

# **Restoring Fish Passage at WSDOT Stream Crossings**

## **Joint Transportation Committee Work Session**

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July 25, 2019

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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



**Area Covered by 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 <sup>1</sup>

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

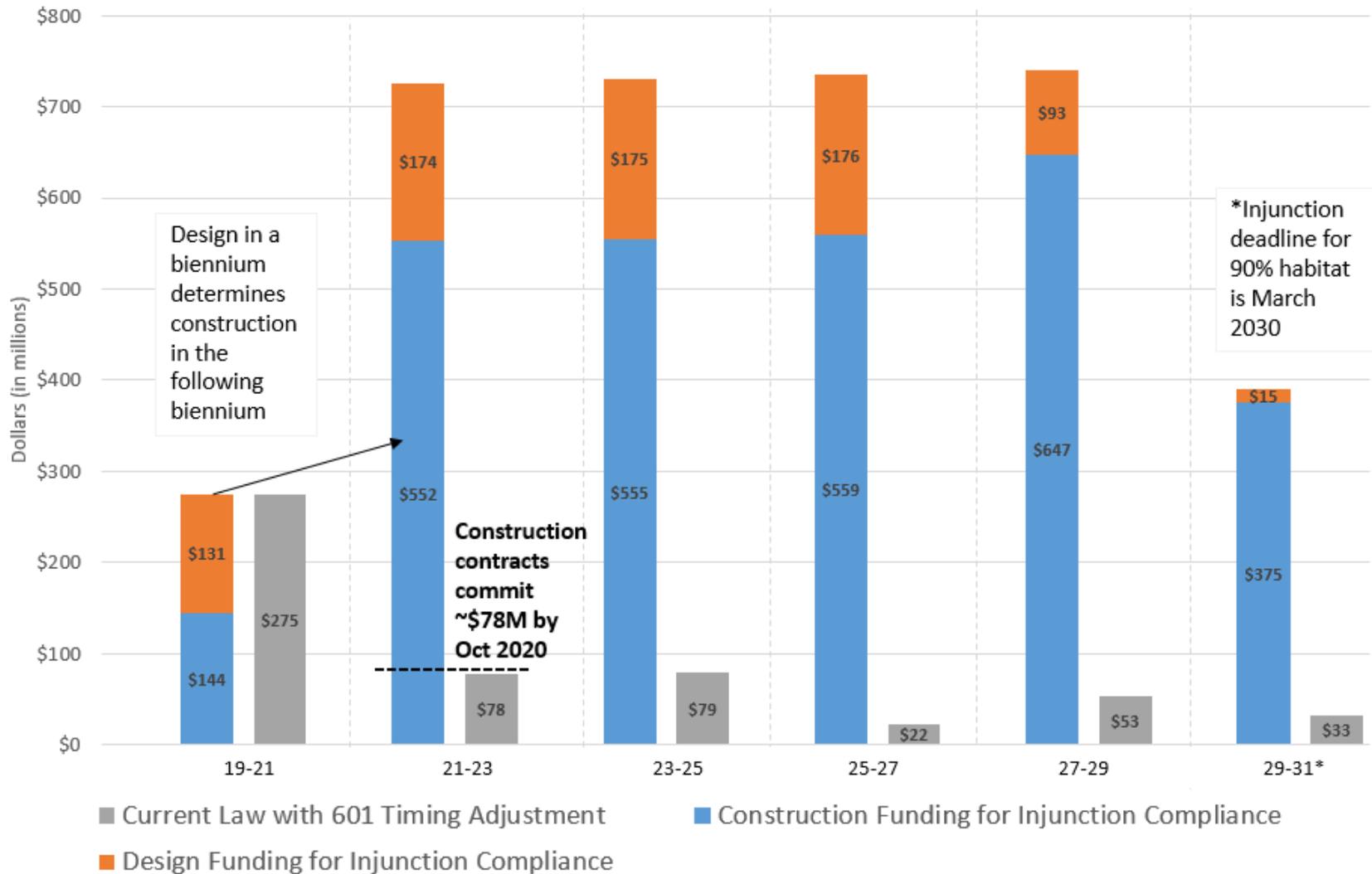
<sup>1</sup> Based on current known barriers. We are required to re-inventory regularly.

