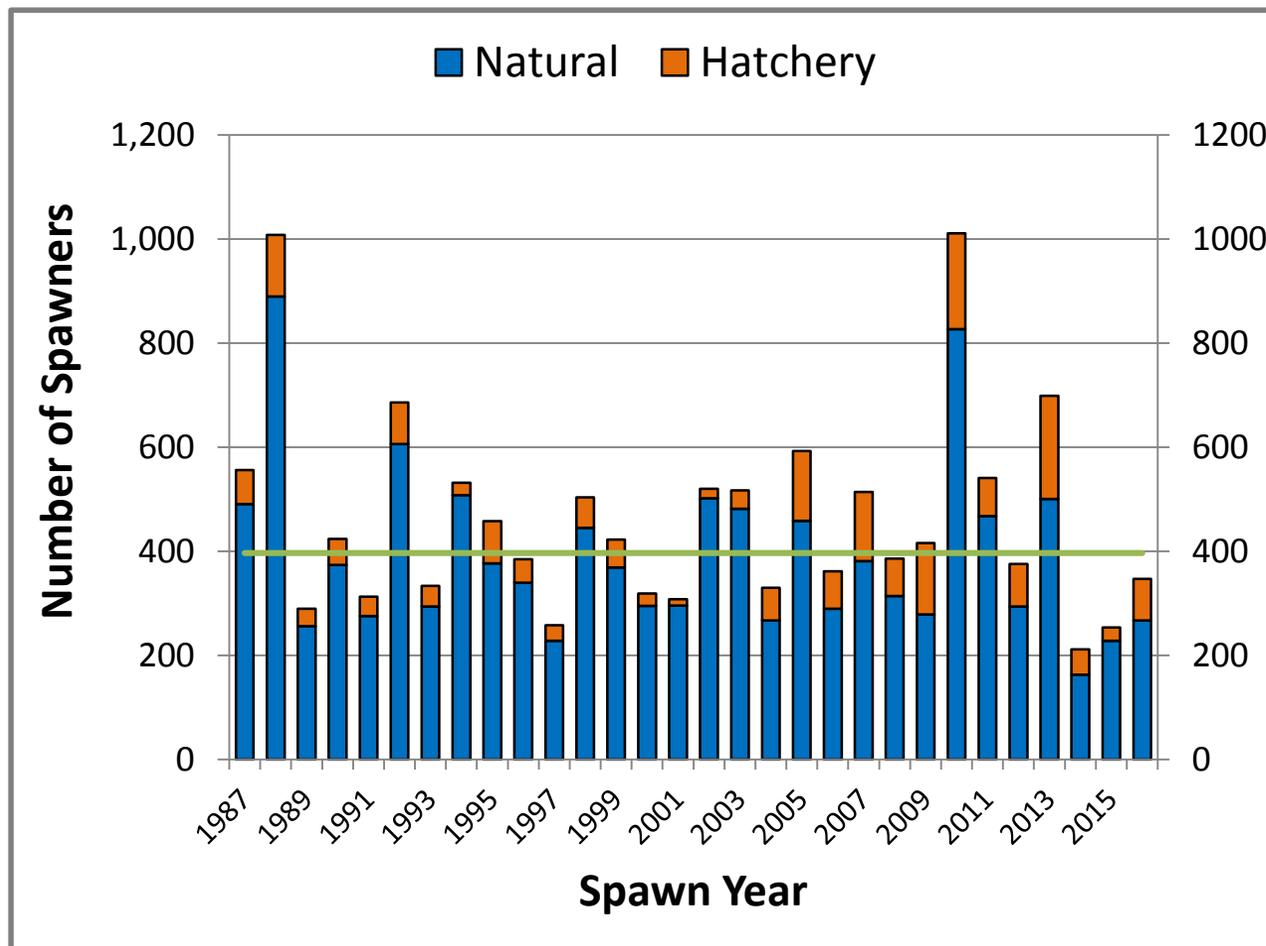


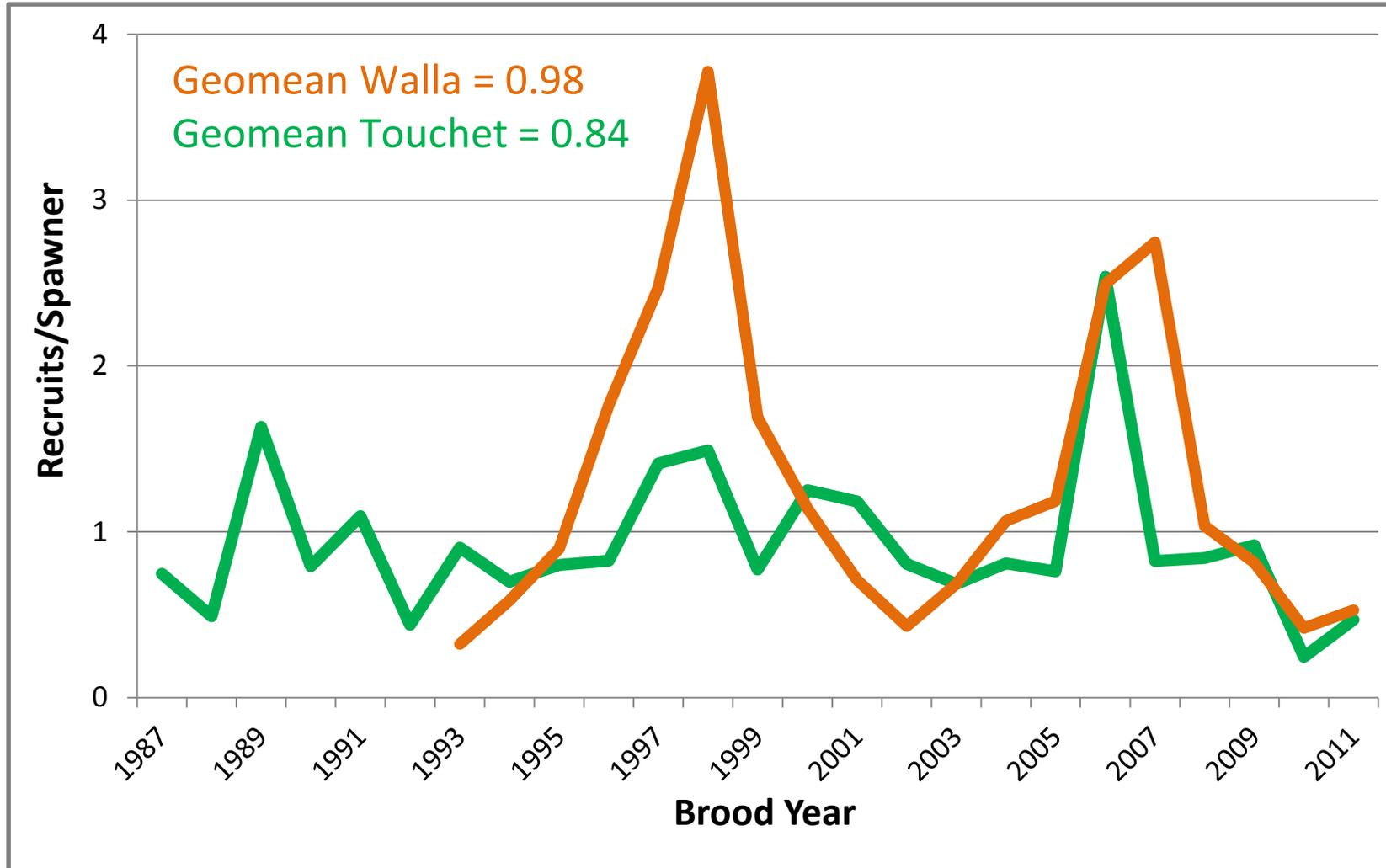


