Status and Management of Coastal Cutthroat Trout in Oregon

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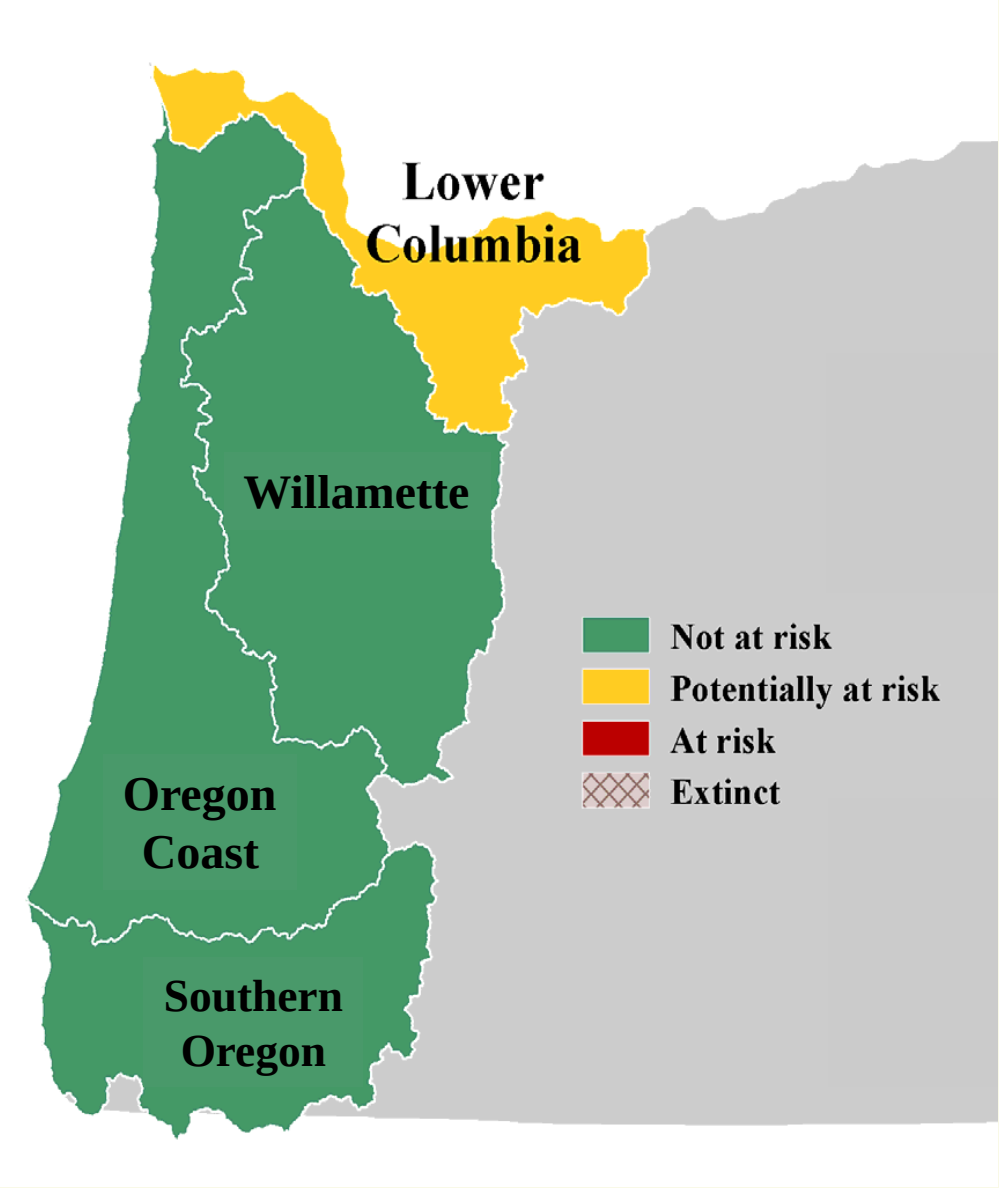
Oregon Department of Fish and Wildlife

Oregon Native Fish Status Report - 2005



- CCT populations grouped into 4 Species Management Units (SMUs)
- Conservation risk assessed based on interim criteria:
  - Existing populations
  - Habitat Use Distribution
  - Abundance
  - Productivity
  - Reproductive Independence
  - Hybridization
- All life history strategies considered part of a single population

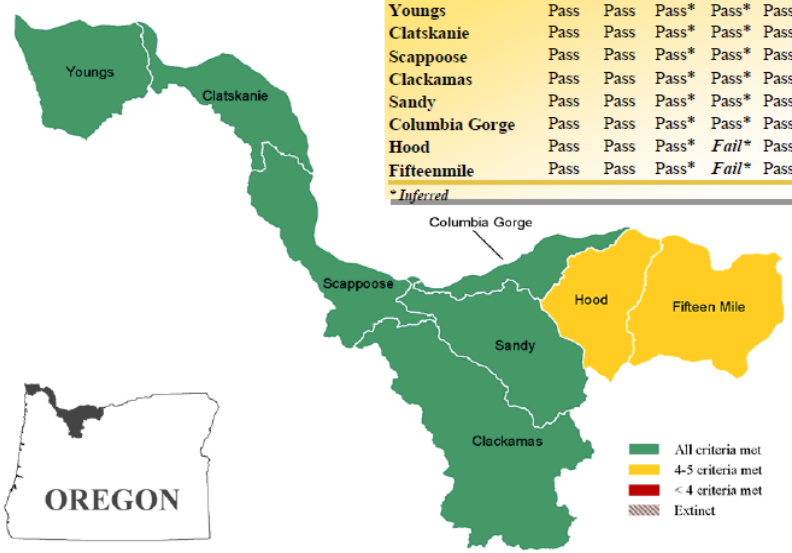
Lower Columbia Coastal Cutthroat SMU

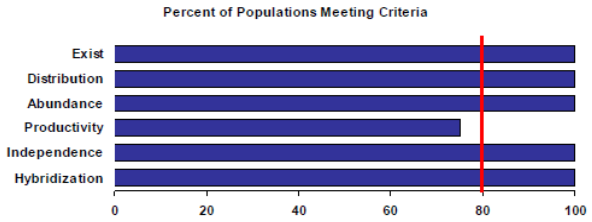
ESA Designation:	State Status:	Interim Assessment:
None	*Critical*	*Potentially at Risk*

The Lower Columbia River basin supports the resident, fluvial, adfluvial and anadromous life histories of coastal cutthroat trout. The Lower Columbia River Coastal Cutthroat SMU is comprised of eight populations. All populations passed all six of the interim criteria except the Hood and Fifteenmile populations, which failed the productivity criterion due to the extremely depressed anadromous life-history. Since quantitative data are limited, the assessment was based on available data, as well as anecdotal evidence and professional opinion. This SMU was assessed as 'potentially at risk' due to the failure of the productivity criterion. Limited data sets and inferences from other information for populations in this SMU provide a qualified level of confidence in the assessment of the interim criteria.

Population	Exist	Dist.	Abund.	Prod.	Ind.	Hybrid
Youngs	Pass	Pass	Pass*	Pass*	Pass	Pass
Clatskanie	Pass	Pass	Pass*	Pass*	Pass	Pass
Scappoose	Pass	Pass	Pass*	Pass*	Pass	Pass
Clackamas	Pass	Pass	Pass*	Pass*	Pass	Pass
Sandy	Pass	Pass	Pass*	Pass*	Pass	Pass
Columbia Gorge	Pass	Pass	Pass*	Pass*	Pass	Pass
Hood	Pass	Pass	Pass*	*Fail**	Pass	Pass
Fifteenmile	Pass	Pass	Pass*	*Fail**	Pass	Pass

**Inferred*





- Quantitative data was limited, so assessment was based on available data and professional opinion
- Important consideration for Lower Columbia SMU was potential loss of anadromous life history in some populations

Coastal Multi-Species Conservation and Management Plan - 2014

- Includes Oregon Coast Coastal Cutthroat Trout SMU
- Spatial structure and diversity were used to evaluate CCT status
- All 19 CCT "populations" deemed viable, with data gaps acknowledged
- Southern Oregon CCT SMU will be included in Rogue-South Coast Multi-Species Plan, for which development has recently begun

		Chinook [a]	Spring Chinook	Chum	Winter Steelhead	Summer Steelhead	Cutthroat
SMU Viability Results	Viable Populations	17	1	3	19	2	19
	Non-Viable Populations	1	1	1	0	0	0
	Populations with Unknown Viability	0	0	9	0	0	0
	Viable Strata	4/4	1/1	*N/A*	4/4	2/2	4/4
Indicators of Confidence in Results	Populations with Declining Trend	7	1	4 [b]	2	0	*N/A*
	Populations with Incomplete Data	4	0	13	17	0	19
Current Overall SMU Status		Strong – Guarded	Sensitive - Vulnerable	Sensitive – Critical	Strong – Guarded	Sensitive - Vulnerable	Strong – Guarded

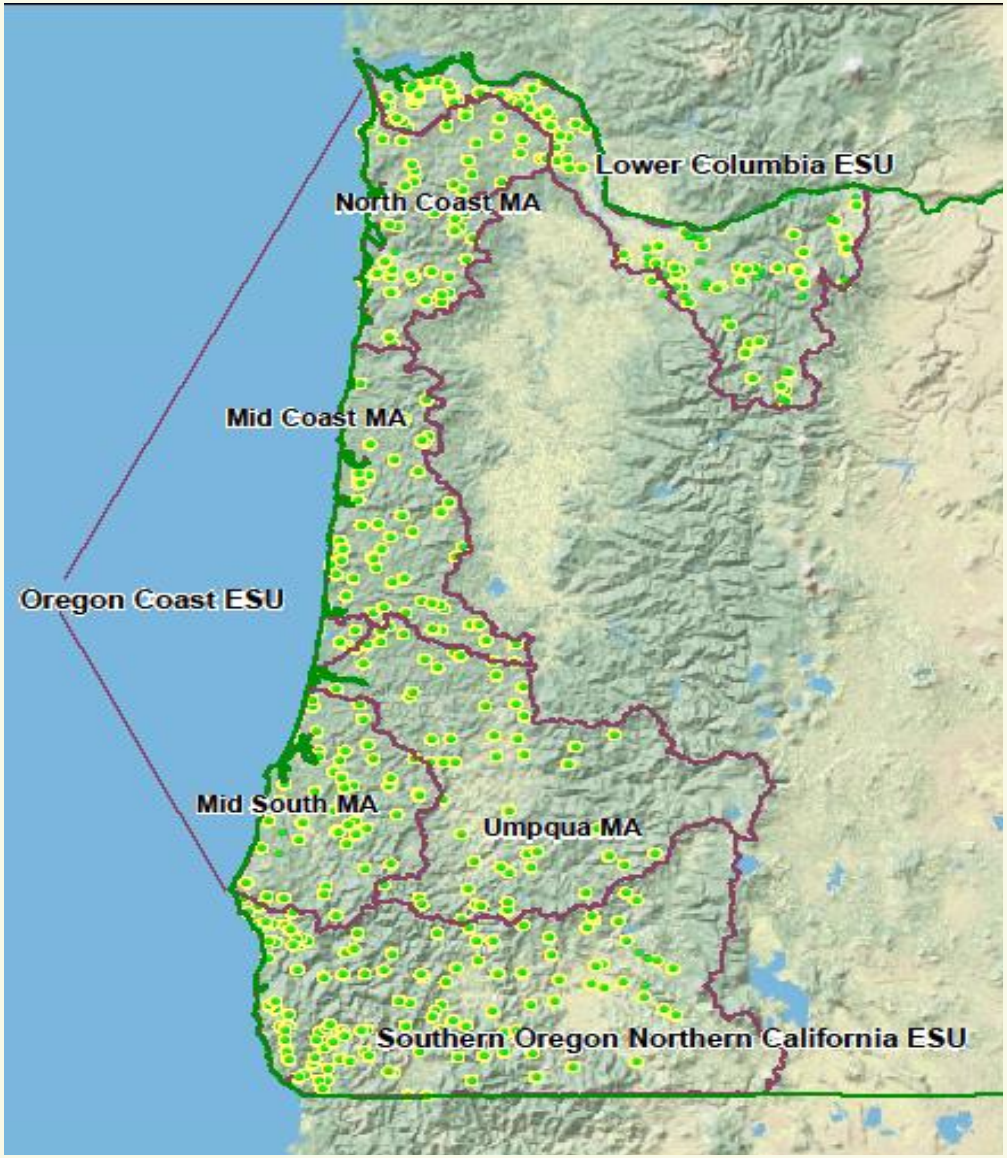
Status and Trend Data Sources

- Dam counts
- Resting hole counts
- Angler reports
- Forest Practices Act stream checks
- Research projects by ODFW and others
- Western Oregon Rearing Project