<sup>2</sup> 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

## Funding Required for Injunction Compliance Compared to Current Law with 601 Timing Adjustment



# 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



Utilities



Large Headwall

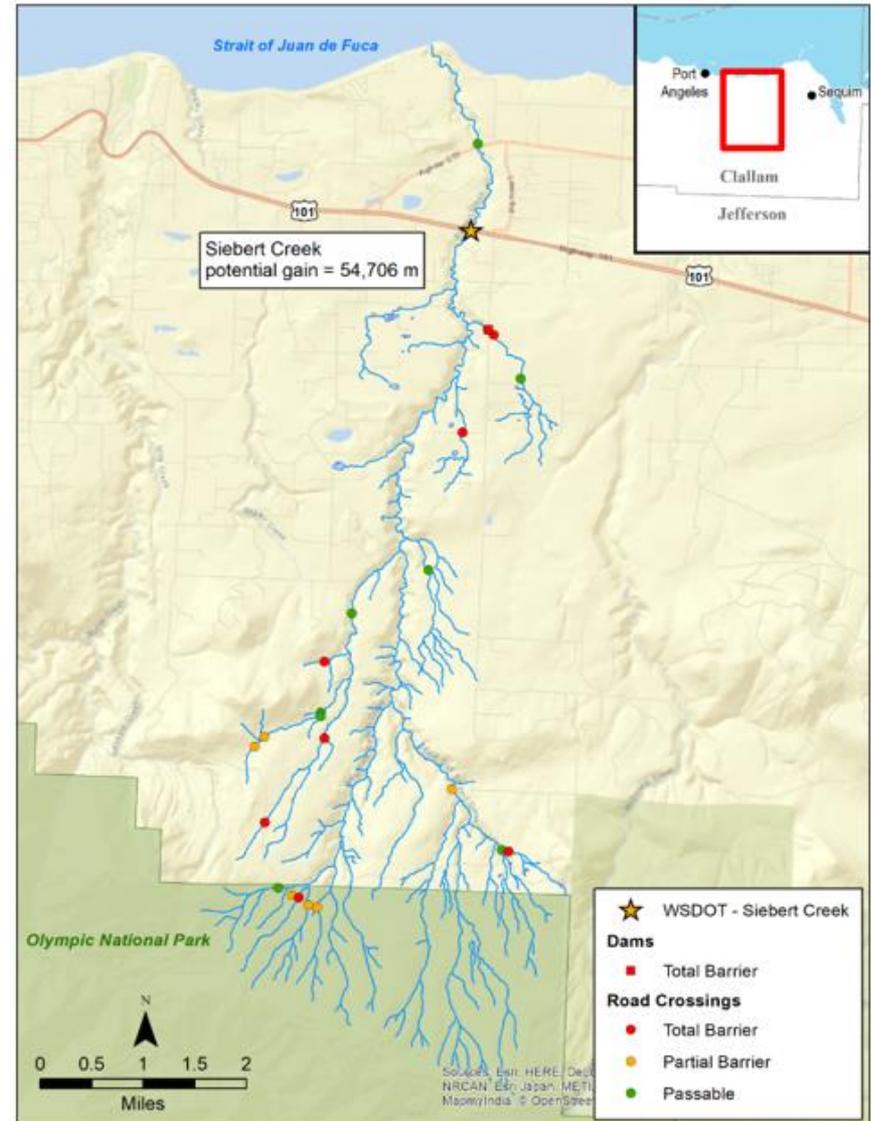