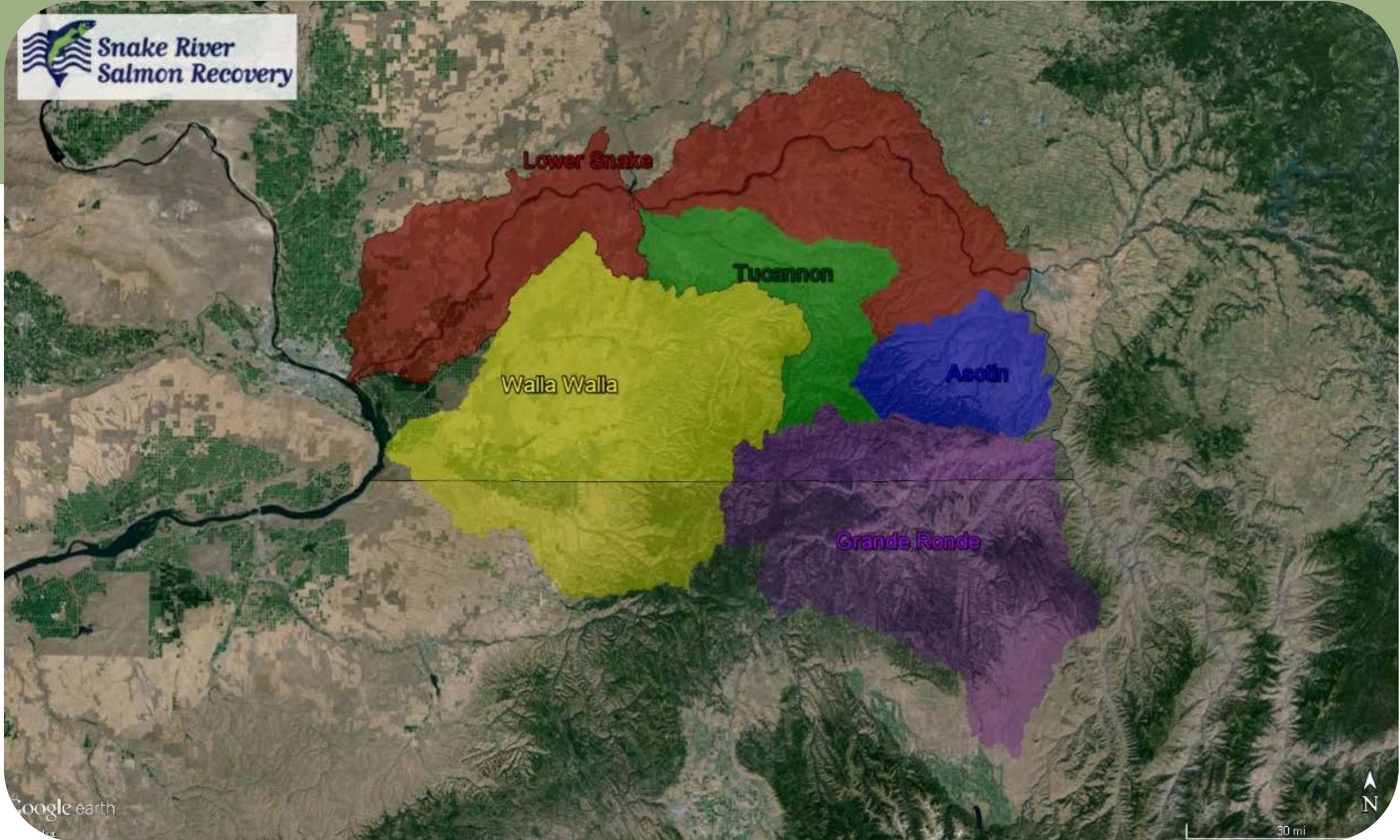
**Expanded Redd  
Surveys and  
Adult Traps**