  Juvenile Snorkel Surveys
- Life Cycle Monitoring Project

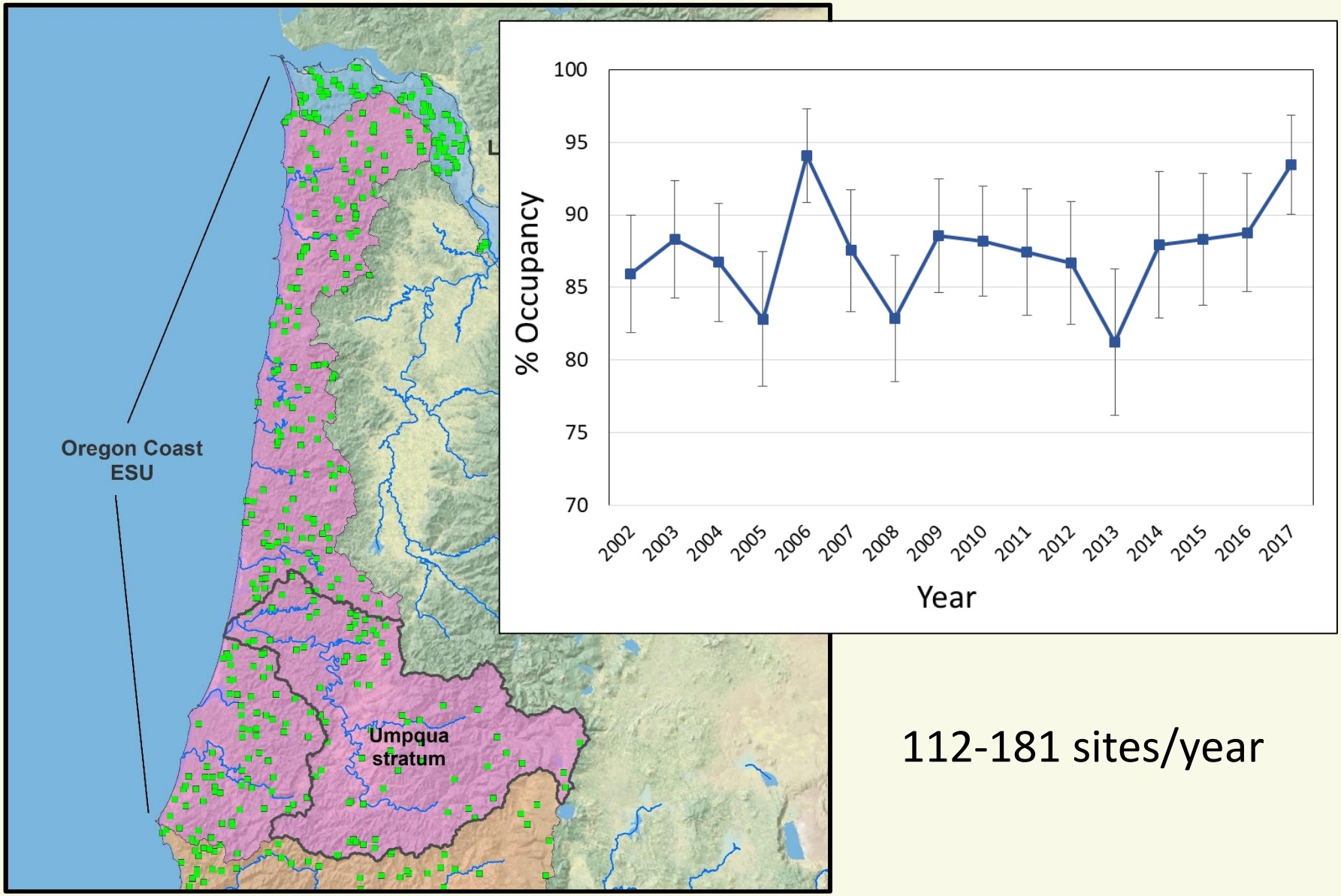
  Smolt and Adult Trapping

Western Oregon Rearing Project



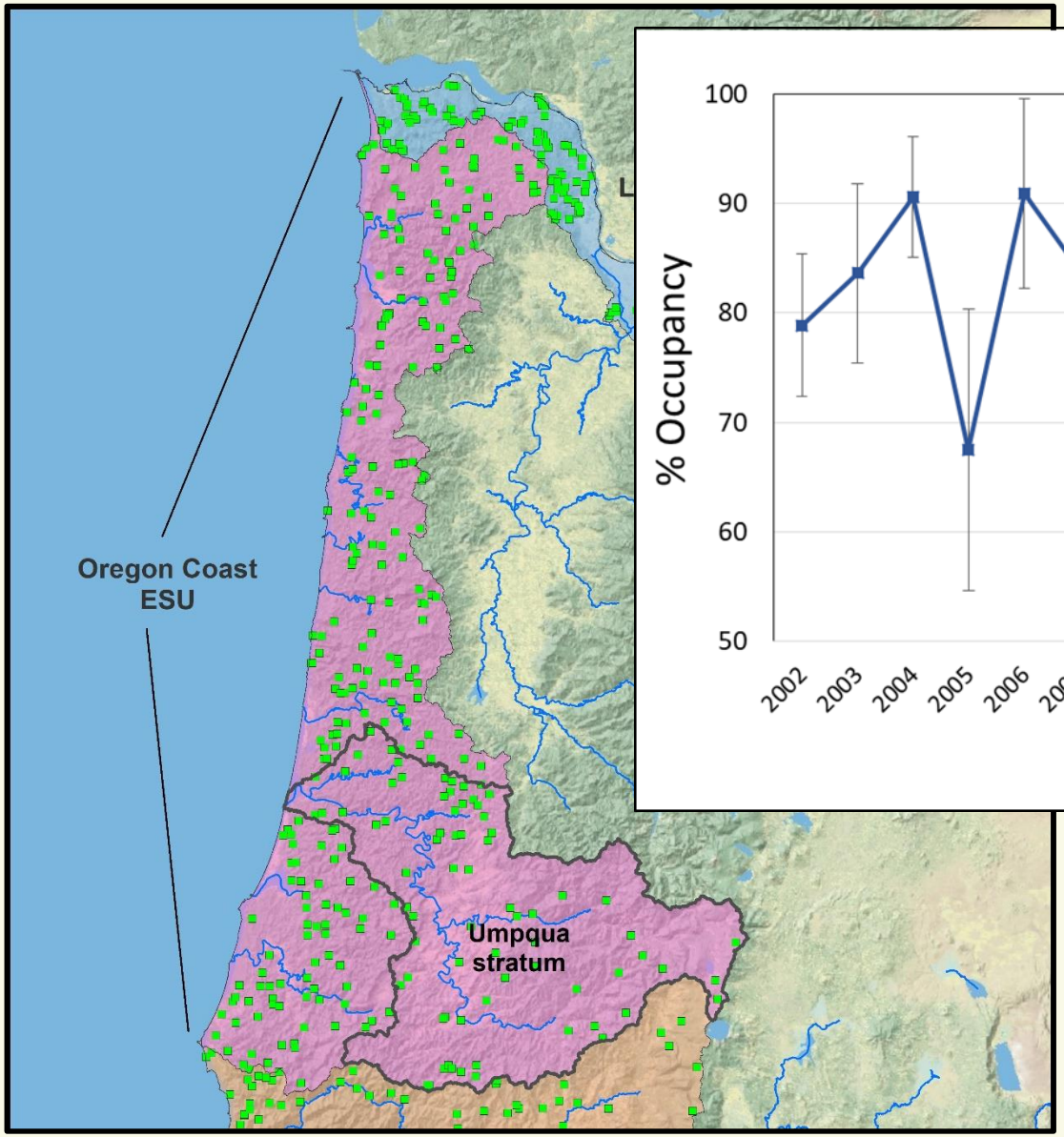
- Spatially balanced random sampling design
- Rotating panel of annual, 3-year, 9-year and once-only sites
- Sites organized by Coho ESU, which correspond to CCT SMUs
- 1st-3rd order streams, although surveys were conducted in 1st-6th order streams in some years
- All pools within 1 km reach are snorkeled at base flows

