27, 2021, regarding replacement of Well 4 with Well 5 to address water supply reliability issues. The USFWS and CTUIR concurred with the BPA archaeologist's determination of *no historic properties adversely affected* on May 27, 2021, and June 28, 2021, respectively. The CTWSRO responded on June 24, 2021, indicating they would defer comment to the CTUIR. No other comments were received from the other Section 106 consulting parties within the 30 day comment period; BPA assumed concurrence.

Subsequently, a revised consultation package was submitted to the same entities on May 16, 2022, to expand the Area of Potential Effects (APE) and address maintenance and rehabilitation actions at Wells 2 and 3. USFWS responded on May 16, 2022 agreeing with the proposed approach, and the NPT responded on May 17, 2022 indicating they would not be commenting. SHPO responded on June 6, 2022 concurring with BPA's effects determination. No other comments were received from the consulting parties, and the 30 day comment period ended June 16, 2022.

Notes:

- A cultural resources monitor shall be present to observe ground disturbing activities and an Inadvertent Discovery Plan shall be on site during implementation.

2. Geology and Soils

Potential for Significance: No

Explanation: Minimal effects to geology and soils would occur associated with excavation and distribution (backfilling) of gravel and sands during well replacement activities, and associated with transport of construction or maintenance materials and equipment to the work sites. Erosion potential associated with the transport activities is expected to be minimal as vehicles would use existing access roads and would then drive across small grassy areas to reach the work sites. Additionally, standard best management practices used would avoid or reduce soil erosion and sedimentation, and excavated well replacement sites would be returned to the original grade to the extent possible and seeded to re-establish areas of disturbed vegetation.

3. Plants (including Federal/state special-status species and habitats)

Potential for Significance: No with Conditions

Explanation: No known Federal/state special-status plants are present in the project area. Therefore, no impacts to special-status plant species would occur as a result of this project. Temporary impacts to existing vegetation from equipment crushing some plants while accessing work areas are expected. For well replacement, post-construction seeding with a locally-appropriate, weed-free, native seed mix would re-establish areas of disturbed vegetation.

Notes:

- Vehicles and equipment accessing the sites would not park on or drive over tall, dry vegetation during dry periods in order to prevent accidental wildfire starts.

4. Wildlife (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: The project area does not include habitat for any Federal or state special-status wildlife species. Project activities would be limited to an already impacted right-of-way and would not substantially alter the footprint or long-term operational noise. Temporary disturbance and/or displacement of local wildlife would occur from increased noise and vehicle traffic during construction and maintenance activities, though this impact is expected to be minor given the anticipated timing of activities (to be conducted predominately outside of the fall waterfowl migration and waterfowl hunting seasons, to the extent possible) and the location of the project sites adjacent to an existing road and crop fields. Local wildlife would likely avoid the area during construction and maintenance activities and return once the project work is completed. Disturbances and/or displacement would be temporary, localized, and minor and cause no lasting impact to wildlife.

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No

Explanation: The project area is not located in the 100-year floodplain, and is greater than 900 feet from a water body. Therefore, no impacts to water bodies, floodplains or fish would occur as a result of this project.

6. Wetlands

Potential for Significance: No

Explanation: The project area is located greater than 1,000 feet of a wetland. Therefore, no impacts to wetlands would occur as a result of this project.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: The existing water right certificate would be amended to change the location of the Well 4 point of diversion to be the location of Well 5; however, the combined water withdrawal quantity for all wells would remain unchanged. The ROW permit for the wells between the USFWS (landowner) and BPA (permittee) notes that the USFWS' Refuge water rights are senior and that BPA would monitor the wells and the parties would coordinate hatchery and Refuge operations to ensure no adverse effects to the water table would occur due to hatchery water use. Therefore, no impacts to aquifers and groundwater would occur as a result of this project.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: Current land use includes existing wells and an utility right-of-way, adjacent to agricultural fields located within the USFWS' Umatilla National Wildlife Refuge. The project would not change current land use. Therefore, no impact to land use and specially-designated areas would occur as a result of this project.

9. Visual Quality

Potential for Significance: No

Explanation: The visual characteristics of existing wells would not change as a result of routine maintenance, The replacement well and electrical vault would have similar visual characteristics as the existing well and vault. Therefore, minimal impact to visual quality would occur as a result of this project.

10. Air Quality

Potential for Significance: No

Explanation: A minor amount of temporary dust and vehicle emissions would be generated during the project's construction and maintenance activities.

11. Noise

Potential for Significance: No

Explanation: Temporary noise associated with maintenance and construction activities (e.g., excavating, drilling, decommissioning, high-pressure gas impulses, testing, etc.) would be generated and limited to daylight hours. The operational noise of the existing wells would be ongoing and operational noise of the new, replacement well would be similar to existing wells. Therefore, minimal impact to noise would occur as a result of this project.

12. Human Health and Safety

Potential for Significance: No

Explanation: All applicable safety standards would be followed. The risk environment would not change.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation: N/A

Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: Project activities would occur on USFWS managed property. Close coordination has occurred between BPA and USFWS to include implementation of project activities with stipulations in an amendment to an existing right-of-way permit.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: /s/ Carolyn Sharp June 27, 2022
Carolyn Sharp, ECF-4 Date
Environmental Protection Specialist