**Touchet River  
Summer Steelhead**  
(does not include Mainstem Touchet)

# Walla Walla and Touchet River Summer Steelhead Productivity

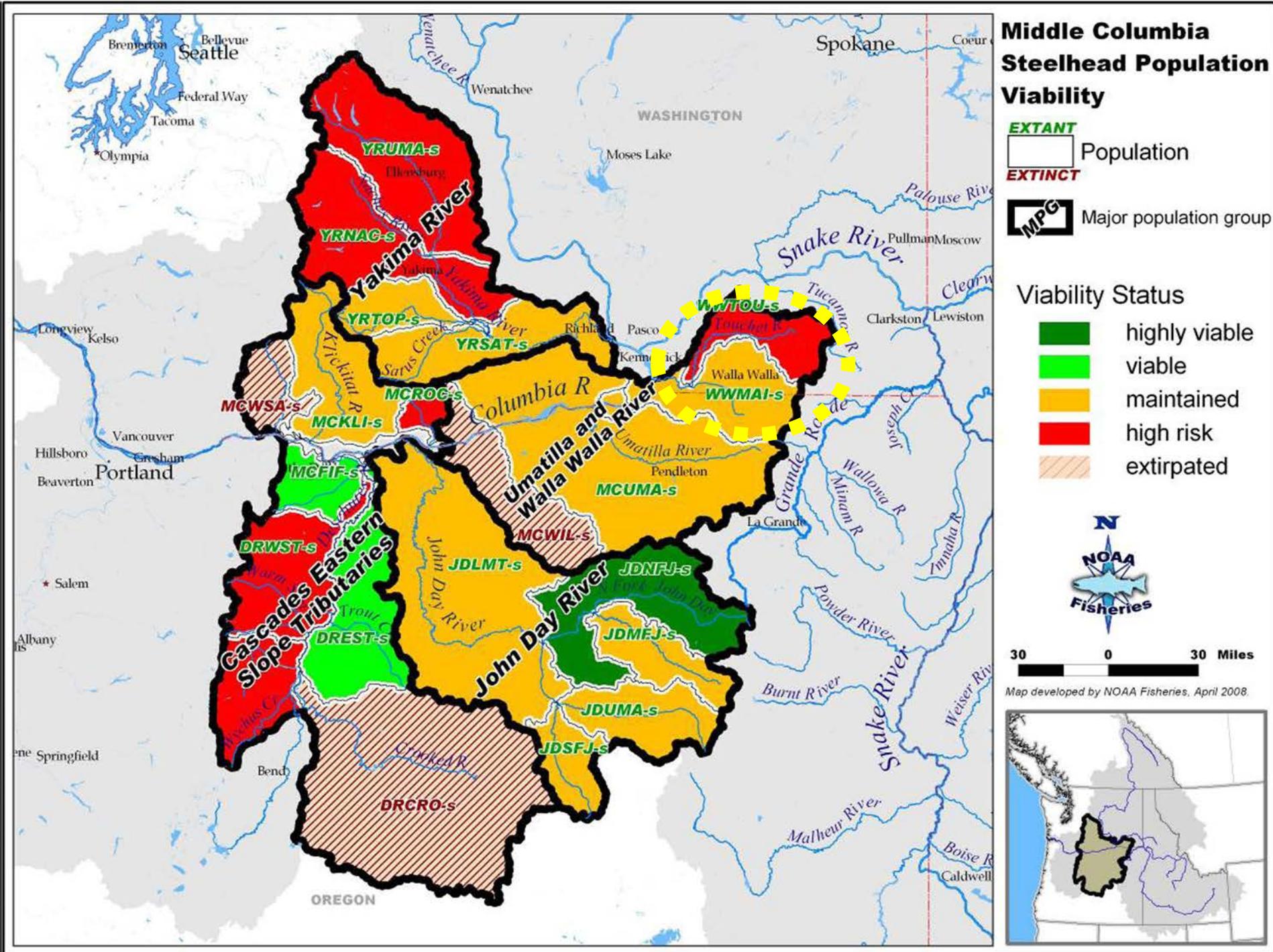






# Actions Completed as of 2017:

- 66 fish passage barriers removed/improved
- 398+ miles of habitat opened/improved accessibility
- 526 fish screens installed
- 800+ flow meters installed
- 72 CFS water conserved
- 8,242 ac/287 miles of riparian buffer, 3,000,000+ trees planted
- 600,000+ feet of livestock fencing
- 94,000 acres of direct seeding
- 25+ miles of structure placement and reconfiguration
- 1,850+ habitat structures installed



# Umatilla/Walla MPG Scenario

		2015 Status			
		Spatial Structure / Diversity Risk			
		Very Low	Low	Moderate	High
Abundance / Productivity Risk	Very Low				
	Low				
	Moderate			Umatilla Walla Walla	
	High			Touchet	

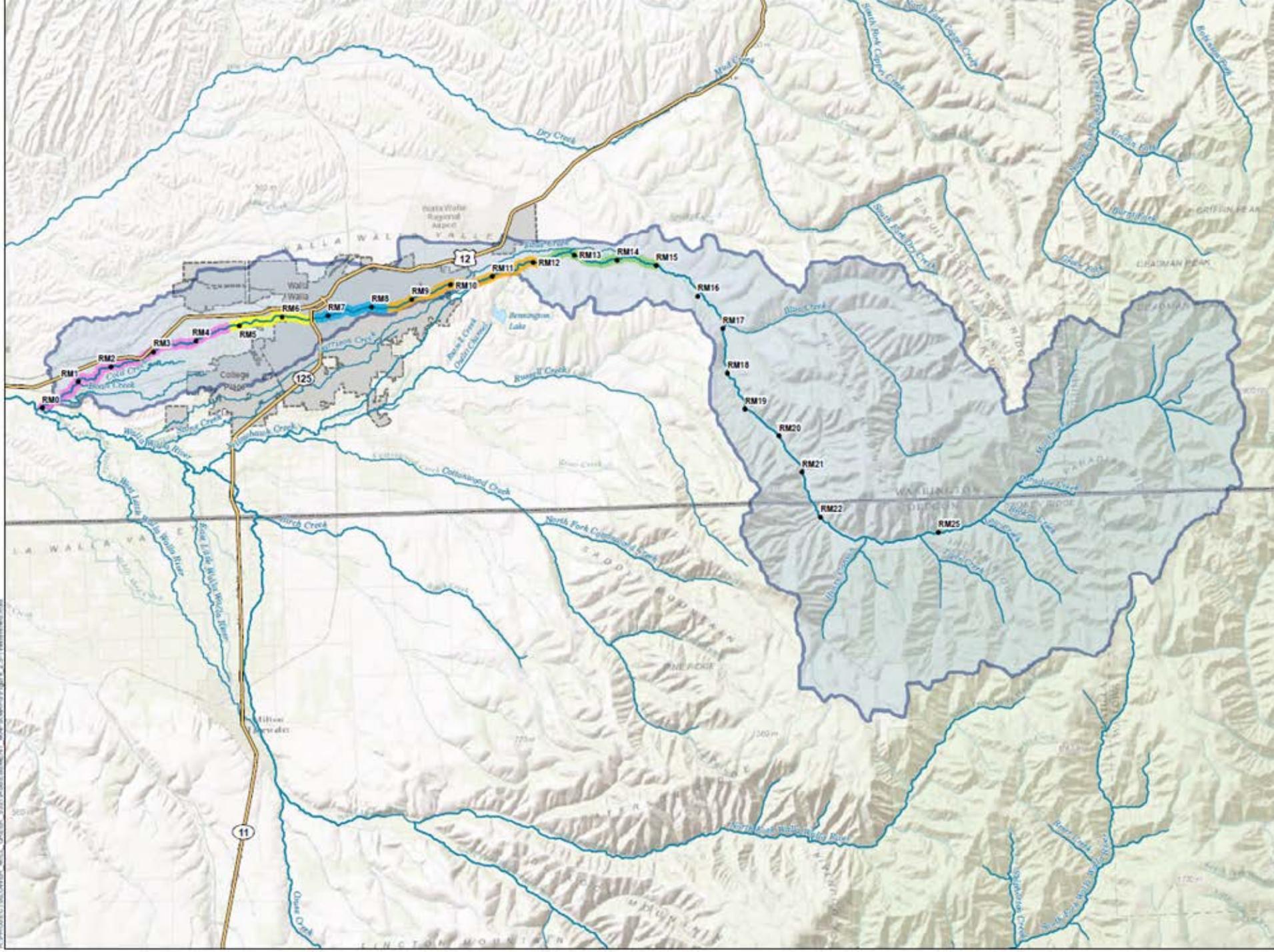
		For MPG Viability we need to see:			
		Spatial Structure / Diversity Risk			
		Very Low	Low	Moderate	High
Abundance / Productivity Risk	Very Low				
	Low		Umatilla Walla Walla		
	Moderate		Touchet		
	High				

**LOWER MILL CREEK  
HABITAT AND PASSAGE  
ASSESSMENT**

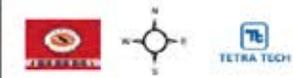
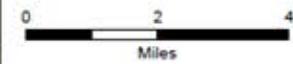
CONFEDERATED TRIBES OF THE  
UMATILLA INDIAN RESERVATION

