

Salmon Habitat Restoration in WRIA 8

WRIA 8 Watershed Restoration and Enhancement Committee

September 26, 2019

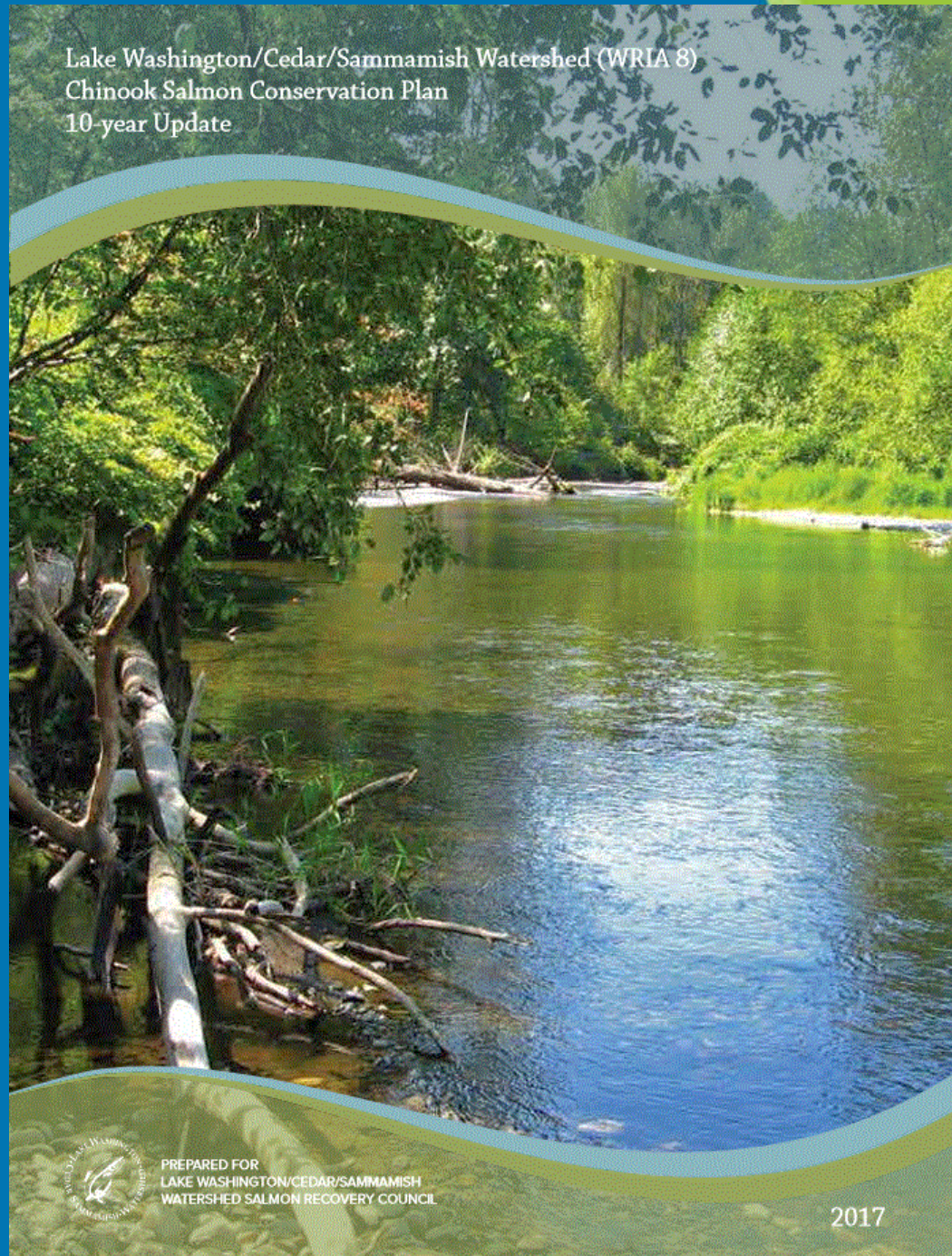
Jason Wilkinson, WRIA 8 Projects and Funding Coordinator



Presentation Summary

- Lead Entity & WRIA 8 structure
- WRIA 8 priorities & recovery strategies
- Project types and examples

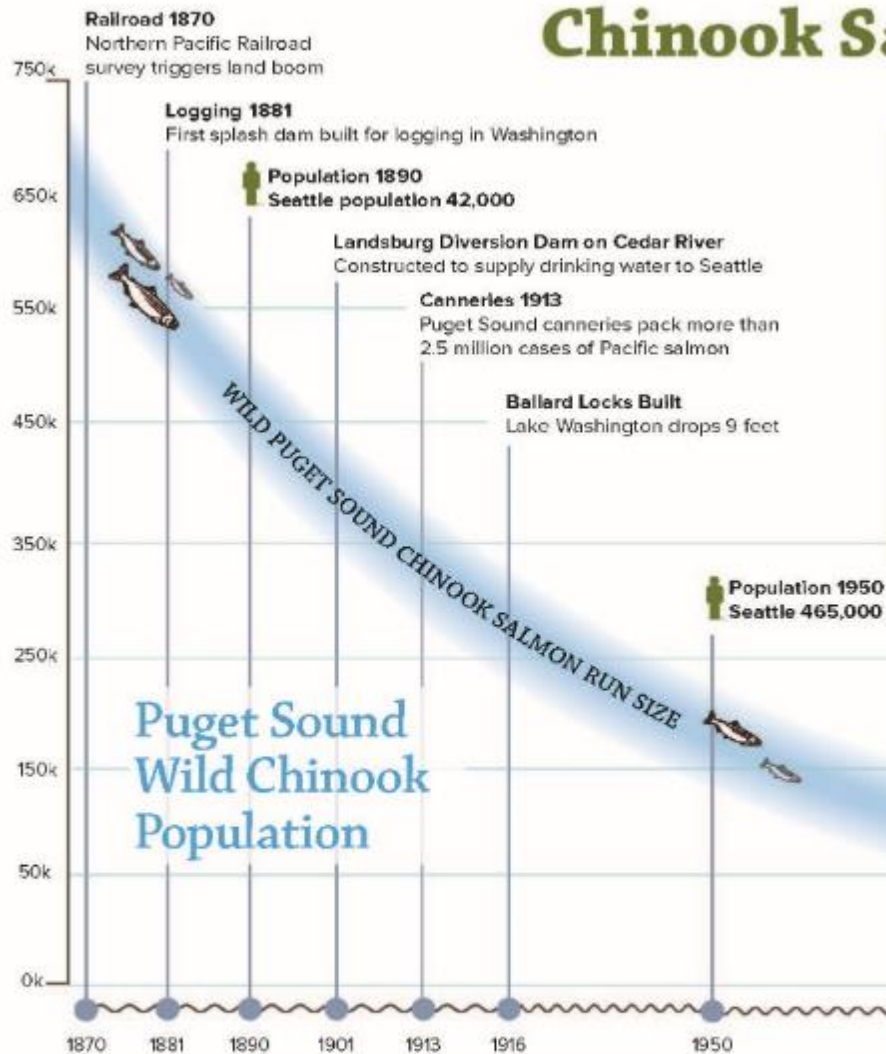
Lake Washington/Cedar/Sammamish Watershed (WRIA 8)
Chinook Salmon Conservation Plan
10-year Update



