Proposed Action: Pacific Lamprey Status and Limiting Factor Evaluation on Ceded Lands of the Confederated Tribes of Warm Springs

Project No.: 2011-014-00

Project Manager: Siena Lopez-Johnston

Location: Jefferson, Sherman, and Wasco Counties in Oregon


Description of the Proposed Action: 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 Jefferson, Sherman, and Wasco counties in Oregon. Monitoring actions would take place from 2019 through 2023 within the Deschutes, John Day, and Hood Rivers, and Fifteenmile Creek. Standard actions would include one or more of the following:

1. Collect tributary water, temperature and quality data to inform lamprey life history models.
   
   Continuously recording thermographs would record stream temperatures year round in focal waterways. eDNA water samples, which include the collection of a vial of water, would also be taken for lab analysis.

2. Collect, sample, PIT tag and release migrating Pacific Lamprey with selective collection methods at high occupancy sites.
   
   Lamprey would be collected by hand or dipnet at high adult density locations and examined for the presence of markings or tags. Unmarked fish would be fin clipped and tagged with half duplex (HDX) Passive Integrated Transponders (PIT) tags. Approximately 1,000 individual lampreys would be tagged each year and released downstream. Recaptured fish would be released upstream of the sampling area. Approximately 200 non-lethal tissue samples (caudal clip) of larval lamprey incidentally caught in the rotary screw trap (operated by ODFW, for alternate research purposes) would be preserved and cataloged annually for genetic analysis.

3. Utilize HDX array and radio-telemetry detections, in conjunction with Tribal creel surveys to estimate abundance and escapement of Pacific lamprey in the region.
   
   Tagged lamprey would be detected by the lamprey passage system (LPS) PIT array and untagged lamprey would be counted by an electronic radio device as part of the LPS design. There would be no ground disturbance as the HDX array infrastructure has already been installed. An antenna wire would be placed on the stream bed in a loop connecting to the multiplexer.

4. Collect larval Pacific Lamprey (ammocoetes) density data from main stem and tributary habitat.
All surveys would be conducted following established protocols for larval lamprey and salmonid safety. Lamprey would be collected using single-pass electrofish techniques and returned to their capture location after sampling. Data recorded would include water velocity, turbidity, sediment depth, and wind speed.

**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/  Tabatha M. Rood
Tabatha M. Rood
Contract Environmental Protection Specialist
Triad Technology LLC.

Reviewed by:

/\s/  Chad Hamel
Chad Hamel
Supervisory Environmental Protection Specialist

Concur:

/\s/  Sarah T. Biegel  
Sarah T. Biegel  
NEPA Compliance Officer  

Date: **August 12, 2019**

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, Hood River, and John Day basins.

**Evaluation of Potential Impacts to Environmental Resources**

<table>
<thead>
<tr>
<th>Environmental Resource Impacts</th>
<th>No Potential for Significance</th>
<th>No Potential for Significance, with Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Historic and Cultural Resources</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Explanation: The proposed actions do not include any new ground disturbance. Therefore, there would be no effect to historic and cultural resources.</td>
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<tr>
<td>2. Geology and Soils</td>
<td>✓</td>
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<tr>
<td>Explanation: Larval lamprey densities and substrate sampling would require disturbing streambed soils; however, soils would be returned to the sampled stream reach, and therefore no effects are anticipated to the quality or quantity of geology and soils in the project areas.</td>
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<td>3. Plants (including Federal/state special-status species and habitats)</td>
<td>✓</td>
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<tr>
<td>Explanation: The proposed action does not include any vegetation management, or any actions that would significantly impact vegetation in work areas. Therefore, there are no effects expected to plant communities.</td>
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<tr>
<td>4. Wildlife (including Federal/state special-status species and habitats)</td>
<td>✓</td>
<td></td>
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<tr>
<td>Explanation: The proposed actions would take place entirely within main stem and tributary waterways. Any terrestrial wildlife present nearby the action area may be flushed by the presence of humans; however, it is consistent with the recreational land use of the area, and therefore no effects are expected. Aquatic wildlife and amphibians may be encountered during collection activities, and those unable to flush (i.e. freshwater mussels etc.) would be avoided by project staff, resulting in no effect.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. **Water Bodies, Floodplains, and Fish**

   (including Federal/state special-status species, ESUs, and habitats)

   **Explanation:** Environmental considerations include water bodies, floodplains, and fish which are typical for stream habitat restoration projects where ESA-listed fish are present. Federal, state, or local permits would be obtained by CTWSRO for in water work and species that could potentially be present during sampling in various tributaries. Sampling of larval lamprey includes the use of electrofishing equipment with methods specifically designed to stun and not harm larval Pacific Lamprey, which are much smaller and more sensitive to listed fish. The levels at which the electrofishing equipment is operated for lamprey are not high enough to directly affect listed salmonids, and therefore no effect is expected.

6. **Wetlands**

   **Explanation:** The proposed actions may take place within or around wetlands; however, they would not have any effects to their quality, condition, or size since there would be no ground disturbance or habitat modifications.

7. **Groundwater and Aquifers**

   **Explanation:** There would be no impacts to groundwater or aquifers as a result of the proposed actions.

8. **Land Use and Specially-Designated Areas**

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

9. **Visual Quality**

   **Explanation:** Some remote areas would be altered only by the presence of humans, and all HDX installations would occur at previously altered fish passage facilities. Therefore, there are expected to be no significant impacts to the visual quality of project sites as a result of the proposed actions.

10. **Air Quality**

    **Explanation:** There would be short-term effects to air quality in the transportation of staff and equipment to project sites; however, they are not inconsistent with recreation and land use typical and therefore would have no significant impact.

11. **Noise**

    **Explanation:** Impacts to noise at project sites would be minimal, short-term, and of low decibels. Installation of HDX 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**

    **Explanation:** The proposed actions would not have any impacts to human health and safety, as the collection of information does not pose a human health or safety risk.

**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, if necessary:**

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

**Explanation, if necessary:**

- **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, if necessary:**

- **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, if necessary:**

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**Landowner Notification, Involvement, or Coordination**

**Description:** The CTWS 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 Fisheries 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/ Tabatha M. Rood  
Tabatha M. Rood  
Contract Environmental Protection Specialist  
Triad Technology Group  

**Date:** August 12, 2019