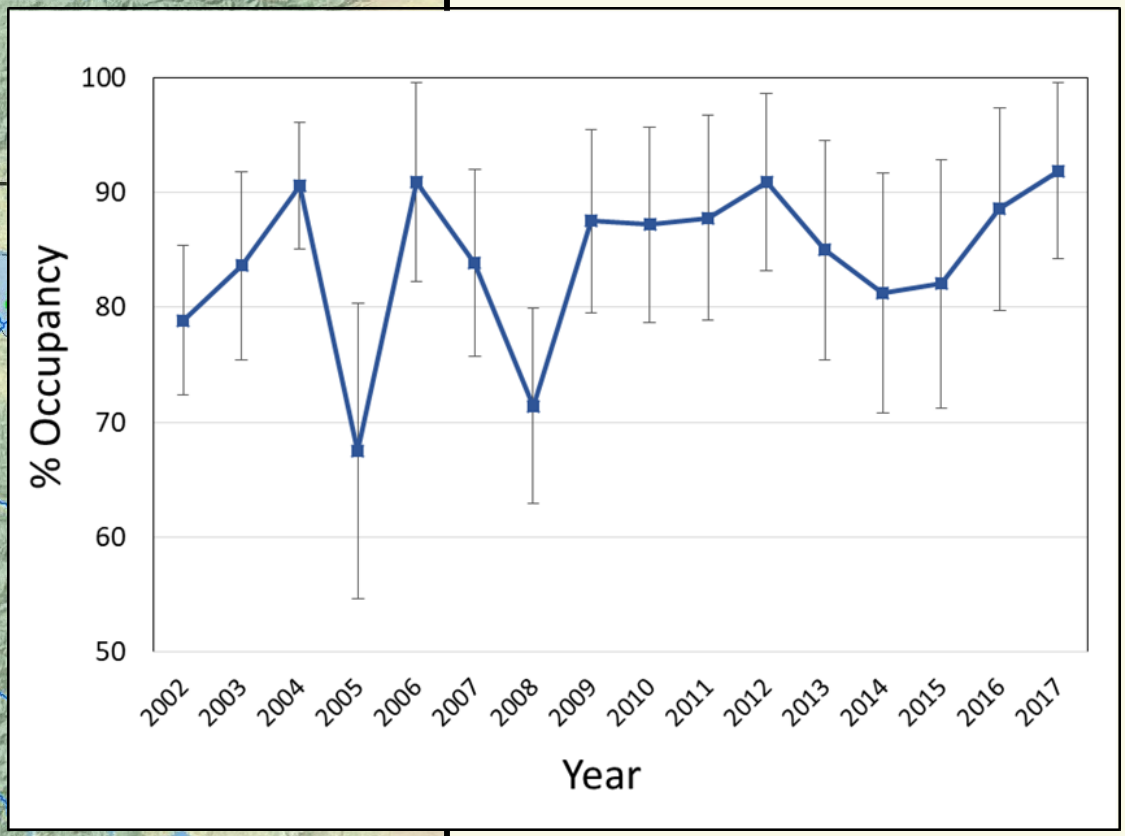
Oregon Coast CCT SMU



112-181 sites/year

Umpqua Basin

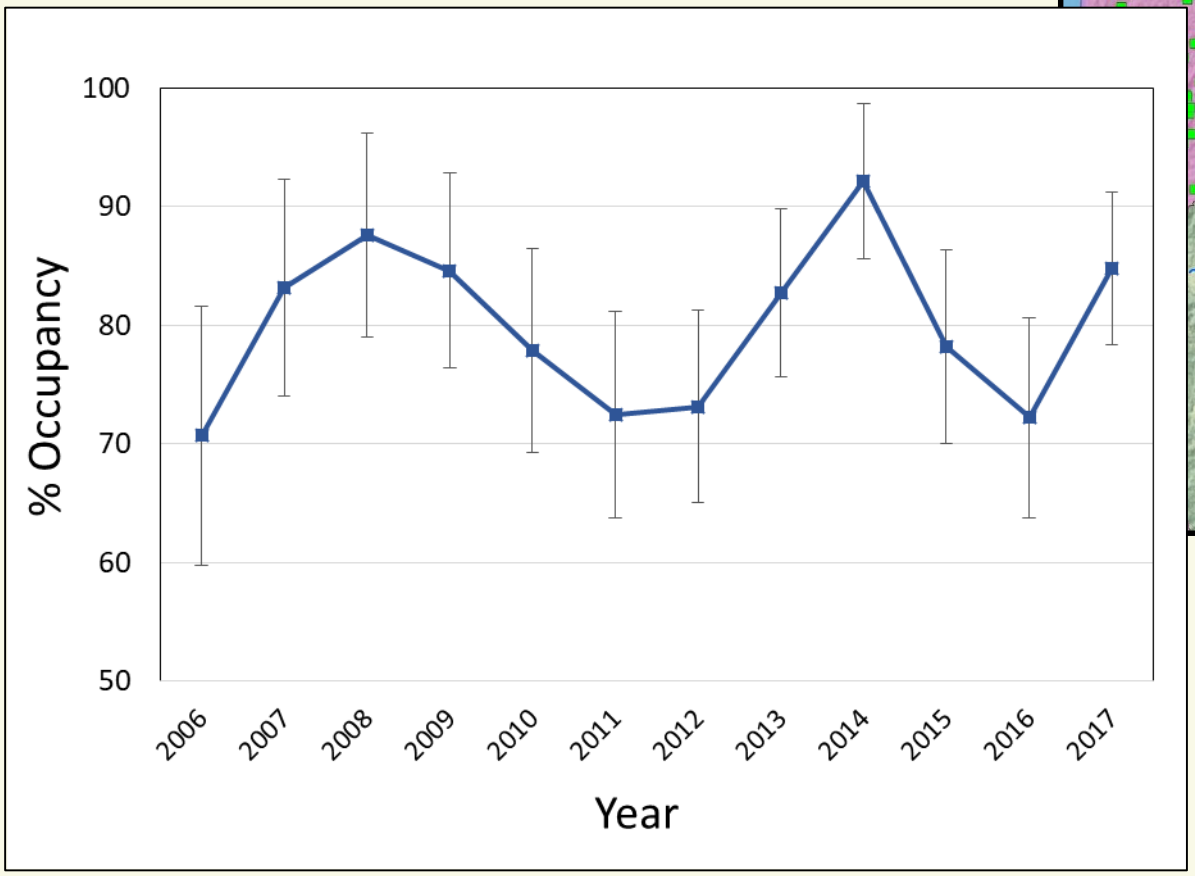


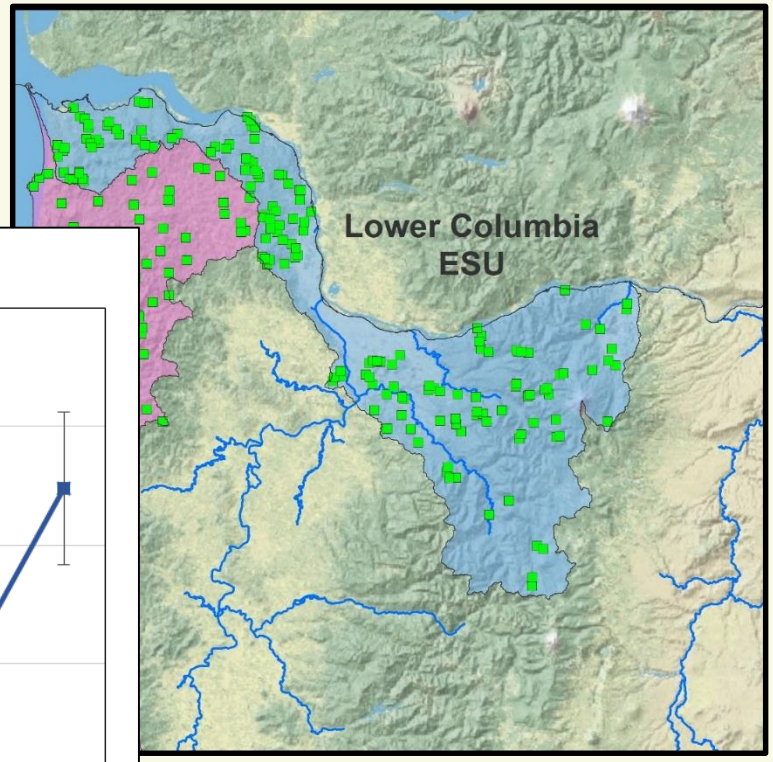


28-44 sites/year

Lower Columbia CCT SMU

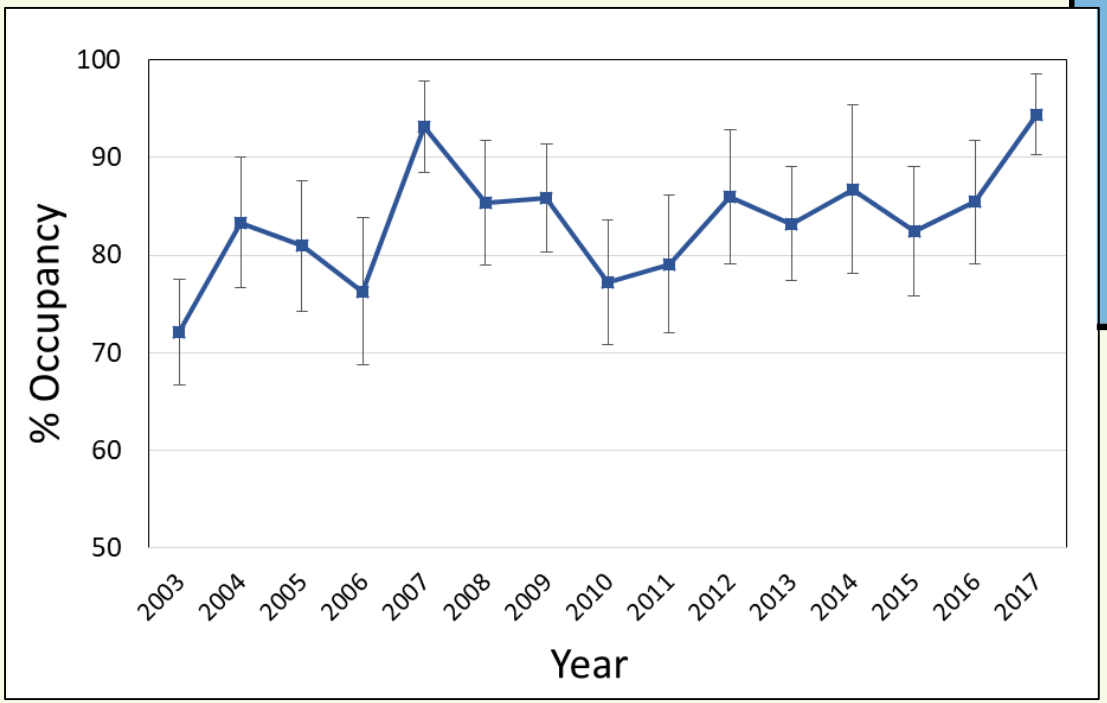
46-81 sites/year

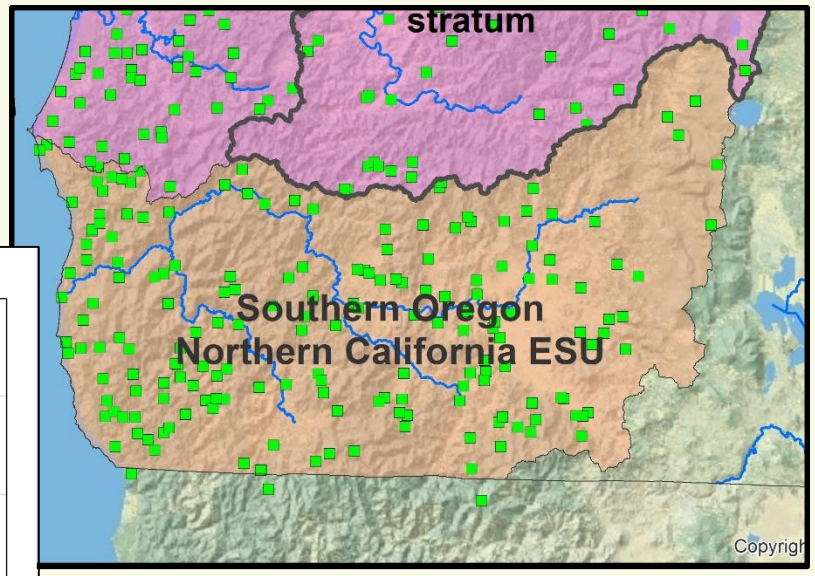


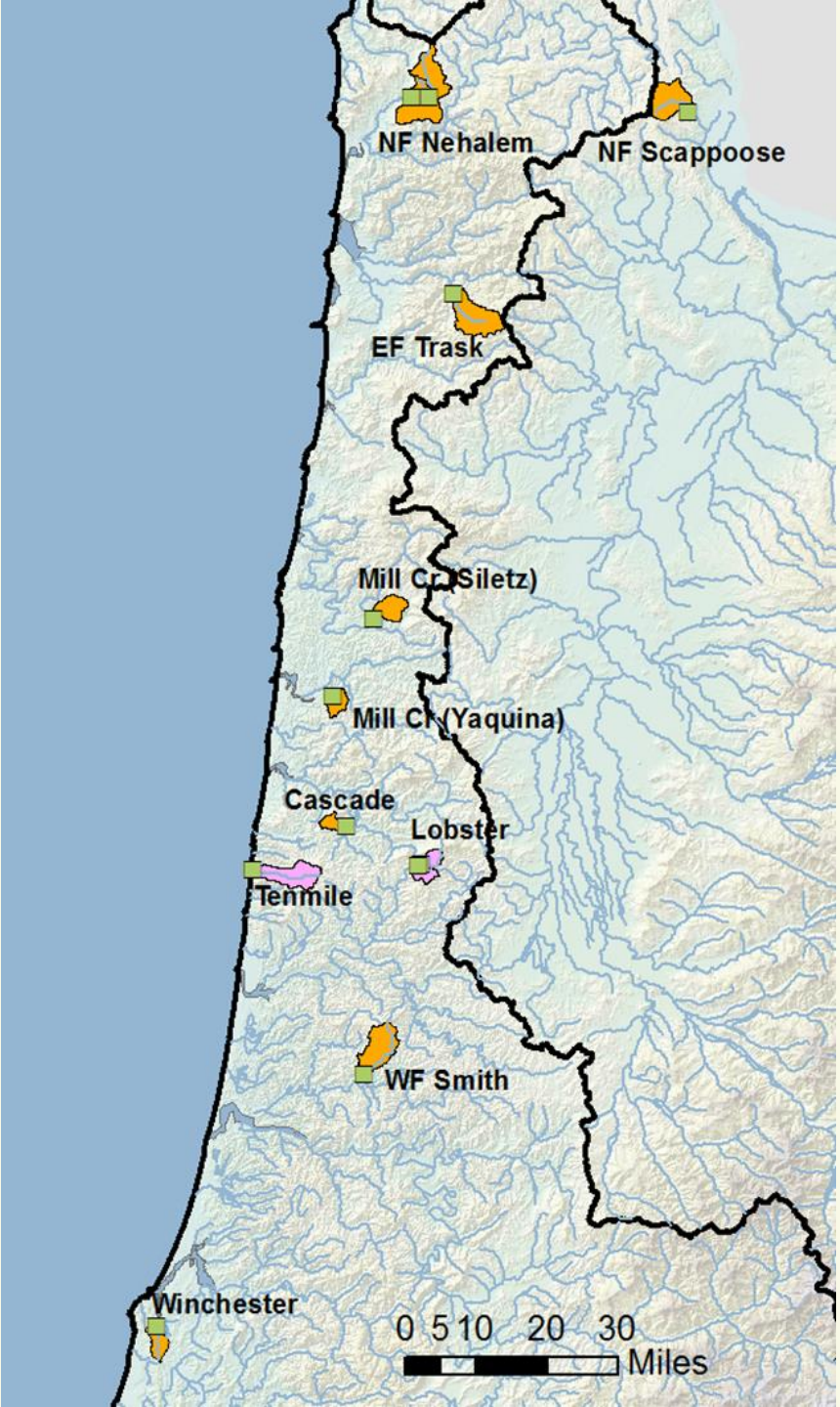


Southern Oregon CCT SMU

58-104 sites/year