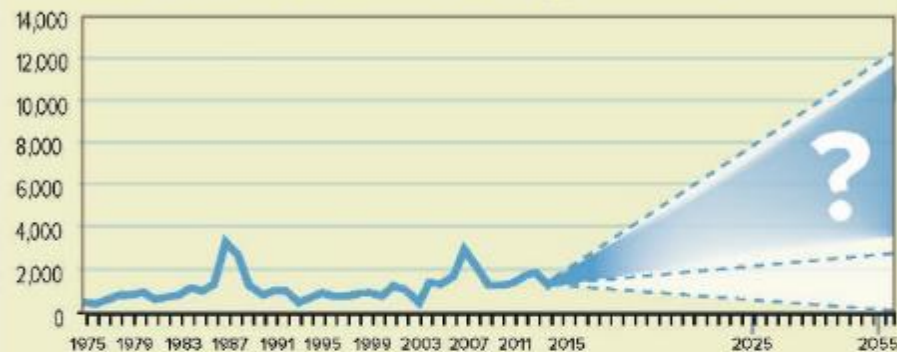
PREPARED FOR
LAKE WASHINGTON/CEDAR/SAMMAMISH
WATERSHED SALMON RECOVERY COUNCIL

2017

Chinook Salmon Recovery Timeline



WRIA 8 Wild Chinook Population



WRIA 8 Chinook Salmon recovery goals:

2025 (near-term) abundance goal =
2,763 returning natural-origin spawning adult fish

2055 (long-term) abundance goal range =
3,000 – 12,000 returning natural-origin spawning adult fish

Why do the data on salmon abundance get better starting in 1975?

The quality of data on annual salmon population runs improves starting in 1975, when the Washington Department of Fisheries (predecessor to Washington Department of Fish and Wildlife) initiated data collection and began estimating annual salmon run size in response to the federal court mandate to develop and share annual abundance of salmon returning to individual rivers in Puget Sound.

Puget Sound Chinook listed as threatened species

Population 2016
Seattle 689,000

Background on Lead Entities

- Community-based salmon recovery
- Develop local salmon habitat recovery strategies
- Work with project sponsors to develop projects and implement WRIA strategies
- Direct funding to projects



WRIA 8 Salmon Recovery Council



Stakeholders representing:

- 27 local governments
- Community and environmental organizations
- King Conservation District
- Water and sewer districts
- State and federal agencies
- Citizens



Planning Context in WRIA 8

FINAL
LAKE WASHINGTON/CEDAR/SAMMAMISH WATERSHED (WRIA 8)
CHINOOK SALMON CONSERVATION PLAN

VOLUME I **JULY 2005**

Lake Washington/Cedar/Sammamish Watershed (WRIA 8)
Chinook Salmon Conservation Plan
10-year Update