Traffic Control

# 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

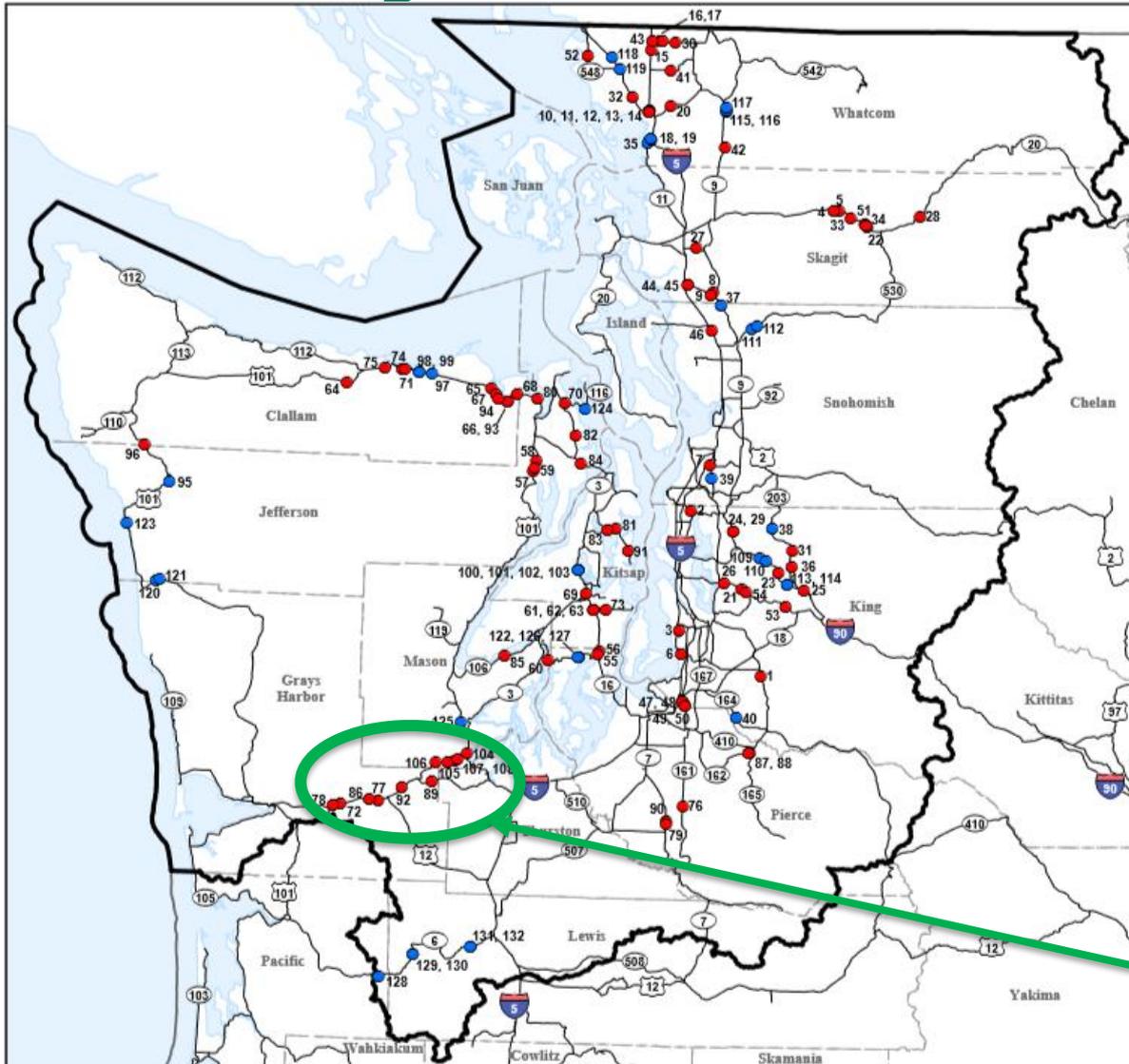
- 39 Barrier Corrections in Construction
  - Improves access to approx. 180 miles of habitat
- 93 Barrier Corrections in Design
  - Improves access to approx. 290 miles of habitat