**FIGURE 2.5-1  
MILL CREEK WATERSHED**

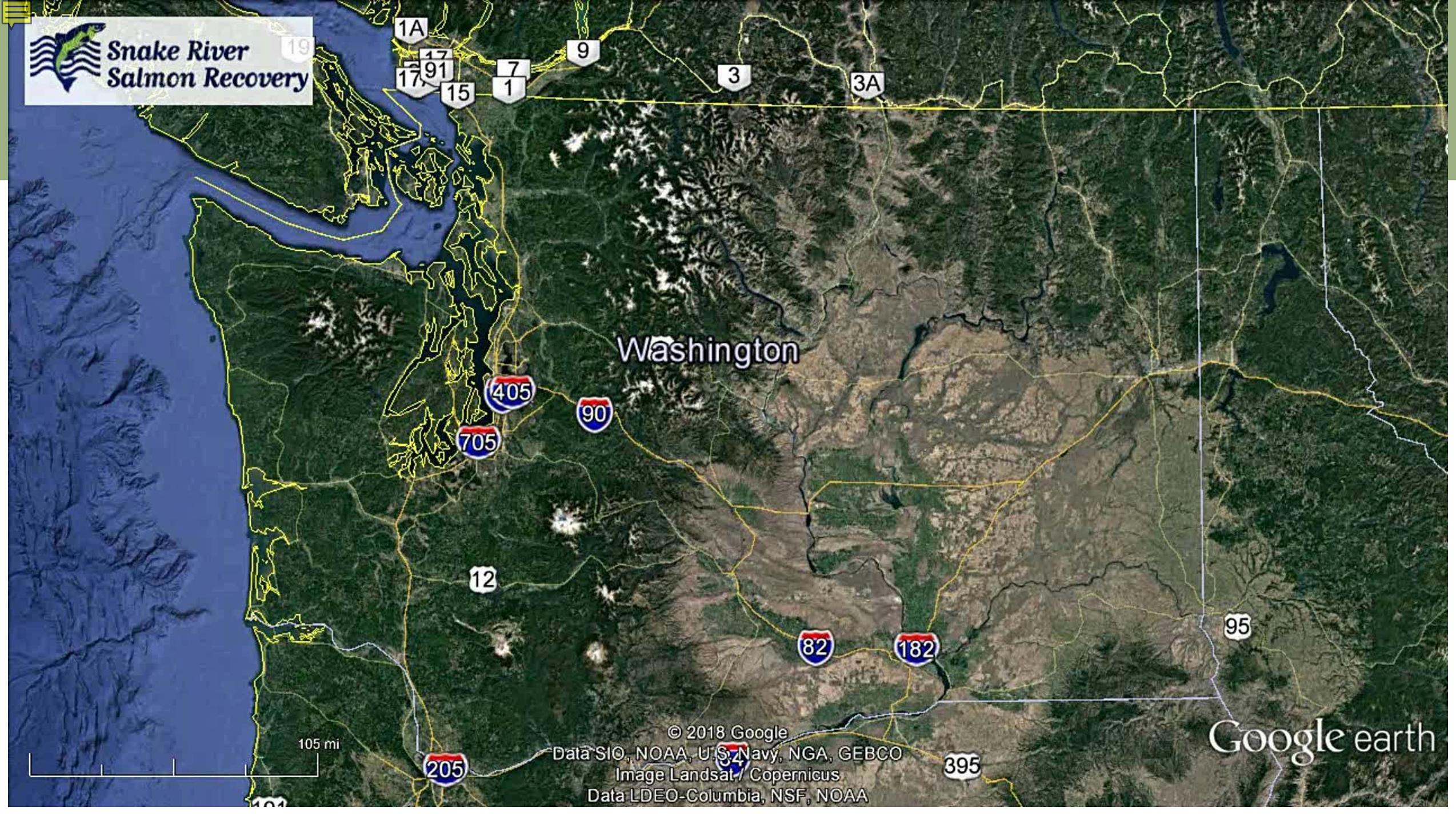
- River Miles
- Major Stream
- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5
- Waterbody
- Mill Creek Watershed
- Cities



Sources: CTUIR, Walla Walla County StreamNet



PROJECT: OMPA - MILL CREEK - HABITAT AND PASSAGE ASSESSMENT - MAP 2.5-1 (Revised 2014)



© 2018 Google

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat / Copernicus

Data LDEO-Columbia, NSF, NOAA

19

1A 17 91 7 9 3 1 3A

Washington

405 705 90 82 182

12

95

105 mi

205

395

# Mill Creek Timeline

1800

2018

1855

1860

1931

1938

1949

1996

2002

2005

2006

2008

2009

2011

2013

2016

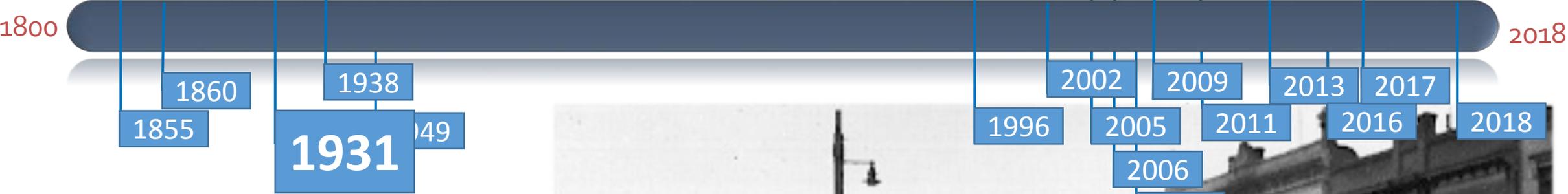
2017

2018





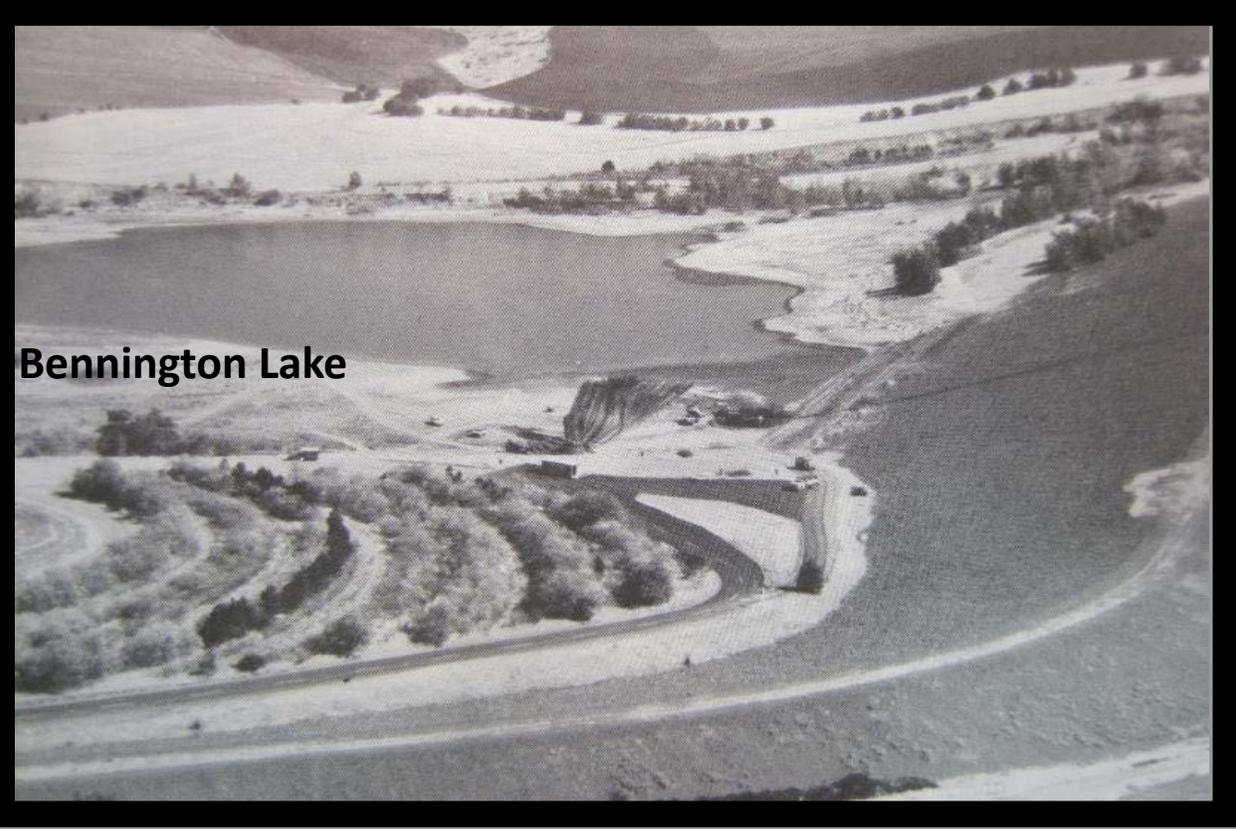
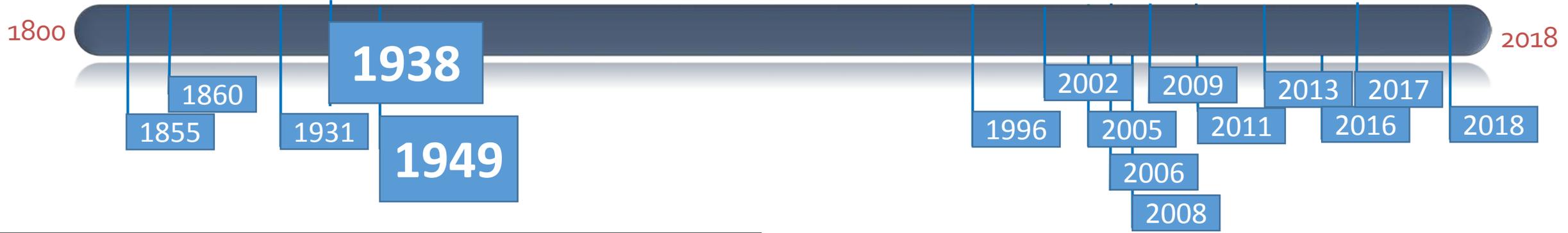
# Mill Creek Timeline



