

2010 Yakima Basin Coho Phase II

Presented By:

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Acknowledgements

YN: Joe Jay Pinkham III

Conan Northwind

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Andrew Lewis

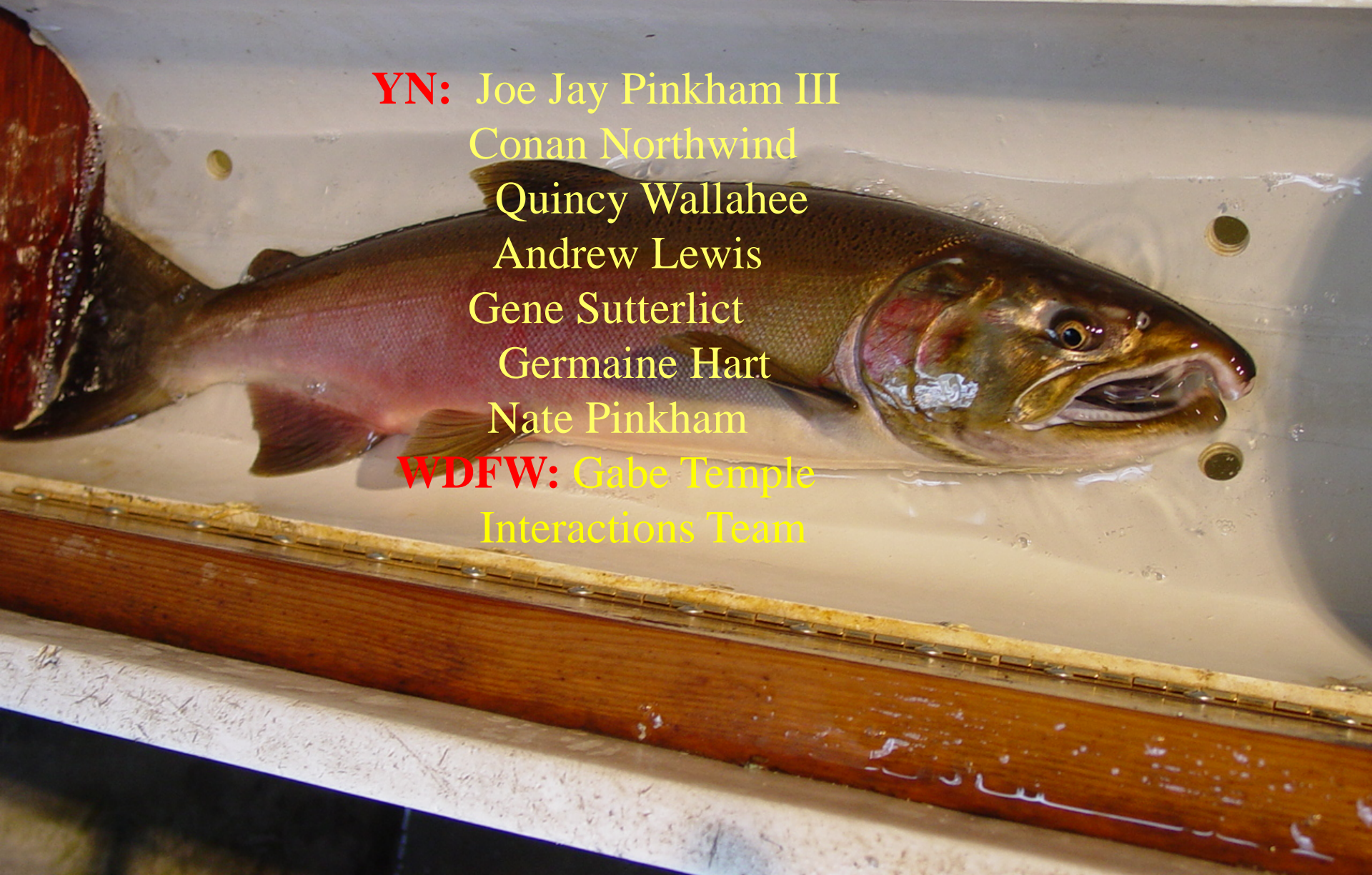
Gene Sutterlict

Germaine Hart

Nate Pinkham

WDFW: Gabe Temple

Interactions Team



Background



Program Goal - Re-establish self-sustaining naturally spawning population of coho salmon in Yakima River