## Noteworthy Projects for Construction

- SR3/Chico Creek
- US101/Siebert Creek



# Delivery Plan: 19-21



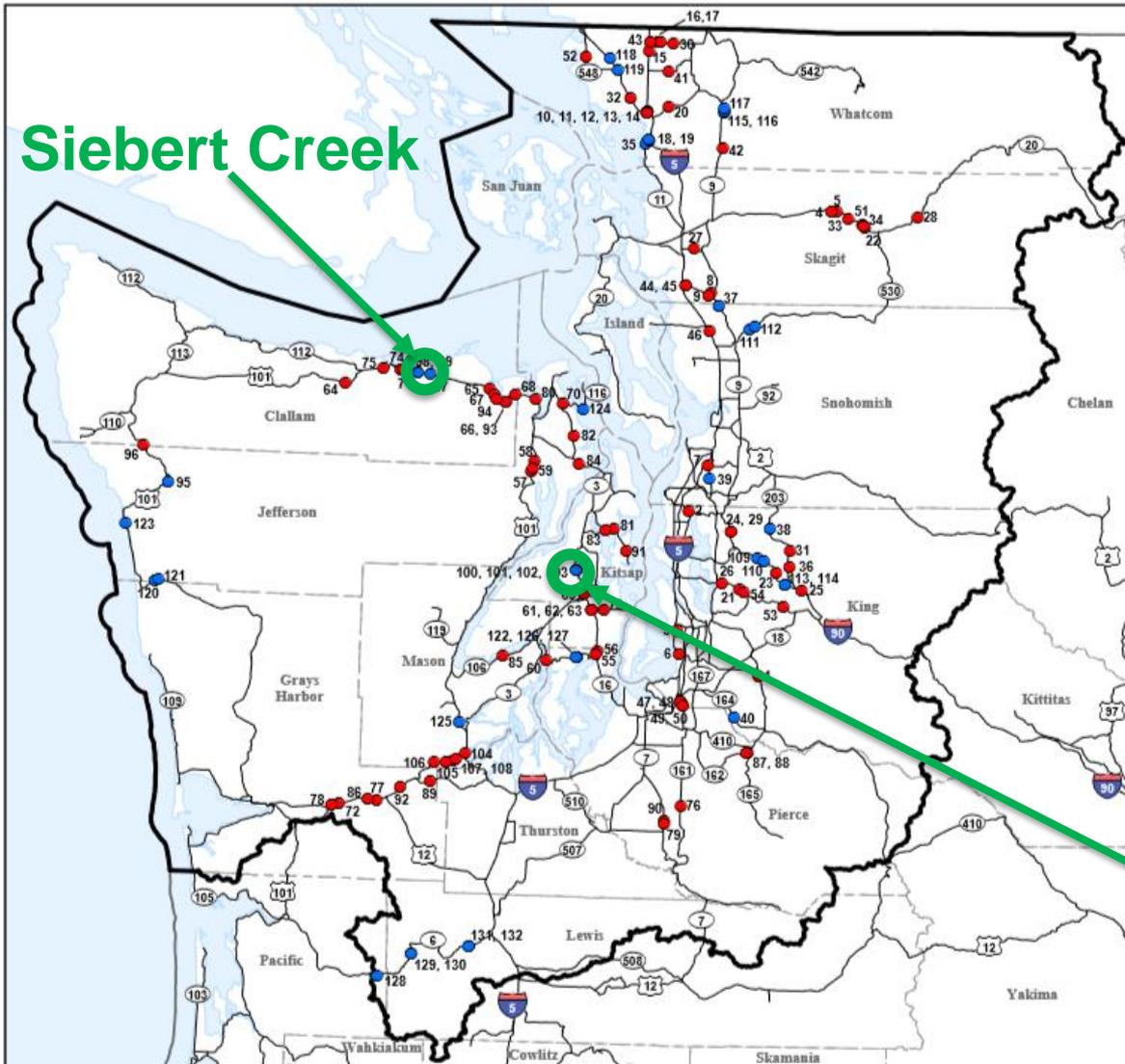
WSDOT Stand-alone Fish Passage Projects planned for Design and Construction 19-21 within the Culvert Case Area