1931 – Major flood devastates Walla Walla

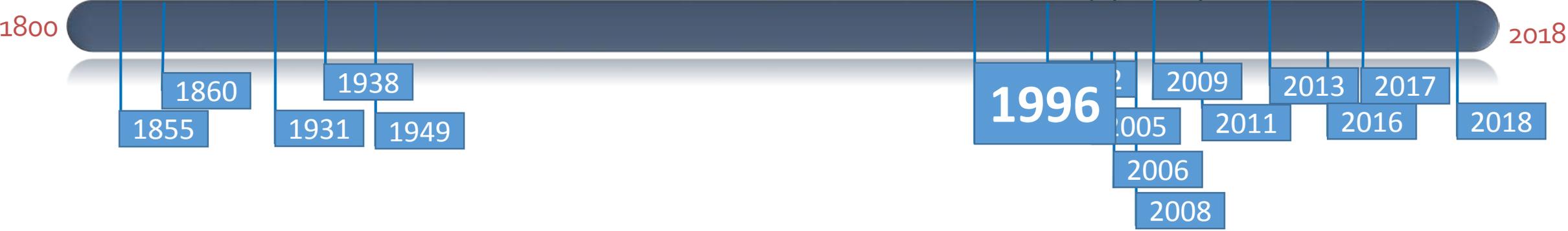


# Mill Creek Timeline

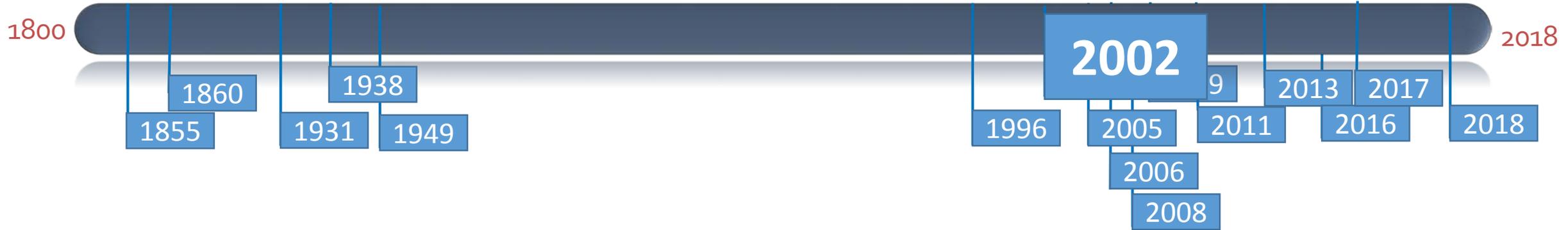




# Mill Creek Timeline



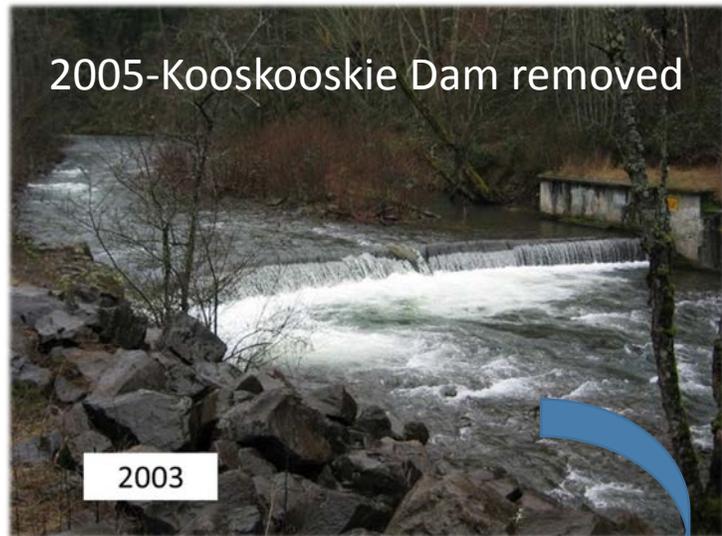
## Mill Creek Timeline



- 2002 – 16 dead adult steelhead observed at Bennington Diversion; bull trout too
- 2002 – Mill Creek Working Group formed

