WSDOT Fish Passage

PROGRAM UPDATE

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Washington State Transportation Commission Meeting

October 15, 2024

WSDOT Fish Passage Program

Organization
- Injunction requirements
- WSDOT’s program organization and priorities

Progress
- Progress to date
- Remaining barrier corrections

Funding & Estimates
- Program estimate history
- Current program estimate

Challenges & Innovations
- Project examples

ORGANIZATION

Requirements and Numbers–

Projects, habitat, and priorities.

Injunction Requirements

2013 List Significant Gain Barriers (>200 meters of upstream habitat)

- Open 90% blocked habitat by 2030
- Open remaining 10% deferred habitat at the end of the structure's useful life or as part of another project

2013 List Limited Gain Barriers (<200 meters of upstream habitat)

- Correct at the end of the structure's useful life or as part of another project

Newly Identified Barriers - those identified after the 2013 List was developed

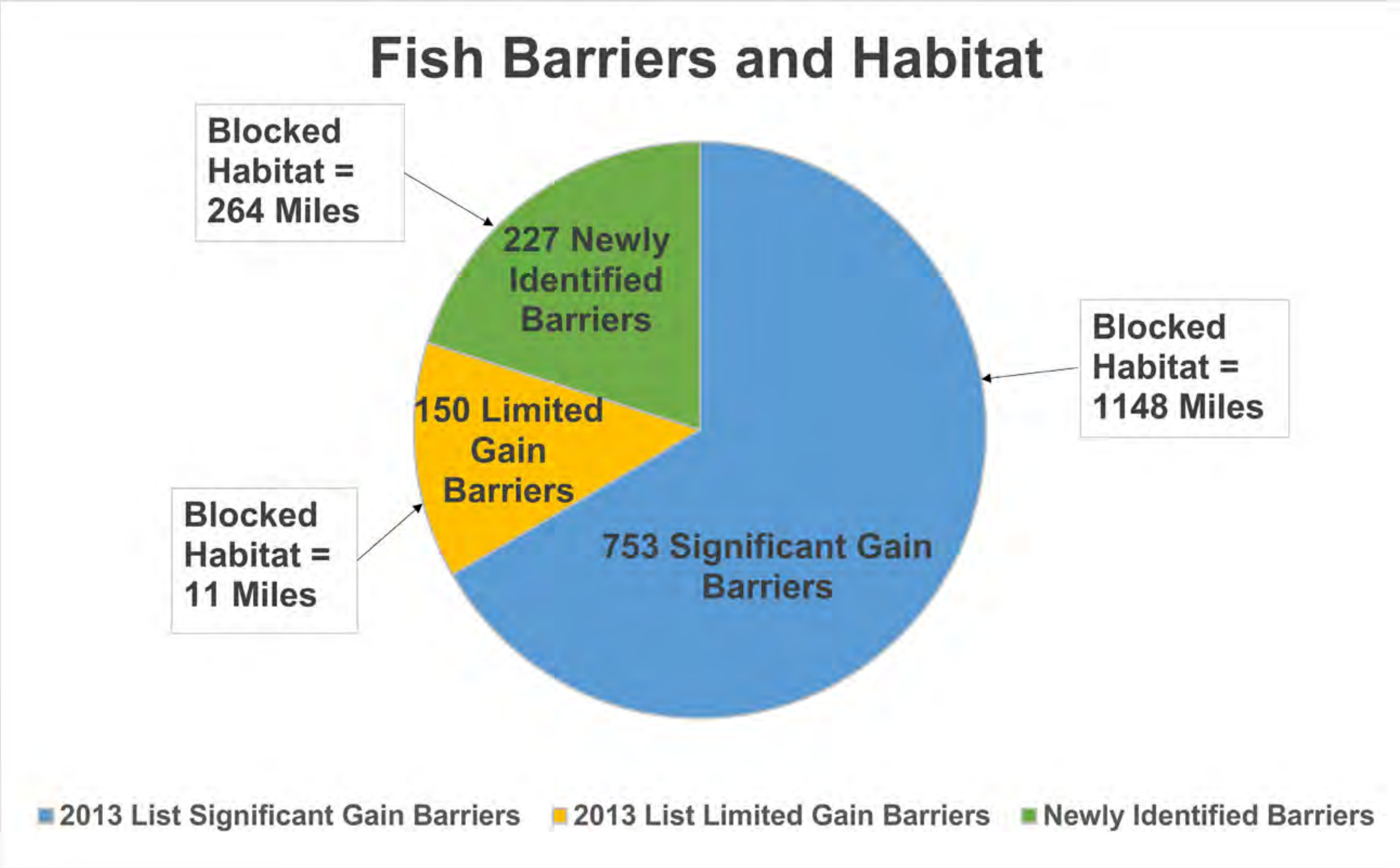
- Correct within a reasonable period of time

