

Yakima Basin Science & Management Conference 2013

Purpose:

To provide a comprehensive overview and exchange of ideas about the most current biological science and resource management activities in the Yakima Basin



Wednesday, June 12, 2013
8:00AM to 5:00PM

Thursday, June 13, 2013
8:30 AM to 5:00PM

Central Washington
University

400 E University Way
Ellensburg, WA 98926

Science Building
Room 147

***This conference is free of charge
and pre-registration is not necessary***

- Information
- Communication
- Coordination



For More information visit the Yakima-Klickitat Fisheries Project website,
www.ykfp.org
or email: Anthony.Fritts@dfw.wa.gov

Historic Salmon Runs Modified from Alex Conley

Species/Run	Estimates	Current Status	Low	Year	High	Year
Spring Chinook	200,000-500,000	Supplemented Population	666	1995	23,265	2001
Fall Chinook	38,000-100,000	Supplemented Population	523	1988	13,000	2002
Summer Chinook	??	Extirpated Began Reintroduction	-	till 12	250 to Bonneville	2012
Coho	40,000 150,000	Extirpated and reintroduced	-	till 93	10,248	2009
Sockeye	100,000 200,000	Extirpated Begin Reintroduction	-	2013?	10,000(+15)	2012
Steelhead	30,000 100,000	Wild Population Kelt Reconditioning	505	1996	6,793	2010
Total	408,000- 1,050,000		1,700		53,000	
Bull Trout	??	Wild Population			2500 to 3000 adults	
Lamprey	??	Wild Population			0 to 87 adults	

Restoration Toolkit

- **Habitat Protection and Restoration**
- **Passage and Flow Restoration**
- **Outplanting Natural- and Hatchery-Origin Adults**
- **Nutrient Enhancement**
- **Hatcheries**