## Legend

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

Bundle Example

# 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

Chico Creek

# 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

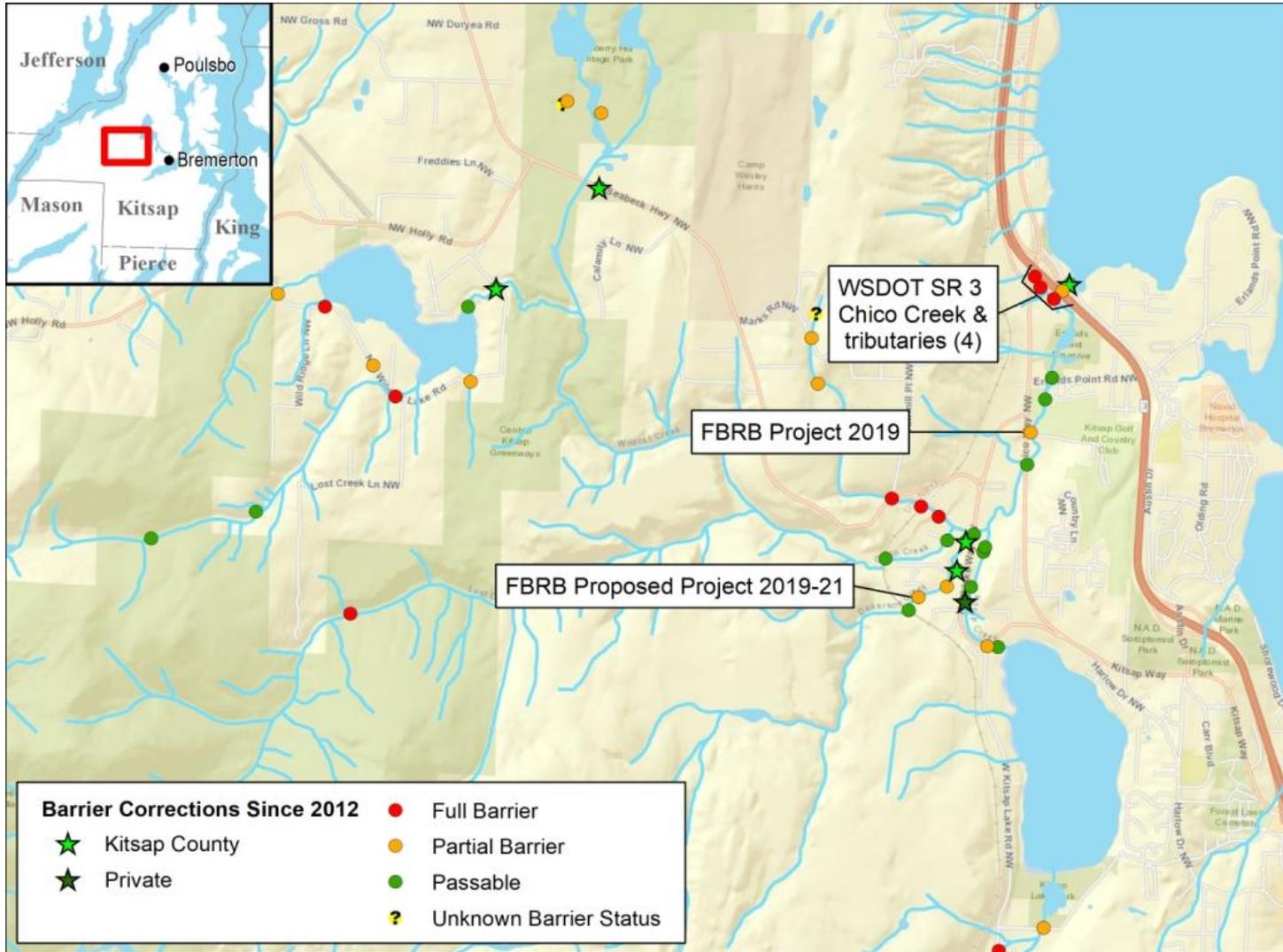