State Requirements

RCW 77.57.030 – Fishways required in dams, obstructions

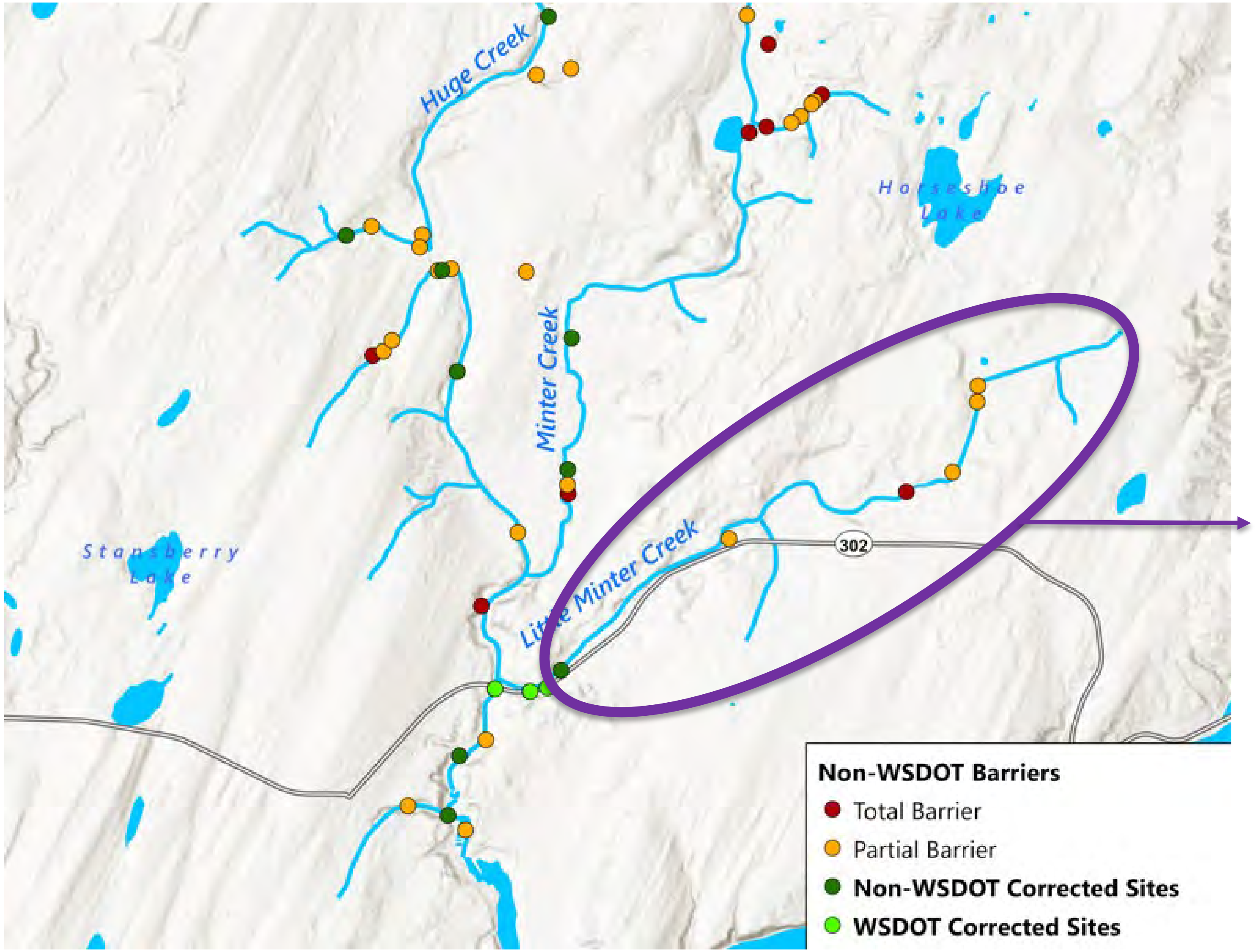
- Requires the removal of fish barriers caused by obstructions such as road culverts

Total Injunction Numbers (prior to corrections)



October 2024

How Habitat is Measured



5,946 meters of fish habitat gain

We have organized our plan as follows:

1) Current Delivery Plan

This plan restores access to 90% blocked habitat of 2013 significant gain barriers and corrects some high value newly identified barriers.

2) Future Delivery Plan (to be developed)

This plan will restore access to 10% deferred blocked habitat of 2013 significant gain barriers, the limited gain barriers, and the remaining newly identified barriers.

