

Hydraulic Code Implementation Citizen Advisory Group (HCICAG)

January 14, 2016 Meeting Notes

These meeting notes are intended to convey highlights from the meeting, including information and perspectives shared and discussed. Decisions made during the meeting are included.

This document is not a word-for-word transcription of the meeting. We have tried to capture the main topics and issues discussed and highlight some of the main questions, comments and action items raised by group members during the meeting.

Members: Please verify and correct any comments attributed to you so that we can accurately capture the issues or points made during the meeting.

Meeting Date/Time:

January 14, 2016

10:00 - 3:00 p.m.

Location:

Washington Department of Fish and Wildlife, Natural Resources Building, Directors Conference Room 537, 1111 Washington St SE, Olympia, WA 98501

Attendees

Name	Affiliation
HCICAG Members	
Shannon Moore	Moore Fish Company (Commercial Fishers)
Jim Shellooe	Association of General Contractors of Washington
Brandon Roozen	Western Washington Agricultural Association
Steve Whitehouse	Building Industry Association of Washington
William Thomas	Washington Prospectors Mining Association
Lisa Willis	Port of Longview
Heather Trim	Futurewise
Amy Carey	Sound Action
Kim MacDonald	Fish not Gold
Kimbal Sundberg	Lead Entities, San Juan County (WRIA 2) Lead Entity
Stephan Dillon	Hancock Forest Management, Inc.
Public and Interested Parties	
Gregg Bafundo	Trout Unlimited
WDFW Staff	
Randi Thurston	Protection Division Manager, Habitat Program
Dan Doty	Environmental Planner, Habitat Program
Melinda Posner	Facilitator, Wildlife Program
Dave Price	Restoration Division Manager, Habitat Program
Other State Agency Staff	
Paul Wagner	WA Department of Transportation

Welcome, Introductions and Agenda Review

Randi Thurston welcomed everyone and reviewed the agenda.

Old Business

Approval of Meeting Notes

Randi asked if the group had reviewed the draft meeting notes from the October 1, 2015 meeting and if there were any comments or changes. Dan noted that he had received and incorporated comments from Steve Whitehouse, Shannon Moore and Lisa Willis. The revised version was not posted on the WDFW site. Members requested that the latest revision of the draft notes get sent to the group for another review and to defer the approval of the meeting notes until the next HCICAG meeting in April.

Action Items:

- Dan will email the latest draft version of the 10/01/15 meeting notes to the group for review.
- Members will review meeting notes and provide any final comments/edits to Dan prior to the next meeting.

Overview of New Program Business

Randi Thurston provided updates on the following items:

- *HPA Listening Sessions*
- *Request for Formal Attorney General Opinion*
- *Pending County/City Litigation*
- *Legislative Update*

HPA Program Listening Sessions

The department will hold a series of listening sessions with our partners, customers and stakeholders get feedback about the HPA Program. The department wants to know what's working and where the HPA Program can improve. A handout was distributed to the group and Randi provided an overview of the process. The plan is to develop a report on the feedback we receive this summer and to work on internal program improvements and to work with our partners to develop recommendations for any revisions to the laws/rules for the 2017 legislative session.

A specific listening session will be held for this group at the next meeting in April.

Comments and Questions:

- Amy Carey requested that a listening session be added for later in the spring or summer (after the legislative session) since many of the environmental groups are busy with current legislative session and may not be able to attend currently scheduled sessions.
- Heather Trim requested a conference/call -in option for these listening sessions.
- Shannon Moore wants the added listening session for environmental groups be at held at WDFW's Mill Creek office if possible.
- Stephan Dillon requested that the agenda for listening sessions sent out in advance of meetings.

Action Items:

- Schedule HPA Program Listening Session for the HCICAG in April at Mill Creek Office if available.

January 14, 2016 HCICAG Meeting Notes

- Provide a teleconference option for the meeting.
- Send listening session agenda to group in advance of the meeting.

Request for Formal Attorney General Opinion and Pending County/City Litigation

Randi briefed the group on the agency's request for formal opinion to get some clarification regarding the agency's jurisdiction and authority at or above the Ordinary High Water Line (OHWL). She noted that this request was driven in part by potential litigation by a consortium of counties and cities challenging our authority for permitting certain projects above the OHWL.

Comments and Questions:

- Lisa Willis asked who was challenging the department's authority and asked if she could get a copy of the counties' request.
 - Randi suggested that Lisa contact one of the counties directly to get more information.
- Heather Trim – noted that this AAG might provide some clarification of authority but hopefully will not result in WDFW relinquishing any of its authority.
- Steve Whitehouse pointed out that any AAG opinion that comes out is just an opinion and is not necessarily binding in court.
- Stephan Dillon asked if or how this would affect Forest Practices.
 - Randi said it's not clear, but doubts that there will be any effect since this would apply to HPAs and Forest Practices are covered under separate rules.

Legislative Update

The short legislative session just started and bills are just starting to come in now.

Randi briefly mentioned two bills of interest. One bill has been introduced to clarify the department's jurisdiction at or above the OHWL and another proposed bill would require mineral prospectors to get a license.

Stakeholder Issues/Concerns

Randi invited members to identify areas of concern, recommend changes and bring up any other issues that the group would like to discuss or put on the agenda for discussion at future meetings. Below are four issues raised and discussed.

1. Point Williams Restoration Project and Public Safety Concerns:

Shannon Moore brought up an example of a restoration project at Point Williams that involved removal of three groin structures. He noted that a large amount of large woody materials (drift logs, etc) that were on these groins ended up getting loose and ended up drifting out into the channels where commercial fleet and recreational boats were operating. He expressed concerns about the project and the safety to vessels and was wondering if the Habitat Biologists could include provisions in the HPA to address public safety and to ensure drift logs don't pose a risk to boaters.

- Randi replied that department HPA authority limits the conditions in permits to the protection of fish life; thus we are limited in the ability to address public safety concerns. She will discuss this question with the Habitat Program Senior Management Team.

2. HPA Compliance, Violations and Enforcement

Heather Trim requested a future discussion on compliance – specifically regarding HPA violations and enforcement of HPAs. She expressed concern about the limited agency staffing and resources to address this issue.

- Randi replied that the new rules allow for civil enforcement and noted that the agency is drafting a Near Term Action (NTA) for the Puget Sound Action Agenda requesting funding for 2 biologists and 2 enforcement officers.

3. Transparency and Sharing of Agency policies, standard practices, technical assistance and guidance.

Steve Whitehouse would like to see the department post any policies, permitting guidance and any other direction that the program has provided to biologists on the web site for applicants to see and use. He wants to see more transparency and sharing of this information to help project applicants understand the basis for how some of the decisions are made.

4. Private Property Issues, HPAs and Culverts

Shannon Moore had a question about private property issues, HPAs and culverts.

- Dave Price responded that he may be able to answer some of his questions in the following presentation about WDFW and WSDOT Fish Passage Programs.

WDFW and WSDOT Fish Passage Programs

Dave Price, WDFW Restoration Division Manager, and Paul Wagner, WSDOT Branch Manager, gave a presentation and Update on the state's effort to fix fish barriers.

Feedback on Forage Fish Spawning Occupancy Standards and Permitting Guidance for Biologists

Randi introduced the topic and the objectives for this work session. This is continued from the previous meeting where advisory group members discussed and provided initial feedback. The goal is to have more discussion and see if there are some specifics that can be drawn from the group that will help the department finalize the Forage Fish Spawning Occupancy Standards and Permitting Guidance for Biologists. The feedback from the advisory group along with the other stakeholder feedback will be shared with the Habitat Senior Management Team (SMT). The SMT will consider the feedback in deciding if and how to move forward with the guidance to staff.

Dan introduced and described six potential alternative actions that the agency may want consider with regard to defining the occupancy and adjacency standards for Surf Smelt and Pacific Sand Lance intertidal spawning habitats. Melinda facilitated a group discussion on each of the actions. A seventh alternative was added by the group during the discussions. Each of the seven Alternatives/Potential Actions is listed in the Table below. A more detailed, illustrated description of each alternative is included in the attached pdf (DRAFT Forage Fish Occupancy and Adjacency Alternative.pdf)

Forage Fish Spawning Habitat Occupancy and Adjacency Standards Alternatives

Alternative	Potential Actions	HCICAG Informal Poll Results
1.	No Action. Keep current occupancy standard for both species. "Adjacent Habitat" to be determined on case-by-case basis.	No HCICAG members preferred this option.
2.	Keep current occupancy standard for both species. Arbitrarily define a standard distance for "adjacent habitat" for each species.	No HCICAG members preferred this option.
3.	Keep current occupancy standard for both species. Apply proposed new adjacency standard only to Surf Smelt. "Adjacent Habitat" for Pacific Sand Lance to be determined on case-by-case basis.	No HCICAG members preferred this option.
4.	Keep current occupancy standard for both species. Apply proposed new adjacency standard to both forage fish species.	No HCICAG members preferred this option.
5.	Extend the proposed new beach occupancy standard to Surf Smelt only. Keep current occupancy standard for Pacific Sand Lance. "Adjacent Habitat" for Sand Lance to be determined on case-by-case basis.	<u>Three</u> HCICAG members preferred this option.
6.	Extend the proposed new beach occupancy standard to both forage fish species.	<u>Four</u> HCICAG members preferred this option.
7.	Extend the proposed new beach occupancy standard to Surf Smelt. Apply the proposed adjacency standard to Pacific Sand Lance.	<u>Three</u> HCICAG members preferred this option.

Committee Discussion, Comments, Questions

- Recommend the Agency talk with tribes about this issue, share the recent data and ask them for their input and opinions on these alternatives.
- Confirm the current practices, without implementing the new guidance
- Is Surf Smelt data applied to Sand Lance currently?
- Agency should review the Surf Smelt species study by Casey Rice
- Be consistent and clear about use of terms: documented vs. occupied, and how they are determined; and adjacency; current code applies to those areas where there were documented eggs
- It was noted that the current occupancy standard for Surf Smelt and Sand Lance data was somewhat arbitrary
- We should be clear on our terms and the definitions for "occupied" and "documented" to avoid confusion.
- If the presence of smelt eggs are "documented" it will affect:
 - Timing windows
 - Conditions of the HPA
 - Project design

- Follow the science.
- There was discussion about whether or not the occupancy standard from the Camano Island Surf Smelt study be applied to Pacific Sand Lance spawning. Would like to have Tim Quinn come back to the group and provide his opinion on these alternatives and whether or not the science supports expanding the occupancy standard to Pacific Sand Lance.
- Provide clear direction/consistent communication from all agency staff to applicants, in advance.
- Until data is conclusive, don't apply Surf Smelt data to Pacific Sand Lance.
- Make sure biologists know to look in other places for new data; re: delay in getting new data posted on maps; website may not have most current information.
- At least one member expressed concern/question that spawning data from 20 years ago may not be credible today.
- What type of public process is needed for making map changes (to the agency GIS database) based on the most recent science data?
- What happens to areas that are not currently mapped? Do they become all "yellow" (Adjacent)?
- Several members express a desire for fairness and consistency to permit applicants.
- Concern about inconsistency in messages from individual Habitat biologists regarding the science necessary to support regulation.
- Consider rules to address new mapping in next rule making.
- Several members suggested the agency put the implications of the new science on the map and see what areas it covers.
 - What will be the impact and to whom?
 - Number of permits, types of projects
 - Replacement vs. new construction
 - Bulkheads and single family homes predominantly?

Discussion summary:

- None of the members preferred the first four alternatives.
- There was general agreement among the members that it may be appropriate to extend the proposed new beach occupancy standard to Surf Smelt spawning habitat based on the Camano Island Surf Smelt Study (Alternatives 5, 6, and 7).
- The group differed on the appropriateness of applying results of the Camano Island Surf Smelt Study to Pacific Sand Lance.
 - Four HCICAG members felt like it should be applied equally to both forage fish species (Alternative 6);
 - Six members felt that there was not enough scientific information or supporting information from the Camano study to apply the standard to Pacific Sand Lance;
 - Three preferred keeping the current occupancy standard for Pacific Sand Lance (Alternative 5); and

- Three members suggested applying the proposed adjacency standard to Pacific Sand Lance (Alternative 7).