*WSDOT SR532 Secret Creek Barrier Correction*

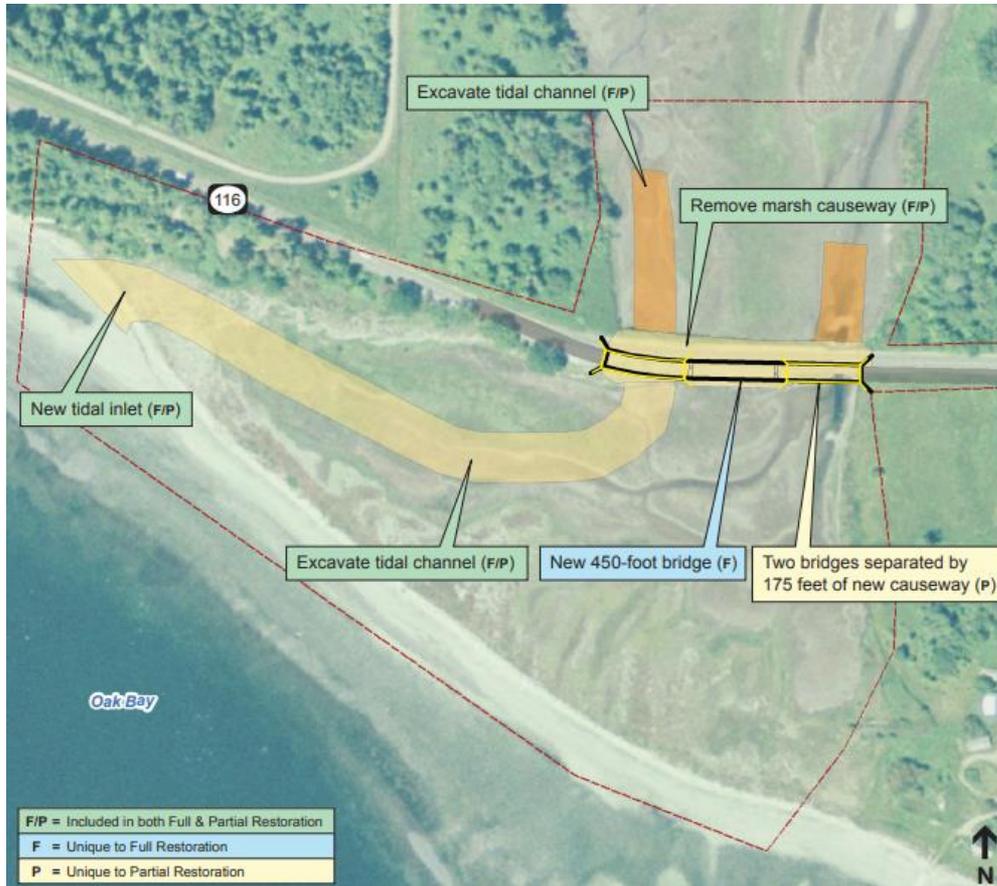


*Upstream FBRB Funded County Barrier on Secret Creek*

# Leveraging Restoration Work in Chico Creek