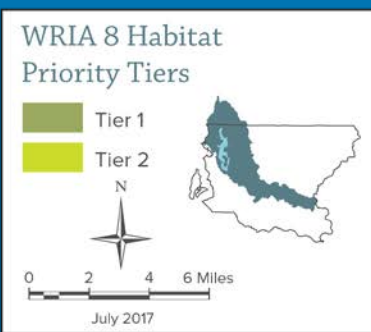
PREPARED FOR
LAKE WASHINGTON/CEDAR/SAMMAMISH
WATERSHED SALMON RECOVERY COUNCIL

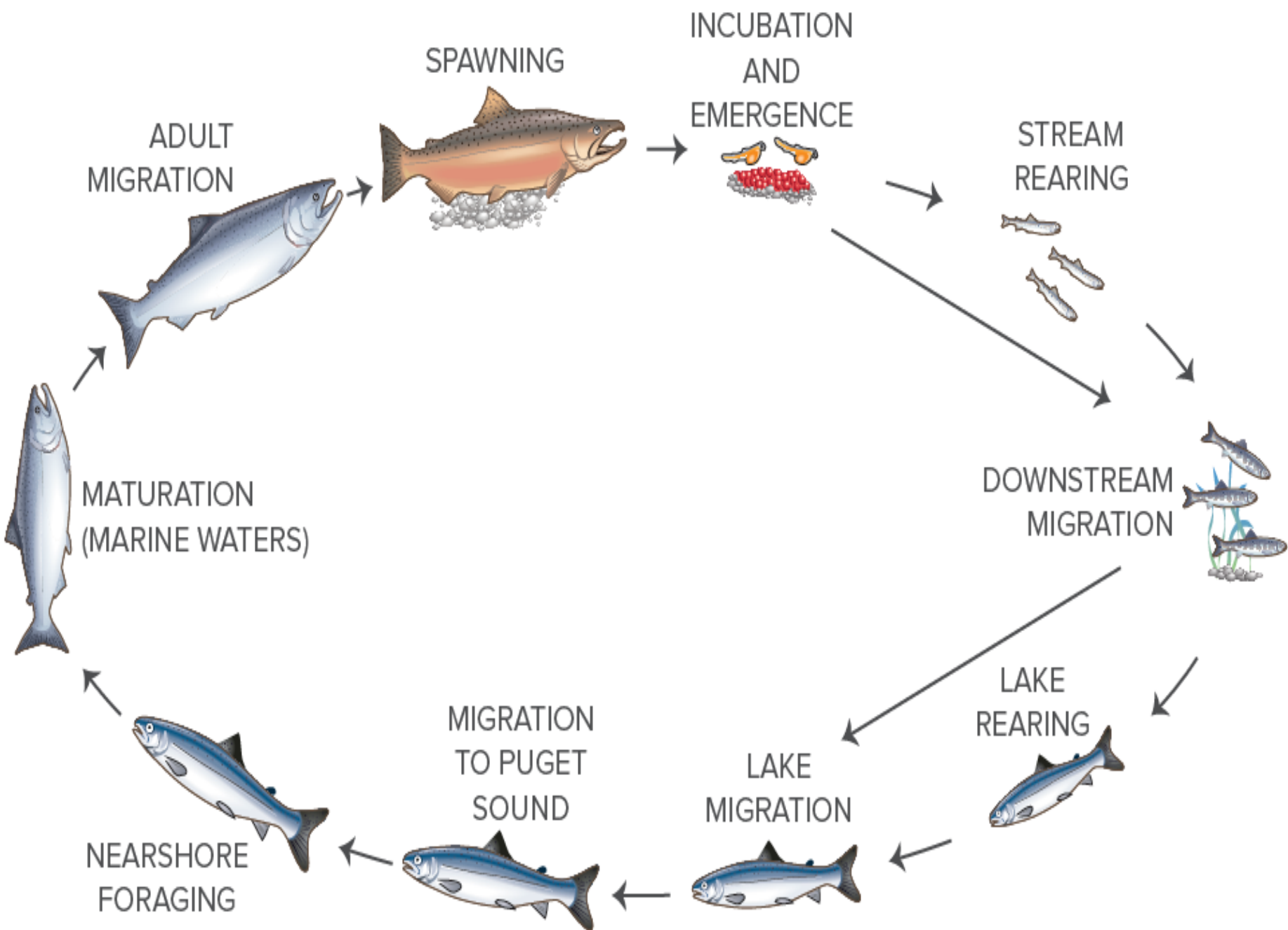
2017

Chinook Populations and Recovery Tiers

**Sammamish
Population**

**Cedar
Population**





Priority Stressors

- Land conversion
- Levees
- Shoreline armoring
- Altered flows
- Increased water temperatures
- Predation
- Fish passage at Ballard Locks



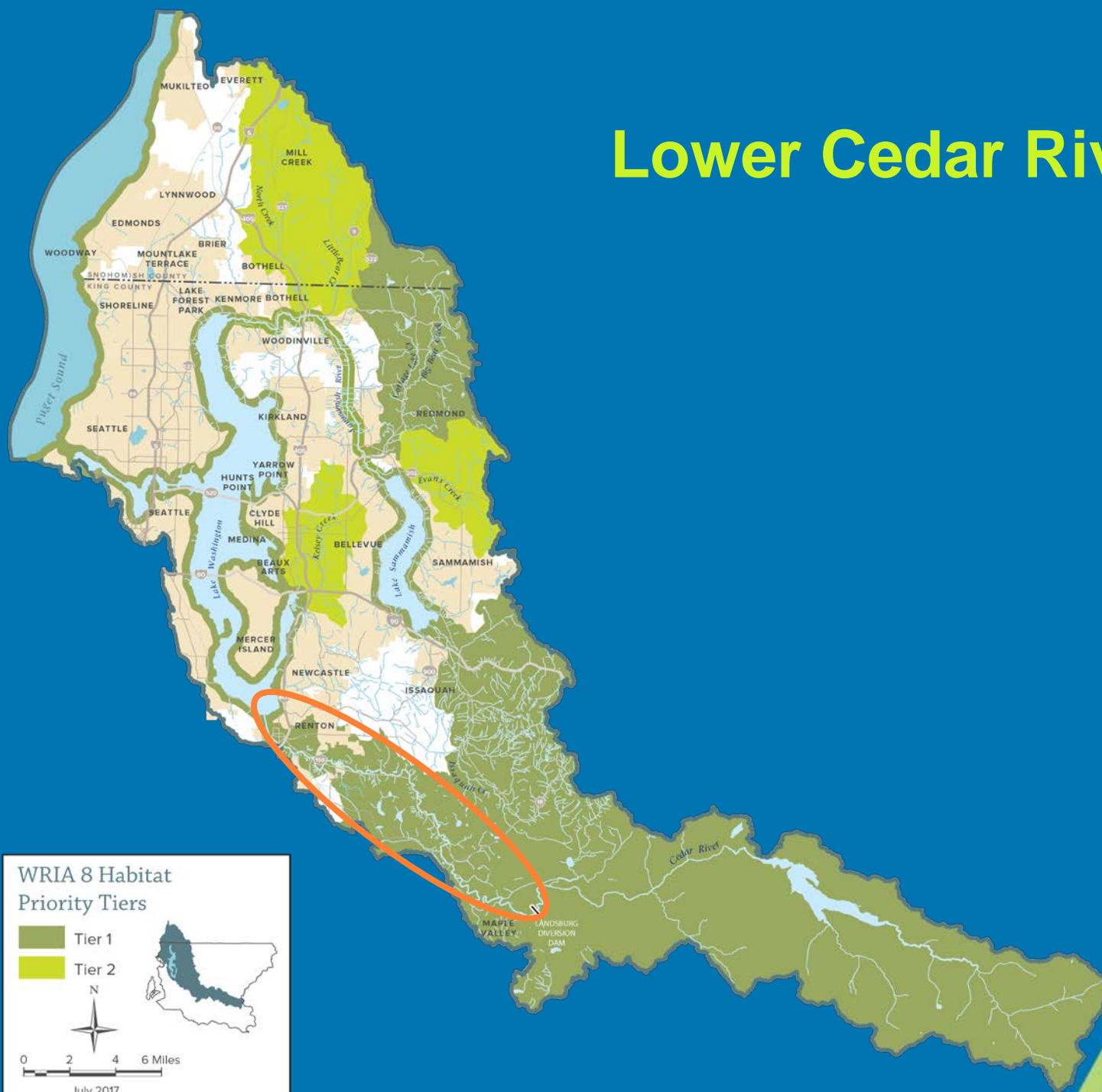
Recovery Strategies & Key Project Types

Protect, restore, enhance...