Wrap – up

- Next Meeting Date: April 20, 2016, WDFW Mill Creek Office with teleconference option
- Agenda Topics:
 - Randi will lead a HPA Listening Session for the HCICAG.
 - Follow-up, status report on today's discussion on the Forage Fish Spawning Habitat Occupancy and Adjacency Standards.

Forage Fish Spawning Habitat Occupancy and Adjacency Standards

Guidance for Biologists and Potential Changes to
Agency GIS Forage Fish Mapping Standards

Alternatives for Consideration and Evaluation

Legend



Occupied Forage Fish Sampling Point - center of a 30 m transect where eggs were found during sampling.



Surf Smelt Spawning Habitat



Pacific Sand Lance Spawning Habitat



Adjacent Habitat – Beach type appears to contain habitat suitable for spawning based on sediment characteristics

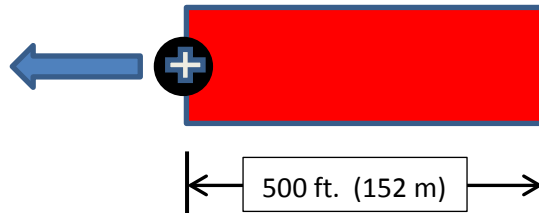


Occupancy and Adjacency Standards are applied along the beach in both directions from an Occupied Forage Fish Sample Point

Alternative 1 – No Action. Keep current occupancy standard for both species. “Adjacent Habitat” to be determined on case-by-case basis.

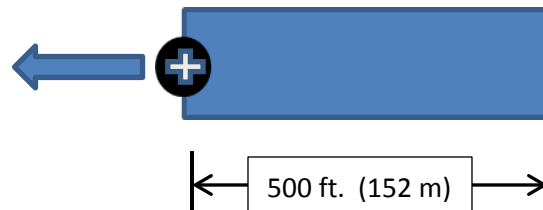
Surf Smelt Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Surf Smelt spawning habitat.
- “Adjacent Habitat” to be determined on a case-by-case basis .



Pacific Sand Lance Spawning Habitat

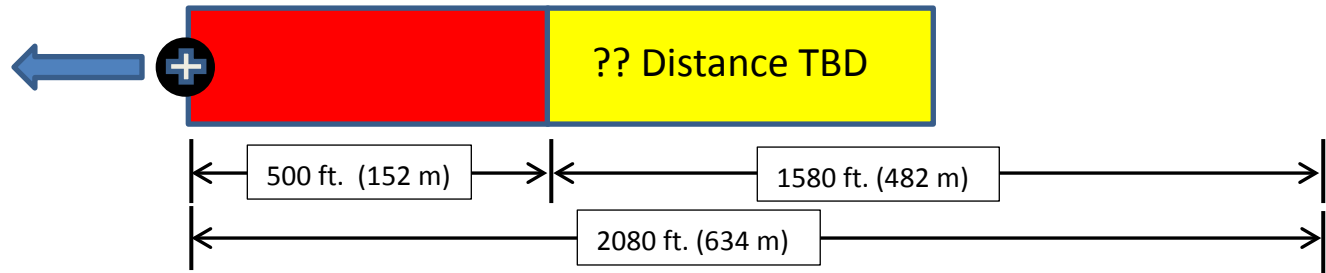
- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Pacific Sand Lance Spawning Habitat.
- “Adjacent Habitat” to be determined on a case-by-case basis.



Alternative 2 – Keep current occupancy standard for both species. Arbitrarily define a standard distance for “adjacent habitat” for each species.

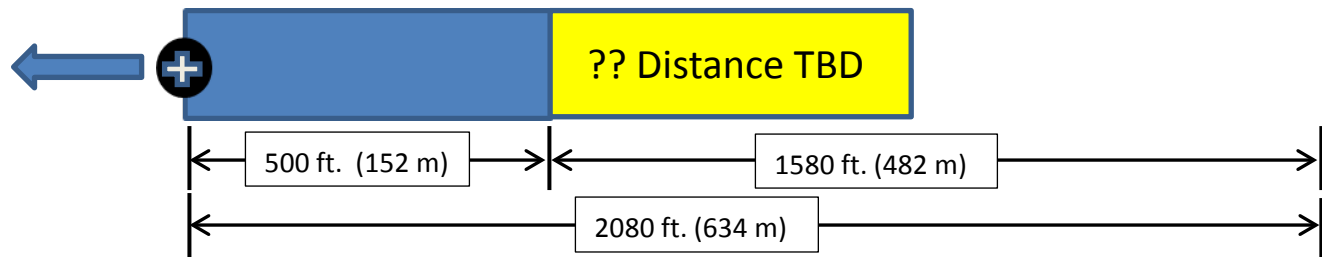
Surf Smelt Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Surf Smelt spawning habitat.
- Arbitrarily define a standard distance for “Adjacent Habitat” as a portion of beach somewhere in between 500 ft. (152 m) to 2080 ft. (634 m)*.



Pacific Sand Lance Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Pacific Sand Lance Spawning Habitat.
- Arbitrarily define a standard distance for “Adjacent Habitat” as a portion of beach somewhere in between 500 ft. (152 m) to 2080 ft. (634 m)*.



*Distances from Camano Island Surf Smelt Study, Ref # 2: Quinn et.al. 2015

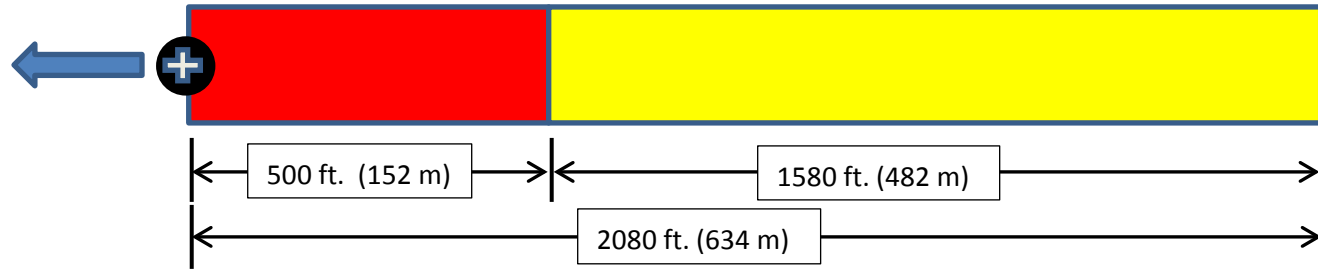
Graphics not drawn to scale

Alternative 3 – Keep current occupancy standard for both species.

Apply proposed new adjacency standard only to Surf Smelt.

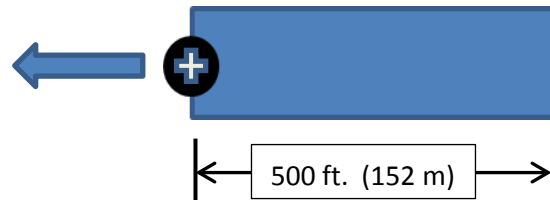
Surf Smelt Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Surf Smelt spawning habitat.
- Define “Adjacent Habitat” for Surf Smelt at that portion of beach between 500 ft. (152 m) to 2080 ft. (634 m)*.



Pacific Sand Lance Spawning Habitat

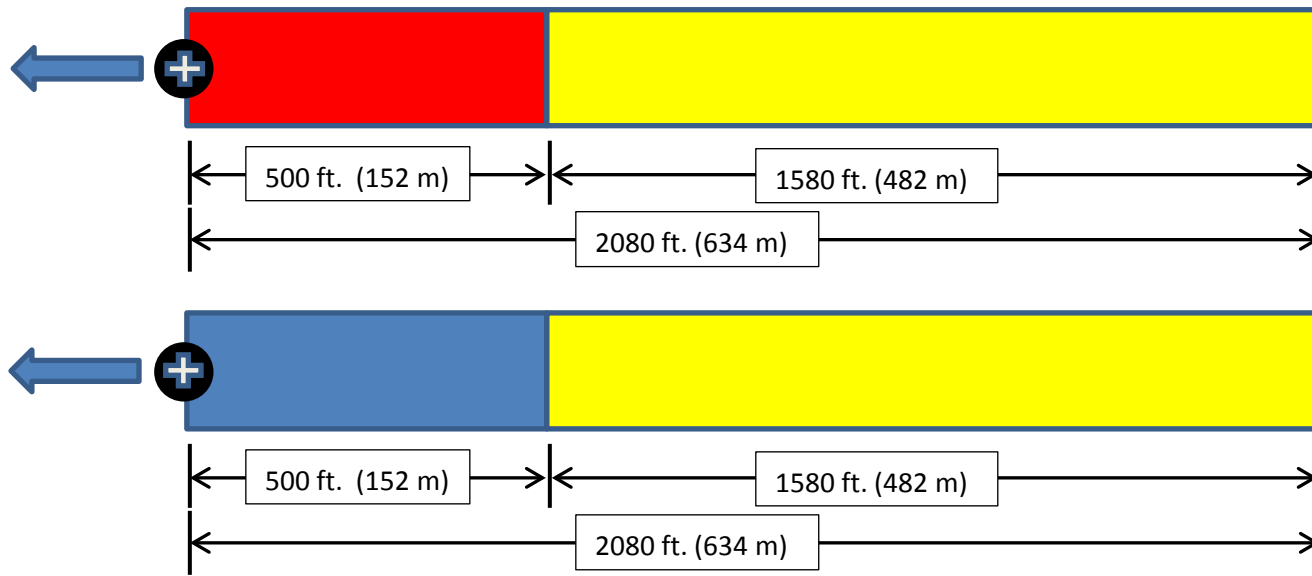
- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Pacific Sand Lance Spawning Habitat.
- “Adjacent Habitat” to be determined on a case-by-case basis.



Alternative 4 – Keep current occupancy standard for both species. Apply proposed new adjacency standard to both forage fish species.

Surf Smelt and Pacific Sand Lance Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Surf Smelt and Pacific Sand Lance Spawning Habitat .
- Define “Adjacent Habitat” for both forage fish species as that portion of beach between 500 ft. (152 m) to 2080 ft. (634 m)*.



*Distances from Camano Island Surf Smelt Study, Ref # 2: Quinn et.al. 2015

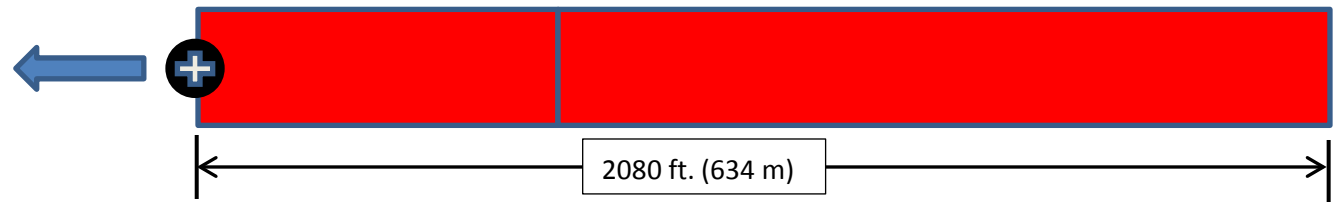
Graphics not drawn to scale

Alternative 5 – Extend the proposed new beach occupancy standard* to Surf Smelt only. Keep current occupancy standard for Pacific Sand Lance.

Surf Smelt Spawning Habitat

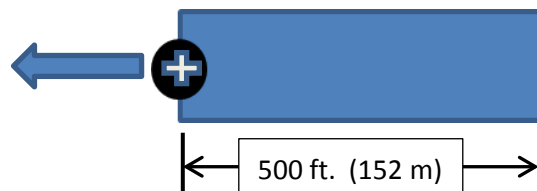
- Extend the occupancy standard from current 500 ft. (152 m) to 2080 ft. (634 m)* from nearest occupied sampling point for Surf Smelt.

