

**Hatchery Assessment for the O&M Strategic Plan  
Statement of Work for RFP  
October 2, 2015**

Formatted: Font: Not Bold

**Goal**

The ~~goal~~expected outcome of this contract is ~~to complete~~completed independent inventory and condition ~~assessments~~assessment of the major physical assets ~~of~~at all 14 Fish and Wildlife Program hatcherieshatchery facilities.

**Background**

The 2014 Columbia River Basin Fish and Wildlife Program, adopted in October 2014, calls for providing funding for long-term maintenance of the assets that have been created by prior program investments. The Council has been working with the Operations and Maintenance (O&M) Sub-committee, Independent Economic Analysis Board (IEAB), Bonneville staff, the Fish Screening Oversight Committee and others to develop a long-term O&M strategic plan to ensure the longevity and integrity of the Program's past investments.

The O&M strategic plan will utilize an asset management framework that will provide a long-term maintenance, rehabilitation, and replacement plan for Program investments. The framework has four phases: Phase 1 is the asset inventory; Phase 2 is the condition assessment; Phase 3 addresses prioritization, and Phase 4 is the strategic plan for implementing priorities over time.

The Council and Bonneville staff completed the direct Program hatchery list (Phase 1 – Inventory) and are now transitioning to implementation of the condition/asset assessment (Phase 2) needed for the asset management strategy

**Definitions**

Council – Northwest Power and Conservation Council

Program – 2014 Northwest Power and Conservation Council Fish and Wildlife Program

Project – Program funded hatchery project and its affiliated facilities (see Appendix A)

TWG – Technical Work Group of Council and BPA staff that oversees condition assessments and is ~~chair~~chaired by a Council member

**General Requirements**

The independent contractor, with direction from the TWG, will complete an inventory/condition assessment of major physical assets at each of the Program hatcheries (see Appendix A). Relying largely on existing information, the assessments should provide enough detail to inform the development of an asset management strategy and recommendations.

Therefore, the assessment is expected to be based largely on existing information, including, but not limited to, reviewed and recommended project narratives (cbfish.org), Hatchery Genetic Management Plans (HGMP's), and other documents readily available.

**Statement of Work**

**a. Phases**

- ~~1. Develop pre-assessment and report template with TWG.~~
- ~~2. Pre-visit data collection~~
- ~~3. Collaborative work session~~
- ~~4. Site visit and data reconciliation~~
- ~~5. General analysis and assessment~~
- ~~6. Submittal of recommendations and report~~

**b. Tasks**

- ~~1. Develop pre-assessment data template and final report template~~
- ~~2. Collect data from hatcheries and affiliated facilities~~
- ~~3. Collaborative work session between stakeholders (i.e., BPA, Council, and hatchery staff)~~
- ~~4. Site visit~~

The project can be visualized as proceeding in six steps:

<u>Project Step</u>	<u>Expected Outcome By Step</u>
<u>1. Template development</u>	<u>Templates for pre-assessment data and final report will be finalized</u>
<u>2. Pre-visit data assembly and organization</u>	<u>Data from hatcheries and affiliated facilities will be collected and organized</u>
<u>3. Collaborative work sessions</u>	<u>Work sessions among stakeholders (i.e. BPA, Council and hatchery staff) will have taken place</u>
<u>4. Site visit and data reconciliation</u>	<u>Site visits to all facilities and field verification of data for accuracy and completeness will have occurred</u>
<u>5. General analysis</u>	<u>Analysis of collected data to determine the status of the existing infrastructure at each facility will be complete</u>
<u>6. Final reporting</u>	<u>Final report with recommendations for what infrastructure repairs or additions are needed at each hatchery location will be finished</u>

~~5.1 General analysis~~

~~6. Final report with recommendations~~

**d. Detailed activities- by step:**

**Formatted:** Font: Bold, Underline

**Formatted:** Font: 12 pt  
**Formatted:** List Paragraph, Indent: Left: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1" + Indent at: 1.25", Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