- *Floodplain connectivity*
- *Channel complexity*
- *Riparian vegetation and forest cover/headwaters areas*
- *Shallow water rearing and refuge habitat*
- *Water quality/cold water sources*
- *Creek mouths/backshore areas/pocket estuaries*
- *Marine shorelines*



Lower Cedar River



WRIA 8 Habitat Priority Tiers

- Tier 1
- Tier 2



0 2 4 6 Miles

July 2017



Rainbow Bend Floodplain Restoration



Rainbow Bend Floodplain Restoration



Rainbow Bend Floodplain Restoration



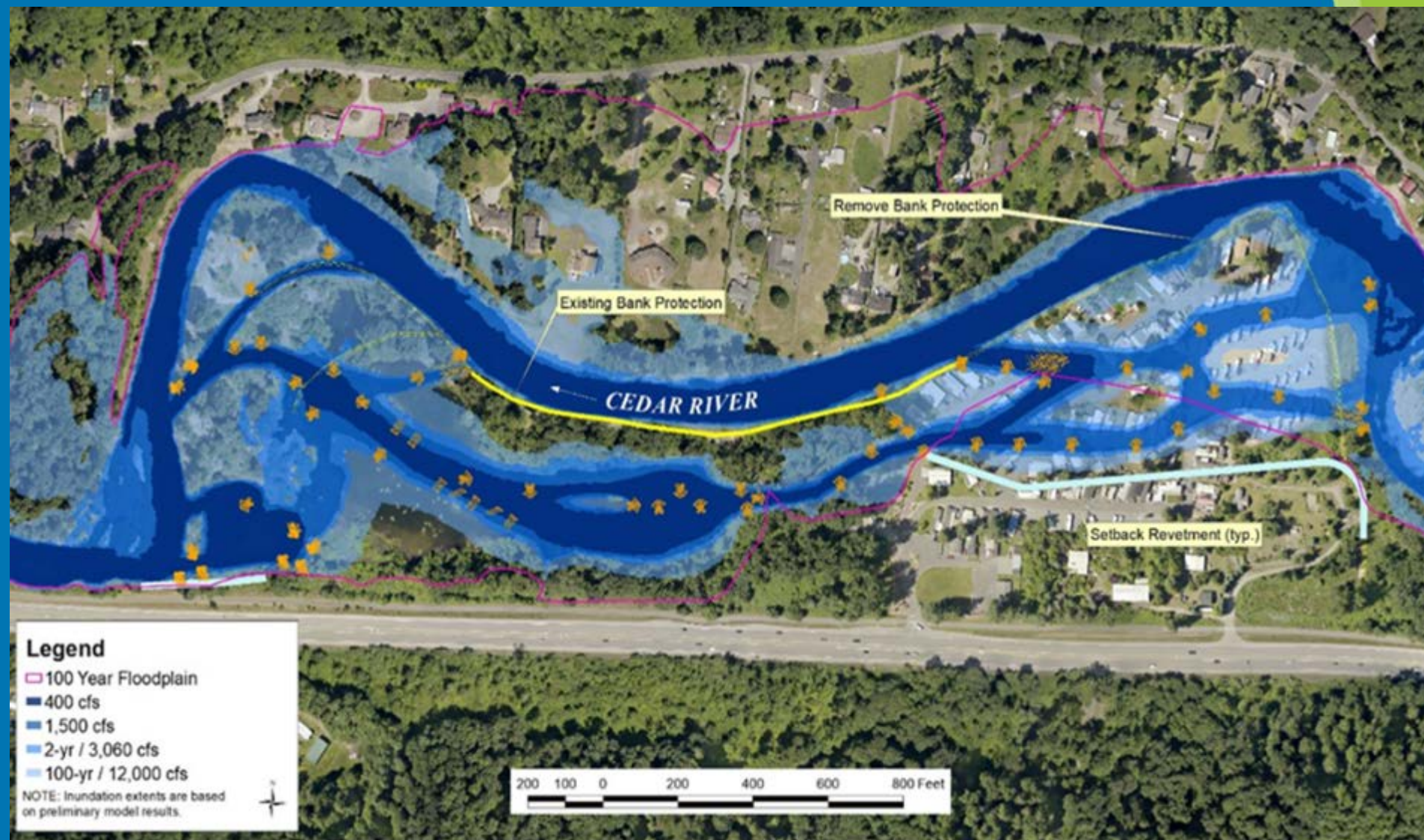
After first flood – April 2014

Photos; King County



Riverbend Floodplain Restoration

Anticipated Start - 2020

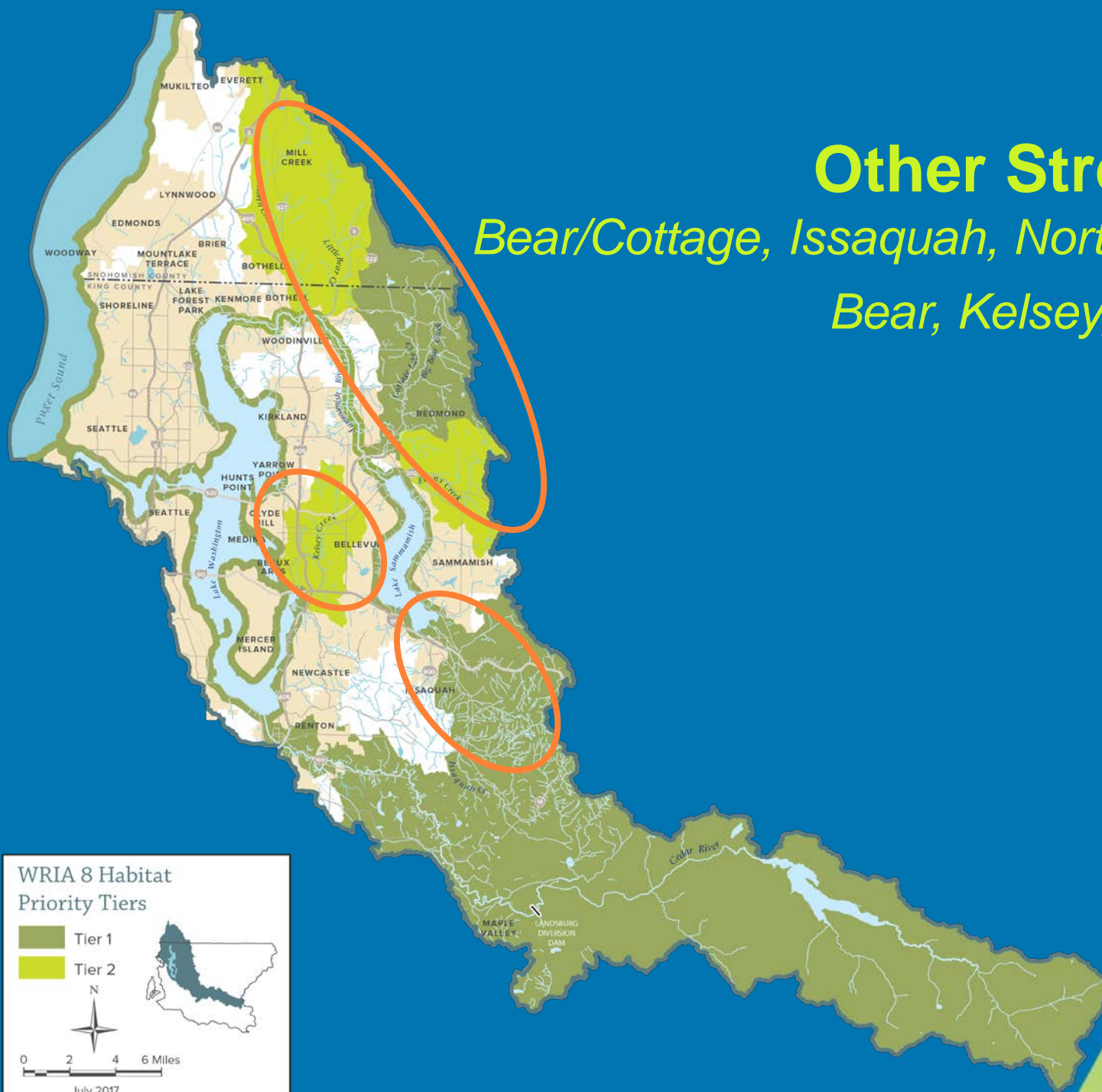


Riparian Restoration



Other Streams

Bear/Cottage, Issaquah, North, Little Bear, Kelsey, Evans



WRIA 8 Habitat Priority Tiers

- Tier 1
- Tier 2



0 2 4 6 Miles