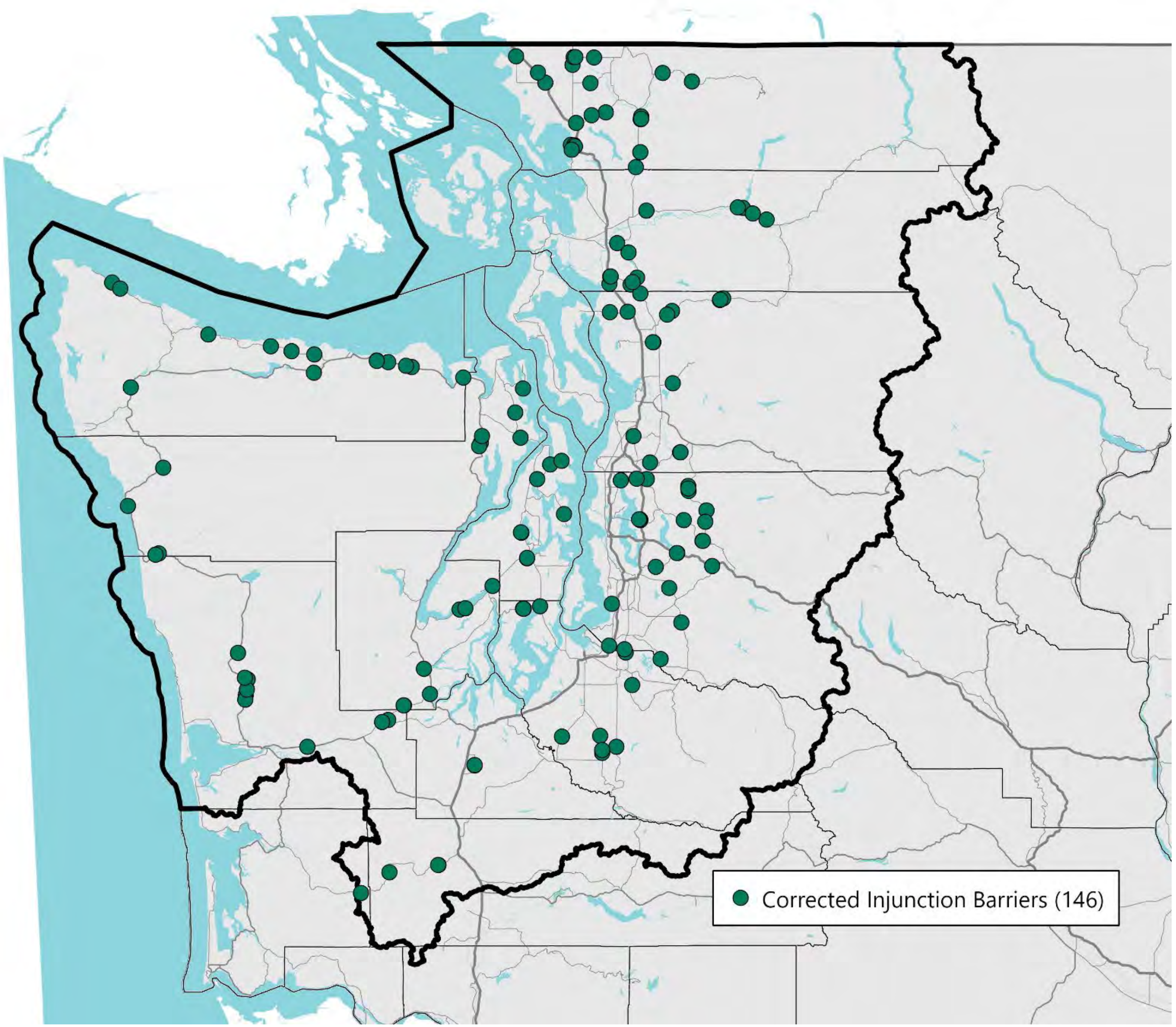
We use a variety of prioritization principles to plan and deliver our program

- Tribal Input
- Habitat Gain
- Geographic Bundling
- Public Impacts
- Culvert Condition
- Downstream Barriers
- Partnership Opportunities
- Project Readiness

PROGRESS

Where we began –

WSDOT has made a lot of progress.