1. ~~Develop pre-assessment and report template~~ Template development (with TWG-)
  - i. Pre-assessment template
    1. Data on resource requirements (~~ie-i.e.~~, water availability, electricity needs, etc.)
    - ~~2. Site designs~~
    2. Site designs (i.e. the physical layout of the buildings, ponds, raceways, and other infrastructure including land elevation values)
  - ii. Report template
    1. ~~Current~~ Assess current asset condition
    2. ~~Summary of~~ Summarize current operations with bio-programming
      - a. Cost to operate the facility
      - b. Resource usage (i.e., water, electricity, etc.)
      - c. Fish production lifecycle (i.e., spawning, release dates, size at release, rearing metrics, infrastructure, etc.)
    3. Assess ~~current condition~~, maintenance needs, and projected replacement year of major physical assets.
    4. Outline potential cost effective options to sufficiently improve infrastructure
    5. ~~Recommendations~~ Recommend and provide cost estimates of major physical assets
      - a. Approximate cost of recommendations
      - b. General analysis of O&M impact
2. ~~Pre-site visit assessment – data collection and synthesis prior to site visit~~ Data assembly and organization (see appendix B for example)
  - i. Contact each hatchery manager with data request
    1. What are current mitigation goals for each hatchery?
      - a. Identify production by program
    2. What are current limitations at each hatchery?
      - a. Operational (i.e., water, space, temperature, etc.) limitations
    3. What are current bio-programming requirements?
3. Collaborative work session
  - i. Review data findings and set expectations of site visit (i.e., be an informed visitor)
  - ii. Develop preliminary findings and share with stakeholders
  - iii. Schedule visits to optimize multiple sites where possible
4. Site visit and data reconciliation
  - i. Full day site visit
    1. Evaluate pre-assessment findings with hatchery manager
    2. ~~Hatchery Meet with hatchery~~ manager provide to receive overview of operations
    3. Tour hatchery with manager, and maintenance engineer as appropriate, considering fish culture perspective and infrastructure/operations.

4. ~~Closing~~ Hold a closing session with manager and maintenance engineer to ~~answer~~ address final questions and share initial findings.

5. General analysis

5. ~~Analysis and assessment~~

i. Consolidate and analyze data ~~to develop final report, prioritizing~~

ii. Prioritize infrastructure needs for each of the Council's Fish and Wildlife Program hatchery projects

6. ~~Submittal of Final report~~

6.i. Prepare report with recommendations ~~and report~~

ii. Submit report to TWG for review, revision and final acceptance

**Formatted:** Font: 12 pt

**Formatted:** List Paragraph, Indent: Left: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1" + Indent at: 1.25", Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

**Formatted:** Indent: Left: 1", Hanging: 0.13", Numbered + Level: 1 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 1" + Indent

The Final ~~reports~~ report should include, but not be necessarily limited to, information ~~for~~ in each of the following categories:

Introduction	<ul style="list-style-type: none"> <li>Description (include goals and objectives of the review and recommended facility/program)</li> </ul>
Water Supply System	<ul style="list-style-type: none"> <li>Surface</li> <li>Ground</li> <li>Infrastructure</li> </ul>
Trap and Weirs	
Transport	<ul style="list-style-type: none"> <li>Ladders</li> <li>Other</li> </ul>
Adult Holding	
Incubation	
Rearing	<ul style="list-style-type: none"> <li>Rearing/Grow-out</li> <li>Raceways</li> </ul>
Release	<ul style="list-style-type: none"> <li>Volitional</li> <li>Other</li> </ul>
Effluent	
Buildings	<ul style="list-style-type: none"> <li>Hatchery Buildings</li> <li>Housing</li> </ul>
Grounds	<ul style="list-style-type: none"> <li>Access</li> <li>Utilities</li> </ul>
Capital (Support) Equipment	

**Other Project management tasks and expectations**

- Maintain budgets and schedules within limits – NTE \$250,000 and 270 days after award
- Identify and resolve technical and management problems.
- Maintain communications with all parties.

## **Reporting**

Submit report to the TWG for review and approval.

## **Deliverables**

An electronic copy of the completed hatchery condition assessment for each of the Fish and Wildlife Program hatcheries listed in Appendix A. ~~The reports~~ These assessments will be reviewed and accepted by the TWG. The TWG may send an assessment back to the contractor for further analyses or revisions if necessary.

## **Time Schedule**

Task 1: Presentation of progress with condition assessments – every 90 days after award

Task 2: Presentation of final condition assessments – 270 days after award

## **Attached Appendixes**

Appendix A – NPCC Hatchery List

Appendix B – Typical hatchery assessment information