Note: This new occupancy standard will be used to extend the defined Documented Surf Smelt Spawning Habitat in Agency GIS maps (WDFW Forage Fish Spawning Location Map ^{Ref #3} and PHS on the Web ^{Ref #5}) and when applying timing windows and for provisioning HPAs under WAC 220-660-320, 330, 340 etc.



Pacific Sand Lance Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Pacific Sand Lance Spawning Habitat.
- “Adjacent Habitat” to be determined on a case-by-case basis.



* Distances from Camano Island Surf Smelt Study, Ref # 2: Quinn et.al. 2015

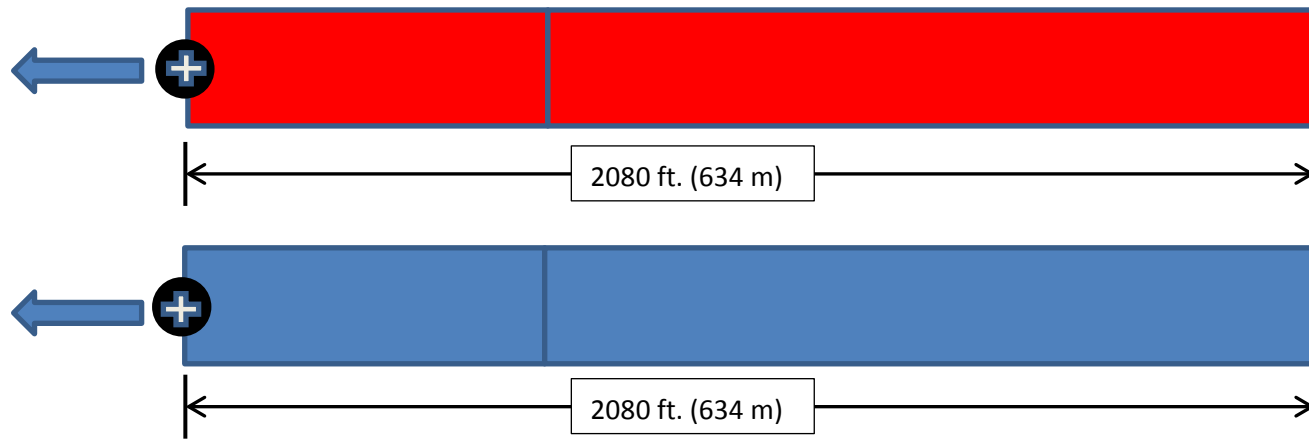
Graphics not drawn to scale

Alternative 6 - Extend the proposed new beach occupancy standard* to both forage fish species.

Surf Smelt and Pacific Sand Lance Spawning Habitat

- Extend the occupancy standard from current 500 ft. (152 m) to 2080 ft. (634 m)* from nearest occupied sampling point for **both** forage fish species.

Note: This new occupancy standard will be used to extend the defined Documented Surf Smelt and Pacific Sand Lance Spawning Habitat in Agency GIS maps (WDFW Forage Fish Spawning Location Map ^{Ref #3} and PHS on the Web ^{Ref #5}) and when applying timing windows and for provisioning HPAs under WAC 220-660-320, 330, 340 etc.



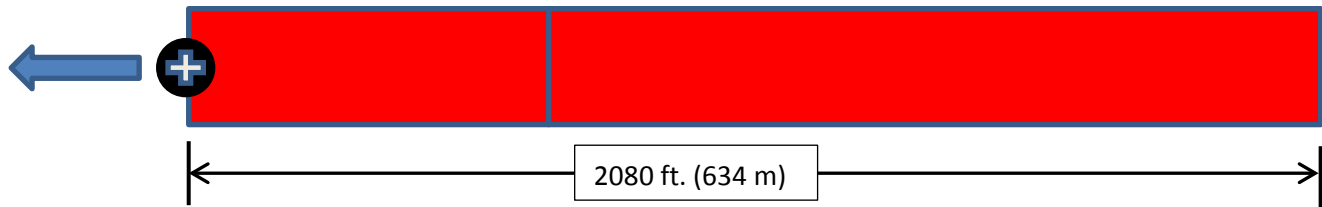
* Distances from Camano Island Surf Smelt Study, Ref # 2: Quinn et.al. 2015

Alternative 7 - Extend the proposed new beach occupancy standard to Surf Smelt*. Apply the proposed adjacency standard to Pacific Sand Lance

Surf Smelt Spawning Habitat

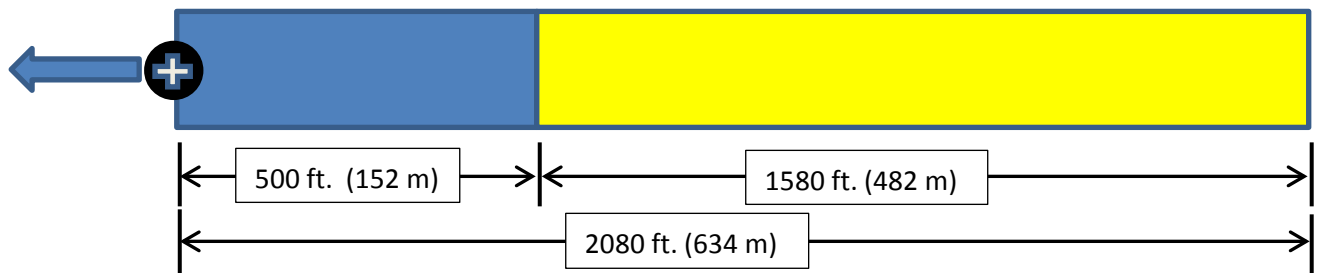
- Extend the occupancy standard from current 500 ft. (152 m) to 2080 ft. (634 m)* from nearest occupied sampling point for Surf Smelt.

Note: This new occupancy standard will be used to extend the defined Documented Surf Smelt Spawning Habitat in Agency GIS maps (WDFW Forage Fish Spawning Location Map ^{Ref #3} and PHS on the Web ^{Ref #5}) and when applying timing windows and for provisioning HPAs under WAC 220-660-320, 330, 340 etc.



Pacific Sand Lance Spawning Habitat

- Keep current occupancy standard of 500 ft. (152 m) from nearest occupied sampling point to define “Documented” Pacific Sand Lance spawning habitat.
- Define “Adjacent Habitat” Pacific Sand Lance spawning habitat as that portion of beach between 500 ft. (152 m) to 2080 ft. (634 m)*.



* Distances from Camano Island Surf Smelt Study, Ref # 2: Quinn et.al. 2015

Graphics not drawn to scale

References

1. Quinn, T., Krueger, K., Pierce, K., Penttila, D., Perry, K. Hicks, T. and D. Lowry. 2012. “Patterns of Surf Smelt, *Hypomesus pretiosus*, intertidal spawning habitat use in Puget Sound, Washington State”. Estuaries and Coasts 35: 1214-1228.
2. Quinn, T., Krueger, K., and Keren, I. 2015. “Informing Spatio-temporal Correlation in Surf Smelt Egg Detection to Improve HPA Protection of Forage Fish Spawning Beaches” WDFW Habitat Science Team Report.
3. WDFW Forage Fish Spawning Location Map:
http://wdfw.wa.gov/conservation/research/projects/marine_beach_spawning/
4. Priority Habitats and Species (PHS): <http://wdfw.wa.gov/mapping/phs/>
5. PHS on the Web: <http://apps.wdfw.wa.gov/phsontheweb/>

Washington Department of Fish and Wildlife

Fish Passage Barrier Repair Progress & Coordination
David Price, WDFW

Injunction Progress Summary

- 73 Projects to repair and evaluate in 2009
- 30 Projects to Repair in 2013
- 2 Projects to Repair in 2016

- New Fish Passable culverts and bridges
- Non-fish bearing streams, non-WDFW ownership
- Agreement with tribes to not repair (e.g., above a hatchery)

John's River WLA, Beaver Creek

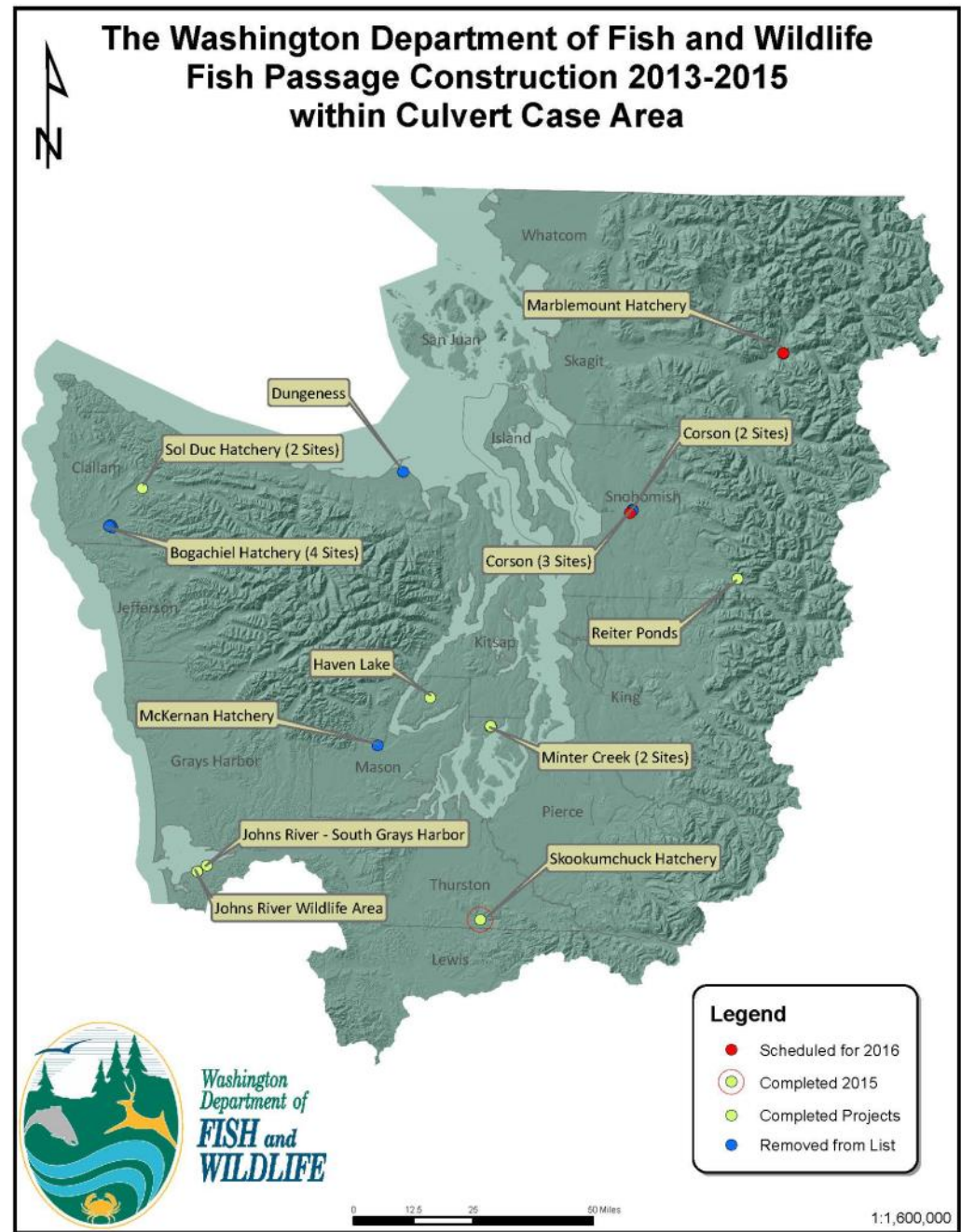


- 33% passable
- Two 1.07m round culvert
- 12% slope
- Tidally influenced

- 85 foot steel bridge
- 5,028 meter of habitat opened
- Coho, steelhead and bull trout
- ~\$475,000