Phase I: 1999-2003 Complete



Feasibility *Interim Work: 2004-2006* Complete

Phase II: 2007-2011 Complete

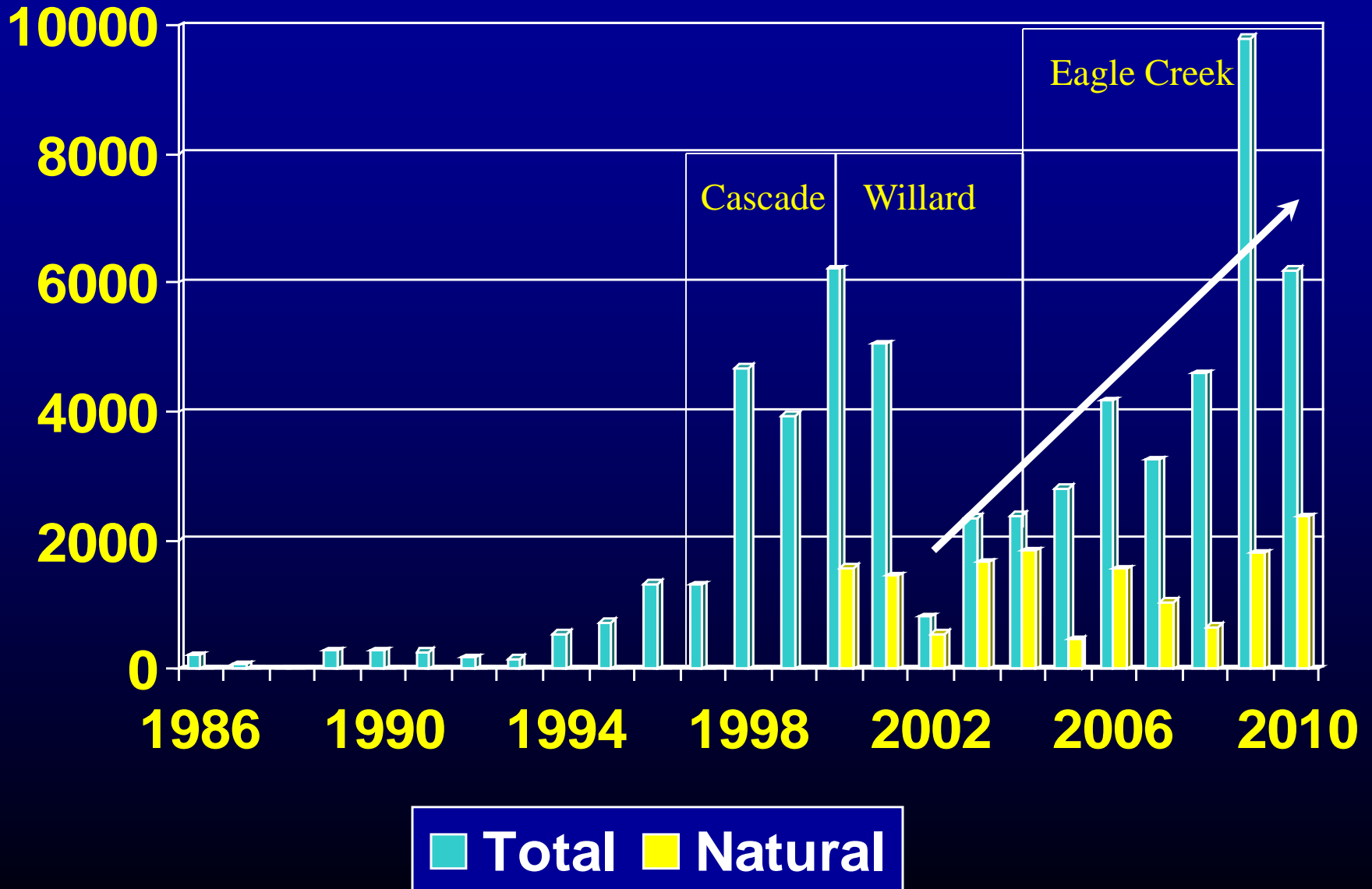


What's Next ?? Master Plan Development and Implementation.