July 2017



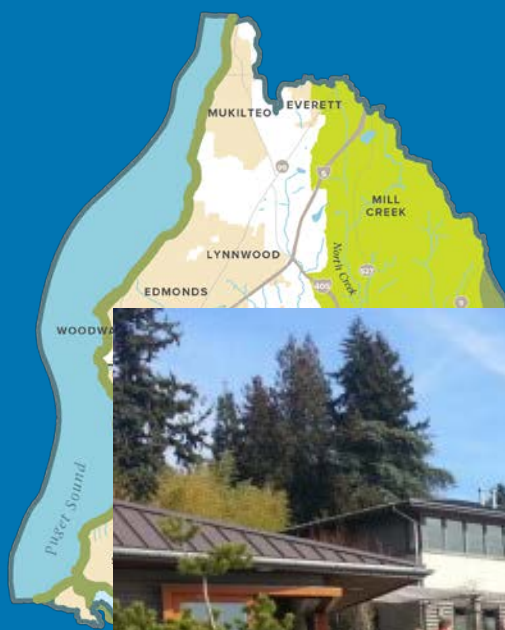
Bear Creek – Doyle Restoration Project



Photos: King County

Migratory Areas

Lake shorelines



WRIA 8
Priority



0 2

July 2017



Bird Island Shoreline Enhancement



Bird Island





Mapes Creek

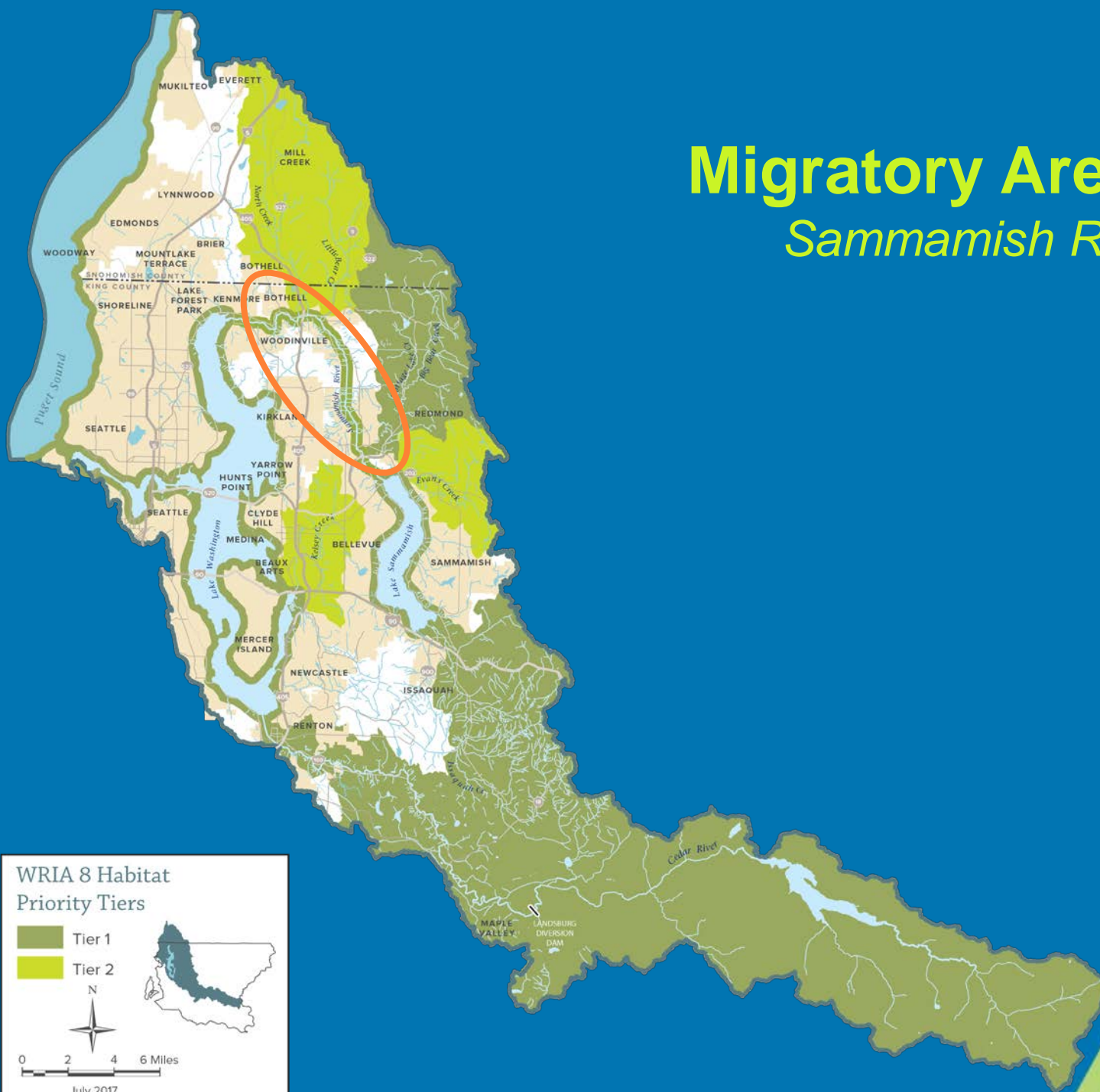


2015



2019

Migratory Areas *Sammamish River*



WRIA 8 Habitat Priority Tiers

- Tier 1
- Tier 2



0 2 4 6 Miles

July 2017