Watershed



# Leveraging Restoration Work Kilisut Harbor

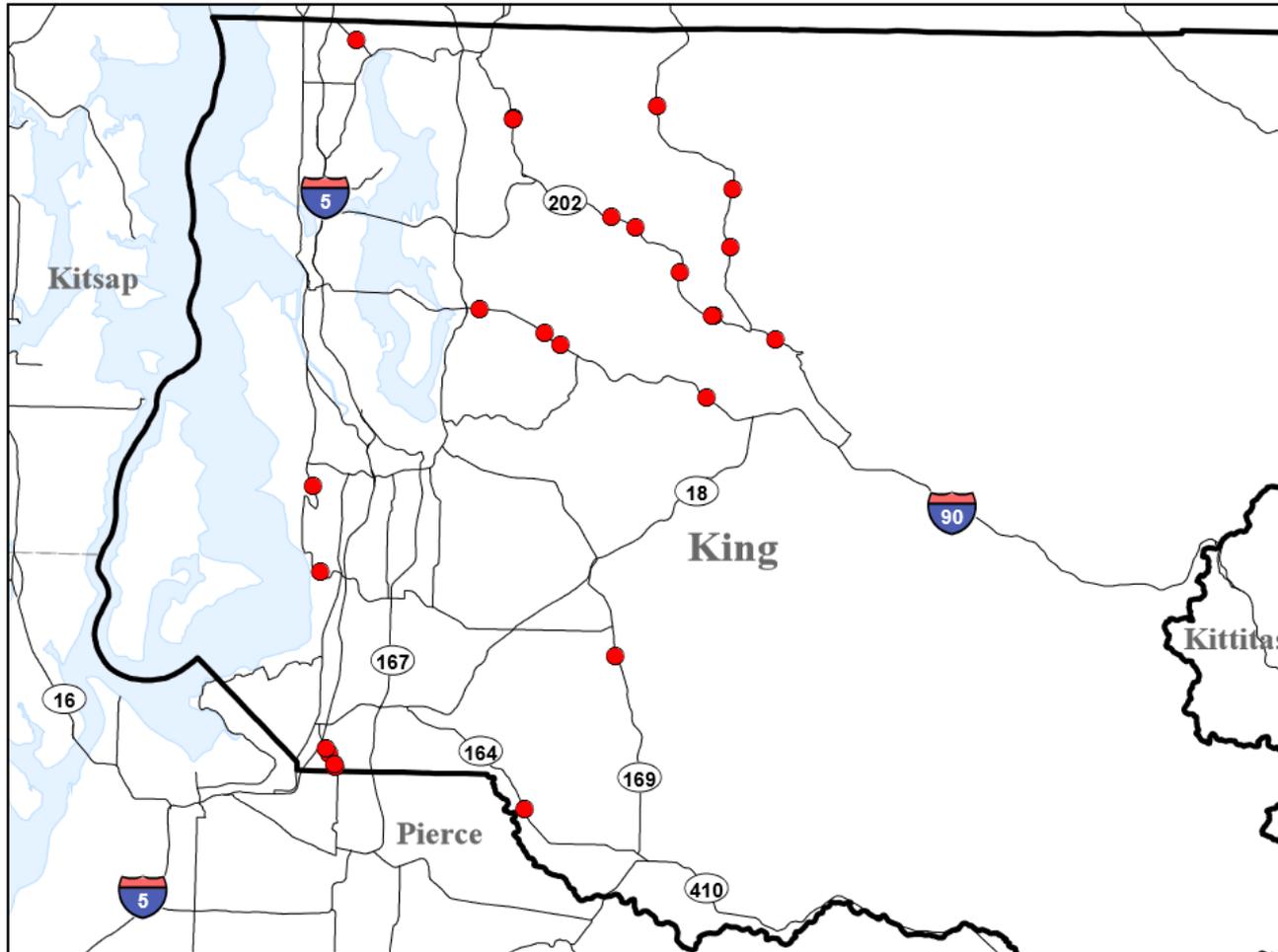


*Restoration work combined with correcting a WSDOT fish barrier*

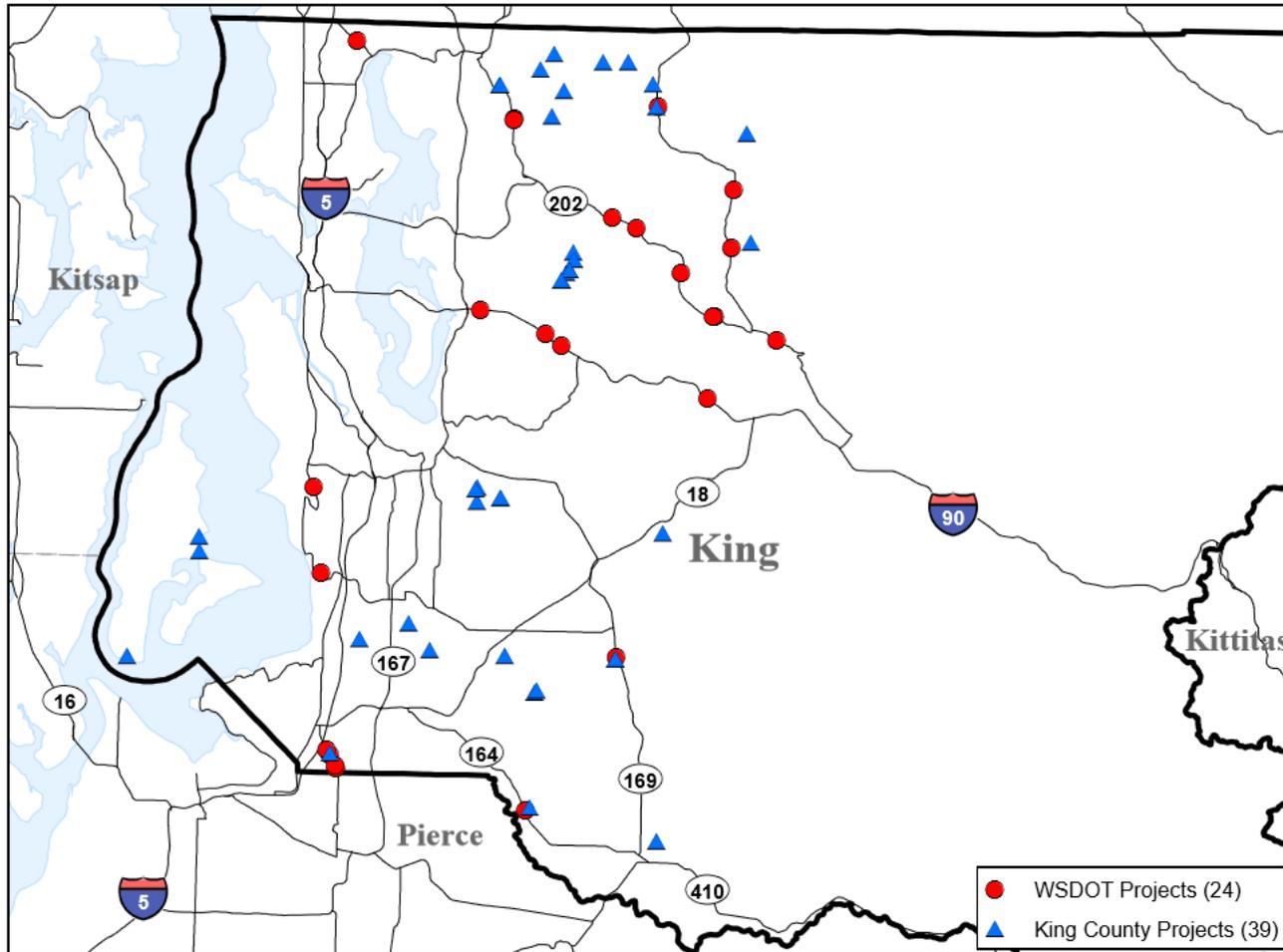