Remaining Projects

- Completed in 2015
 - Skookumchuck Hatchery
- To be completed in 2016
 - Marblemount Hatchery
 - Corson Wildlife Area



Skookumchuck Hatchery, Troll Run Cr



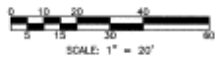
- 0% passable
- 0.91m culvert
- 1,072 meters of habitat
- Steelhead

- 9' span bottomless arch culvert
- Stream simulation
- Construction summer 2015
- Project Total: \$256,775

Marblemount Hatchery, Hatchery Creek

- 33% passable
- 497 meters of habitat upstream
- Chinook, coho, steelhead, and bull trout





EXISTING BEAVER DAM

NEW SIDE CHANNEL

EXISTING 36\"/>

POD

PLY

EXISTING BOARD FENCE

EXISTING GRAVEL ROAD

SITE PLAN

SCALE: 1\"/>

EXISTING POND

EXISTING POND

Corson (Snoqualmie) Wildlife Area



- 0% passable
- Poned wetland habitat
- Coho

- 2010 planned construction blocked by adjacent landowner
- New concept under design
- Construction Summer 2016



Re-assessment of Passable Culverts

- 10% re-inventory completed
- Total of 8 sites
 - 3 = no change in barrier status
 - 3 = barrier status to “unknown”
 - Engineer review needed
 - 2 = barrier status to “yes”
 - 982761 - due to debris
 - 125 1602W12A - due to slope, bottom rusting out
 - 100% passable to 33% passable

Site 982761



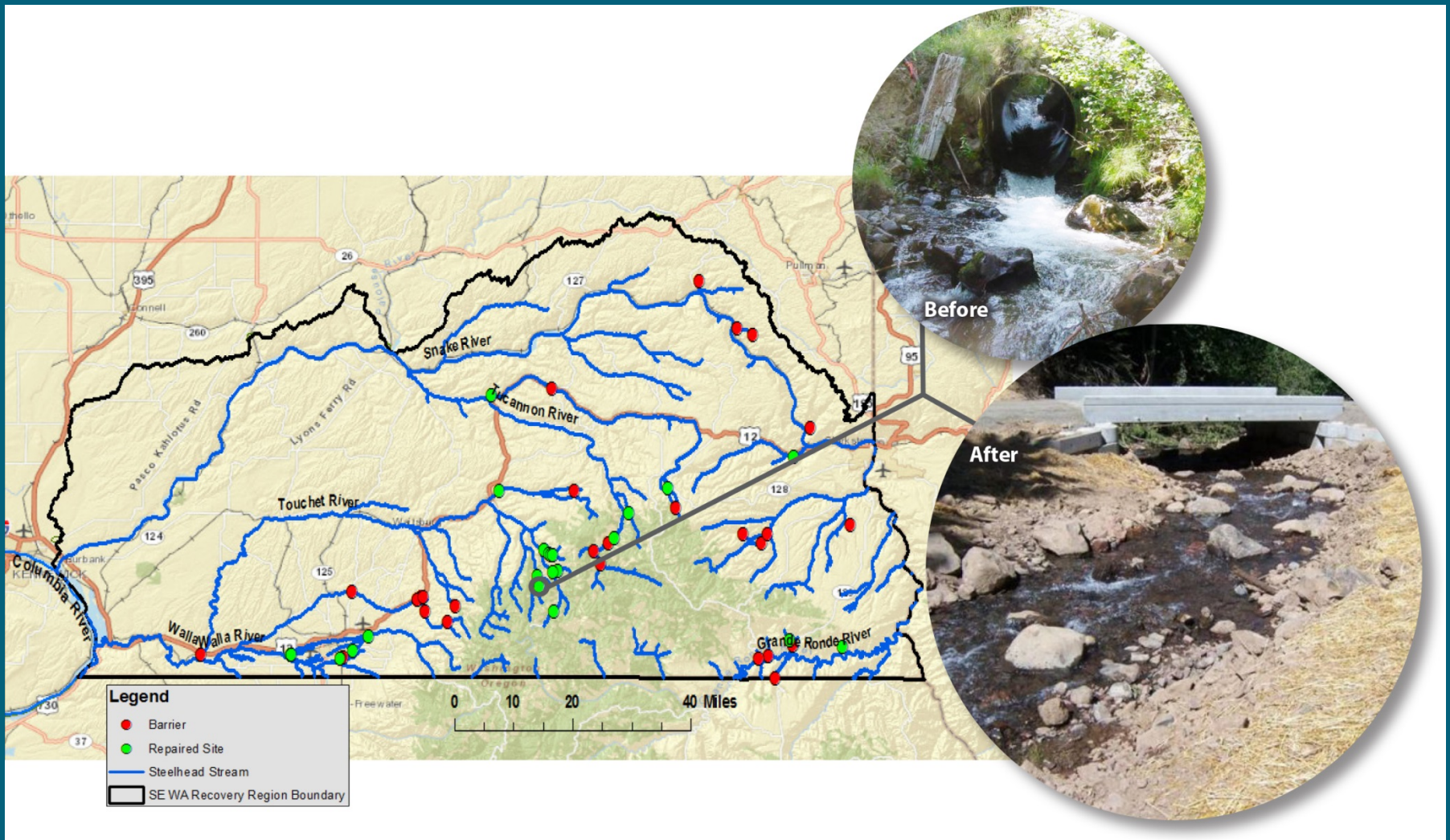
Outlet 2015

The Fish Barrier Removal Board: A Coordinated Statewide Approach to Removing Fish Passage Barriers

