Restoring Fish Passage at WSDOT Stream Crossings

Joint Transportation Committee Work Session

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Injunction Overview

Culvert Litigation Chronology and Overview (see handout)

- Litigation activity and timeframes

- Injunction directions
  - WSDOT’s deadline to address barriers with significant habitat
  - Preference for corrections
  - Ongoing requirement to assess culverts
  - Tribal coordination
WSDOT & the Federal “Culvert” Injunction

- WSDOT has about 2,000 fish barriers statewide.

- 992* barriers subject to the Federal Injunction as of June 2018
  - ~415* barriers with significant habitat address
    90% blocked habitat** -- Must be corrected by 2030
  - An additional 577* must be corrected at the end of the structure’s life, or as part of a transportation project
  - 55 barriers removed through 2017 Construction Season

* Based on current known barriers, we are required to re-inventory regularly.

**For the purpose of implementing the injunction, habitat gain is measured from the barrier to end of salmon habitat regardless of other barriers.
## Investment Level For Injunction Compliance

<table>
<thead>
<tr>
<th>Biennium (in Millions)</th>
<th>13-15</th>
<th>15-17</th>
<th>17-19</th>
<th>19-21</th>
<th>21-23</th>
<th>23-25 to 29-31</th>
<th>Cumulative Total thru 29-31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Funding(^2)</td>
<td>$23.8</td>
<td>$67</td>
<td>$109</td>
<td>$275</td>
<td>$78</td>
<td>$186</td>
<td>$739</td>
</tr>
<tr>
<td>Add’l Funding Required</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$648</td>
<td>$2,410</td>
<td>$3,057</td>
</tr>
<tr>
<td><strong>Total Compliance Funding</strong></td>
<td>$23.8</td>
<td>$67</td>
<td>$109</td>
<td>$275</td>
<td>$726</td>
<td>$2,595</td>
<td>$3,796</td>
</tr>
<tr>
<td>Barriers Corrected</td>
<td>19</td>
<td>25</td>
<td>22</td>
<td>24</td>
<td>90-110</td>
<td>390-420</td>
<td>515-540</td>
</tr>
<tr>
<td>Potential Habitat Gain (%)</td>
<td>4%</td>
<td>10%</td>
<td>10%</td>
<td>10-15%</td>
<td>20-25%</td>
<td>21-31%</td>
<td>90%+</td>
</tr>
</tbody>
</table>

\(^1\) Based on current known barriers. We are required to re-inventory regularly.

\(^2\) Current Law with 601 timing adjustment (does not change current law total)

**NOTE:** Total compliance funding for 2021-23 and beyond includes:
- $9-10M/biennium outside the case area
- $10M-$31M/biennium to address culvert failures within injunction area
Design in a biennium determines construction in the following biennium.


*Injunction deadline for 90% habitat is March 2030.
Program Estimating

During initial litigation ~2007 ($1.88B)
• Based on historic project cost information
  ➢ Grouped barriers into small, medium, and large
• Assigned average costs to small, medium, and large barriers to estimate overall program cost

In 2013 following the Injunction Issuance ($2.4B)
• Updated overall program cost to include inflation for the 2030 Injunction deadline

For 2019 Legislative Session ($3.8B program total, which is a $3.1B increase to current law with 601 timing adjustment)
• Updated costs for small, medium, and large barriers to reflect more recent fish passage projects
• Updated inflation for delivery timeline
• Included failing culvert assumptions
• Included barriers outside injunction
Program Estimating Cost and Complexity Drivers

- Traffic Control
- Site Characteristics
- Right of Way
- Utilities
- Structures/Retaining Walls
- In-Water Work Timing Limitations
- Coordination with Others

Large Headwall

Traffic Control

Utilities
Delivery Plan Prioritization Principles

• Improve Habitat Access
• Partnership Opportunities
• Downstream Barriers
• Public Impacts
• Project Readiness
• Tribal Input on Priorities
• Geographic Bundling
• Culvert Condition

Siebert Creek with upstream and downstream barriers 34 miles of potential fish habitat 31 miles immediately accessible to fish when WSDOT barrier is corrected.
Delivery Plan: 19-21

Total Projects
• 39 Barrier Corrections in Construction
  ➢ Improves access to approx. 180 miles of habitat
• 93 Barrier Corrections in Design
  ➢ Improves access to approx. 290 miles of habitat

Noteworthy Projects for Construction
➢ SR3/Chico Creek
➢ US101/Siebert Creek
Delivery Plan: 19-21

WSDOT Stand-alone Fish Passage Projects planned for Design and Construction 19-21 within the Culvert Case Area

Legend
- Construction 19/21 (39)
- Design 19/21 (93)
- US v. WA Case Area Boundary
Delivery Plan: 19-21

WSDOT Stand-alone Fish Passage Projects planned for Design and Construction 19-21 within the Culvert Case Area

Bundle Example
Delivery Plan: 19-21

Siebert Creek

Chico Creek

WSDOT Stand-alone Fish Passage Projects planned for Design and Construction 19-21 within the Culvert Case Area

Legend
- Construction 19/21 (39)
- Design 19/21 (93)
- US v. WA Case Area Boundary
WSDOT’s Role in the Fish Barrier Removal Board

- Active member of the Board
- Planned WSDOT projects are used in grant proposal ranking, improving the scores for nearby proposals
- 2017-2019 projects funded on Chico Cr and Coffee Cr where WSDOT is planning culvert work
- 2019-2021 Board is funded for design or construction of 13 projects that are upstream or downstream of planned WSDOT barrier corrections
Leveraging Restoration Work in Chico Creek Watershed
Leveraging Restoration Work
Kilisut Harbor

Design Visualization of restoration work

Restoration work combined with correcting a WSDOT fish barrier
Leveraging Restoration Work in King County
Leveraging Restoration Work in King County
Leveraging Restoration Work in WRIA 1
Contact

For more information about Restoring Fish Passage at WSDOT Stream Crossings, please contact:

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