*Design Visualization of restoration work*

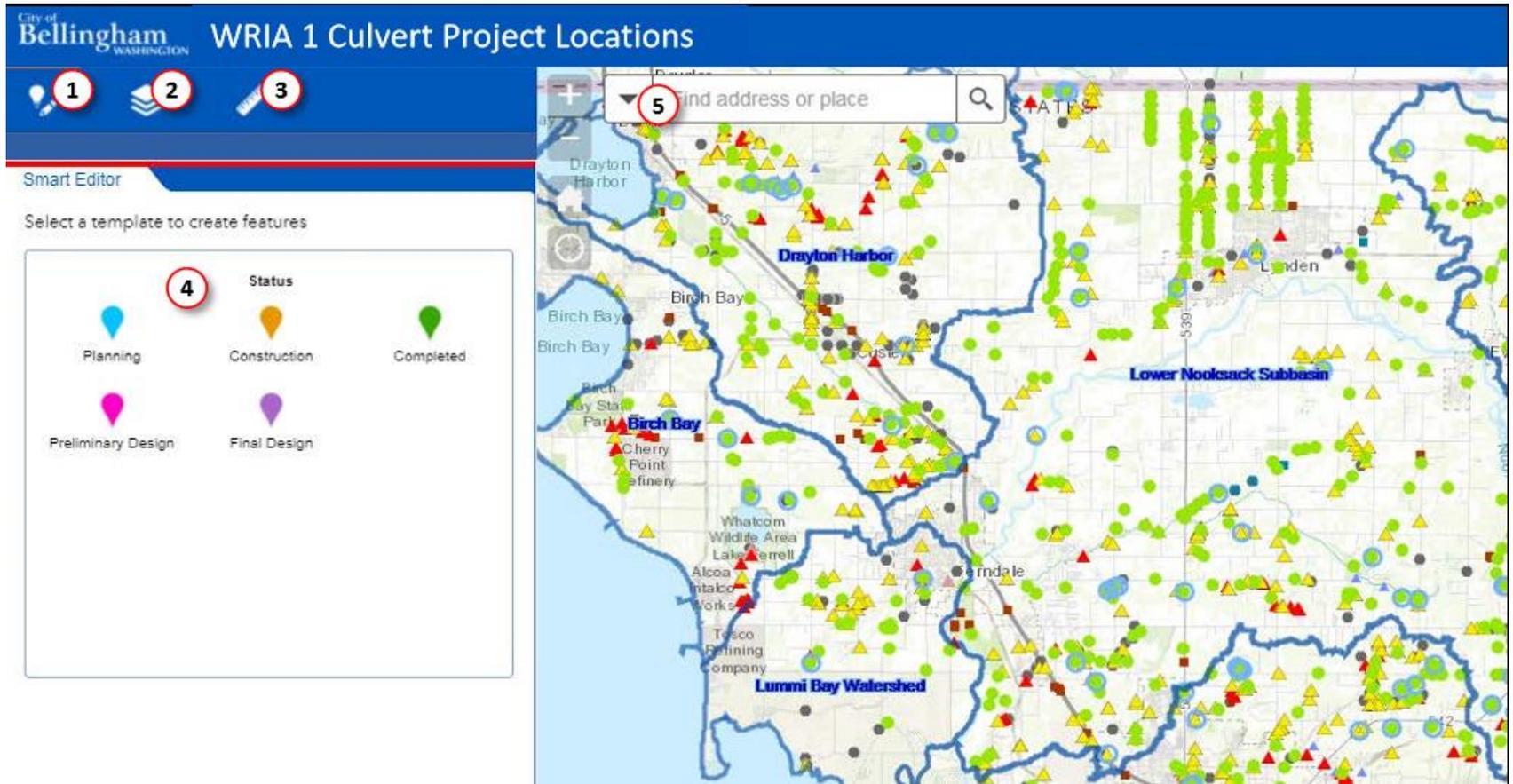
# Leveraging Restoration Work in King County



# 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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