as of June 2024

US101/Siebert Creek

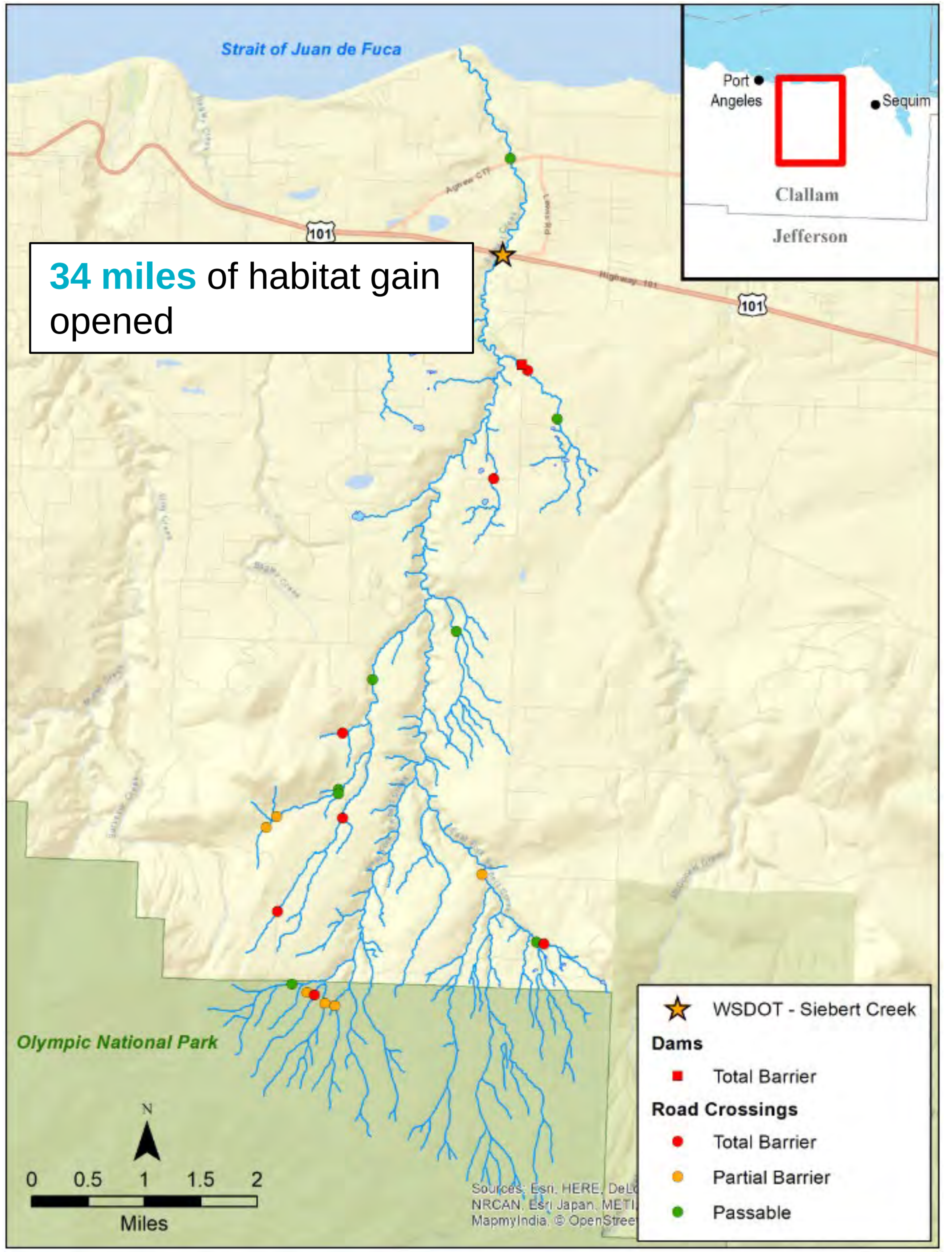
Completed

Previous Inlet

Previous Outlet

Inlet after construction

Chinook salmon



SR169/Ravensdale Creek – Partnership with King County

US 101/Leland Creek

Coho Salmon returning to site

Current Delivery Plan Barrier Corrections

This restores access to 90% of blocked habitat of significant gain barriers and corrects some high value newly identified barriers

306 Barriers from the 2013 Significant Gain Habitat List

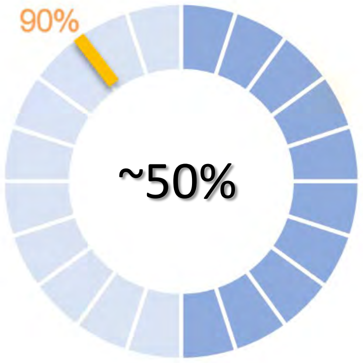
2 Barriers from the 2013 Limited Gain Habitat List

75 Barriers from the Newly Identified Barriers List

Notes:
- All culvert numbers are approx. and are subject to change
- This does not include the 146 barriers corrected as of June 2024
- 42 of these barriers are corrected through larger transportation projects

WSDOT's Injunction Progress With Existing Funding and What it Takes to get to 90% Habitat Restored

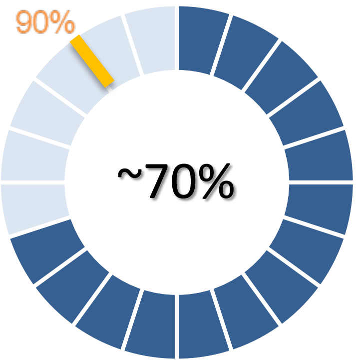
June 2024



146 Barriers*

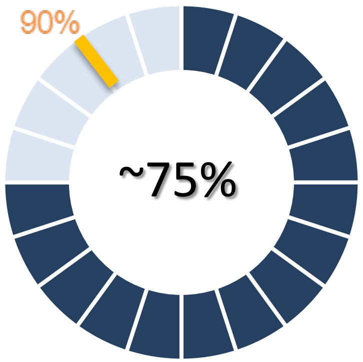
Total potential habitat opened with corrected barriers

Currently under contract



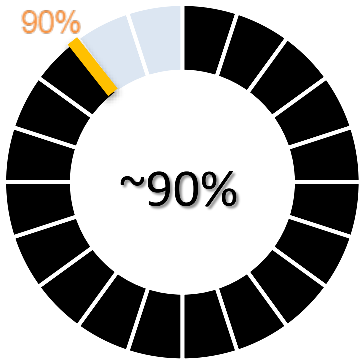
Total ~155 Barriers*

Under contract with remaining existing funds



Additional ~ 45 Barriers*

Total potential habitat opened once all barriers in construction are complete



Additional ~180 Barriers*

Additional Funding Needed for Remaining Barriers

*Includes Significant Gain, Limited Gain and Newly Identified Barriers. Habitat percentages only reflect Significant Gain 2013 List Barriers that count toward the 90%.

October 2024

FUNDING AND ESTIMATES

Fish Passage Program Funding

How it works and current information.

Injunction Compliance Estimates – History

2009 - $1.88 B
Did not include inflation

2012 - $2.4 B
Includes inflation and steady delivery through 2030

2018 - $3.8 B
Higher program-level estimate and updated inflation

2023 - $7.8 B
Performed site specific program-level estimate

2024 - $8.8 B
Program-level estimate includes structurally failing culverts

September 2024 Agency Budget Submittal

Fish Barrier Removal ($5 billion)

In March 2013, a federal court mandated WSDOT fix numerous fish barrier culverts in a specified area, upheld by a U.S. Supreme Court decision in June 2018 leading to a permanent injunction. About 1,000 culverts under state highways are affected. By June 2024, 146 barriers have been corrected, improving access to 50% of blocked habitat. To comply with the injunction requirement of restoring 90% potential habitat, around 300 more barriers need correction which requires $3.5 billion, along with addressing 75 newly identified barriers needing $500 million. Additionally, $1 billion is needed for structurally failing culverts. There's a long-term need for more funding to address deferred culverts to open the remaining 10% of blocked habitat and newly identified barriers, including those at the end of their useful life.