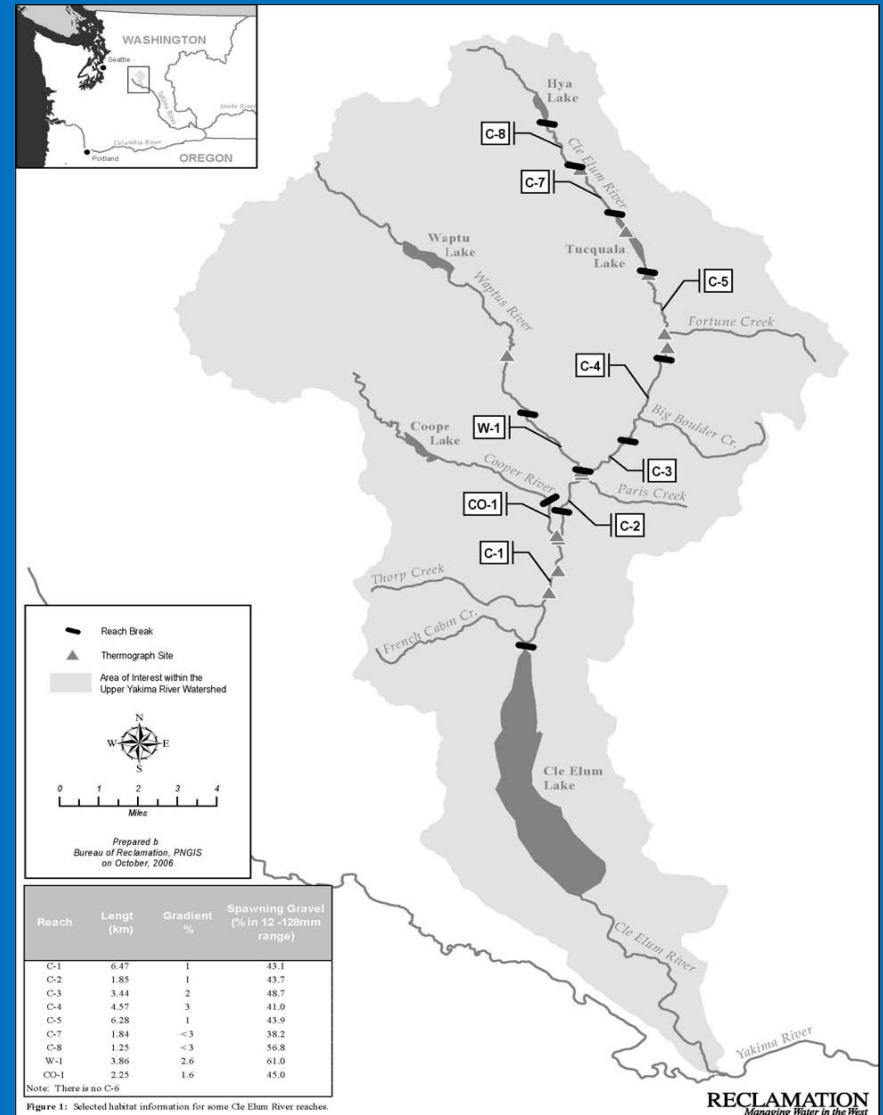


L. Cle Elum Sockeye Reintroduction

Year	Adults Transported
2009	1,000
2010	2,500
2011	4,500
2012	10,000



Some of the first sockeye to spawn in upper Cle Elum R. watershed in over 100 years







L. Cle Elum Sockeye Reintroduction

About 80,000 juveniles (progeny of 2009 adult plants) were estimated to have passed Prosser in 2011.

