

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Pacific Lamprey Research, Monitoring, and Evaluation – 2023 through 2025

Project No.: 1994-026-00; 2008-308-00; 2008-470-00; 2008-524-00; 2011-014-00; 2017-005-00

Project Manager: James Barron, EWU-4; Debbie Docherty, EWM-4; Elizabeth Santana, EWM-4

Location: Multiple Counties in Idaho, Oregon, and Washington

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 multiple parties, including the Columbia River Inter-Tribal Fish Commission, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of Warm Springs, National Oceanic and Atmospheric Administration, Pacific Lamprey Conservation Initiative, and Yakama Nation, to perform routine Pacific lamprey (*Entosphenus tridentatus*) research, monitoring, and evaluation (RME) activities in Idaho, Oregon, and Washington. Funding supports ongoing efforts to mitigate for effects of the Federal Columbia River Power System on fish and wildlife in the main stem 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.).

BPA proposes to fund the below lamprey RME actions from 2023 through 2025. Work may include one or more of the RME actions listed below:

Population Surveys: A variety of survey methods would be carried out to determine lamprey distribution and/or abundance, including visual surveys for redds, adults, and adult carcasses, surveys using existing lamprey-specific fish traps that exclude other fish species or using salmon smolt traps that are operated under their own ESA consultation, and electrofishing surveys.

Larval lamprey electrofishing surveys would be conducted using backpack electrofishing units and lamprey-specific electrofishing techniques. Electrofishing would be conducted following protocols as described in the U.S. Fish and Wildlife Service's *Best Management Practices to Minimize Adverse Effects to Pacific Lamprey (Entosphenus tridentatus)*.

eDNA Sampling: Water or sediment samples would be collected and analyzed for DNA released from lamprey into the surrounding environment as an indication of lamprey presence or absence. Sampling for eDNA is non-invasive, would not require handling fish, and could be completed from the stream bank without entering the water; although field crews may enter the stream, if required.

Collection, Tagging, and Translocation: Adult, juvenile, and larval lamprey would be collected using a variety of methods, including selectively collecting by hand or dip net, in lamprey-specific fish traps that exclude other fish species, in salmon traps that are operated under their own ESA consultation, or lamprey-specific electrofishing techniques.

Collected lamprey would be implanted with passive integrated transponder (PIT) tags and/or radio tags. Tagged lamprey could also be implanted with a secondary dart or floy tag, in case the PIT or radio tag is expelled. Lamprey movement would then be monitored as they migrate through an existing network of PIT tag arrays or by using mobile radio telemetry equipment. Some pit tag arrays could be removed and reinstalled in the same locations each season. The installation of new PIT tag or acoustic telemetry arrays in new locations would not be covered by this Categorical Exclusion.

Collected lamprey could be released near the collection sites or could be translocated to other stream reaches in an effort to increase lamprey densities in areas where populations are declining or extirpated. In some cases, collected lamprey could be euthanized for biochemical analysis or could be transferred to a laboratory setting for controlled experiments with no intention of returning them to the wild.

Genetic Sampling: Non-lethal caudal fin clips would be collected and archived for genetic analysis in a laboratory setting.

Laboratory-Based Research: Indoors in a laboratory setting, lamprey would be euthanized for biochemical analysis or used as live test subjects for controlled experiments. Live specimens subject to experimentation would be euthanized or retained following completion of the studies, with no intention of returning them to the wild.

Habitat Assessments: At field sites, habitat assessments would involve collection of quantitative and qualitative data, including:

- Water temperature, pH, conductivity, and turbidity
- Organic debris depth and substrate size
- Chanel unit type (i.e., pool or riffle), channel position (i.e., margin or mid-channel), wetted channel width and depth, and flow
- Percent canopy closure and riparian land cover

Habitat assessments would be non-invasive, would not require handling fish, and could be completed from the stream bank without entering the water; although field crews may enter the stream, if necessary.