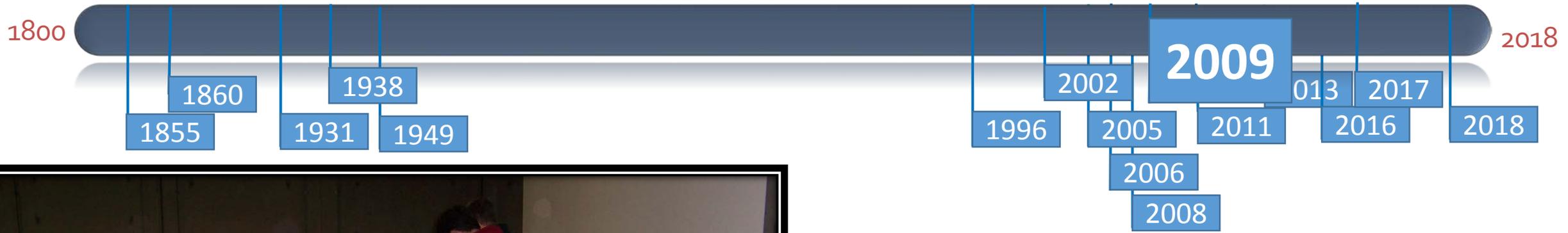


# Mill Creek Timeline

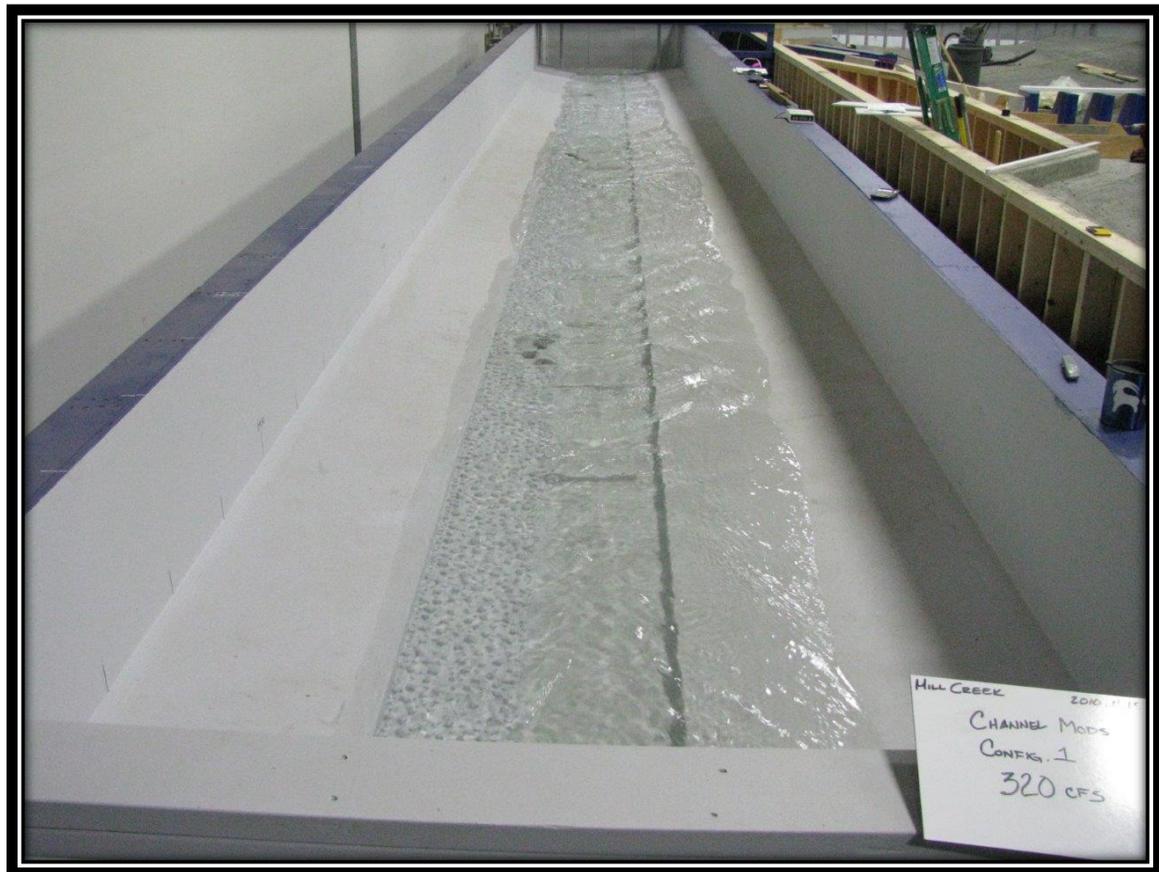


2006-Gose Street Passage Project

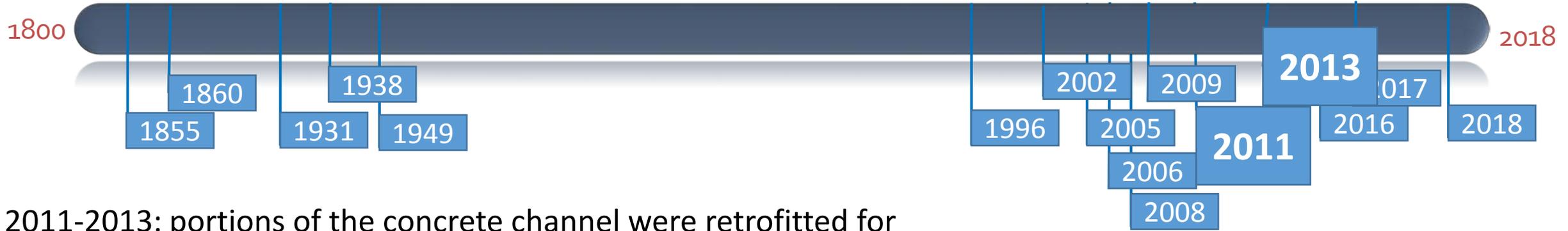
# Mill Creek Timeline



2009 – Mill Creek Passage Assessment



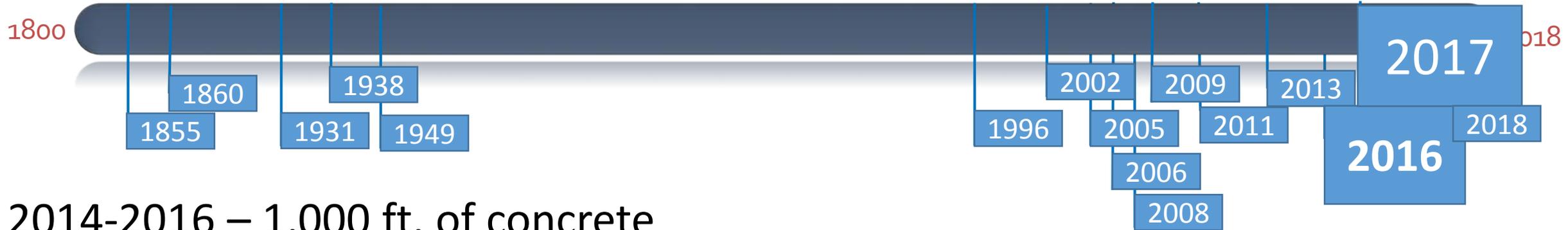
# Mill Creek Timeline



2011-2013: portions of the concrete channel were retrofitted for passage; pilot weir-notching and low flow channel completed



