Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Pacific Lamprey Status and Limiting Factor Evaluation on Ceded Lands of the Confederated Tribes of Warm Springs (*Update to previous categorical exclusion issued on August 12, 2019*)

Project No.: 2011-014-00

Project Manager: Siena Lopez-Johnston

Location: Baker, Grant, Harney, Hood River, Jefferson, Sherman, Umatilla, Wasco, and Wheeler Counties, Oregon

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B3.3 Research related to conservation of fish and wildlife.

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to fund the Confederated Tribes of the Warm Springs Reservation in Oregon (CTWSRO) to collect monitoring data regarding the status and limiting factors of Pacific lamprey on their ceded lands, including parts of Baker, Grant, Harney, Hood River, Jefferson, Sherman, Umatilla, Wasco, and Wheeler Counties, Oregon. Monitoring actions would take place within the following waterbodies:

- Fifteenmile Creek basin: Fifteenmile Creek, Eightmile Creek
- Hood River basin: all major tributaries bearing Pacific lamprey
- Lower Deschutes River basin: Deschutes River, Warm Springs River, Badger Creek, Beaver Creek, Shitike Creek
- Mill Creek

Standard monitoring actions would include one or more of the following:

(1) Collect water samples and water temperature data to identify and characterize Pacific lamprey habitats and to inform lamprey life history models.

Environmental DNA (eDNA) water samples would be collected and analyzed in a lab to determine the presence of lamprey. Using thermographs, stream temperatures would be recorded hourly, year-round to describe habitat conditions.

(2) Collect, sample, tag, and release migrating Pacific lamprey with selective collection methods at high occupancy sites.

Adult lamprey would be collected by hand or using a dipnet from locations where they are known to occur at high densities. Collected lamprey that have not been previously marked or tagged would be fin clipped and tagged with a passive integrated transponder (PIT) tag.

Recaptured lamprey would be released upstream of the sampling area. Annually, approximately 200 larval lamprey incidentally caught in the rotary screw trap (operated by ODFW, for alternate research purposes) would be measured for length and a non-lethal tissue sample (caudal fin clips) would be preserved and cataloged for genetic analysis.

(3) Estimate Pacific lamprey abundance and escapement and determine migration patterns using fixed full-duplex and half-duplex (FDX/HDX) Dual Reading PIT tag arrays and mobile radio-telemetry surveys, in conjunction with Tribal creel surveys.

Throughout the project area, tagged lamprey would be detected at existing FDX/HDX Dual Reading PIT tag array sites as they migrate upstream into tributaries to overwinter or spawn. These data would be used to estimate lamprey abundance and to determine migration timing and patterns. When present at study locations, Tribal fishers would be asked to participate in voluntary creel surveys to estimate total harvest. Harvest estimates would be subtracted from abundance estimates to approximate annual lamprey escapement. At the Warm Springs National Fish Hatchery (WSNFH), FDX/HDX Dual Reading PIT tag arrays and an electronic radio device would be used to estimate the efficiency of the lamprey passage system (LPS) by documenting the number of tagged and untagged lamprey ascending the LPS.

Radio telemetry would be used to track the movements of adult lamprey that were radio-tagged in the previous year. Radio-tagged lamprey would be tracked by vehicle or on foot as they resume their upstream migration and spawning. These data would be used to record lamprey movements and to identify holding areas and overwintering and spawning locations. This information, in turn, could identify potential limiting factors as well as areas that may be suitable for restoration or habitat improvement.

(4) Collect Pacific lamprey larvae (ammocoete) and juvenile density data from main stem and tributary habitat.

All surveys would be conducted following established protocols for lamprey and salmonid safety. Lamprey would be collected using single-pass electrofishing techniques, measured for length, and returned to their capture location. From a subsample, a non-lethal tissue sample (caudal fin clip) would be preserved and cataloged for genetic analysis. Additional data collected would include water velocity, turbidity, sediment depth, and wind speed.

In addition to the standard monitoring actions above, CTWRSO would also perform routine maintenance of monitoring equipment, including replacing batteries and broken or worn components, securing FDX/HDX Dual Reading PIT tag arrays loosened by high water flows, and testing the temporal and spatial operation of FDX/HDX Dual Reading PIT tag arrays. No ground disturbance would be associated with these activities, and no new monitoring locations are proposed.

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/ W. Walker Stinnette
W. Walker Stinnette
Contract Environmental Protection Specialist
Salient CRGT

Reviewed by:

/s/ Chad J. Hamel
Chad J. Hamel
Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel *August 12, 2020*
Sarah T. Biegel 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.