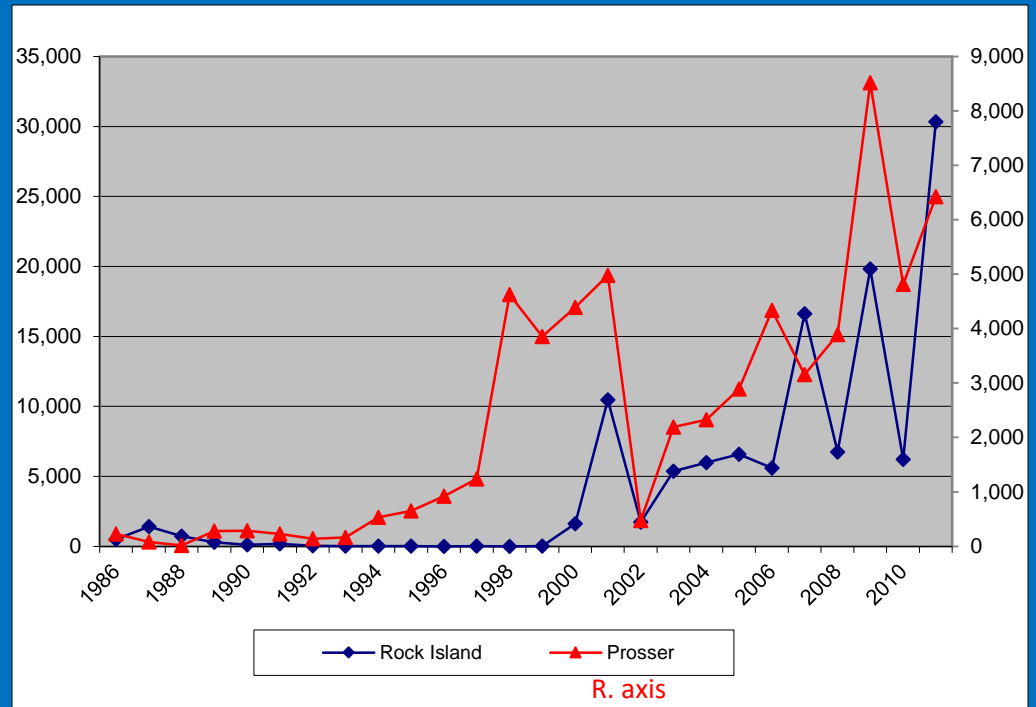


Wild smolt at Roza, 5/10/2011

Yakama Coho Reintroduction Programs

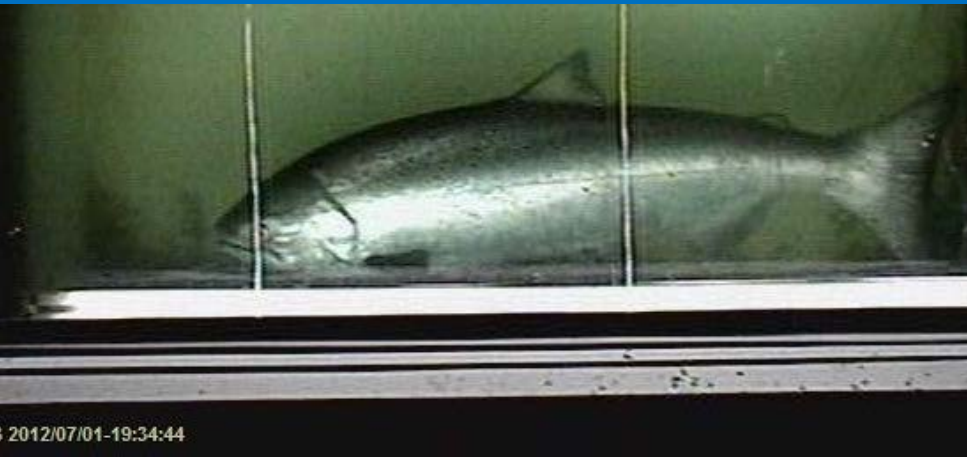
- Virtually extinct in the mid-1980s
- Started with out-of-basin transfers
- Demonstrated ability to reestablish a naturalized population after as few as 3 to 5 generations of outplanting in the wild
- Moving to local brood stocks
- Using combination of fry, smolt, and adult release strategies
- Adult returns are combination of natural- and hatchery-origin fish

Adult Coho counts at Rock Island and Prosser Dams, 1986- Present



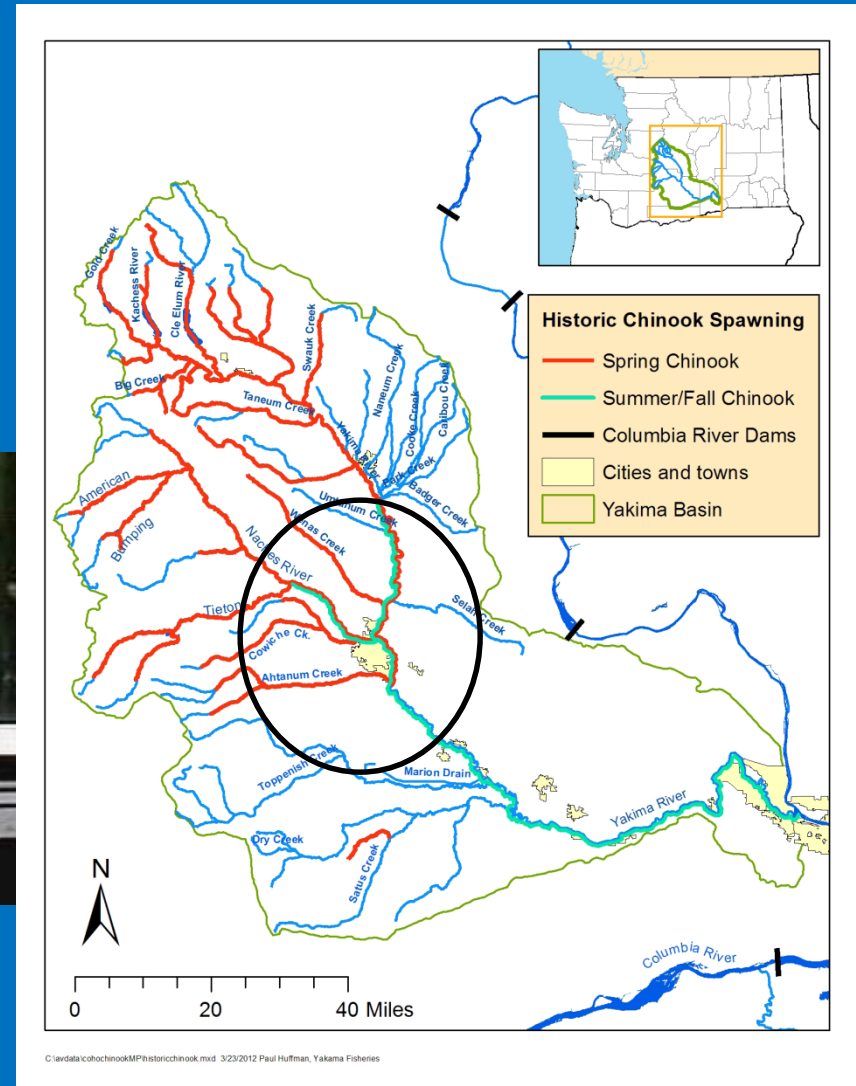
Yakima River Summer Run Chinook Reintroduction - Restoring Diversity