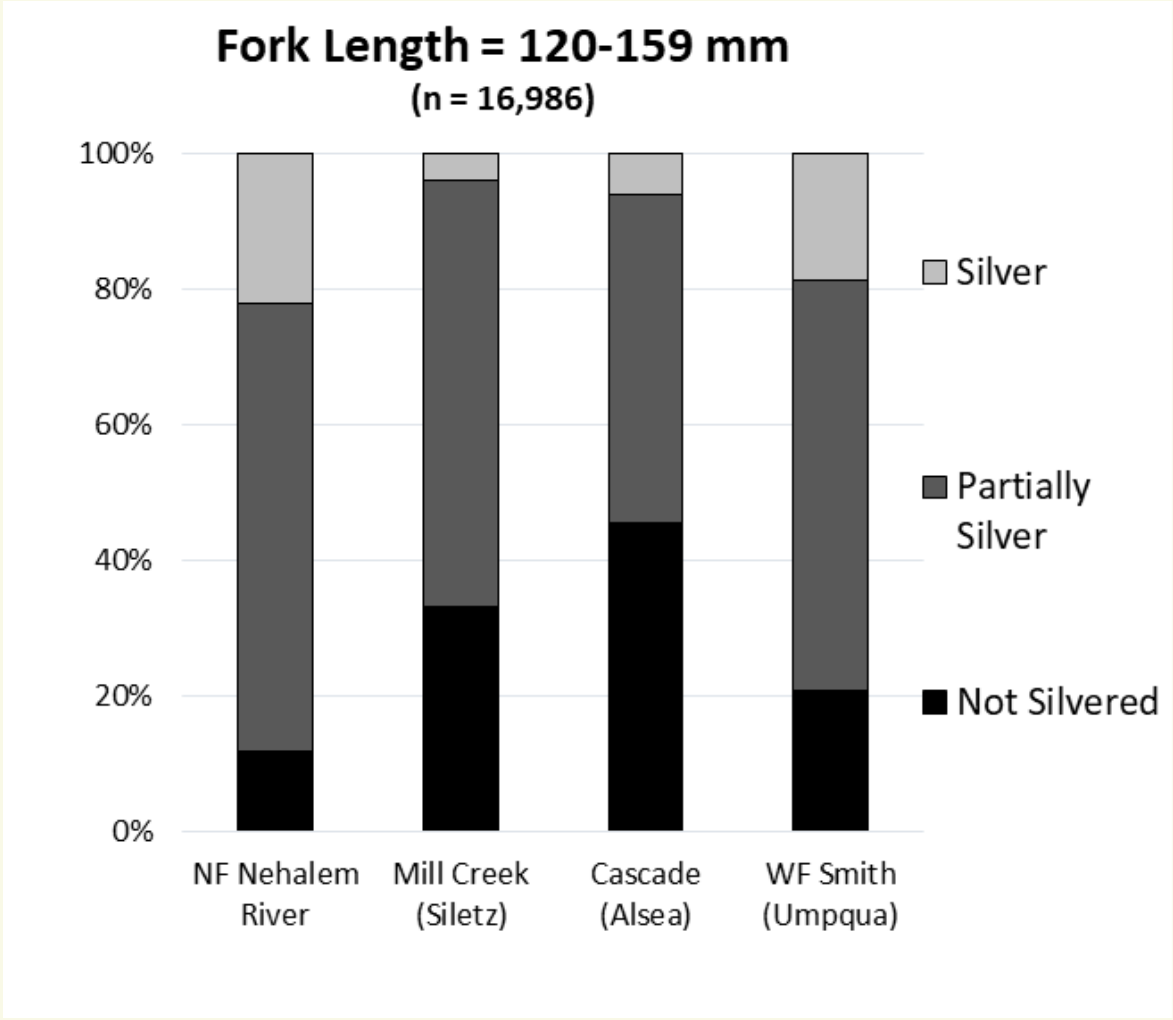




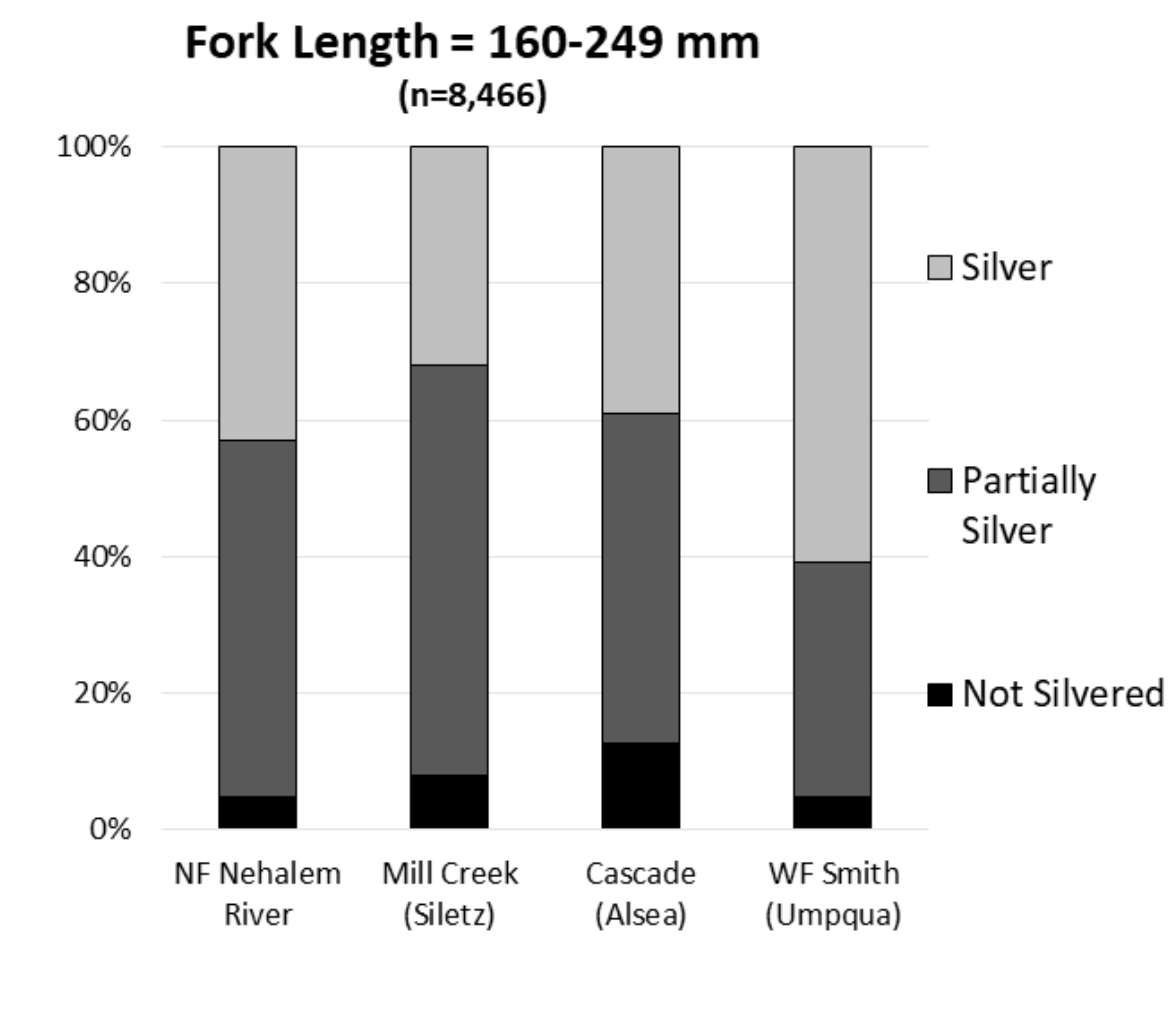
Life Cycle Monitoring Project

- Intensive monitoring sites with smolt and adult traps
- Continuous monitoring since 1998 at 6 coastal sites and 1 site in Lower Columbia
- Smolt trapping occurs from March-June and out-migrant estimates are made for all salmonid species
- Design of adult traps does not generally allow for complete count of adult cutthroat trout