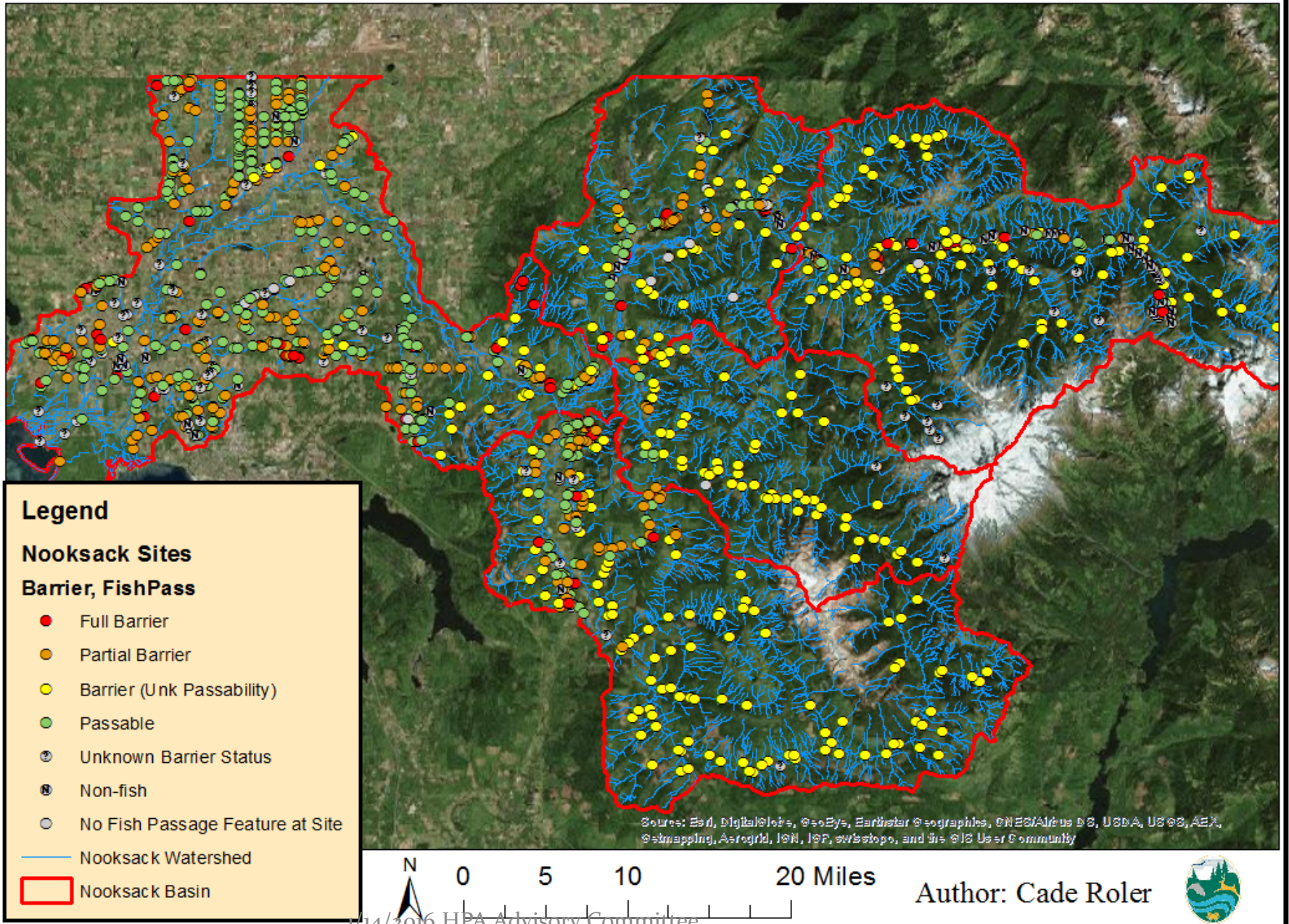


David Price
Washington Dept. Fish and Wildlife

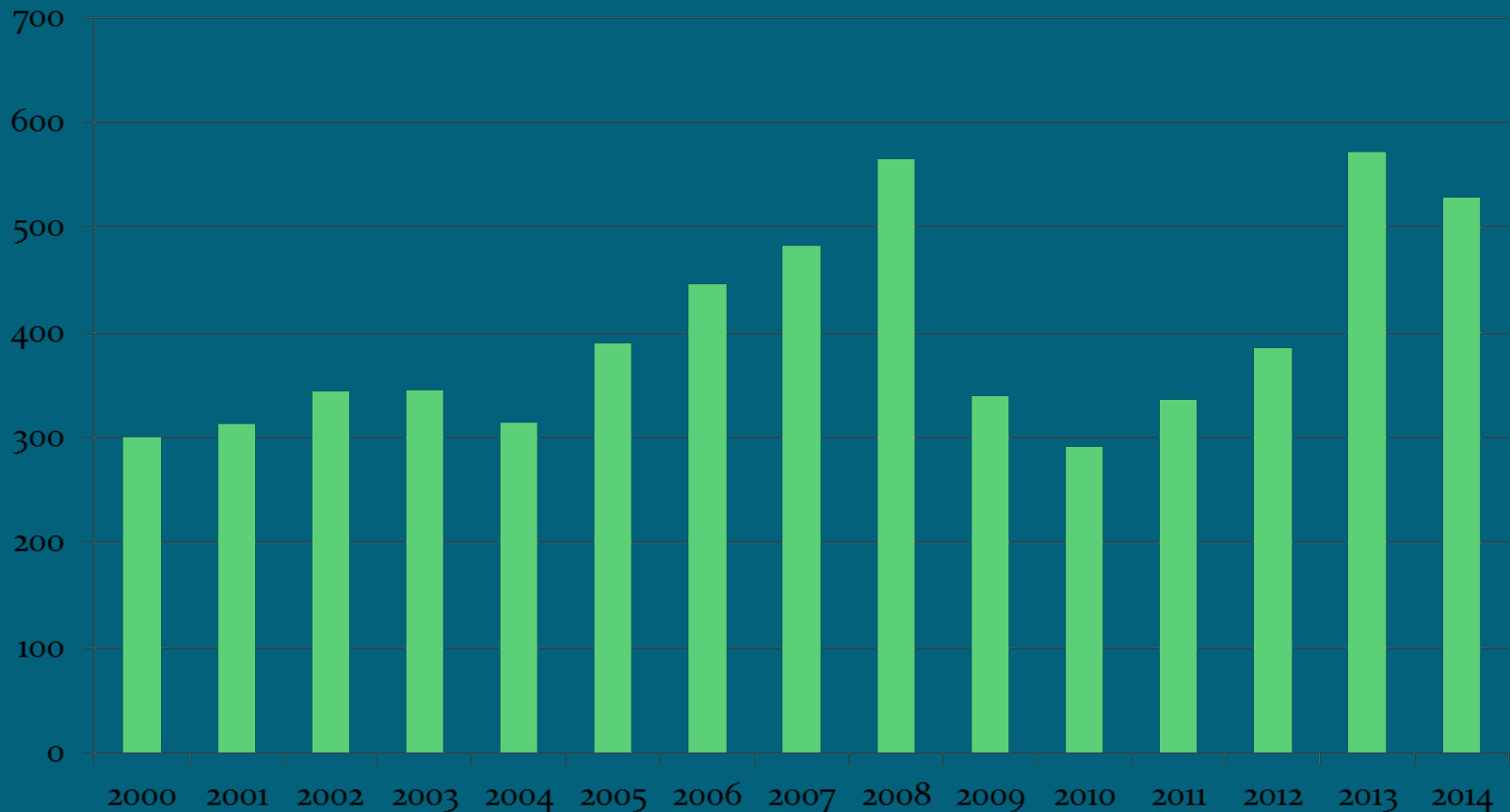
Snake River Salmon Recovery Region



Nooksack Watershed - Known Fish Passage Sites



Washington Stream Miles Opened



Fish Passage Efforts - Today

- State agencies addressing their barriers
- Forest and Fish closing in on their deadline
- SRFB continues to fund barriers
- Counties and cities are fixing their barriers piecemeal
- Small forest landowners have access to grant funds (FFFPP)
- There was no comprehensive statewide fish passage effort until the Legislature created the Fish Barrier Removal Board in 2014.

A coordinated approach is necessary



2SHB 2251 – passed in 2014

- Creation of a Fish Passage Board
- Policy bill to develop a statewide strategy for correcting fish barriers
- Once prioritization is completed = request money to help local gov. and private owners with fish barriers
- WDFW (chair), GSRO, WDNR, WSDOT, Counties, Cities, Tribes

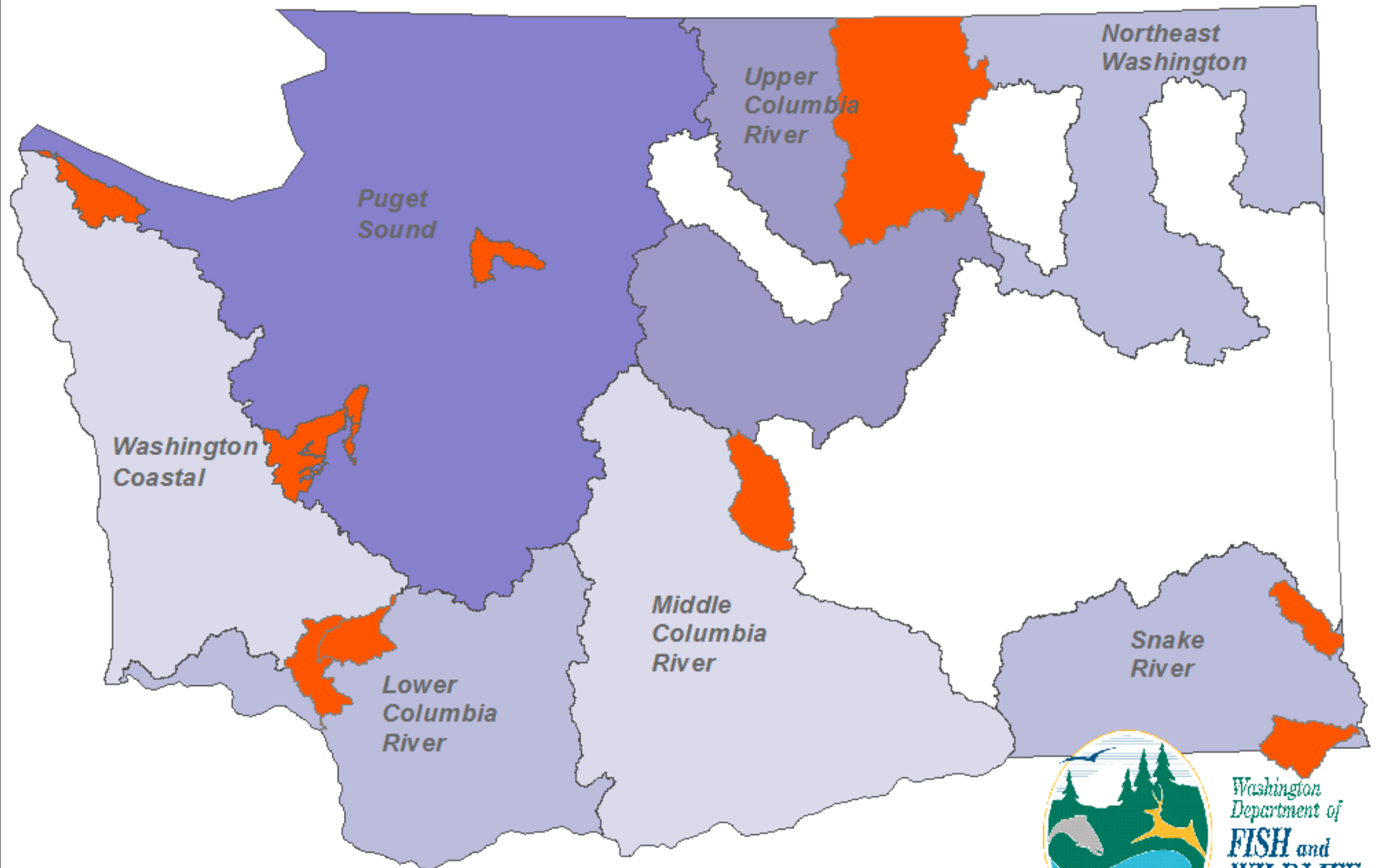


Conceptual Pathways approach

- *Watershed approach*: The Board is developing a pathway to prioritize barrier repairs in whole stream reaches and subbasins that will have the largest benefit to salmon at a population scale
- *Coordinated partnerships*: leverage large gains made by the investments of WSDOT, forest industry, and local governments with funding to repair barriers in close proximity to other barrier repairs.

FBRB-Approved Watersheds

October 26, 2015

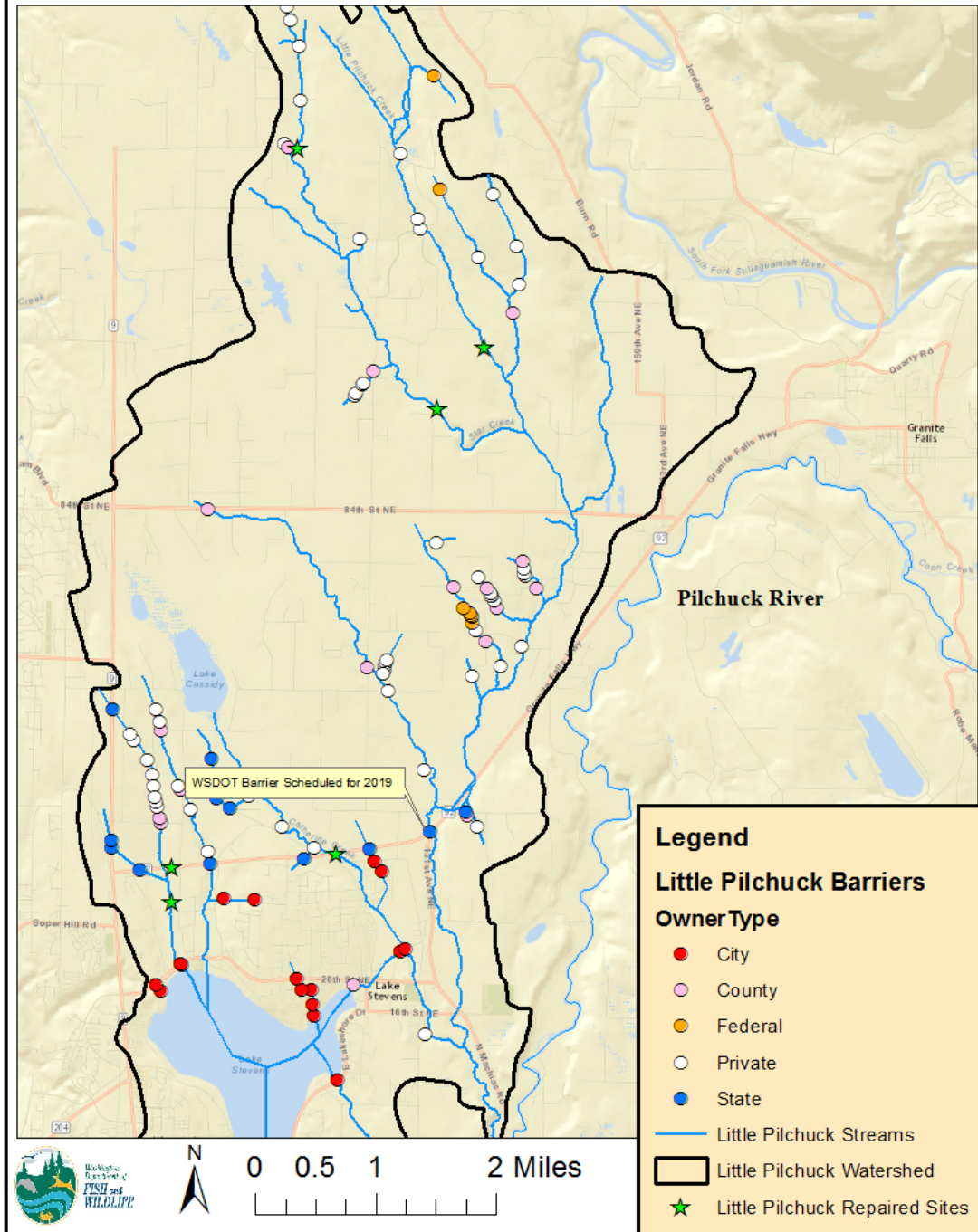


Washington
Department of
**FISH and
WILDLIFE**

* Washington Coastal Region nominations still under review.
1/14/2016 HPA Advisory Committee