- Extirpated stock
- Started with Wells transfers
- Releasing both yearling and subyearling fish
- Intend to move to local stock once returns and infrastructure in place
- Several hundred adults returning now from three different age classes



2012/07/01-19:34:44

3-Ocean Adult Summer at Prosser,
7/1/2012



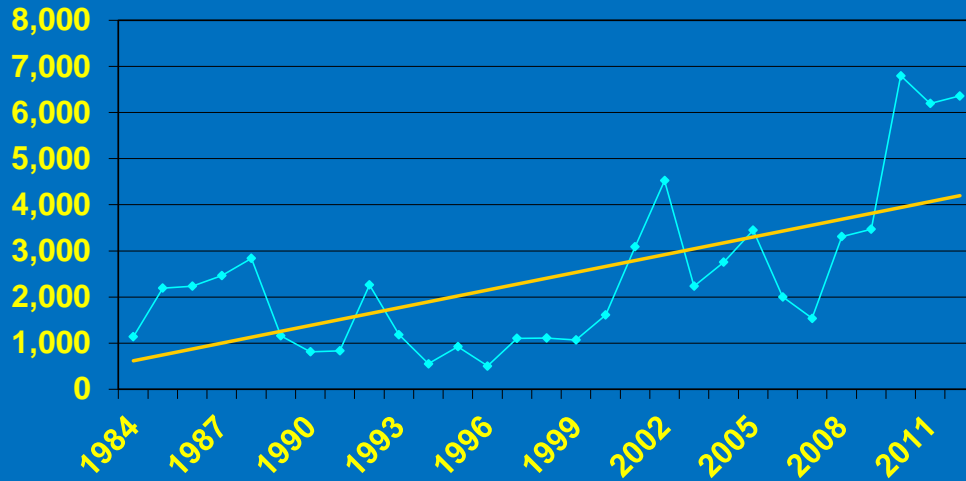
Yakima River Steelhead Kelt Reconditioning

- Capture steelhead returning to ocean after completing first spawning cycle
- Most (>90%) are females
- Held and fed for 6-8 months
- Released in mid-late October (beginning of upstream migration peak)
- Select own mates, where to spawn, when to spawn