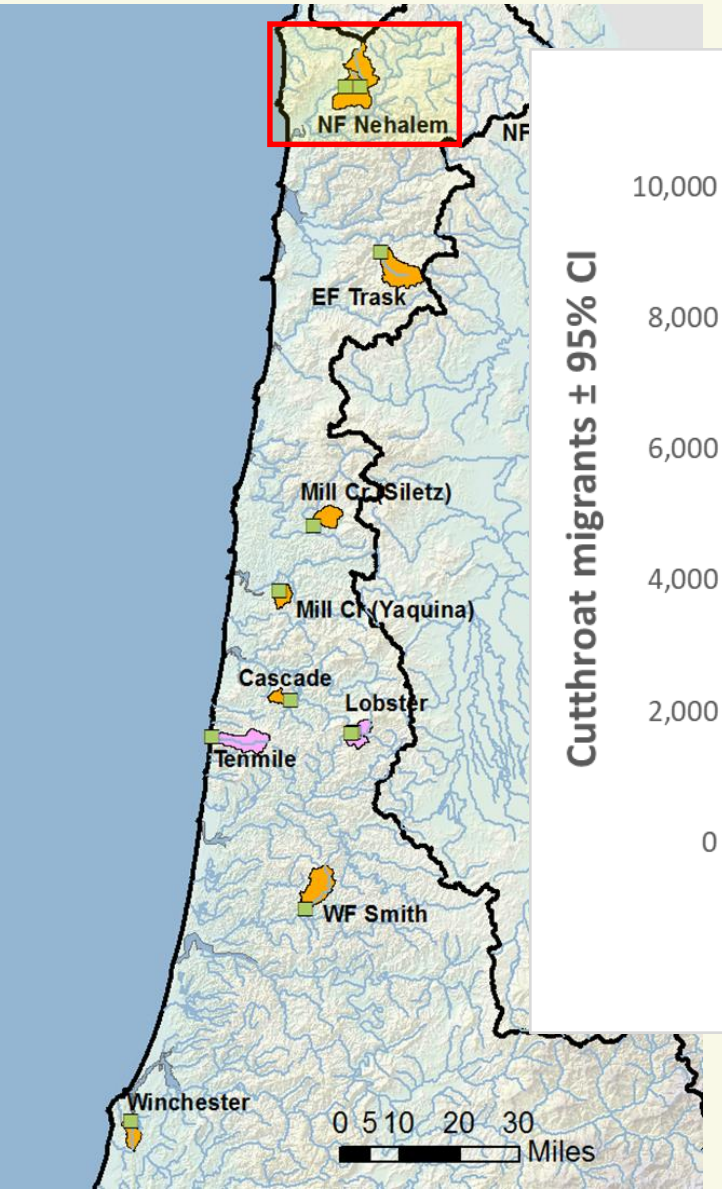
Cutthroat Trout Out-Migrants

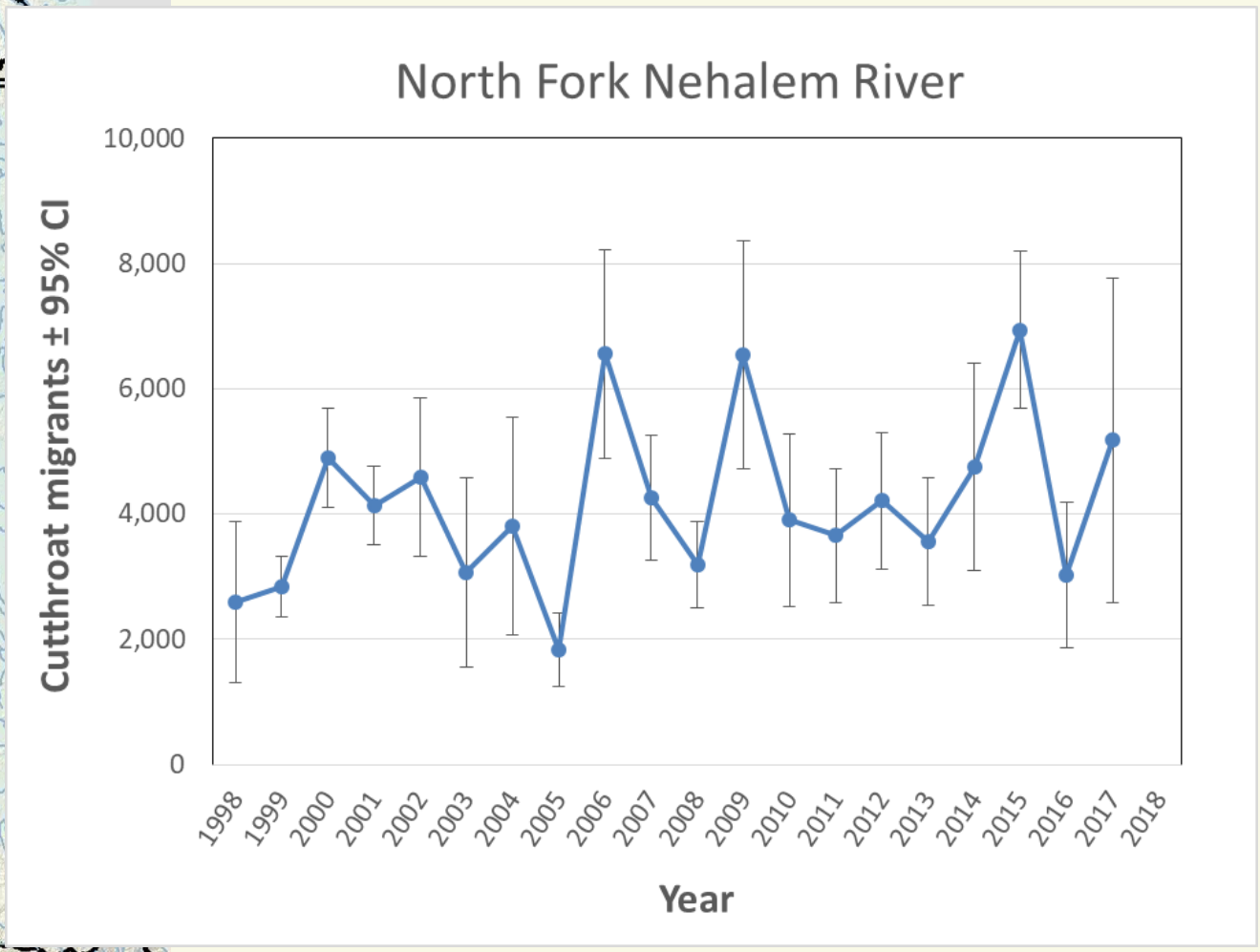


Cutthroat Trout Out-Migrants

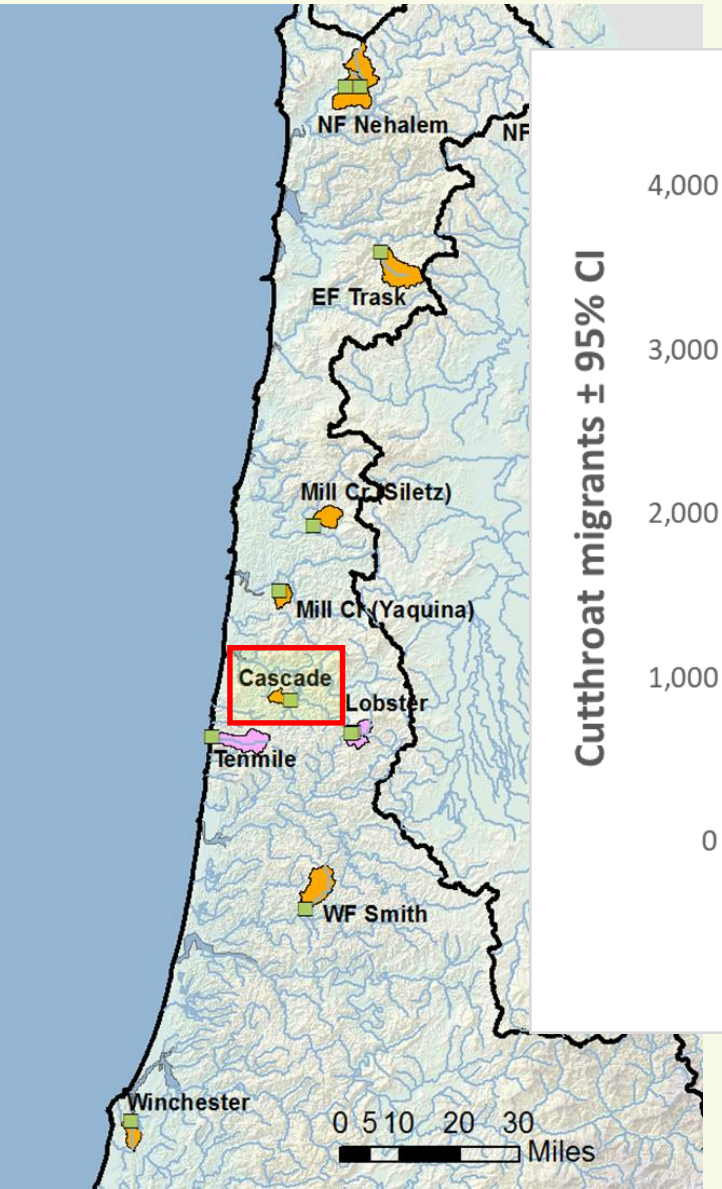