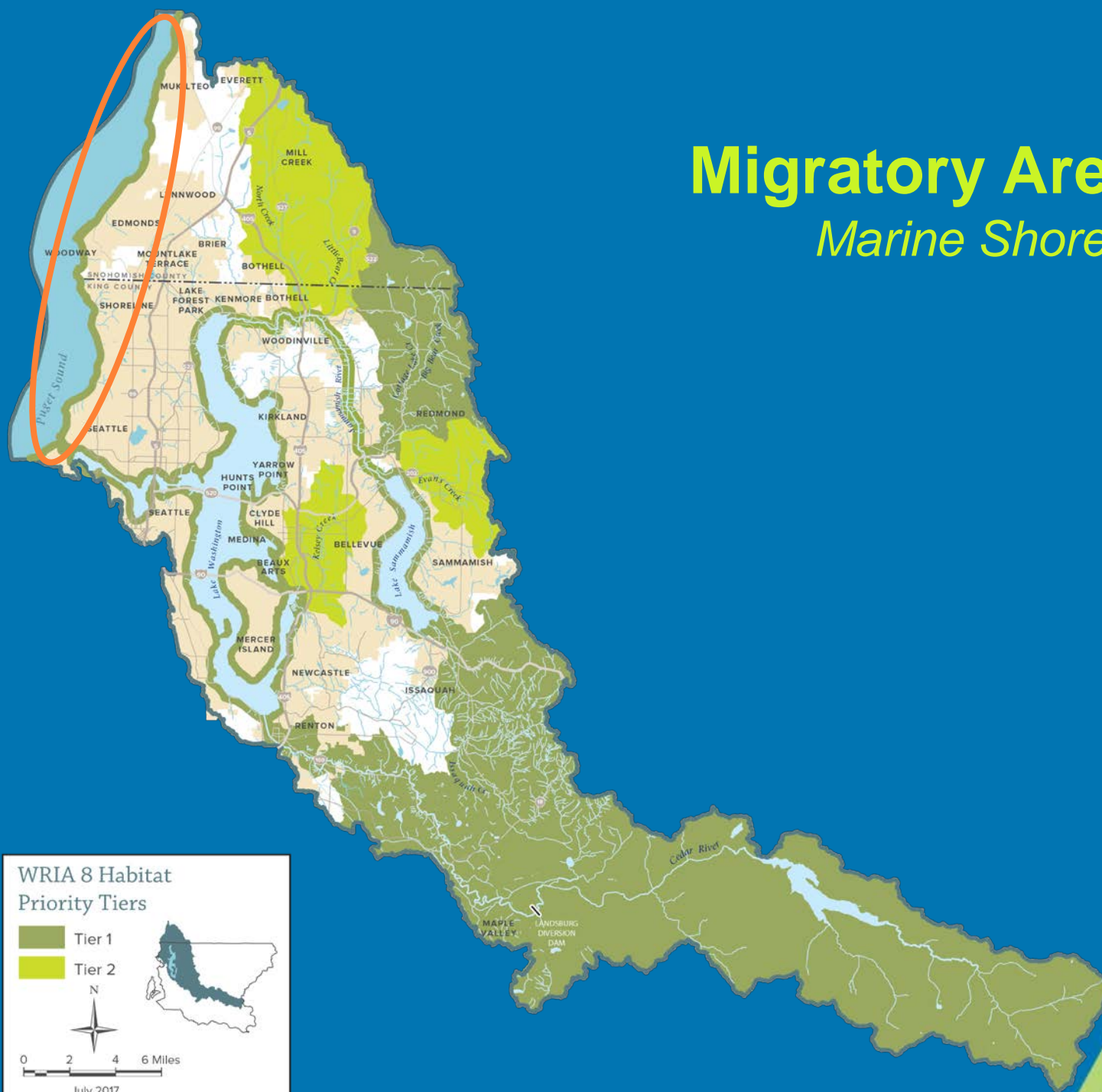
Sammamish River Projects



Photo: Forterra

Migratory Areas

Marine Shoreline



WRIA 8 Habitat Priority Tiers

- Tier 1
- Tier 2



0 2 4 6 Miles

July 2017



Meadowdale Beach Park & Estuary Restoration

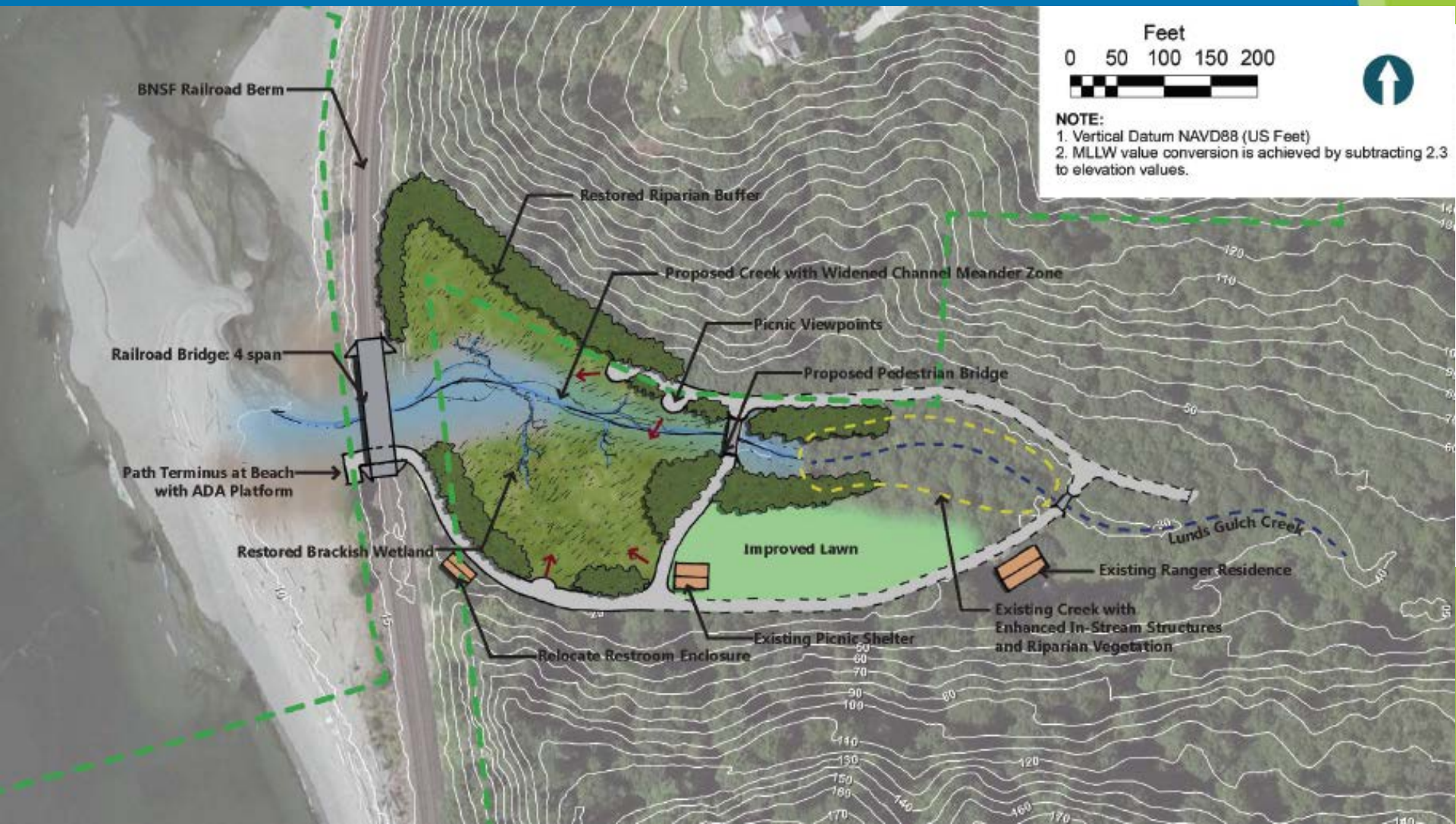


Meadowdale Beach Park & Estuary Restoration



Photos: Snohomish County

Meadowdale Beach Park & Estuary Restoration