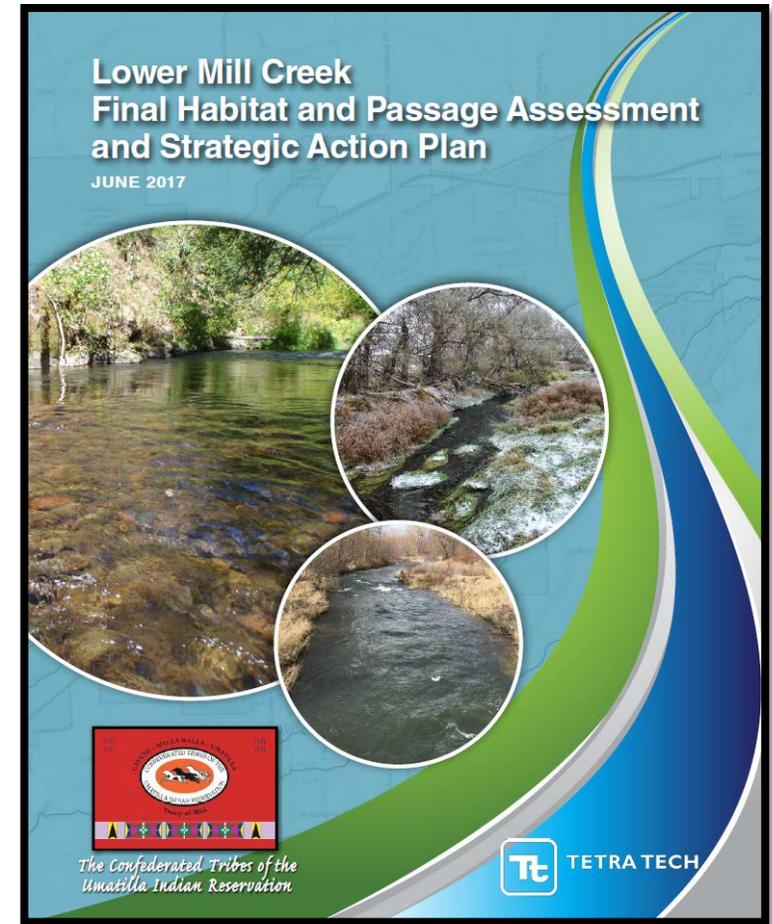
# Mill Creek Timeline



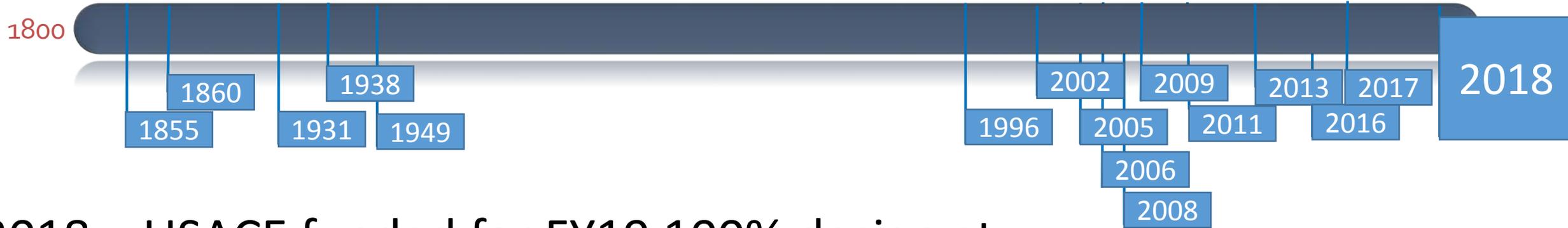
2014-2016 – 1,000 ft. of concrete channel designed and completed



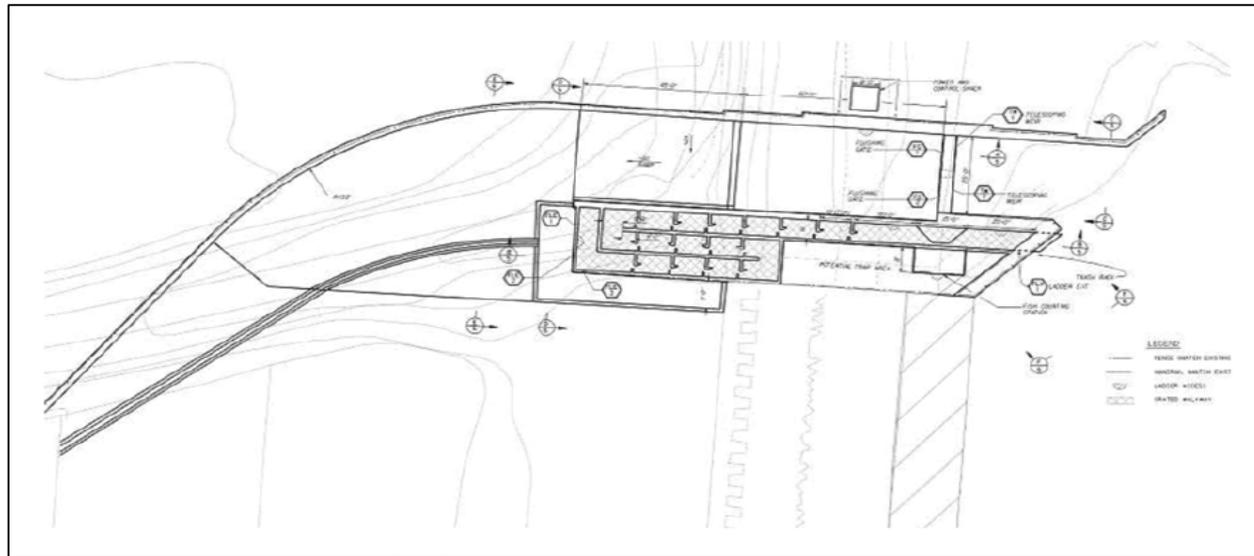
2017 – Lower Mill Creek Habitat and Passage Assessment and Strategic Action Plan completed



## Mill Creek Timeline

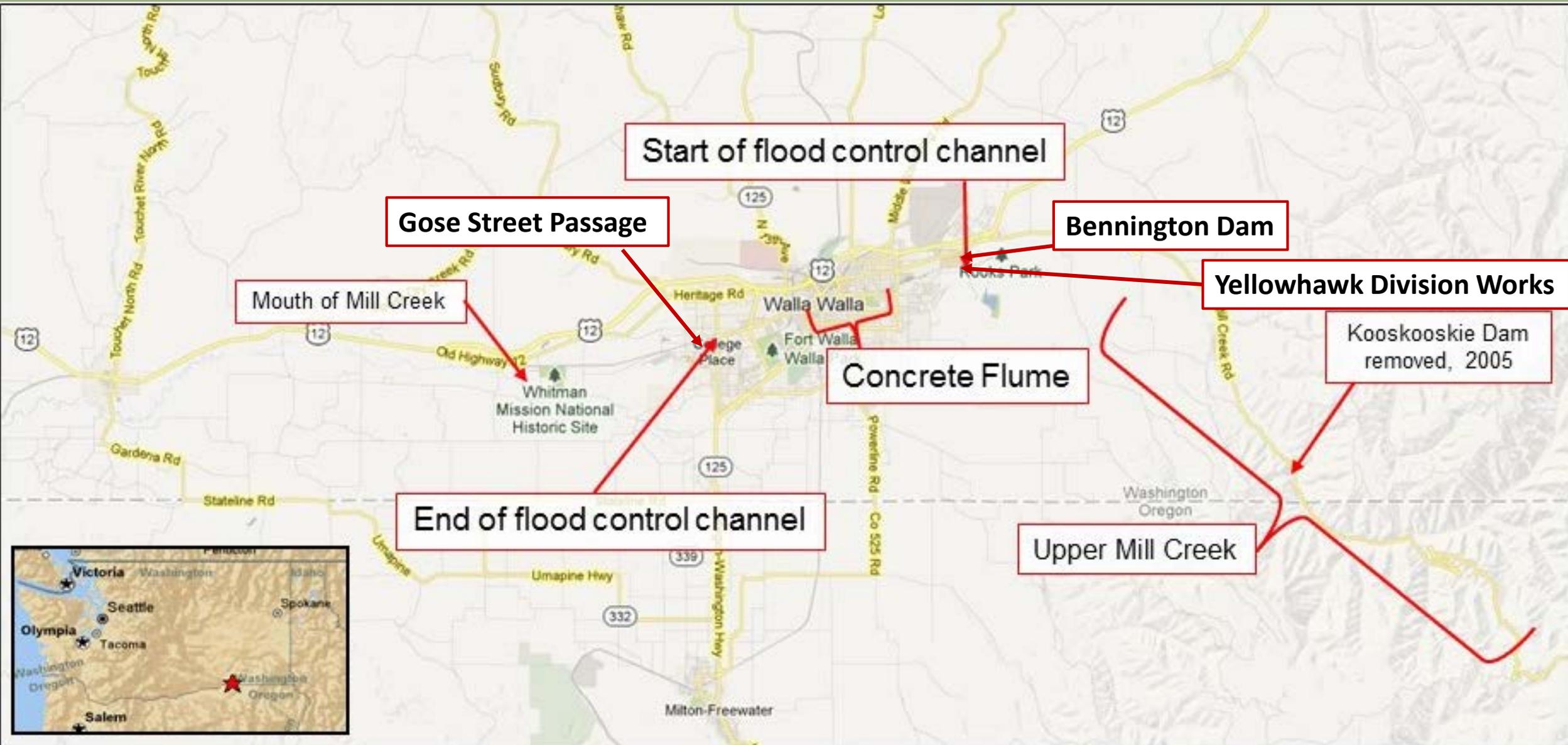


2018 – USACE funded for FY19 100% design at Bennington ladder and 100% design and construction for Division Works Ladder improvements

