Restoring Fish Passage at WSDOT Stream Crossings

Chehalis Basin Board Meeting
Program Overview
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WSDOT Fish Passage Program

Partnership with WDFW since early 1990's
Fish barrier inventory & prioritization

Statewide:
- 7,401 WSDOT culverts evaluated
- 3,855 culverts in fish bearing waters
- 2,052 fish passage barriers identified

Correction of barriers:
- 345 corrections to date
- 1,155 miles of stream habitat with improved access

Data from 2019 WSDOT Fish Passage performance report

WSDOT & the Federal "Culvert" Injunction

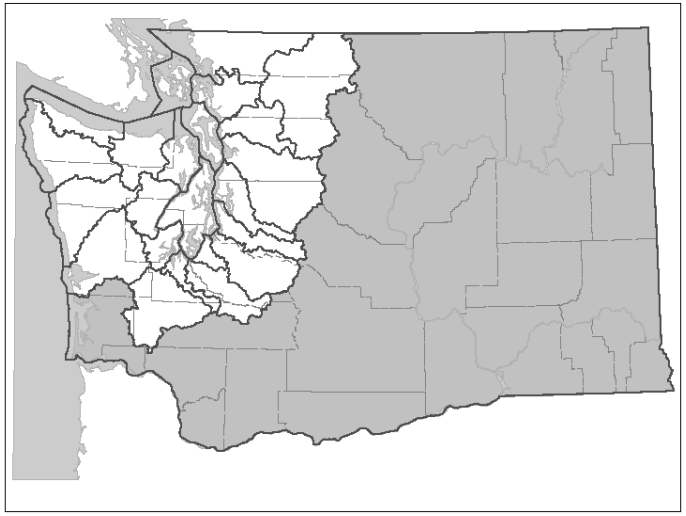
- WSDOT has about 2,000 fish barriers statewide

- 1,001* barriers subject to the Federal Injunction as of June 2019

  - ✓ ~413* barriers with significant habitat address 90% blocked habitat** -- Must be corrected by 2030

  - ✓ An additional 588* must be corrected at the end of the structure's life, or as part of a transportation project

  - ✓ 66 barriers corrected through 2018 Construction Season (another 12 in 2019)



Area Covered by the 2013 Injunction

* 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.

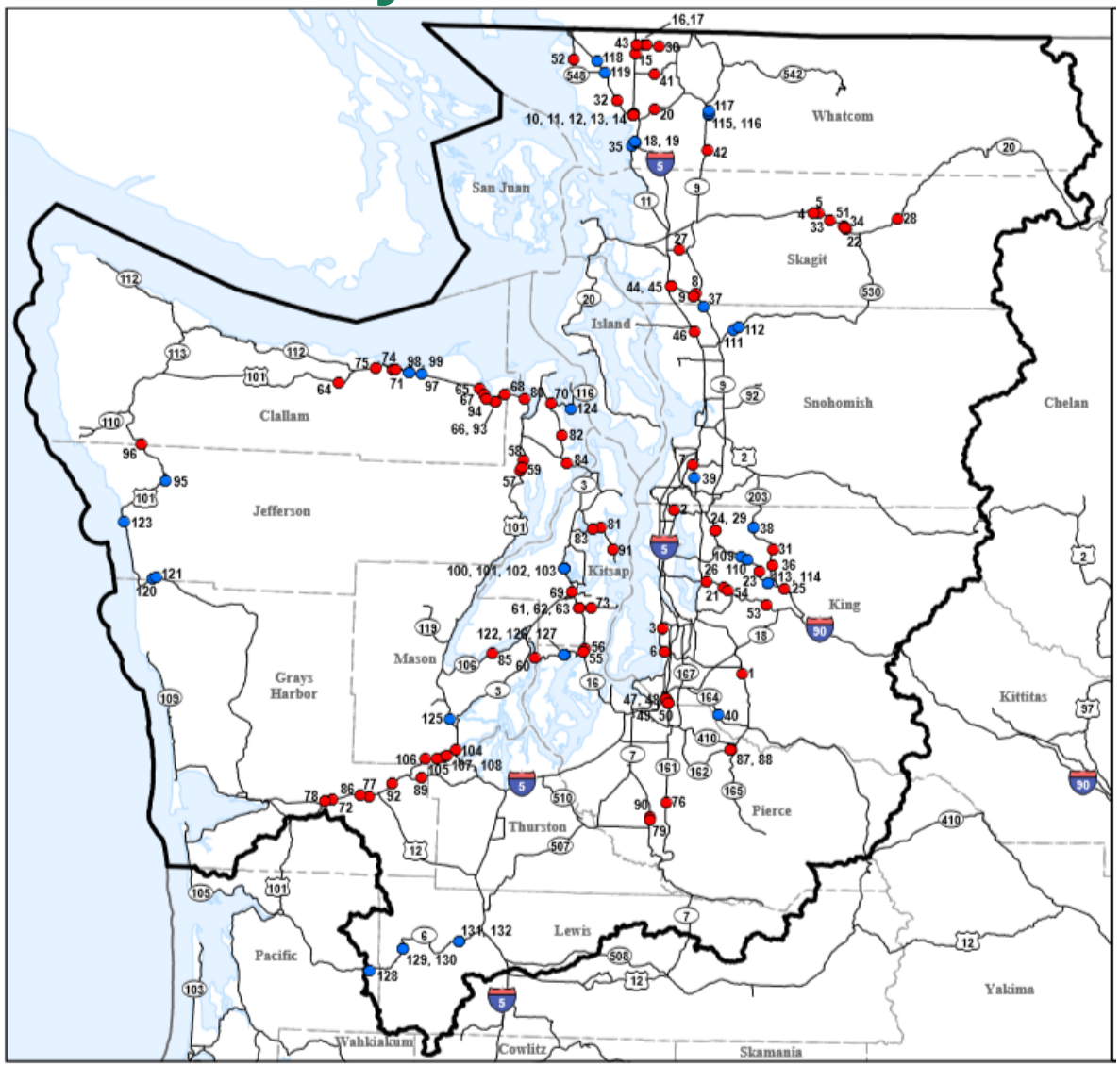
Investment Level For Injunction Compliance