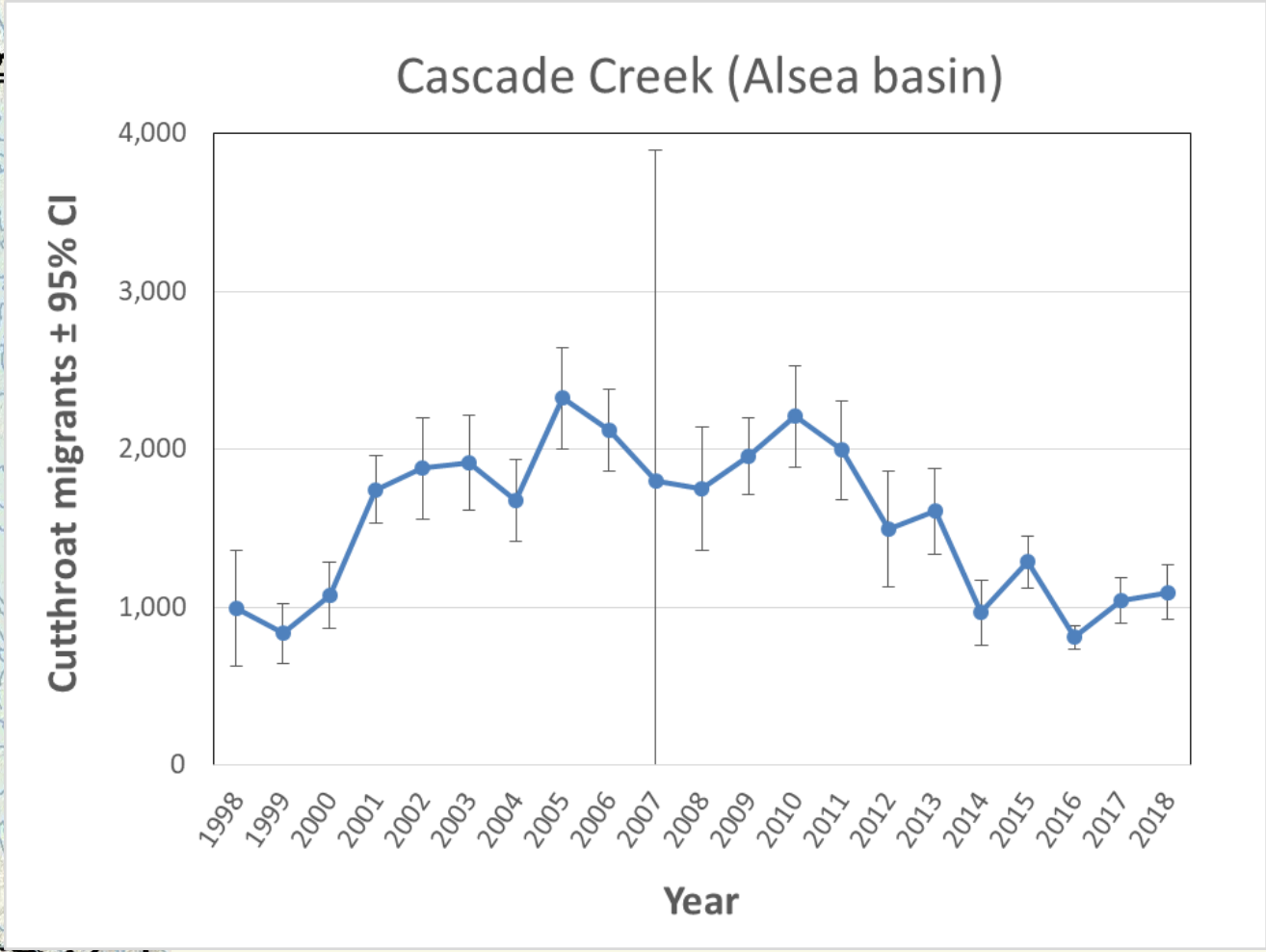
Cutthroat Out-Migrants (120-249 mm FL)

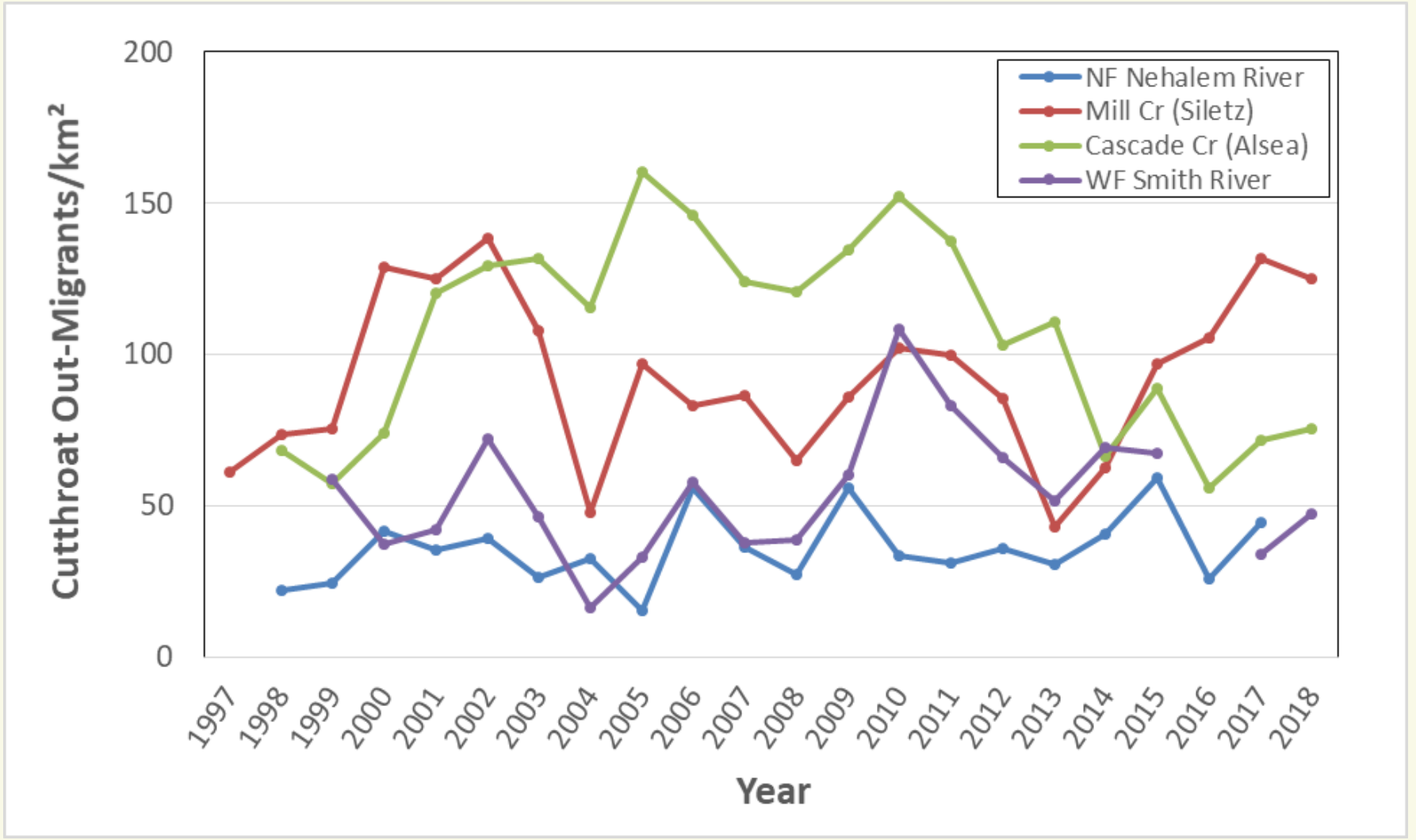




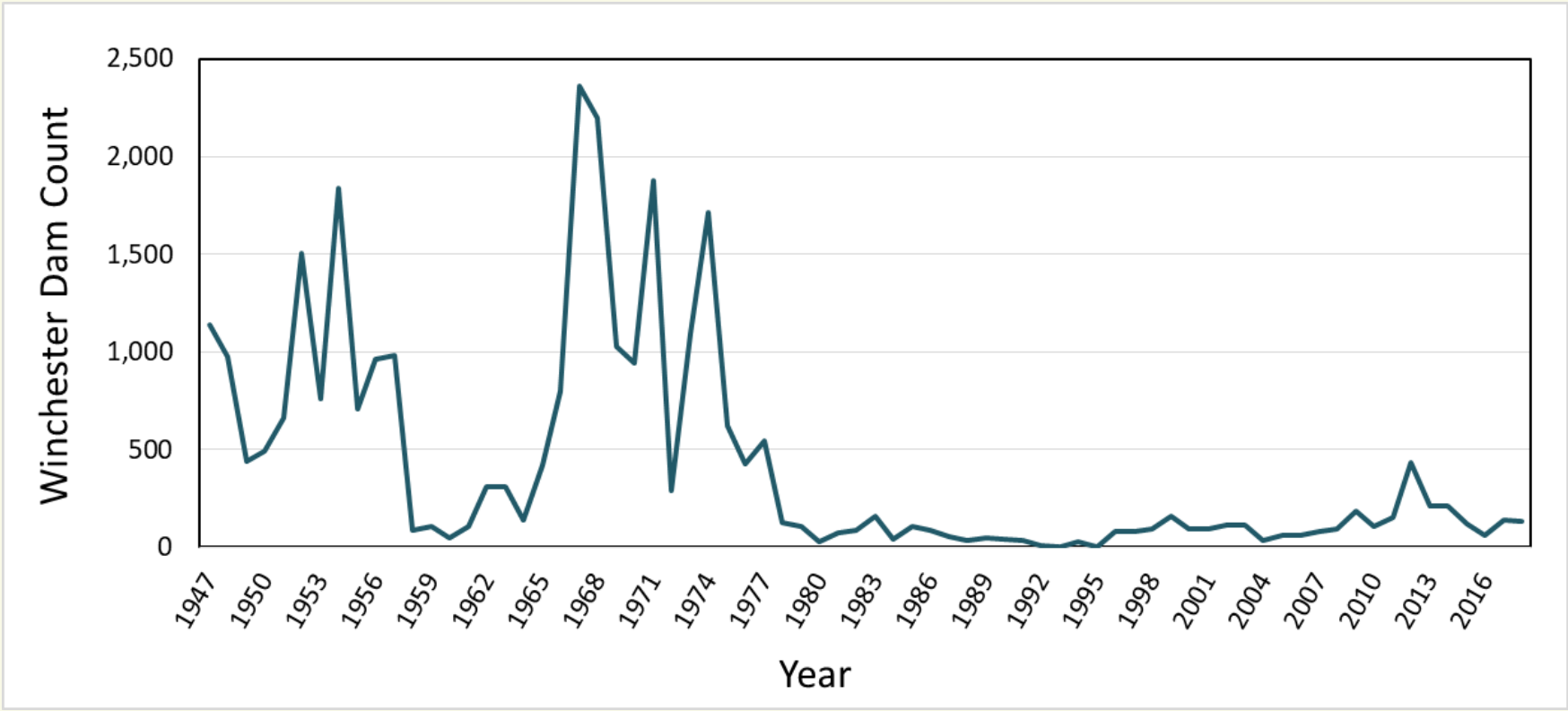
Cutthroat Out-Migrants (120-249 mm FL)