Watershed Approach

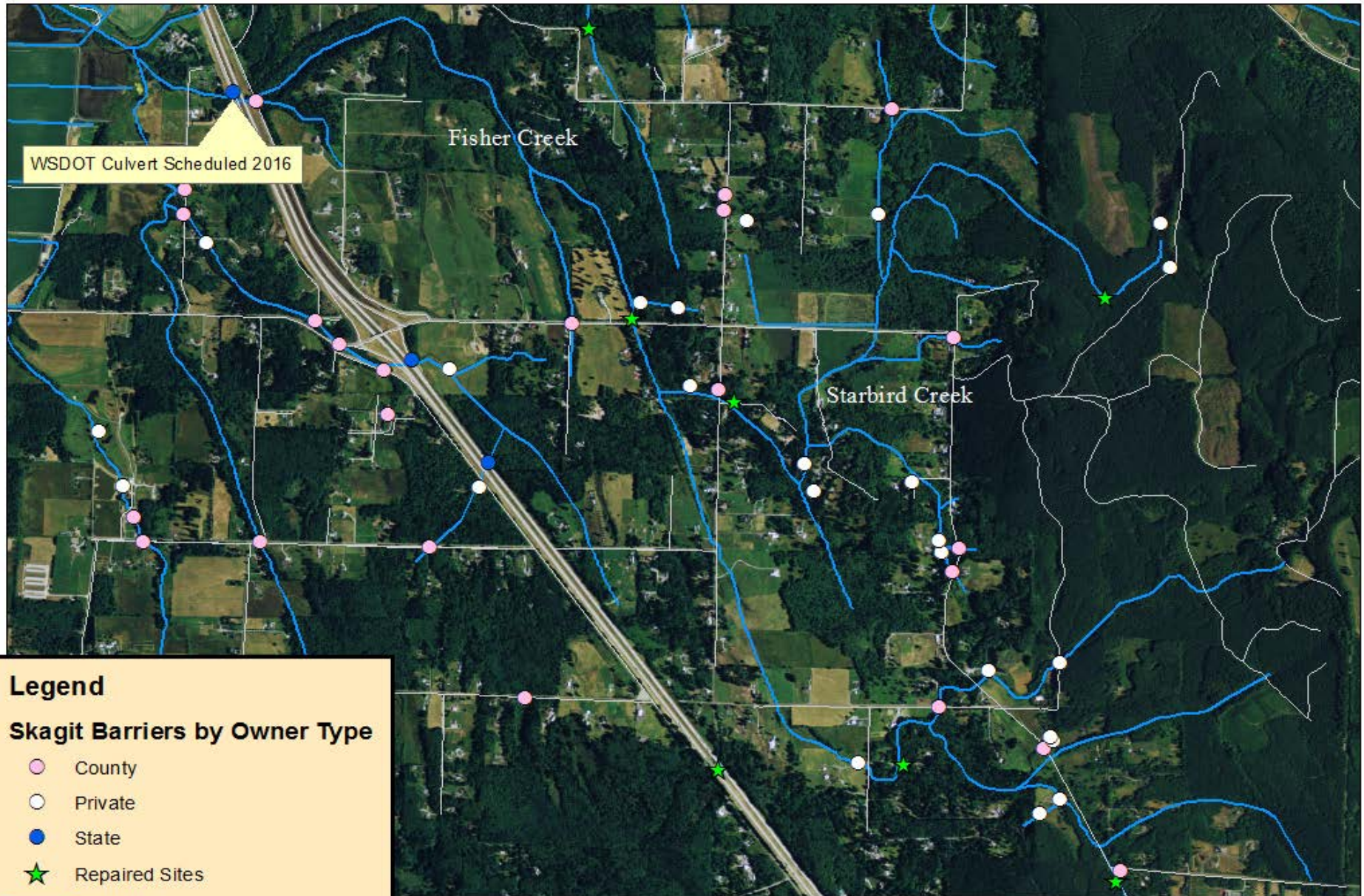
Little Pilchuck Watershed Barrier Coordination



Watershed Pathway - Status

- All salmon recovery region recommendations were adopted by the Board
- Puget Sound and Coast recovery regions - Intrinsic Potential modeling for coho and steelhead produced habitat productivity estimates which ranked priority watersheds
- Board is now downscaling these watersheds into actionable repair reaches and subwatersheds

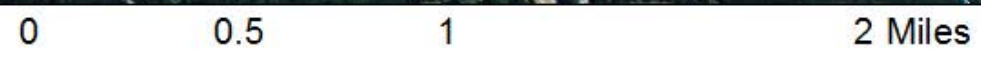
Fisher Creek Project Coordination



Legend

Skagit Barriers by Owner Type

- County
- Private
- State
- ★ Repaired Sites
- Streams
- Roads



Coordinated Pathway - Status

- 224 individual projects nominated (only one east side)
- Board is now validating that no barriers exist downstream of nominated projects
- Next steps: review for readiness, associated barrier corrections, and lineal habitat gain

FBRB next steps

- Develop priority barrier portfolio list (winter)
- Field verify status with local entities (spring)
- Prepare funding package for legislative action (summer)
- Implement communication strategies

Communication Strategies

- FBRB working with Pyramid Communications
- Developing communication framework
- How do we talk about fish passage?

POLITICS & GOVERNMENT OCTOBER 24, 2015

To help salmon, fixing culverts is key – but state must find them all first

HIGHLIGHTS

No good count of how many fish-blocking culverts exist statewide

State under court order to fix fish barriers, but injunction doesn't apply to local governments

Collaboration between agencies can help open up more salmon habitat, supporters say

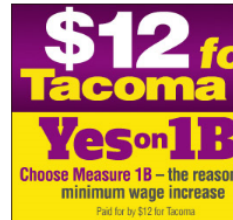


1 of 2

In this June 22, 2015 photo, Melissa Erkel, a fish passage biologist with the Washington Dept. of Fish and Wildlife, looks at culvert along the north fork of Newaukum Creek near Enumclaw, Wash. The culvert is slated to be replaced by a private land owner with a wider bridge designed to let salmon and other fish pass naturally along the creek. **Ted S. Warren** - AP



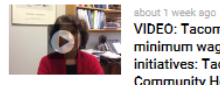
BY MELISSA SANTOS
Staff writer



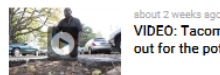
Videos



about 4 days ago
VIDEO: Pub staff weighs in on Tacoma minimum wage hike



about 1 week ago
VIDEO: Tacoma minimum wage initiatives: Tacoma Community House



about 2 weeks ago
VIDEO: Tacoma - out for the potato



about 2 weeks ago
VIDEO: Candidate state House talk

Communications Messages:

- Last great strategic investment for salmon survival
- Estimated 40,000 fish passage barrier statewide
- Repairing fish passage barrier will maximize previous and ongoing restoration and protection investments
- Road related barriers often pose additional threats to nearby landowners and communities

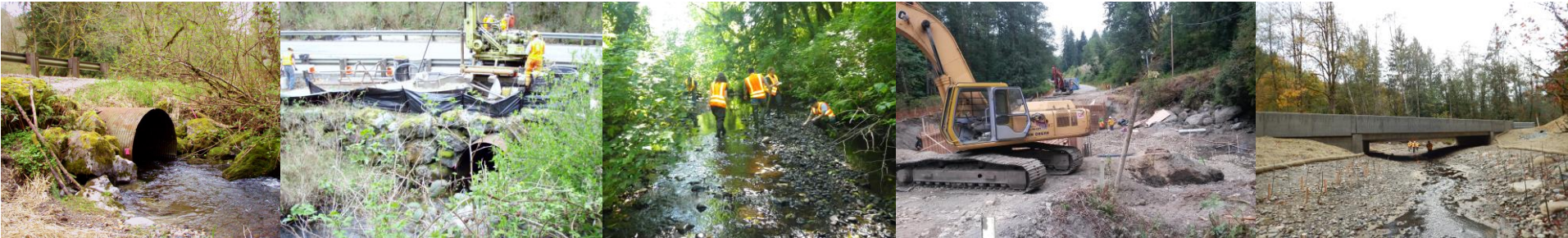


Partners & Coordination

- Regional Salmon Recovery Boards
- Salmon Recovery Funding Board
- NWIFC & tribes
- Lead Entities and watershed leads
- Regional Fisheries Enhancement Groups
- Conservation Districts
- Local Governments
- Recreation and Conservation Office
- Transportation Improvement Board
- USACE

WSDOT Fish Passage Program

Fish Passage Barrier Correction, Progress, and Coordination



Dean Moon

Fish Passage Manager

Paul Wagner

Biology Branch Manager

Lynn Peterson

Secretary of Transportation

WDFW Hydraulic Code Implementation Citizen Advisory Group

Olympia WA
January 14, 2016

What's the deal with Culverts?

Many older culverts have been designed for hydraulic criteria, not for ecological functions, undersized for stream

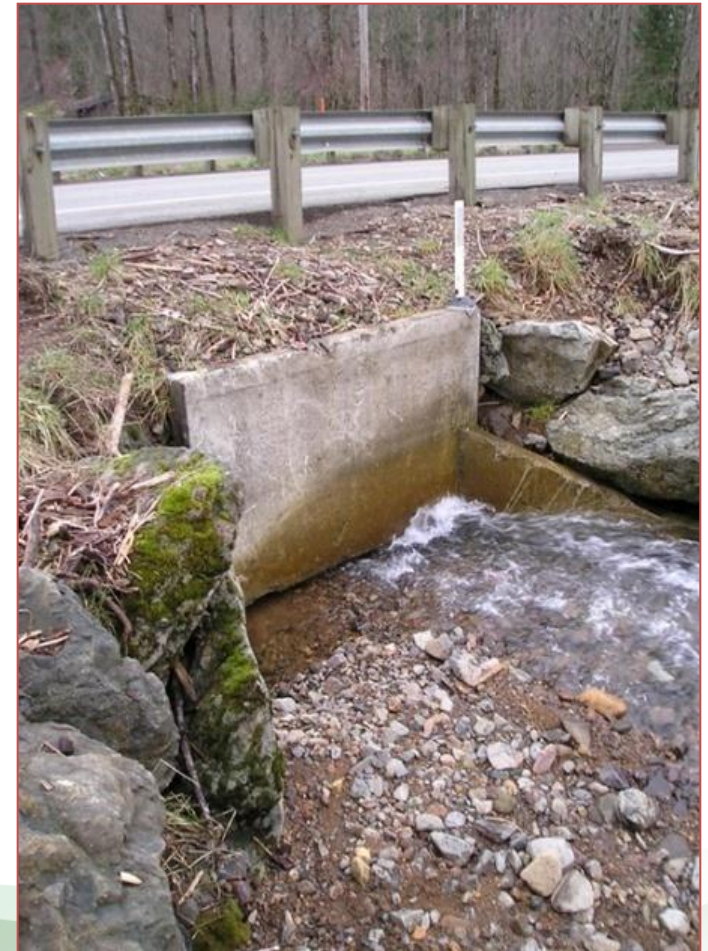
These often constrict high flows- increasing velocity, and downstream erosion

Urbanization and other development in basins can exacerbate this over time



Common problems with old culverts

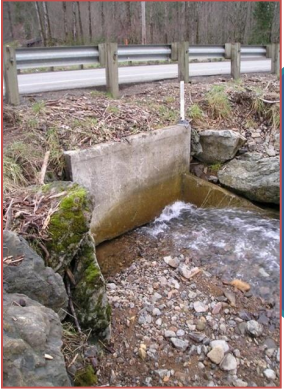
- Static feature in the stream bed- Impeding natural channel movement
- Reduced transport of wood, sediment = maintenance



What makes a barrier for salmon?



