11/30/16 Draft Lower Columbia River Steelhead

RECOMMENDED FINDINGS FOR 2016 ESA 5-YEAR REVIEWS

<table>
<thead>
<tr>
<th>ESU/DPS Name:</th>
<th>Lower Columbia River Steelhead DPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESU/DPS Definition:</td>
<td>Naturally spawned anadromous <em>O. mykiss</em> (steelhead) originating below natural and manmade impassable barriers from rivers between the Cowlitz and Wind Rivers (inclusive) and the Willamette and Hood Rivers (inclusive); excludes such fish originating from the upper Willamette River basin above Willamette Falls. This DPS does include steelhead from seven artificial propagation programs: the Cowlitz Trout Hatchery Late Winter-run Program (Lower Cowlitz); Kalama River Wild Winter-run and Summer-run Programs; Clackamas Hatchery Late Winter-run Program (Oregon Department of Fish and Wildlife (ODFW) Stock #122); Sandy Hatchery Late Winter-run Program (ODFW Stock #11); Hood River Winter-run Program (ODFW Stock #50); and the Lewis River Wild Late-run Winter Steelhead Program (79 FR 20802).</td>
</tr>
<tr>
<td>Current Status:</td>
<td>THREATENED</td>
</tr>
<tr>
<td>First Listed:</td>
<td>1998</td>
</tr>
<tr>
<td>Last Reviewed:</td>
<td>2011</td>
</tr>
<tr>
<td>Recovery Plan Completed:</td>
<td>2013</td>
</tr>
</tbody>
</table>

**Status and Recent Trends**

<table>
<thead>
<tr>
<th>Viability Criteria</th>
<th>Abundance</th>
<th>Productivity</th>
<th>Spatial Structure</th>
<th>Diversity</th>
</tr>
</thead>
</table>

**ESA 4(a)(1) Listing Factors**

<table>
<thead>
<tr>
<th>Habitat</th>
<th>Overutilization</th>
<th>Disease/Predation</th>
<th>Inadequacy of Regulatory Mechanisms</th>
<th>Other Natural or Manmade Factors</th>
</tr>
</thead>
</table>

**Key Threats Currently Facing ESU/DPS**

- Reduced stream complexity, connectivity, quantity and quality of habitat.
- Toxic contamination
- Development pressures in smaller watersheds
- Dams blocking or impeding passage for adult and juvenile steelhead.
- Lack of access to historic floodplain habitat
- Elevated water temperatures

**Noteworthy Conservation Accomplishments**

- Numerous habitat protection and restoration efforts have been implemented through the efforts of groups.
- Conservation banks will be implemented in FY 16 and beyond to address habitat limiting factors for the ESU.
- Habitat conservation plans are being implemented in the Lewis Basin, and in State forest lands that address habitat factors limiting this DPS.
- Condit Dam was removed from the White Salmon River and Delta Dam from the Sandy River Basin.
- Improvements at dams include new collection facilities, a floating surface collector at Swift Dam, and multiple projects at the Clackamas River Hydroelectric Project.
## Key Research and Monitoring Recommendations

- Quantitatively analyze net habitat loss and restoration/protective efforts on recognized habitat limiting factors. Evaluate the effectiveness of existing land-use regulatory mechanisms, land-use management plans, and identify areas of improvement that would benefit recovery. (A Habitat Status and Trends Monitoring sampling and analysis plan is in the final stages of development for implementation in FY 17).
- Analyze fisheries harvest management regulations relative to the viable salmonid recovery criteria listed in the 2013 Lower Columbia River Recovery Plan.
- Complete life-cycle/extinction risk modeling to quantify predation rates by predatory pinnipeds on listed salmon and steelhead stocks in the Columbia River and Willamette River.
- Expand research efforts in the Columbia River estuary on survival and run timing for adult salmonids migrating through the lower Columbia River to Bonneville Dam.

## Top Near-Term Recovery Priorities

- Continue to work with our Federal, state and local partners in implementing our 2013 Lower Columbia River Recovery Plan.
- Continue to implement our ongoing FERC settlement agreements in multiple Lower Columbia River basins.
- Complete ESA section 7 consultations on multiple proposed actions including hatchery and harvest biological opinions and hatchery and genetic management plans.
- Consider implementing re-introduction programs to re-establish populations in basins that have been extirpated.
- Identify funding source to support expanded activities to evaluate the effect of hatchery program changes on the status of ESA-listed LCR steelhead populations.

## Potentially Sensitive or Controversial Issues

- Land-use decision making throughout the domain
- Hatchery and harvest management decisions.
- Regulatory approvals that lack ESA consultation (e.g., state NPDES actions)

### RECOMMENDATIONS

**Changes in ESU/DPS Delineation:** None  
**Changes in Hatchery Membership:** None  
**2016 Listing Status Recommendation:** Retain Current Threatened Status