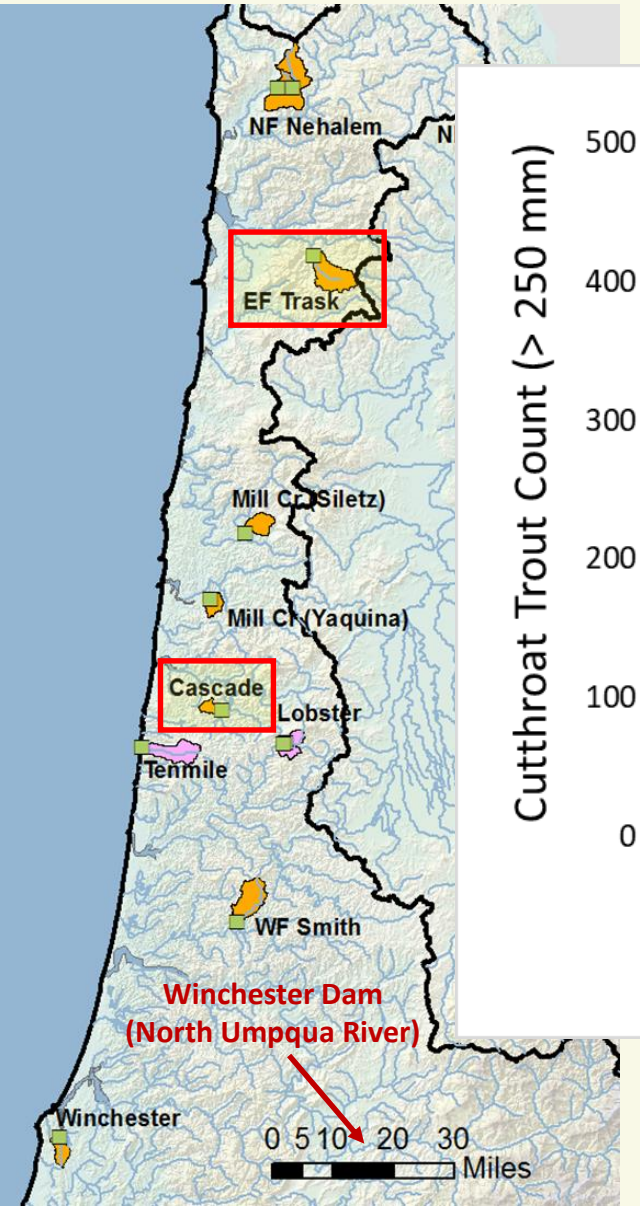


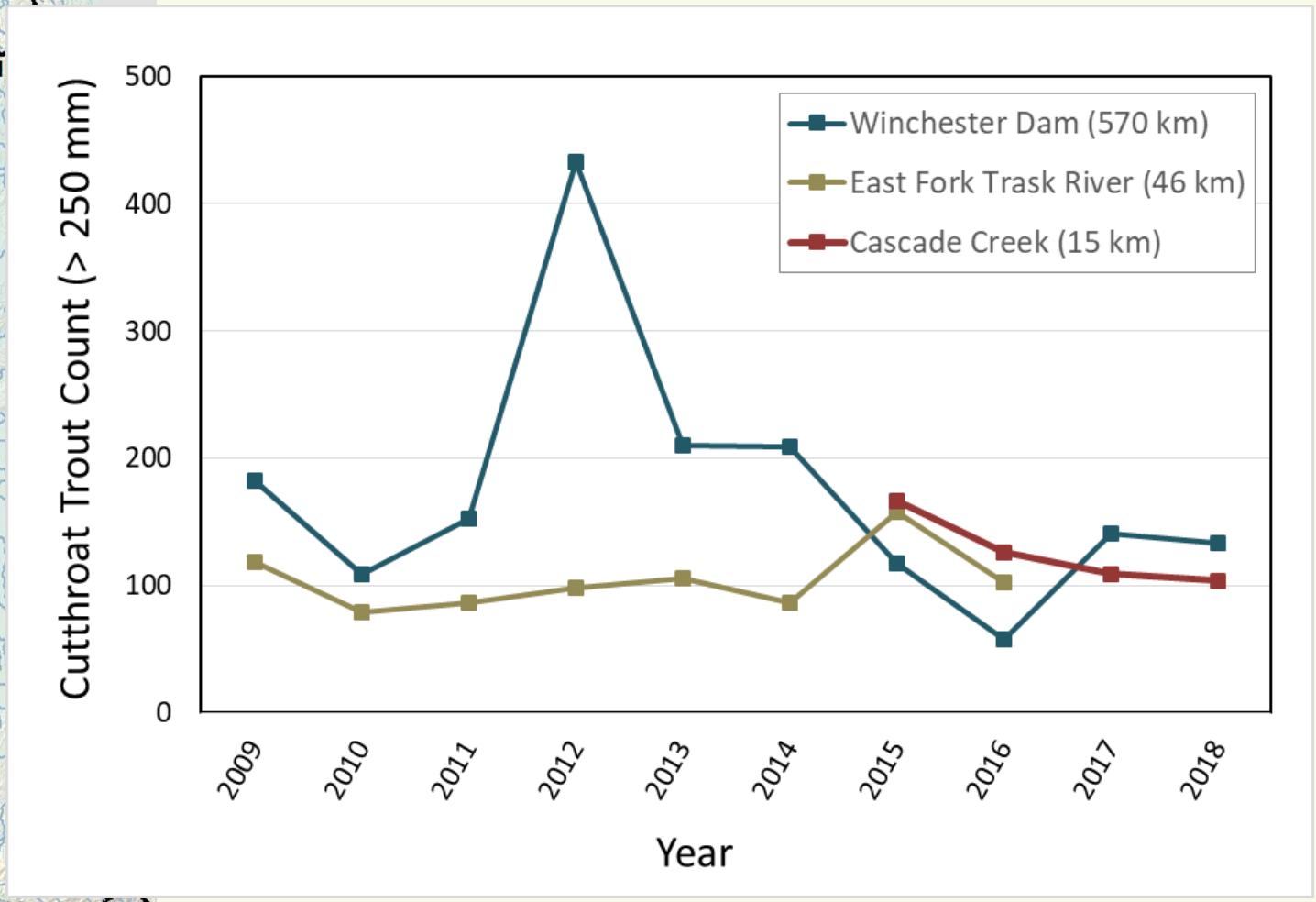

Cutthroat Out-Migrants/km²
200
150
100
50
0
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year
NF Nehalem River
Mill Cr (Siletz)
Cascade Cr (Alsea)
WF Smith River

Sea-Run Cutthroat Trout Abundance

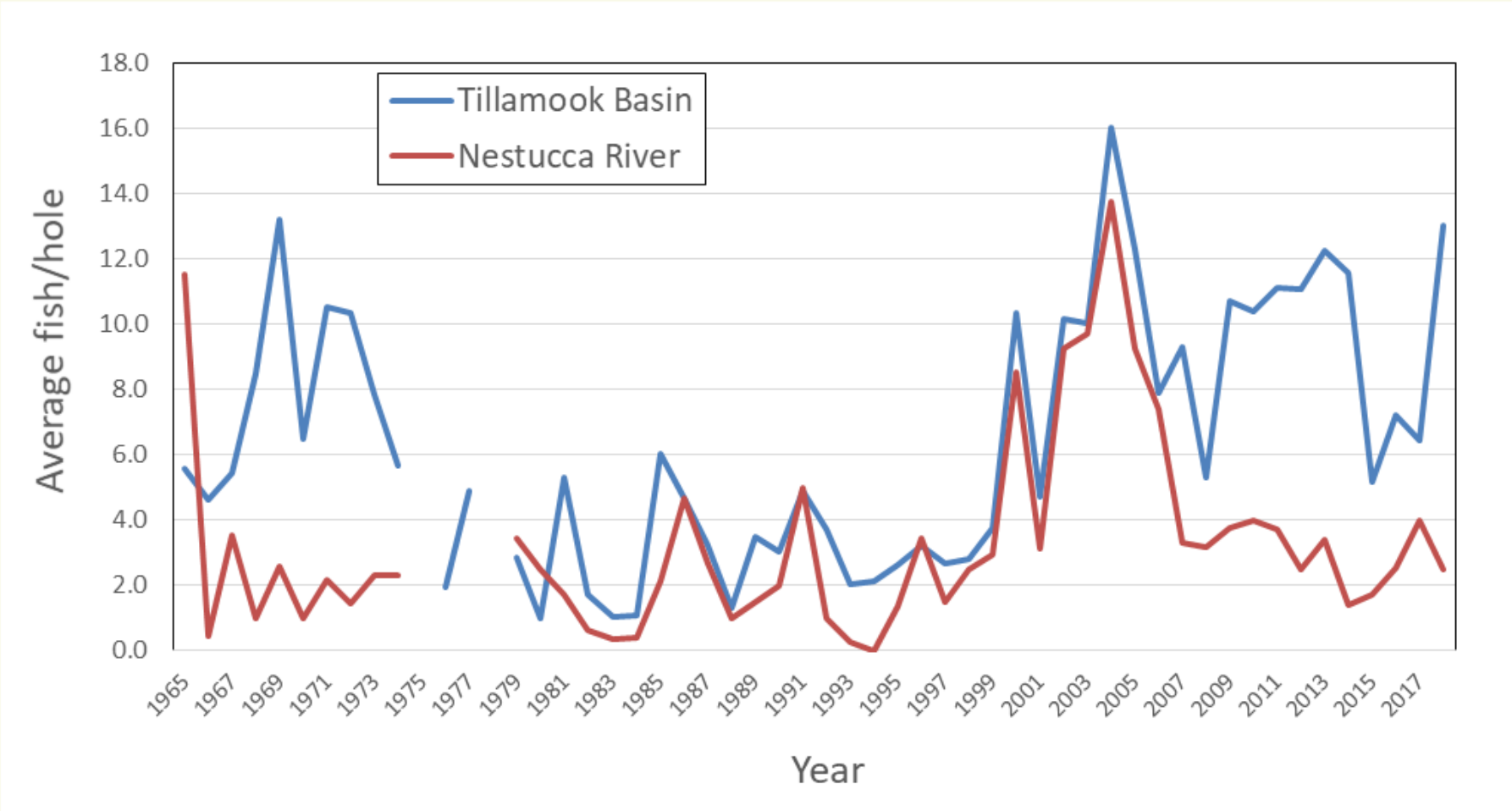


Sea-Run Cutthroat Abundance





Sea-Run Cutthroat Resting Hole Counts



CCT Management in Oregon

- Cutthroat trout considered in habitat altering activities, Oregon Forest Practices Act, fish passage
- Large number of habitat restoration projects with direct benefits for cutthroat trout
- No hatchery releases in streams
- Fishing regulations provide diverse angling opportunities and allow harvest where consistent with conservation goals
- MOU between ODFW and USFWS signed in 2005