Why is program estimate so much higher?

- Planning level assumptions vs. engineered estimates
- High complexity sites
- Large amount of work in small timeframe
  - o Higher use of consultants
  - o Alternative Delivery Methods
- Construction volatility
- Cost escalation

Highest Cost Remaining Delivery Plan Barriers*
(not yet under construction contract)

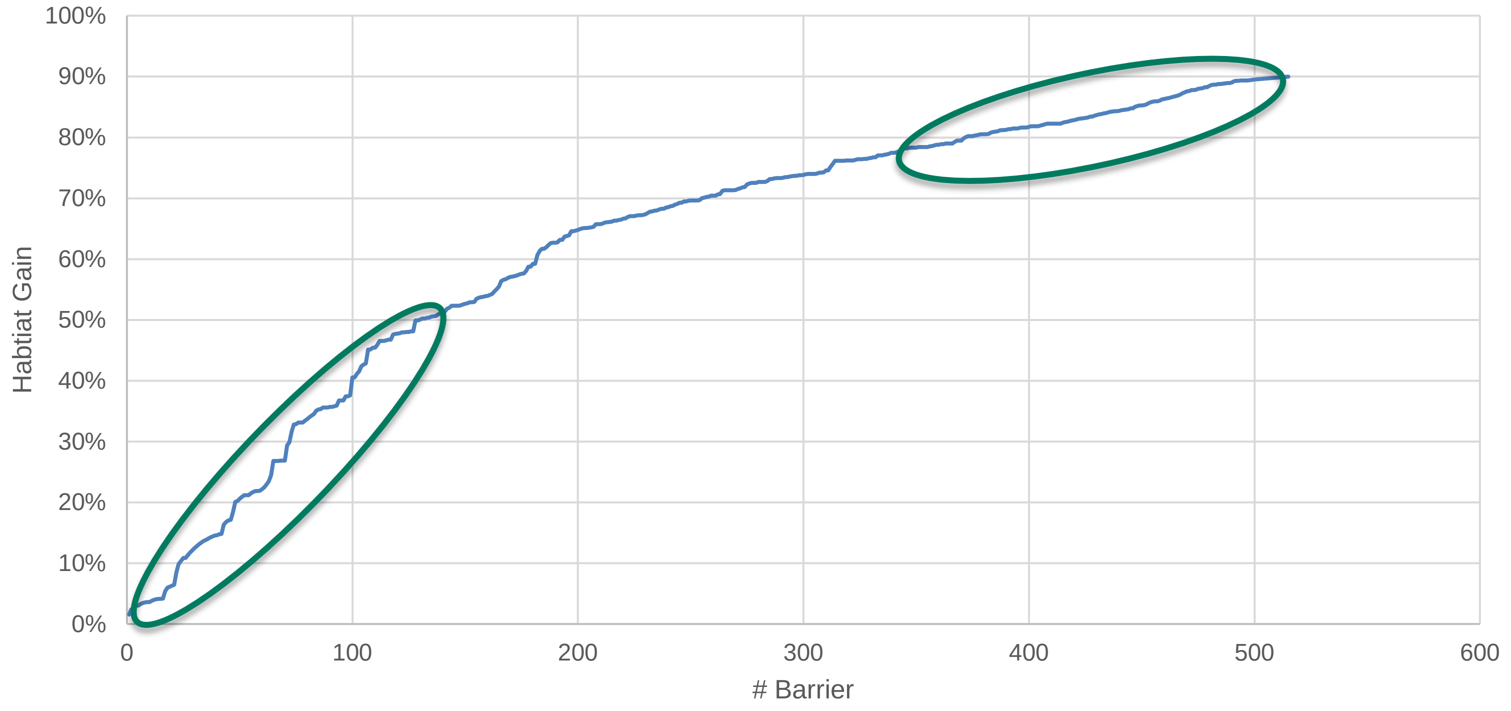
Site	Habitat	Total Estimated Cost
994984 – I90/unnamed to Lake Creek	1,027 meters	$240 Million
990326 – US101/Peabody Creek	7,464 meters	$150 Million
997675 – SR509/Redondo Creek	1,436 meters	$135 Million
994562 – I5/Thornton Creek	2,987 meters	$130 Million
932343 – I90/unnamed to Lake Sammamish	1,076 meters	$130 Million
996965 – I90/unnamed to EF Issaquah Cr	1,834 meters	$125 Million
990481 – US101/White Creek	6,405 meters	$100 Million
15.0056 4.50 - SR16/Burley Creek	2,265 meters	$95 Million
990273 – I5/McAleer Creek	5,961 meters	$85 Million
990199 – I5/Indian Creek	5,026 meters	$80 Million
	Total =	$1.3 Billion

* This list doesn't include high cost culverts that have structurally failed (e.g. I-405/Lakehurst Creek and SR518/Gilliam Creek)

From 75% to 90% Habitat Restored

Includes:

- About 180 barrier corrections
- Lower habitat gain and high-cost barrier corrections



Program Delivery Plan

Success = keeping program structure intact as much as possible so we are prepared for additional funding in 2025 while getting as much habitat under contract as possible

Future Delivery Plan for Known Barrier Corrections

The injunction is permanent

~460 Significant and Limited Gain Barriers

- injunction requires correction at the end of their useful life or part of Transportation Project

~140 Known Newly Identified Barriers

- injunction requires correction within a reasonable period of time.