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Project Site Description

Evaluation includes multiple locations in the Mid-Columbia, Deschutes, and Hood River basins.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: As proposed activities include research, monitoring, and evaluation (water sampling, biological sampling, tagging, and using existing infrastructure to track movement) as well as routine maintenance of existing monitoring equipment (replacing batteries, broken and worn components), BPA has determined that this undertaking would have No Potential to Affect historic properties.

2. Geology and Soils

Potential for Significance: No

Explanation: Larval lamprey density surveys and in-water data collection would result in temporary and minor disturbance of streambed sediment. However, no sediment would be removed from the sampled stream reach, and disturbed sediment would eventually resettle on the streambed. Therefore, there would be no long-term impact on the quality or quantity of geology and soils in the project areas.

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

Potential for Significance: No

Explanation: Some activities (e.g. vehicle use, equipment maintenance, electrofishing, etc.) may crush or strip small patches of vegetation in some work areas. However, the proposed actions do not include any vegetation removal or management and would not result in adverse modification to suitable protected species habitats. Therefore, there would be no effect on state special-status plant species or plant species protected under the Federal Endangered Species Act (ESA).

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

Potential for Significance: No

Explanation: Minor and temporary disturbance of normal wildlife behavior could occur from elevated noise and human presence. However, terrestrial wildlife species that could be present nearby the project area would likely be habituated to human activity. Aquatic wildlife

species could be encountered during in-stream activities, but most would only be temporarily flushed. Project staff would avoid those species unable to flush (e.g. freshwater mussels). The proposed activities would be consistent with the existing recreational land use around work areas and would not result in adverse modification to suitable protected species habitats. Therefore, there would be no effect on state special-status wildlife species or wildlife species protected under the Federal ESA.

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

Potential for Significance: No with Conditions

Explanation: Larval Pacific lamprey density surveys would use electrofishing equipment and methods specifically designed to stun and not harm lamprey. In addition, density surveys and in-water data collection would also disturb streambed soils, which would temporarily increase turbidity. Because larval lamprey are smaller and more sensitive to shocking than protected fish, electrofishing equipment would be operated at frequencies low enough to not harm protected fish while still effectively targeting lamprey. Field staff would visually inspect survey areas and would not conduct in-water surveys when protected fish species are observed. CTWSRO has obtained the following ESA permits:

- ESA Section 10(a)(1)(A) Permit Number: 18260-2R
- ESA Section 10(a)(1)(A) Permit Number: TE71541A-3

Following completion of the proposed activities, suspended sediments would resettle on the streambed, and turbidity would quickly return to pre-existing conditions. Therefore, there would be no long-term impact to water bodies. There would be no impact to floodplains.

6. Wetlands

Potential for Significance: No

Explanation: Some proposed activities could take place within or around wetlands. However, no new ground disturbance or vegetation removal or management is proposed. Therefore, there would be no impacts to wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: The proposed activities would not include any new ground disturbance. Therefore, there would be no impacts to groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: There would be no change in land use and no impacts to specially-designated areas.

9. Visual Quality

Potential for Significance: No

Explanation: All FDX/HDX Dual Reading PIT tag arrays work would occur at previously altered work areas or fish passage facilities. Therefore, there would be no significant change in visual quality.

10. Air Quality

Potential for Significance: No

Explanation: Minor and temporary impacts to air quality in the local area could result from the transportation of staff and equipment to project sites. There would be no permanent change in air quality.

11. Noise

Potential for Significance: No

Explanation: Impacts to noise at project sites would be minimal, short-term, and of low decibels. Installation of FDX/HDX Dual Reading PIT tag arrays in the future could increase the thresholds for noise project-wide. However, given the short implementation time, there would be no significant impact to noise levels.

12. Human Health and Safety

Potential for Significance: No

Explanation: Field crews would be trained in appropriate protocols to ensure safety while conducting fieldwork. The proposed actions would not have any impacts to human health and safety.

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: The CTWSRO Fisheries Staff regularly coordinate with the Tribal council and Federal, state, and local authorities. The program collaborates with the Oregon Department of Fish and Wildlife and the regional inter-agency Pacific lamprey conservation team, and the Columbia River Inter-Tribal Fish Commission to share data contributing to Pacific lamprey recovery.

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

Signed: */s/ W. Walker Stinnette* *August 12, 2020*

W. Walker Stinnette, EC-4 date
Contract Environmental Protection Specialist
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