Other Habitat Projects...Not WRIA Projects *Taylor Creek*



2006 May, Pre-construction



05/07/2019

© 2019 Pictometry

Issaquah Creek Mitigation



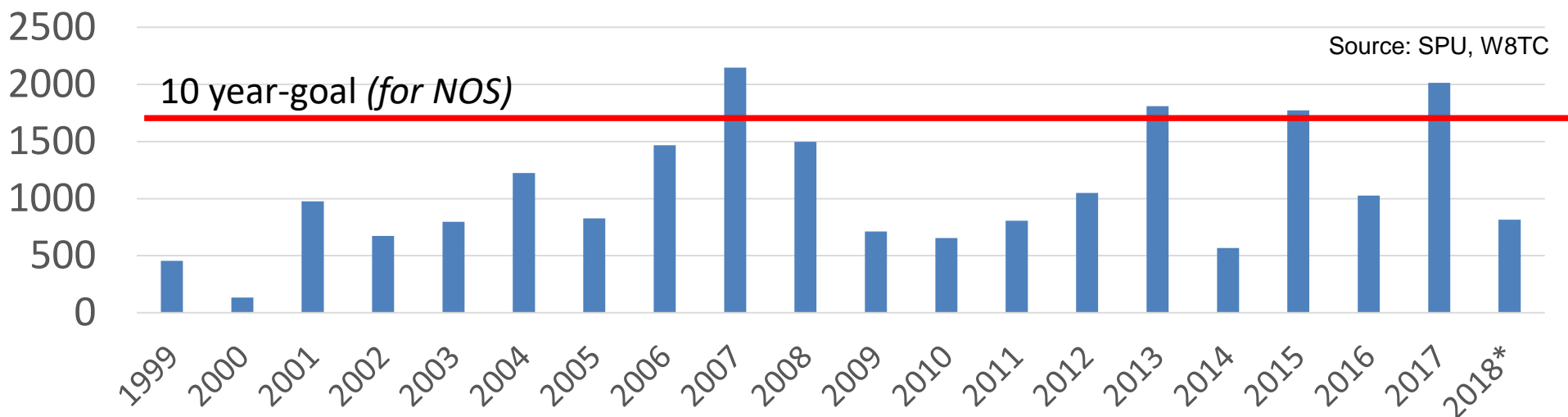
Photo: King County



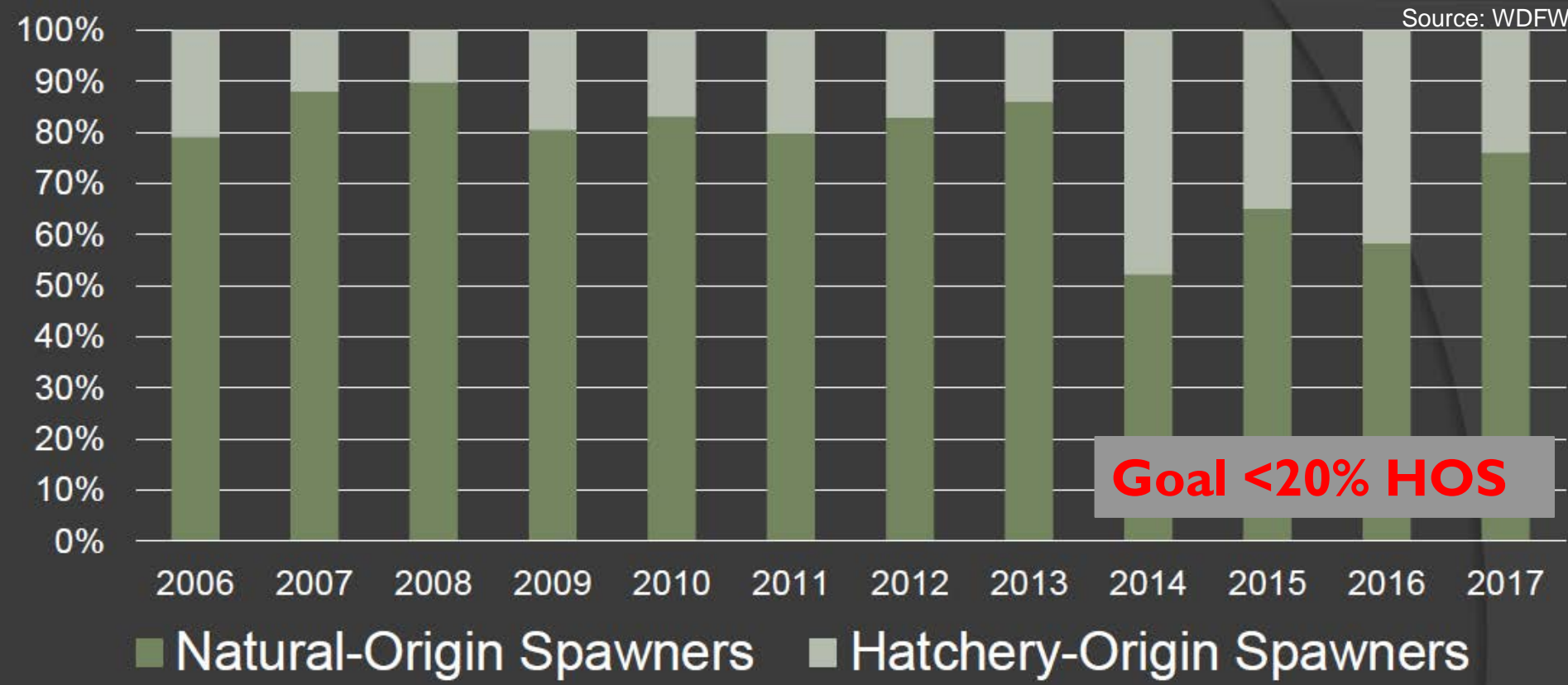


Questions and Discussion

Cedar Spawning Escapement

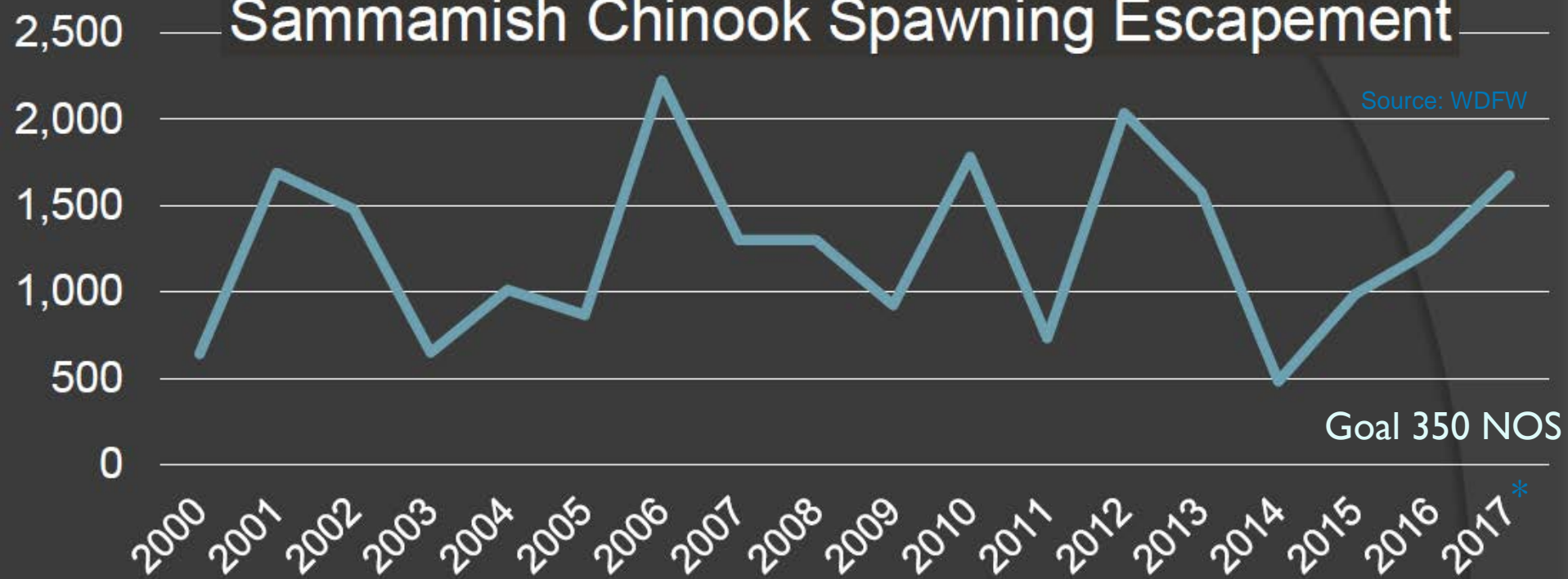


*84% NOS



Sammamish Chinook Spawning Escapement

Source: WDFW



Goal 350 NOS



*14% NOS