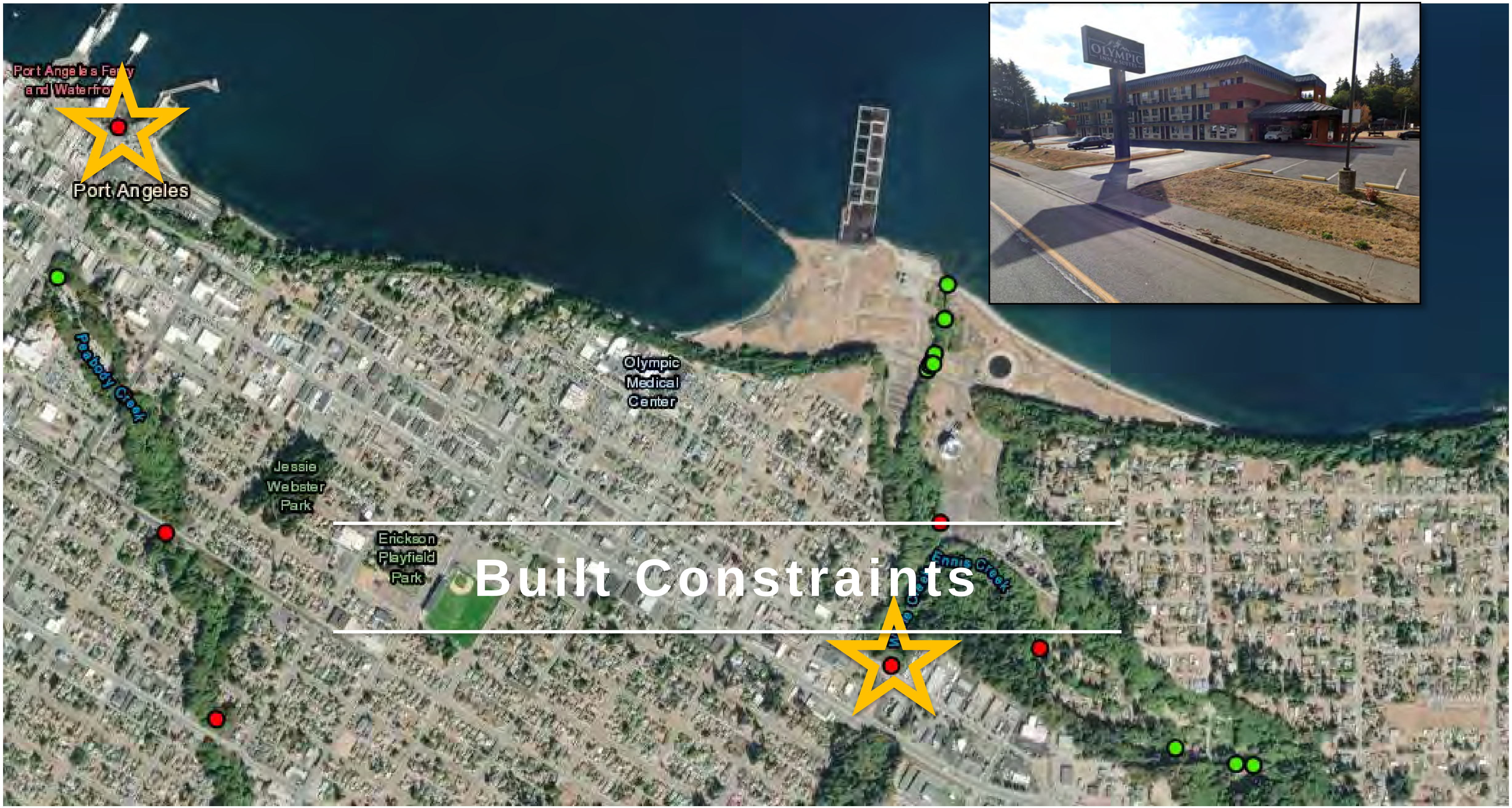
Notes:

- All culvert numbers are approx. and subject to change

CHALLENGES

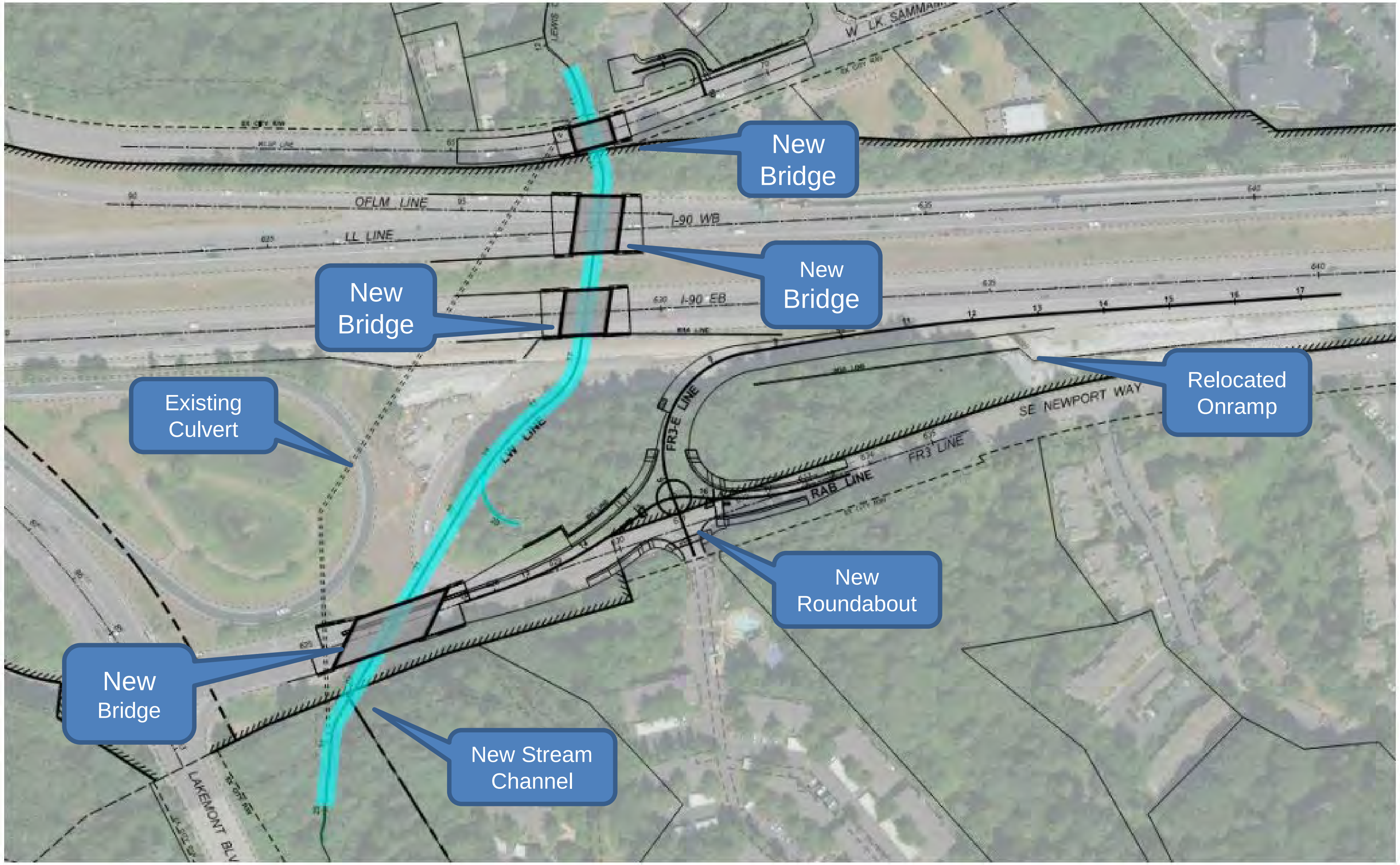
Where we are at –

Some challenges are inside our control, and others outside.



Built Constraints

I-90/Lewis Creek



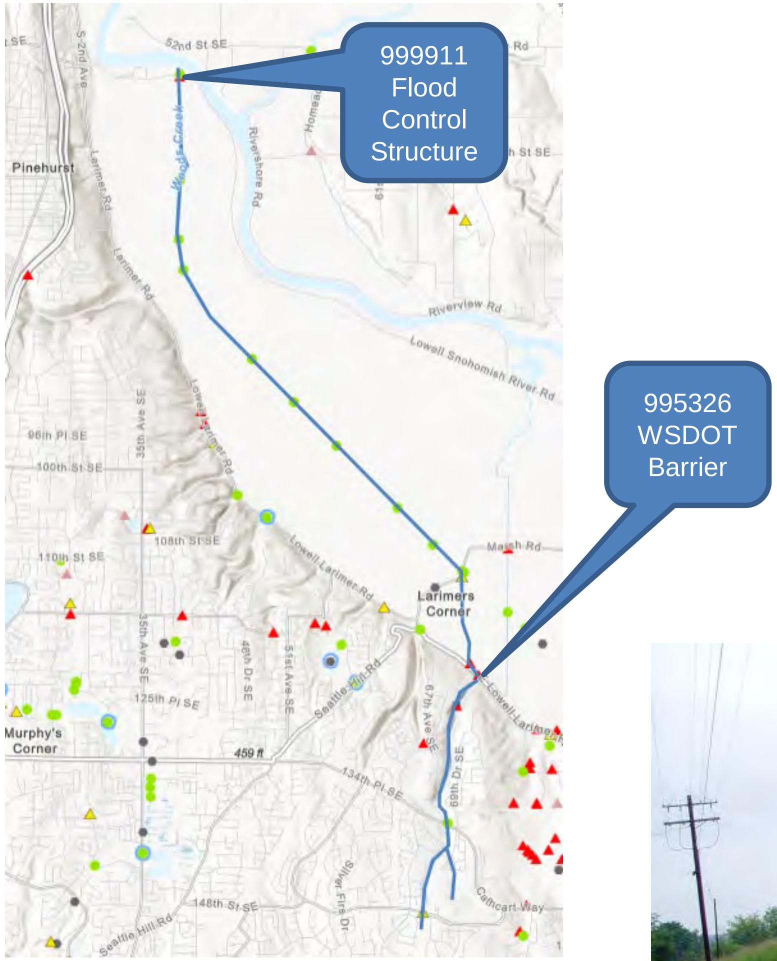
Crossings (4 bridges):