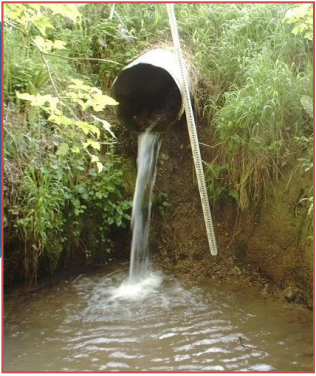
High Velocity
>4 feet per second



Plugged with sediment or debris



Excessive Drops
>0.80 feet



Shallow Water Depth
<1 foot



Mobility is needed for all life stages

Adults returning to spawn



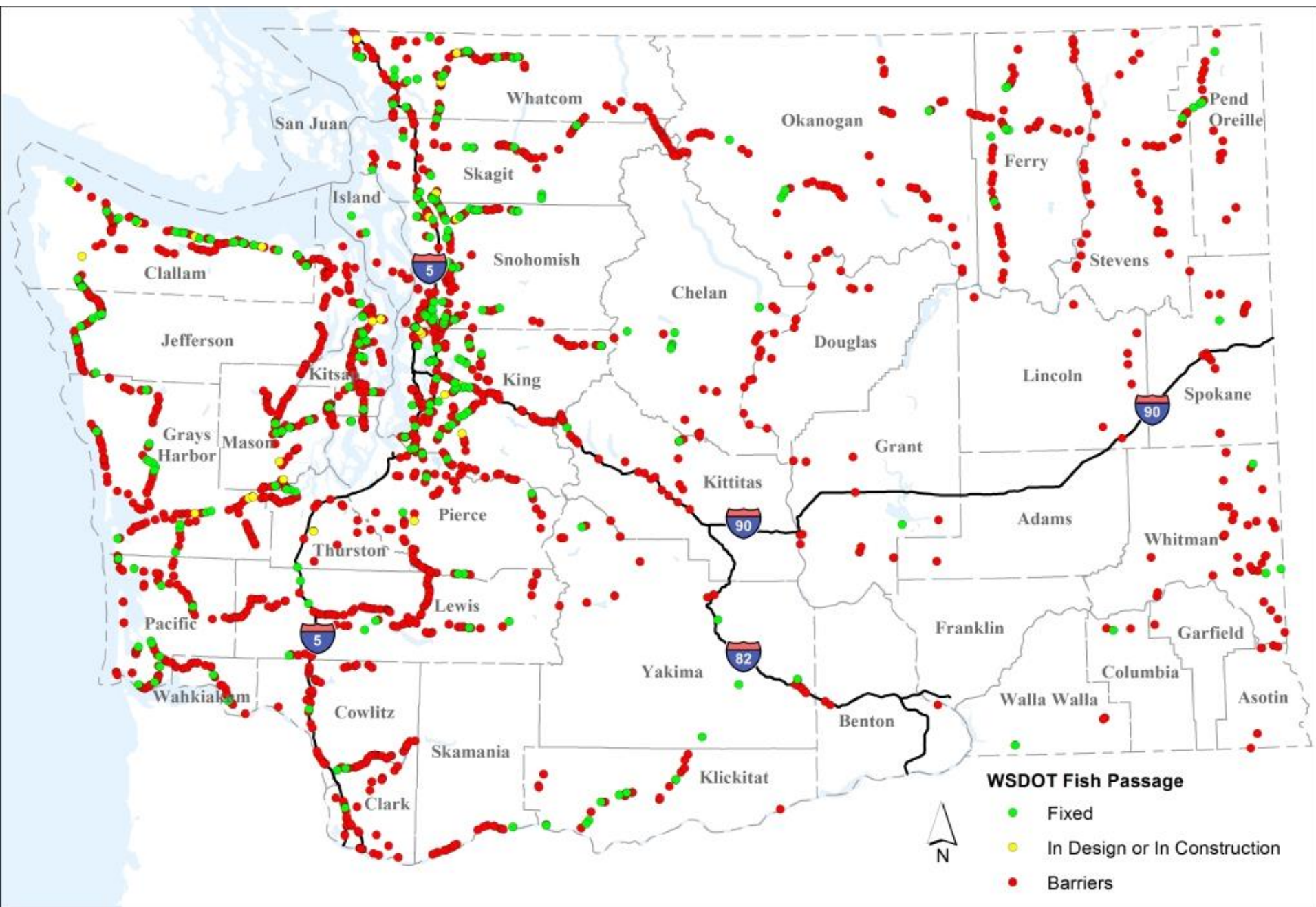
Juveniles rearing in stream

WSDOT Fish Passage Program

- Partnership with WDFW starting early 1990's
- Fish barrier inventory and prioritization
- Statewide: 6,478 culverts evaluated, 7,000 miles of highway 1,976 barrier culverts, 1,528 with significant habitat
- Correction of barriers:
 - stand alone prioritized projects
 - part of planned highway projects, and
 - 291 corrections to date, improving access to 1,000 miles of stream habitat.



US 12 Silver Creek east of Randle



Fish Barrier Corrections

Stand alone *environmental retrofit* projects

Or

As part of transportation projects

Project costs vary widely- \$1M to > \$40 M

Typical replacement costs \$3-7 M

291 corrections so far,

Improving access to > 1,000 stream miles



SR 112 Trib to Pysht R
west of Port Angeles

US v. WA “Culvert Case”

2013: Federal court ruled that the State’s fish barrier culverts are not consistent Indian fishing rights established by treaties in the 1850’s



Injunction requires removal of fish barriers

Over 900 WSDOT culverts are affected:

Some can be corrected at the end of their useful life

Hundreds of barriers must be corrected by 2030

Cost is estimated at over \$ 2.4 B

Injunction Standard:

- Stream simulation culvert or bridge design.
- Crossings must mimic natural stream conditions.
- Crossings must fully span the stream channel.



Stream simulation culvert



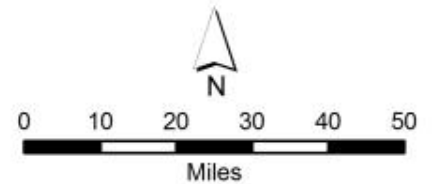
Bridge

WSDOT Culvert Barriers

August 2015



Culvert Barriers
● 817 Barriers



Culvert Injunction Implementation



SR 530 Fortson Creek west of
Darrington

Program costs:

- \$2.4 B estimated to fix all barriers within case area
- Need \$310 M per biennium thru 2030
- Accelerated correction target rate: 60 to 80 projects per biennium
- Have additional work to do to get the funding needed to meet the injunction requirements.

Accelerating Fish Passage Correction



SR 530 Fortson Creek west of
Darrington

Lean process improvement methods-
gain efficiencies in scoping and design
process. (less start-stop, less handoff)

Created 4 Specialized Fish Passage
Design Teams, multidisciplinary, cross-
agency

Developed Programmatic ESA
Consultation with USFWS, NOAA
Fisheries with 'fast track' for fish passage

Coordination on Culvert Corrections



SR 21 Curlew Creek near
Curlew Creek State Park

WSDOT coordinates barrier correction efforts with regional fish enhancement groups, state and local government agencies, tribes, private landowners, and other entities.

Project level early and frequent coordination with tribes, regulators partners.

- Participate in initial scoping site reviews
- Review preliminary design
- Provide input on permitting

Outreach to legislature and key leaders through ‘culvert field trips’ to build understanding

Factors for prioritization include:

- Amount of habitat blocked (injunction directs this as a guiding principle in prioritization)
- Estimated project cost
- Coordination with Tribes
- Coordination with other restoration efforts and partnership opportunities to address other barriers or habitat issues on a stream
- Ability to group projects for efficiencies
- Status of other planned transportation projects in the vicinity, which may advance or delay work on the culvert

WSDOT Response to Injunction

- In 15-17 biennium proposed to the Legislature to shift existing transportation funds around to free up \$80 M for fish passage.
- Legislature approved \$70 million in the Transportation Budget for fish passage in the 15-17 biennium plus \$17.5 million in new revenue from new gas tax.
- Additional corrections from other transportation projects funded with new revenue.

WSDOT Budget Update

- Washington State Legislature passed 16-year transportation revenue package “Connecting Washington”
- Includes 11.9-cent gas tax increase
- Combined with the Transportation Budget, Funds 57 Fish Passage Projects Statewide over the next 6 years
 - 2015-2017 Bi – \$87.5 M est. 28 barrier corrections
 - 2017-2019 Bi – \$63.5 M est. 17 barrier corrections
 - 2019-2021 Bi – \$41.5 M est. 12 barrier corrections

WSDOT Fish Passage Budget Overview

Fish Passage Funding

from 13-15 through the 2029-2031 Biennium:

- Current Law * \$136M
- Connecting Washington \$300M
- Total Funding for Fish Passage: **\$436M**

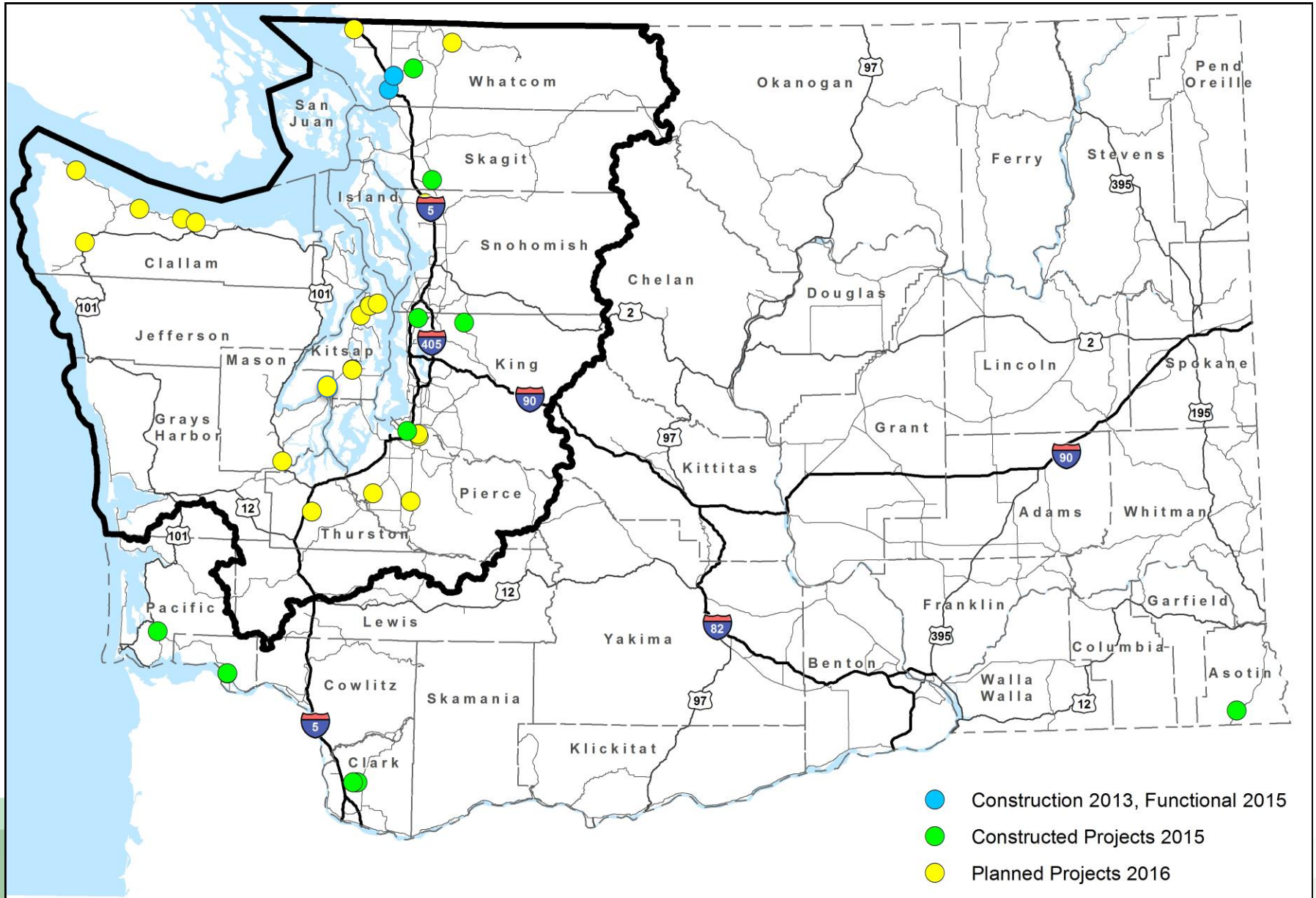
*Moved money from Safety & Preservation Programs

Provides approximately 45%-50% habitat gain

2015-2016 Fish Passage Projects

- 12 Fish Passage Projects completed Statewide in 2015 construction season
 - 5 Injunction Barriers Corrected
 - 25+ miles of habitat in Case Area
- 21 Fish Passage Projects planned for 2016
 - Correcting 21 Injunction Barrier Culverts
 - Will open 77+ miles of habitat

WSDOT Fish Passage Projects 2015-2016



SR 99 WF Hylebos Creek WRIA 10

Before



6 ft box with deficient fishway

- \$2.6 M estimated cost
- 2 miles habitat gain
- Chum, coho, steelhead, sea-run cutthroat, & resident trout

During



After

New 20 ft wide structure

SR 522 Lyon Creek WRIA 8

Before



Twin 5 ft wide box culverts



New 20 ft wide structure

After

- \$1.6 M estimated cost
- 1.82 miles incremental habitat gain
- Coho, steelhead, sea-run cutthroat, bull trout & resident trout