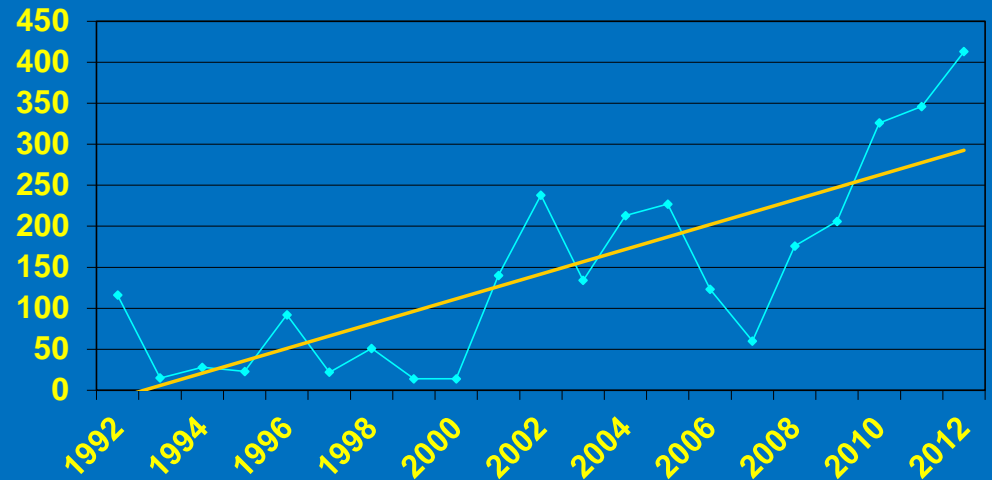


Steelhead Population Response: Abundance Trends

Prosser Adult Abundance



Roza Adult Abundance

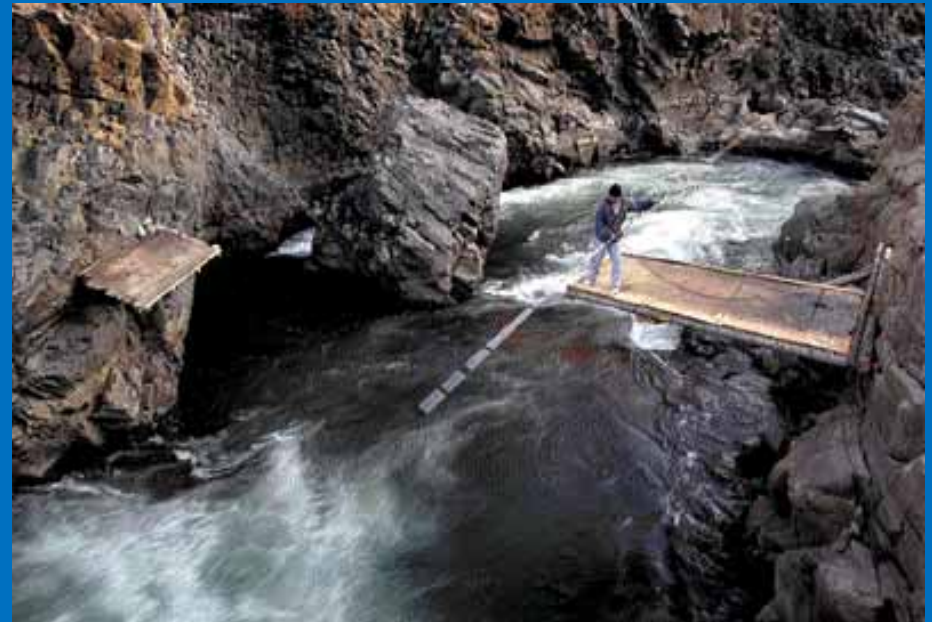


Threatened Bull Trout

Courtesy Eric Anderson



**DEVELOPMENT AND OPERATION OF THE CLE
ELUM SUPPLEMENTATION RESEARCH FACILITY
TO ENHANCE SPRING CHINOOK SALMON
Oncorhynchus tshawytscha IN THE YAKIMA
RIVER, WASHINGTON**



Reproductive Success

Comparative behavioral/reproductive fitness research



Yakama Nation Lamprey Restoration

- Goal: restore throughout ceded lands
- Regional collaboration
- Habitat surveys – identify limiting factors, key habitats for spawning and rearing
- Document presence and abundance
- Research and develop lamprey culture techniques



Lamprey spawning at Prosser Hatchery,
4/25/2012