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/ Walker Stinnette

Walker Stinnette
Environmental Protection Specialist

Concur:

Katey C. Grange
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: Pacific Lamprey Research, Monitoring, and Evaluation

Project Site Description

Pacific lamprey RME activities would occur at multiple field sites in waterbodies in Idaho, Oregon, and Washington.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: The proposed actions would be limited to biological sampling and environmental and habitat condition assessment. Activities would typically occur within stream channels and would not result in ground disturbance that could potentially impact archaeological resources. No modifications to existing built historic resources are proposed. Therefore, the proposed actions would have no potential to cause effects to historic properties.

2. Geology and Soils

Potential for Significance: No

Explanation: No ground disturbance would occur as a result of the proposed actions. Therefore, the proposed actions would not impact geology and soils.

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

Potential for Significance: No

Explanation: The proposed actions would not require any tree or vegetation removal or management and would not result in adverse modification to suitable protected plant habitats. Therefore, the proposed actions would have no effect on special-status plant species or habitats.

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 at the various field sites. However, the proposed actions would be temporary (no more than a few hours at each site) and would be largely consistent with human activity and natural processes typical of the sites. Wildlife species that could be present in the area would likely be habituated to this level of activity. The proposed actions would not result in adverse modification to suitable protected species habitat. Therefore, the proposed actions would have no effect on special-status wildlife species or habitats.

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

Potential for Significance: No

Explanation: Larval and juvenile lamprey surveys and in-water data collection would disturb streambed sediment, which would temporarily increase turbidity in a limited area. Following completion of the proposed actions, suspended sediments would resettle on the streambed, and turbidity would quickly return to pre-existing conditions. The net effect of these actions would be similar to those associated with routine events and processes that commonly occur in streams (e.g., large wildlife walking in a streambed, human recreation). No ground disturbance within floodplains would occur as a result of the proposed actions.

The proposed actions include using backpack electrofishing equipment and lamprey-specific methods. These methods use voltages and frequencies low enough to avoid harming salmonids and other special-status fish species, while still effectively capturing lamprey. Furthermore, larval and juvenile lamprey habitat (i.e., shallow, depositional areas at the stream margins) largely does not coincide with special-status fish habitat (i.e., rocky substrates in flowing water). Backpack electrofishing equipment operated at lamprey-specific voltage and frequencies generate a small diameter (~18") electrical field, which allows for avoidance of non-lamprey fish, if present.

Therefore, the proposed actions would result in no long-term impact to water bodies and no impact to floodplains. The proposed actions would have no effect on special status fish species or habitats.

6. Wetlands

Potential for Significance: No

Explanation: Some proposed activities (e.g., accessing streams on foot and completing habitat assessments) could take place within or near wetlands. However, no ground disturbance would occur as a result of the proposed actions. Therefore, the proposed actions would not impact wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: No ground disturbance would occur as a result of the proposed actions. Therefore, the proposed actions would not impact groundwater and aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

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

9. Visual Quality

Potential for Significance: No

Explanation: There would be no change in visual quality.

10. Air Quality

Potential for Significance: No

Explanation: Minor and temporary dust and emissions could increase in the local area from vehicle and equipment use. There would be no permanent change in air quality.

11. Noise

Potential for Significance: No

Explanation: Minor and temporary noise could increase at field sites from vehicle and equipment use and human presence. However, these actions would be consistent with current activities typical of the field sites. All other proposed project activities would occur indoors at existing laboratory facilities. There would be no permanent change in ambient noise.

12. Human Health and Safety

Potential for Significance: No

Explanation: Individuals carrying out the proposed actions would be trained in proper techniques and equipment use. The project would not generate or use hazardous materials and would not create conditions that would increase risk to human health and safety. No impacts to human health and safety are expected as a result of the proposed actions.

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: No landowner notification, involvement, or coordination would be required as all field sites would likely be accessed via existing roads and public lands. The individual project sponsors would coordinate site access with private landowners, if applicable.

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

Signed: /s/ Walker Stinnette September 19, 2023
Walker Stinnette, ECT-4 Date
Environmental Protection Specialist