SR 203 Coe Clemons Creek WRIA 7

Before



6 ft wide box culvert



New 25 ft wide structure

After

During



- \$2.8 M estimated cost
- 1.45 miles habitat gain
- Coho, steelhead, sea-run cutthroat, bull trout & resident trout

SR 9 Lake Creek WRIA 3

Before



6 ft culvert



45 ft wide bridge

After

- \$2.8 M estimated cost
- 6.43 miles incremental habitat gain
- Coho, steelhead, sea-run cutthroat, bull trout & resident trout



During construction

SR 542 Anderson Creek WRIA 1

Before



Two 8 ft box culverts and fishway



42 ft wide bridge

After



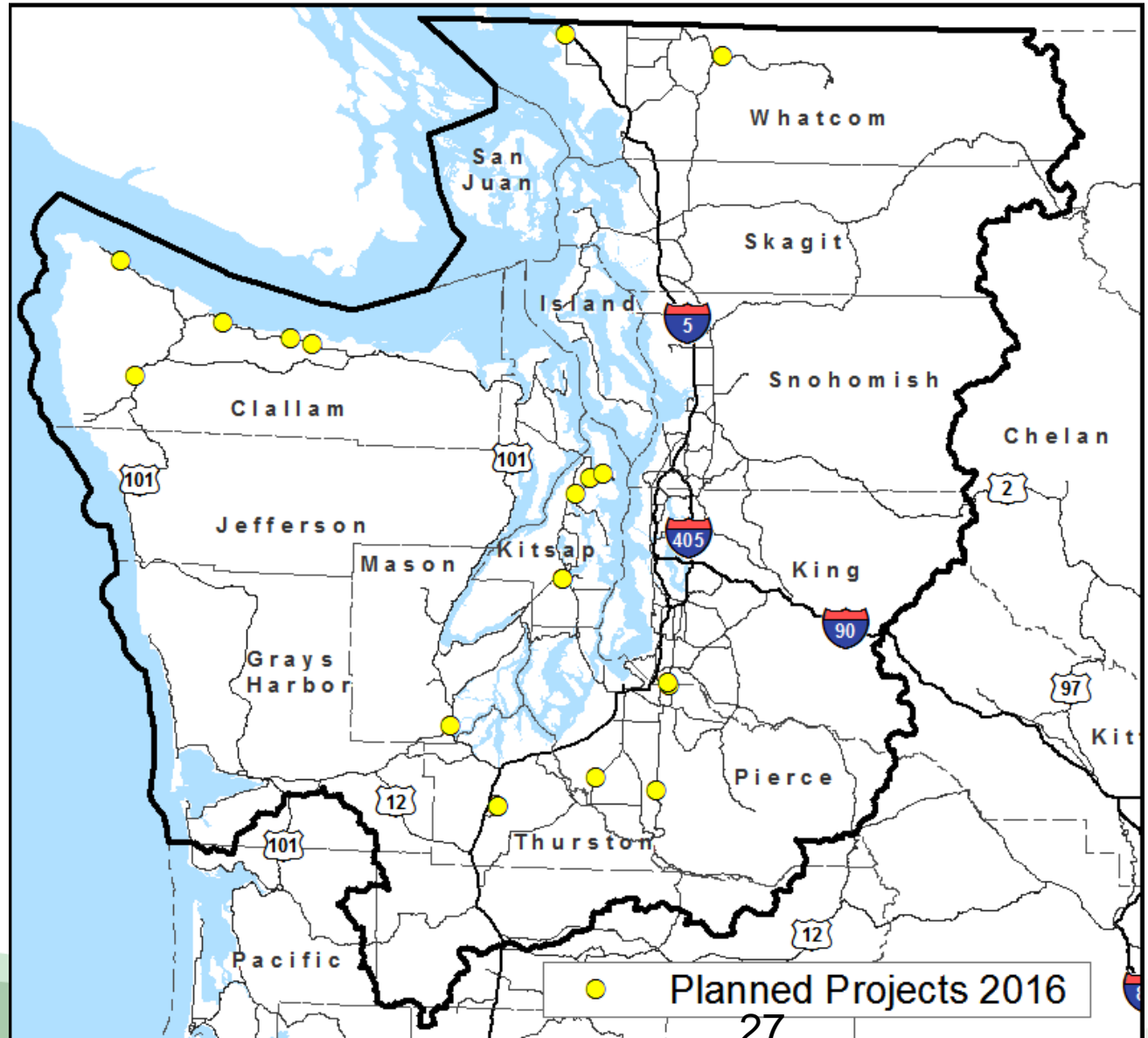
During construction

- \$7.9 M estimated cost
- 13.6 miles habitat gain
- Chinook, pink, chum, coho, steelhead, sea-run cutthroat, bull trout & resident trout



SR-542 Anderson Creek Fish Barrier Correction 10/15

Injunction Area Projects for 2016



Project Info

- [Home](#)
- [Coordinating with Others](#)
- [Costs for Fish Barrier Removal](#)
- [Determining Culvert Repair Priorities](#)
- [Environmental Stewardship](#)
- [Federal Court Injunction](#)
- [Fish Barrier Correction Construction Process](#)
- [Frequently Asked Questions](#)
- [Fish Passage Responsibilities](#)
- [Culverts as Barrier to Fish](#)
- [Number of Fish Barriers](#)
- [Fish Passage Contacts](#)
- [Working with Partners](#)

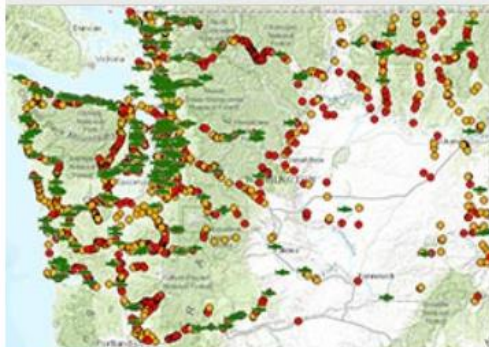
Publications

- [Barrier Correction Folio \(pdf 1 mb\)](#)
- [2015 Annual Fish Passage Report \(pdf 3.22 mb\)](#)
- [2014 Annual Fish Passage Report \(pdf](#)

Fish Passage

State highways cross streams and rivers in thousands of places in Washington state. At many of those locations, culverts are too small or otherwise inadequate to allow fish to migrate upstream and downstream as necessary for growth and reproduction. WSDOT has worked for more than two decades to improve fish passage and reconnect streams. A single removed barrier can deliver impressive benefits, improving fish access for miles both upstream and downstream. When rivers and streams are connected, fish can better access the habitat they need. This is an important component of protecting and restoring fish populations, which can in turn have multiple benefits - including for commercial and recreational fishing industries.

Find Fish Passage Projects



[View Interactive Map](#)

Why is WSDOT fixing fish barriers?

- [Environmental Stewardship Related to Fish Passage](#)
- [Fish Passage Responsibilities](#)
- [Federal Court Injunction Related to Fish Passage](#)

Before Photo



US 97 culvert that blocked fish passage at Butler Creek, a tributary to the Little Klidkitat River near Goldendale.

After Photo



US 97 at Butler Creek after the \$3.5 million barrier removal project was completed in April 2013.

WSDOT Fish Passage Barriers

Map Controls

Layers Legend Basemap Search

WSDOT Fish Passage Barriers

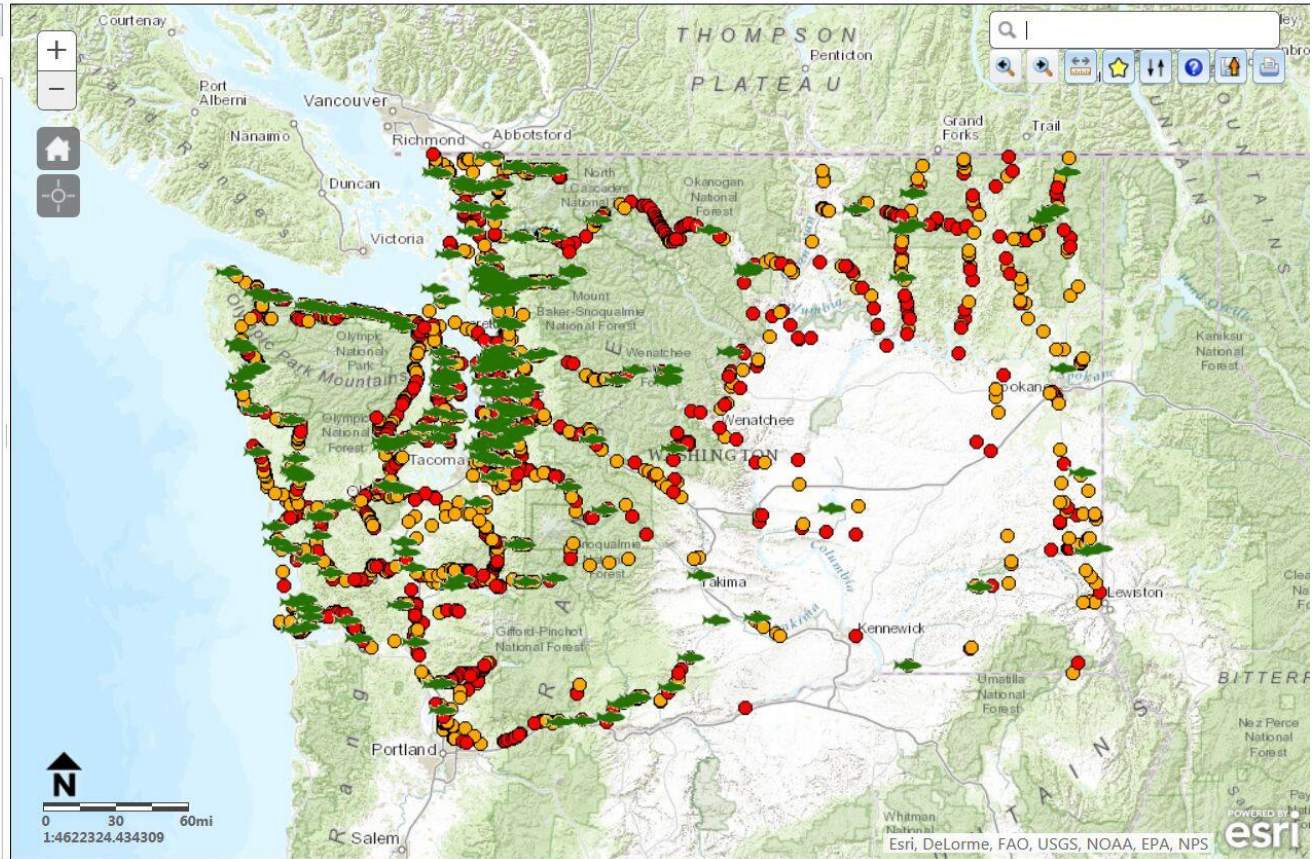
- Uncorrected Barriers Statewide⇒
- Corrected Barriers Statewide⇒
- US v. WA Case Area Boundary
- In Design Barriers Subject to Injunction
- Uncorrected Barriers Subject to Injunction

Additional Features

- Rivers and Lakes
- State Boundary
- Region Boundaries
- County Boundaries
- Legislative Districts
- Water Resource Inventory Area (WRIA)
- City Limits

Basemap

- Basemap Layer



Thank you!

WSDOT Contacts

Dean Moon

Fish Passage Manager

360-705-7130

moondr@wsdot.wa.gov

Paul Wagner

Biology Branch Manager

360-705-7406

wagnerp@wsdot.wa.gov

Mike Barber

Stream Restoration Program Manager

360-705-7518

barberm@wsdot.wa.gov

Susan Cierebiej

Fish Passage Biologist

360-705-7250

cierebs@wsdot.wa.gov

WSDOT Fish Passage Website

www.wsdot.wa.gov/Projects/FishPassage