- **W Lake Sammamish Parkway SE**
- **I-90 WB**
- **I-90 EB**
- **SE Newport Way**

Other Key Elements:

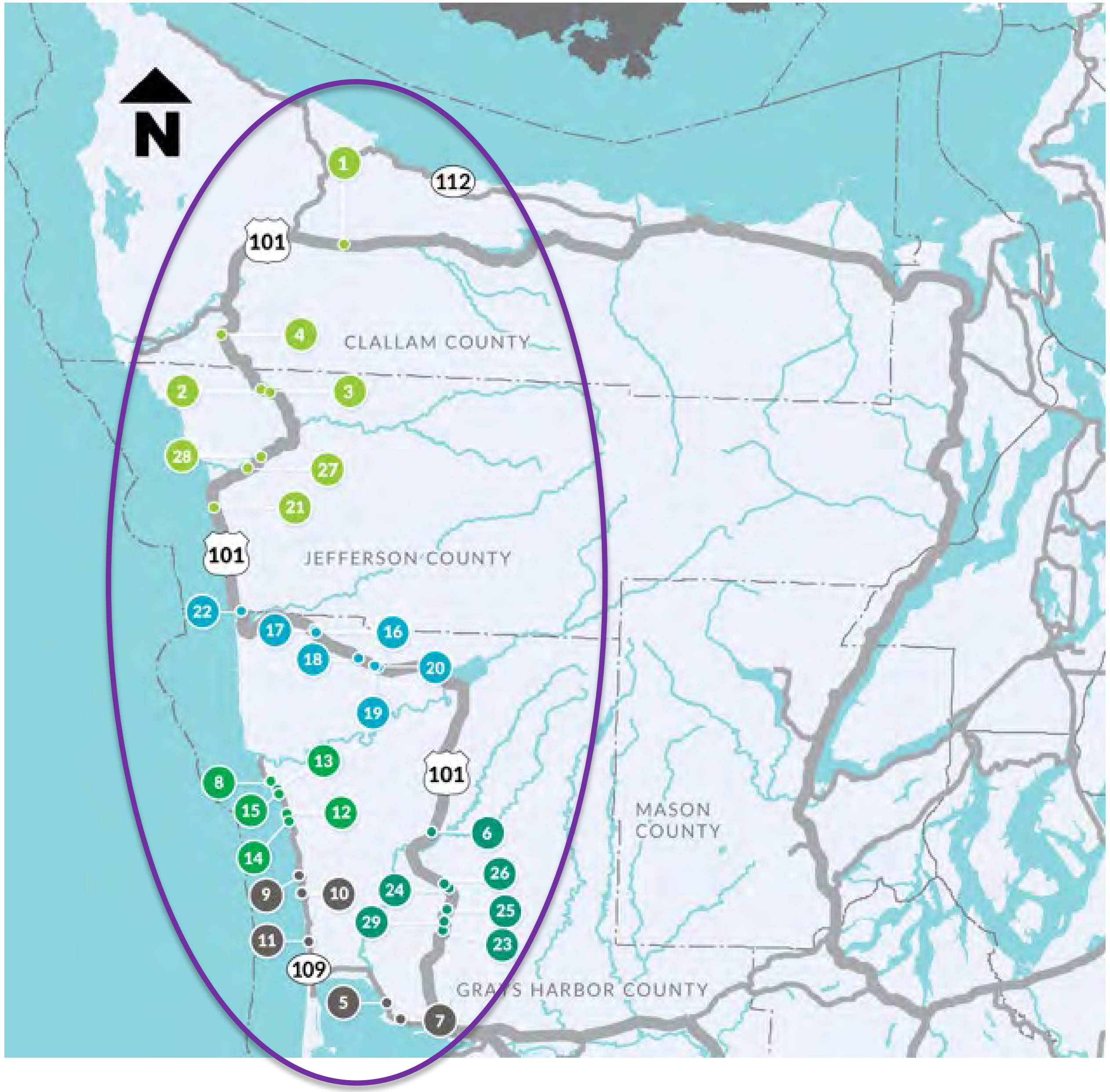
- **Relocate onramp**
- **New roundabout**
- **Noise wall relocation**
- **Utility relocation and impacts**

SR96/Thomas Creek



CHALLENGES AND INNOVATIONS

Where we are going – Innovations are driving rapid change and delivery.



Innovations in Delivery Method – Progressive Design Build is a new method of delivery for WSDOT, allowing for many sites to get under contract at once.

Innovations in Structure Type

SR 203/Loutsis Creek

Learning Lessons and Evolving Stream Designs

As of **June 2024**, we have corrected **146 fish barriers** restoring access to **50% blocked potential habitat** of significant gain barriers.

We currently have another **155 fish barriers under contract** and will restore access to a total of **70% blocked habitat** by 2030.

With existing funding we will get another **45 fish barriers** under contract that will restore access to a total of **75% of blocked habitat**.

An **additional $5 billion** is needed to achieve **90% habitat restoration,** correct some newly identified barriers, and address structurally failing culverts**.**

Additional funding is needed for 10% deferred habitat, limited gain, and remaining newly identified barriers.

QUESTIONS

For additional information on the WSDOT Fish Passage Program, please contact:

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Discussion time –
What are your questions?