History of Fishing Regulations

- Pre-1980
  10 fish/day, 8 inch minimum length

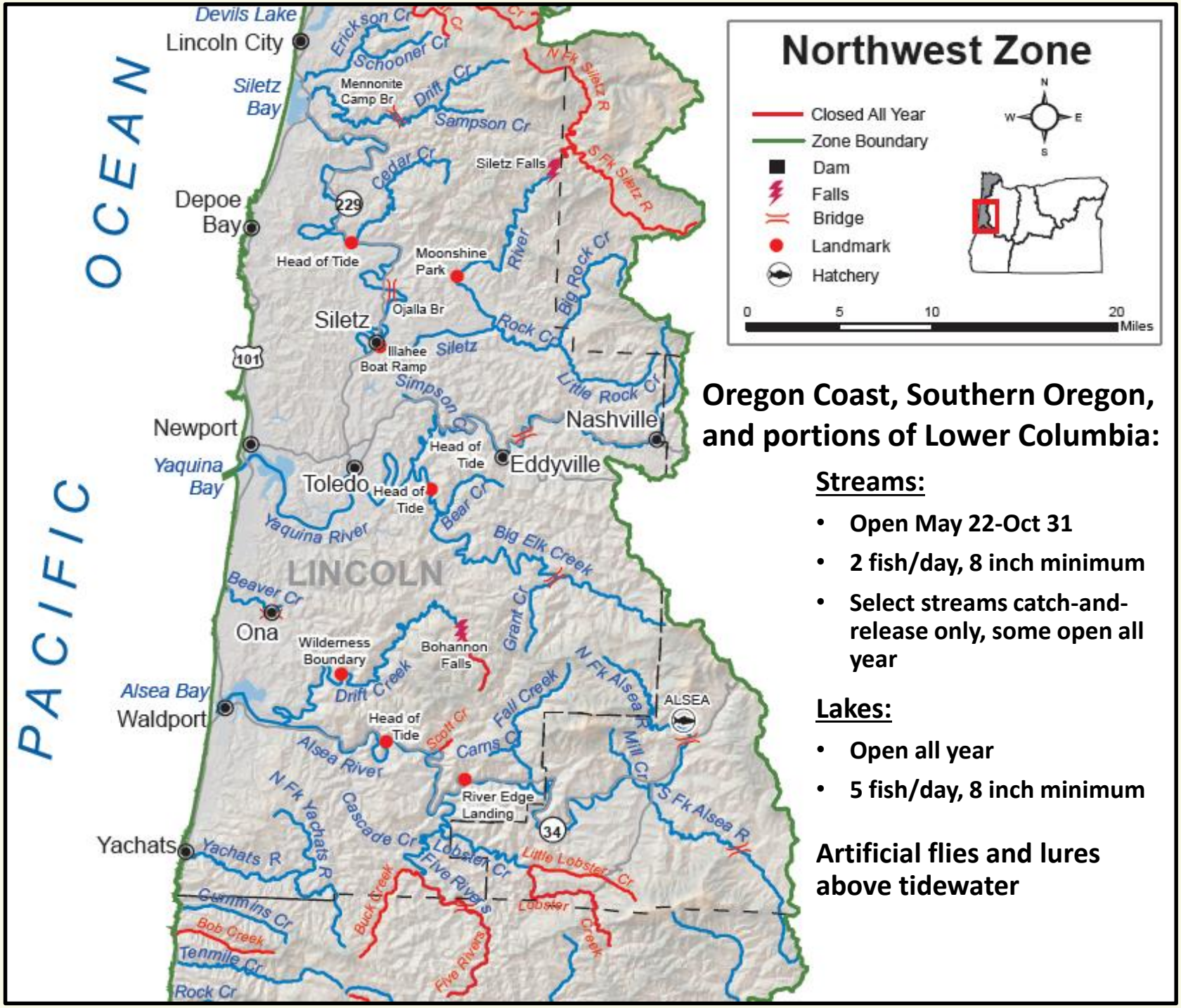
- 1980-1997
  Late May-October 31: 5 fish/day, 8 inch minimum length
  November 1-March 31: 2 fish/day, 12 inch minimum length

- 1997
  Coast-wide catch and release during summer season
  Winter season closed
  End of hatchery releases in streams, previously 60,000-120,000 on central coast alone

- 2001
  Central and south coast streams - Late May-October 31: 2 fish/day, 8 inch minimum
  North coast streams - catch and release during summer season

- 2009
  Coast-wide: Late May-October 31: 2 fish/day, 8 inch minimum length

- 2014
  Coastal Multi-Species Plan: North and South Umpqua closed to retention, catch and release only



Oregon Coast, Southern Oregon, and portions of Lower Columbia:

Streams:

- **Open May 22-Oct 31**
- **2 fish/day, 8 inch minimum**
- **Select streams catch-and-release only, some open all year**

Lakes:

- **Open all year**
- **5 fish/day, 8 inch minimum**

Artificial flies and lures above tidewater

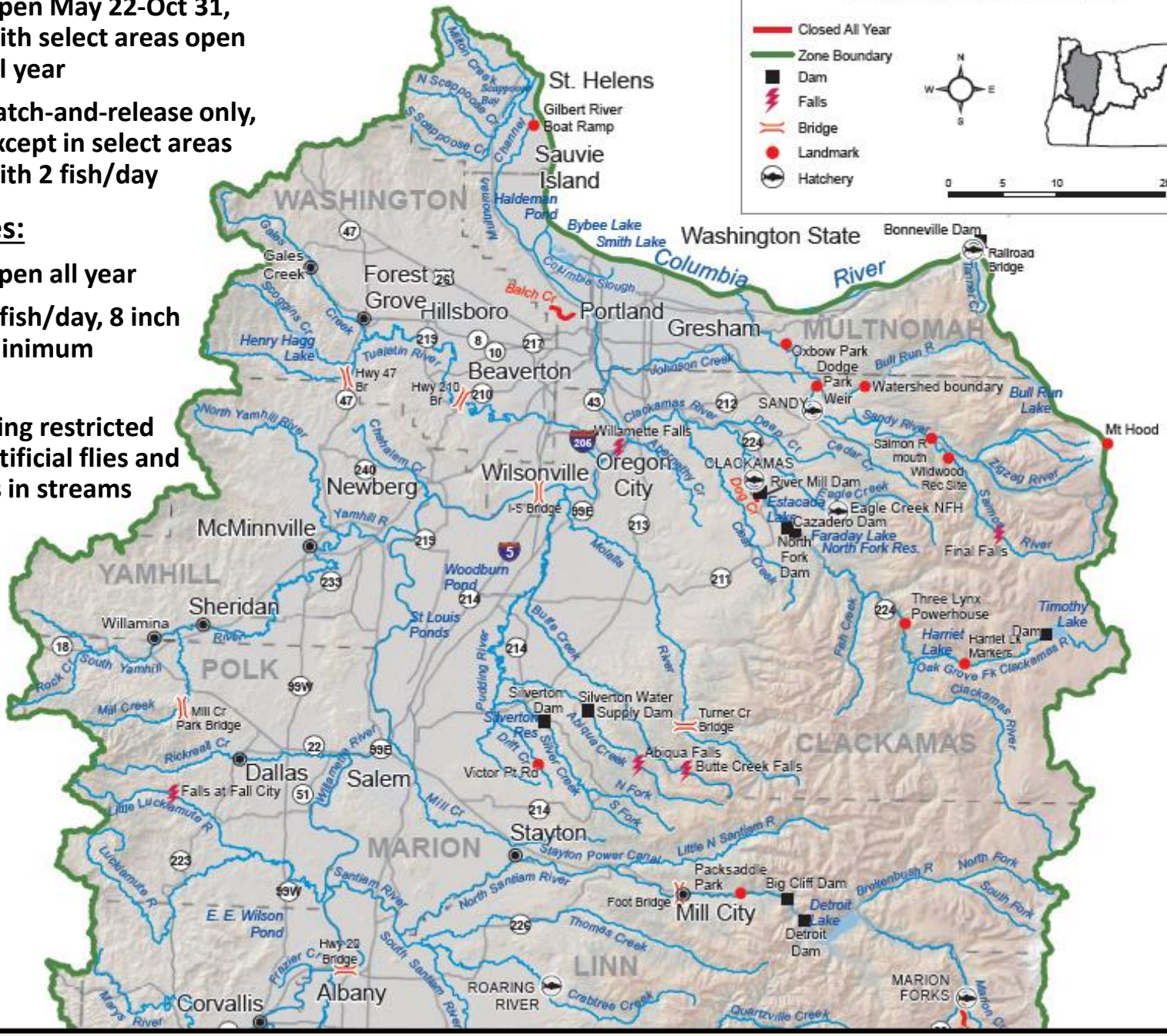
Streams:

- **Open May 22-Oct 31, with select areas open all year**
- **Catch-and-release only, except in select areas with 2 fish/day**

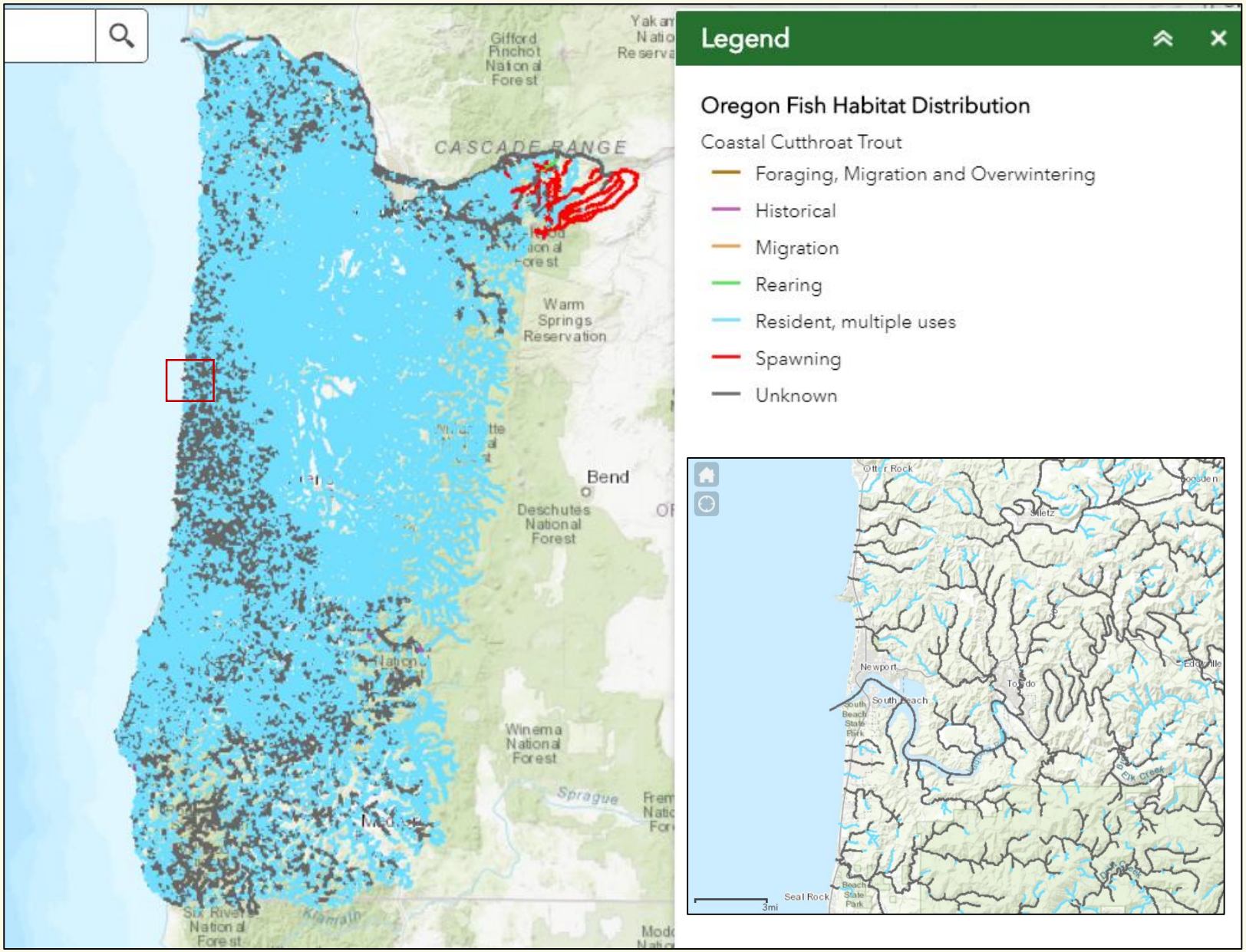
Lakes:

- **Open all year**
- **5 fish/day, 8 inch minimum**

Angling restricted to artificial flies and lures in streams



Oregon Fish Habitat Distribution Data



Conclusions

- CCT are abundant and occupy a high percentage of historical habitat in Oregon
- Multiple monitoring programs collect distribution or abundance data
- Fishing intensity is generally much lower than when hatchery programs were in place
- Willamette SMU has less systematic monitoring, but generally more restrictive fishing regulations
- Sea-run life history remains the biggest conservation concern and presents the most challenges for monitoring

Questions?