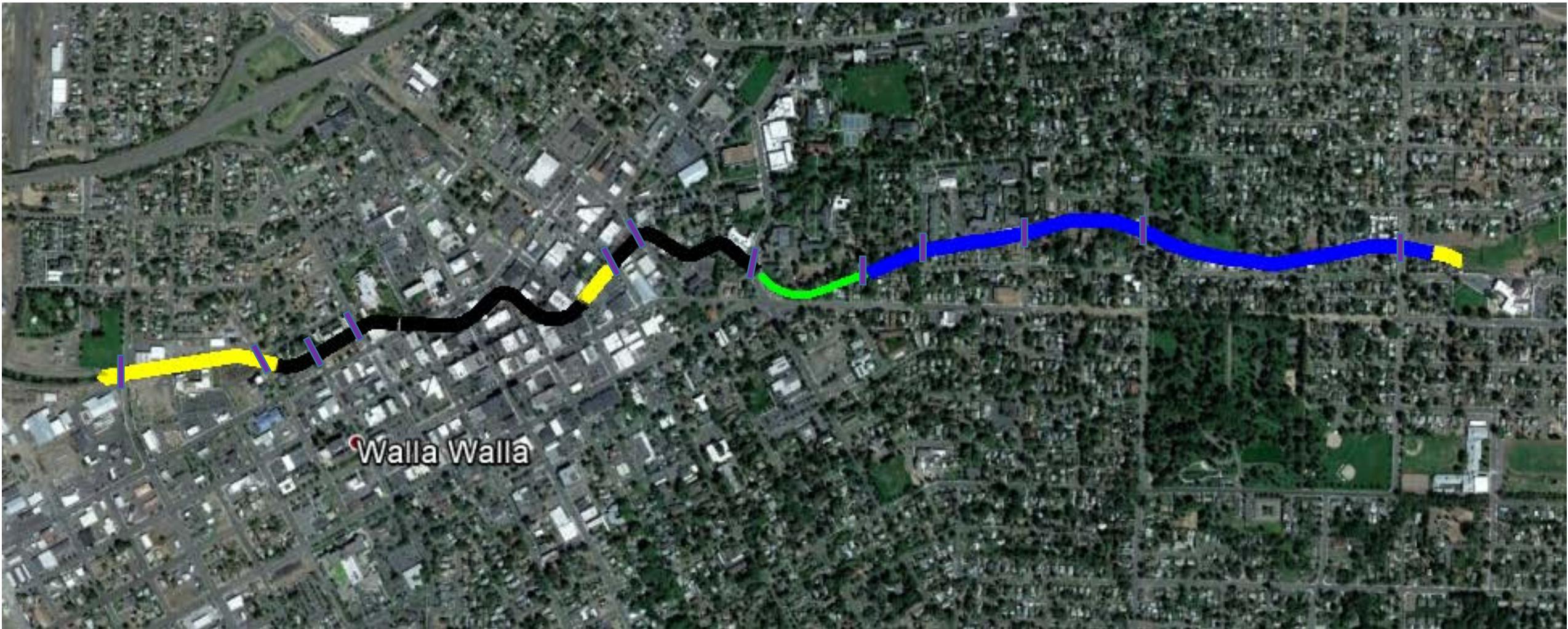


2018 – Designs finalized for 5,000 ft. on concrete channel

2018 – City of WW and CTUIR increased flow projects



# Concrete Channel Progress - Spring 2018



How are we getting things done?  
***Coordination and Collaboration.***



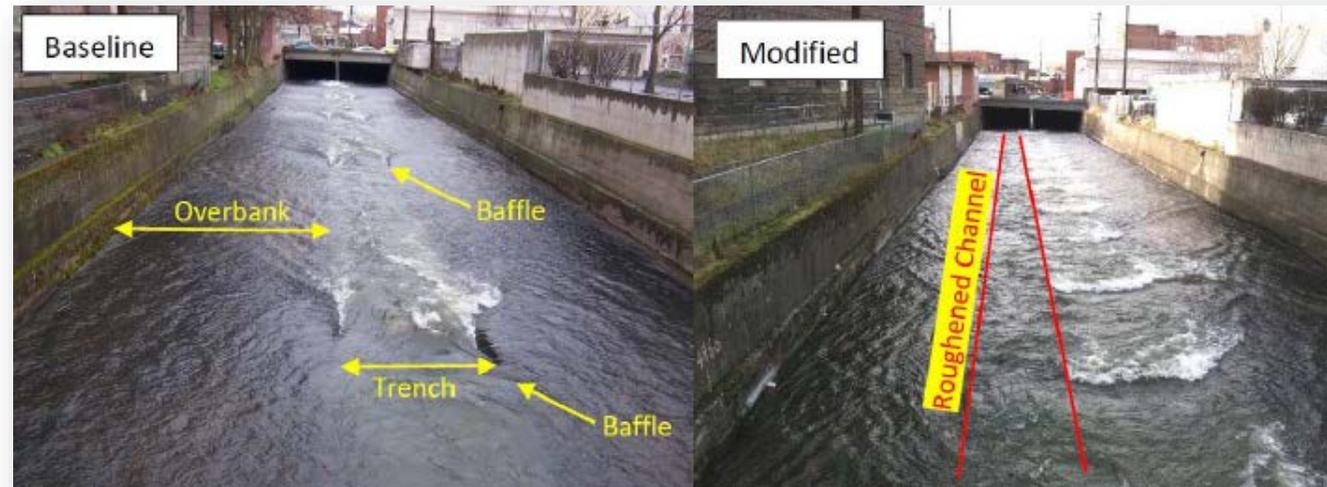
# What is at Stake?

- 50+ miles of designated critical spawning/rearing habitat upstream
  - Summer steelhead
  - Bull trout
  - Spring Chinook
- Population Viability
- Population Viability
- Headwaters are completely closed and protected



# Conclusions

- Leave you with a better understanding of Mill Creek Passage and what has been done
- Shared what is at stake – critical habitat and viability
- Identified what is left to do – several passage components are moving forward and we need support





# Monitoring

- We still have data gaps in the Touchet (mainstem from Dayton to Prescott) – unknown use of spawners.
- Data gap in Walla Walla below Nursery – Unknown use of spawners
- Data gap in Mill Creek – Counting stations not really working due to limitations with video counting
- Types of monitoring used to determine abundance/productivity (all of these have issues with data quality for steelhead because of the time of year steelhead return (high flows) but it's what we have in toolbox which is way more than we had in the past.
  - Smolt Traps
  - PIT Tag Arrays
  - Adult Traps
  - PIT Tagging of juvenile migrants/smolt
  - Spawning ground surveys



# Concrete Channel Progress- Spring 2018