	To Date 2013-2019	Current Biennium 2019-2021	2021-2023	2023-2025	2025-2027	2027-2029	2029-2030	Total
Current Funding	$185M	$275M	$78M	$79M	$22M	$53M	$33M	$725M
Total funding needed to comply with the Injunction	$185M	$275M	$726M	$730M	$735M	$740M	$390M	$3.8B
Additional funding required			$648M	$651M	$713M	$687M	$357M	$3.1B
# Barriers (completed)	66	24	90-110	115-130	115-130	115-130	30-40	515-540
% Habitat	24%	10-15%	20-25%	9-13%	7-11%	5-9%	1-3%	90%+

NOTE:

- Based on current known barriers. We are required to re-inventory regularly.
- 19-21 is Current Law with 601 timing adjustment (does not change current law total)
- 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

Delivery Plan: 19-21



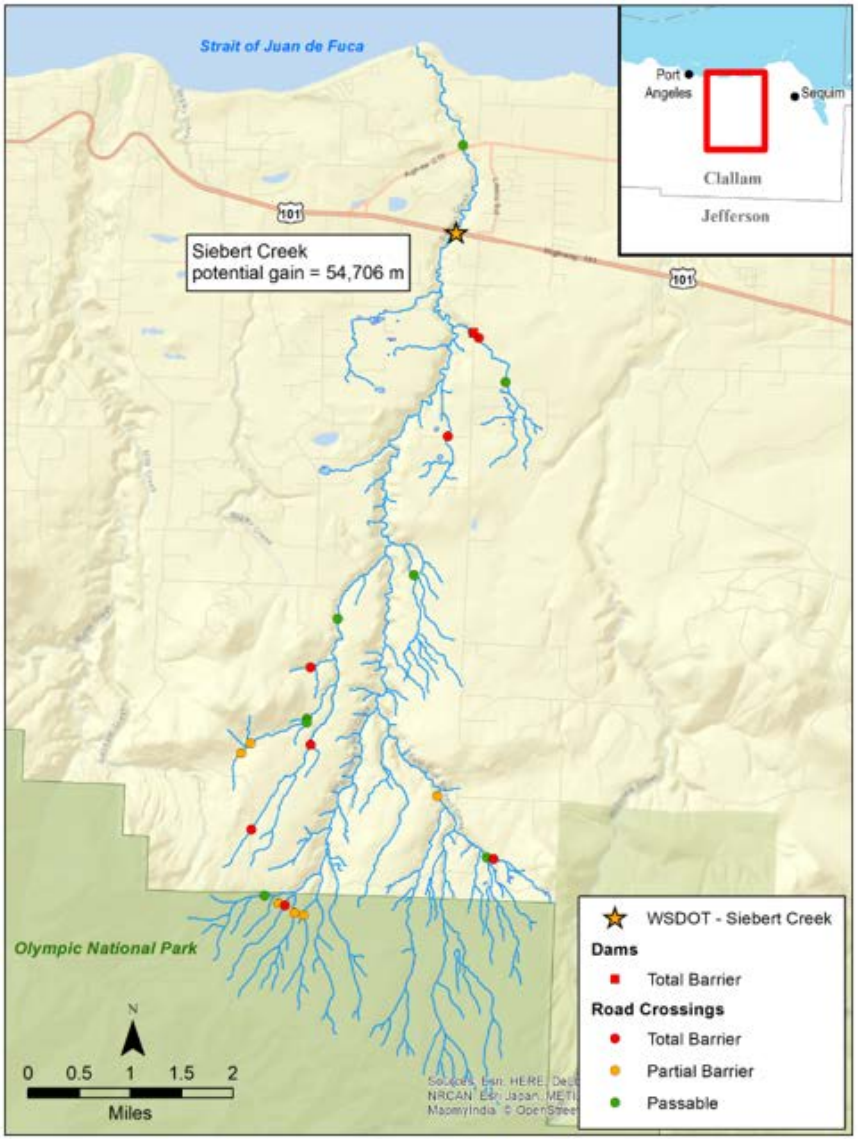
WSDOT Stand-alone Fish Passage Projects planned for Design and Construction 19-21 within the Culvert Case Area

Legend

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

Delivery Plan Prioritization Principles

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

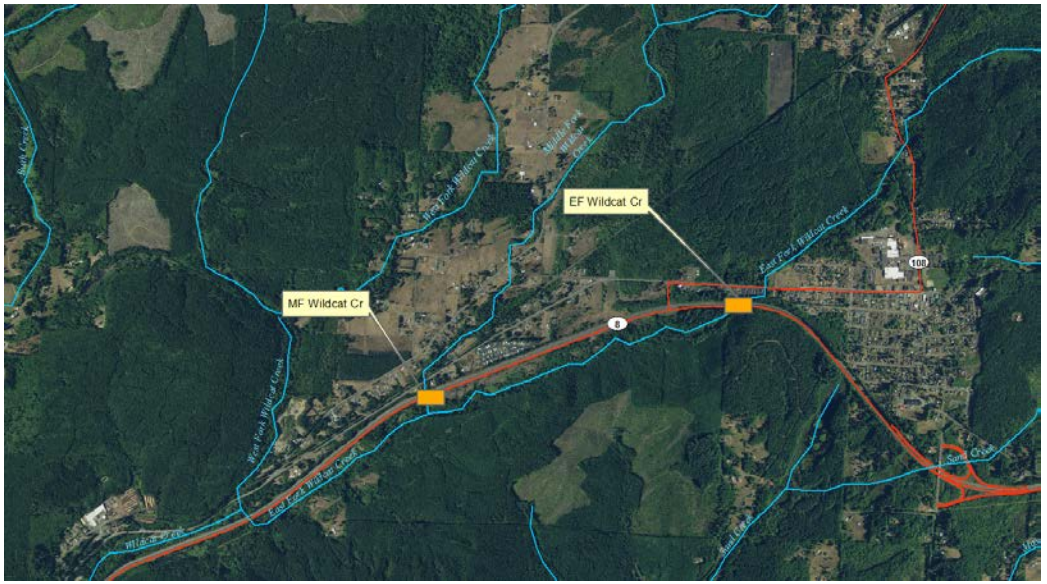


Siebert Creek with upstream and downstream barriers <u>34 miles</u> of potential fish habitat <u>31 miles</u> immediately accessible to fish when WSDOT barrier is corrected

SR 8 East Fork and Middle Fork Wildcat Creek

Fish Passage Deficiencies:

- EF Wildcat was a barrier due to high velocities (13.6 miles of habitat)
- MF Wildcat had excessive water surface drops (blocking 18.6 miles habitat gain)
- Project provides a combined total of 32.2 miles of stream with improved access.



Construction Efficiencies:

- Permitting allowed Contractor to do work over water year-round (in-water work only during summer fish window)
- Staging Concept – Build detour in order to maintain two lanes of traffic in each direction during construction

East Fork Before

Middle Fork Before

SR 8 Middle Fork Wildcat Creek WRIA 22

- Barrier was 20 foot box culvert with excessive drop
- Replaced with 110’ span bridges; large wood and channel work
- Completed in 2018
- $7.4 M estimated cost (East Fork wildcat Creek was $9.8 M for a total project cost of $17.2M)
- Benefits Chum, coho, steelhead, searun cutthroat, & resident trout

Before

During

After

SR 8 East Fork Wildcat Creek WRIA 22

- EF Wildcat two 160' span bridges; large wood and channel work
- $9.8 M estimated cost
- 13.6 miles habitat gain
- Chum, chinook, coho, steelhead, searun cutthroat, & resident trout

Before

During

After

Contact

For more information about
Restoring Fish Passage at WSDOT Stream Crossings, please visit out website:
https://www.wsdot.wa.gov/Projects/FishPassage

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