Proposed ISRP Step 1 Review: Fall of 2011

Upper Yakima Coho Returns, 1986 – 2010



2010 Hatchery Coho Juvenile Acclimation Sites Yakima Basin

Volitional Release, April 14, 2010

Boone: 37,806

Holmes: 90,188

Lost Creek, 173,009

Stiles, 209,524

Easton, 205,926

Prosser, 182,719

Total: 899,172

Key

-  City
-  Coho Acclimation
-  Current Sites

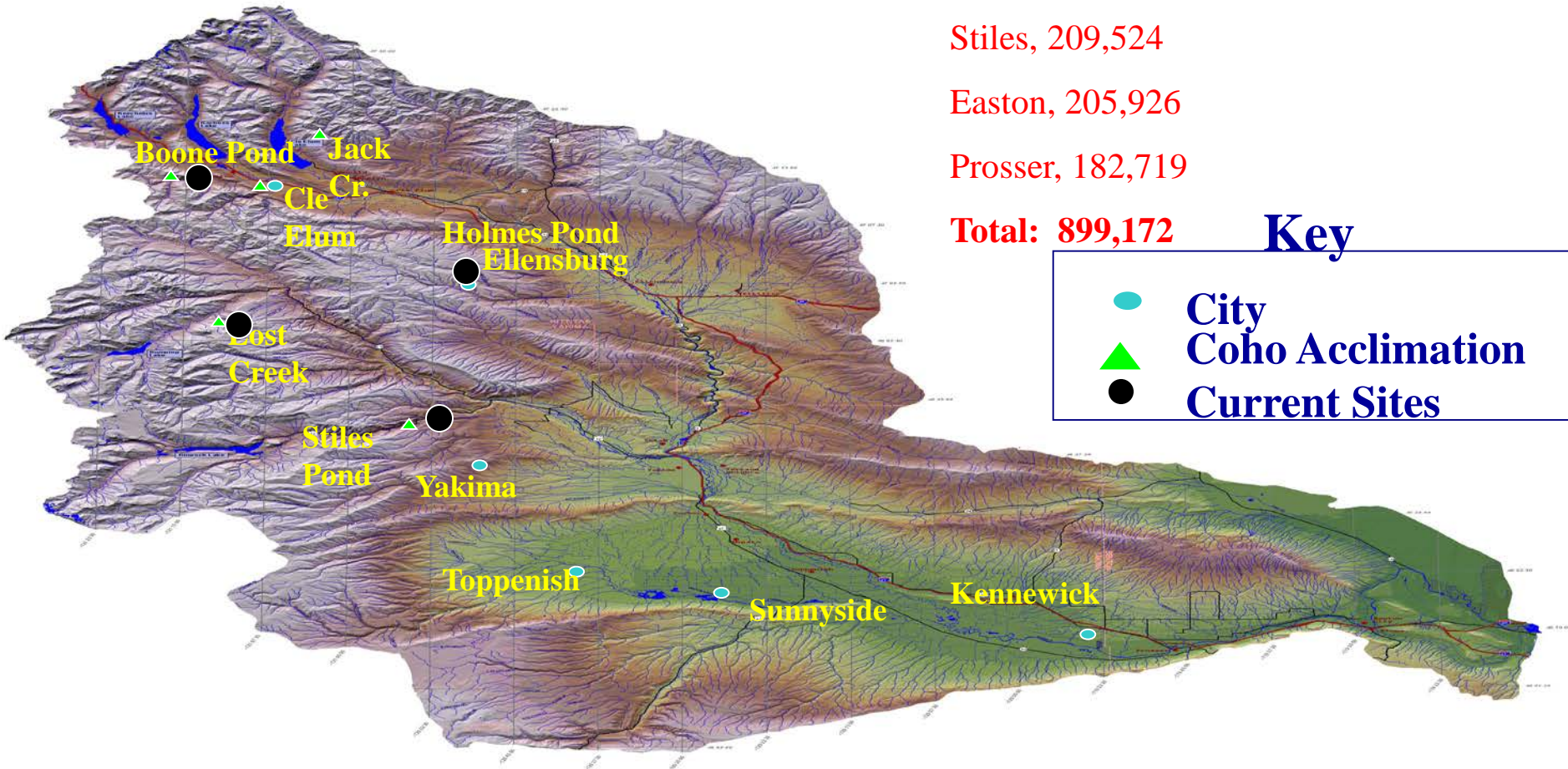
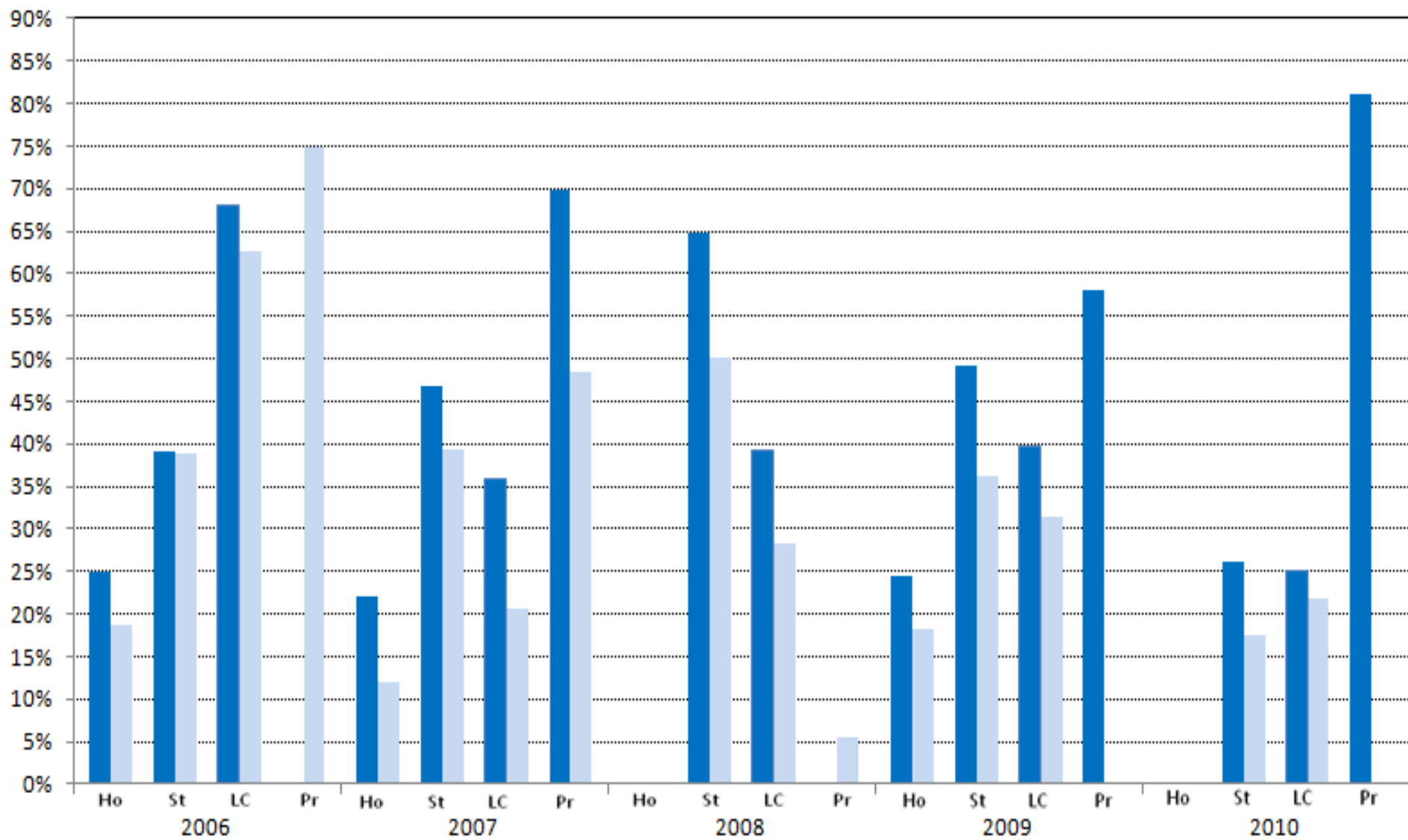


Figure 1. Outmigration-Year 2006-2010 Release-to-McNary Smolt-to-Smolt Survival for Yakima Stock (dark) and Eagle Creek Stock (light) (2004-2008 Brood)



Preliminary 2011 Spring Migrant Survivals

- Wild Coho Tagging

- Buckskin Slough 216/55
- Cowiche Creek 28/7
- Lost Creek 10/3

- Taneum Creek

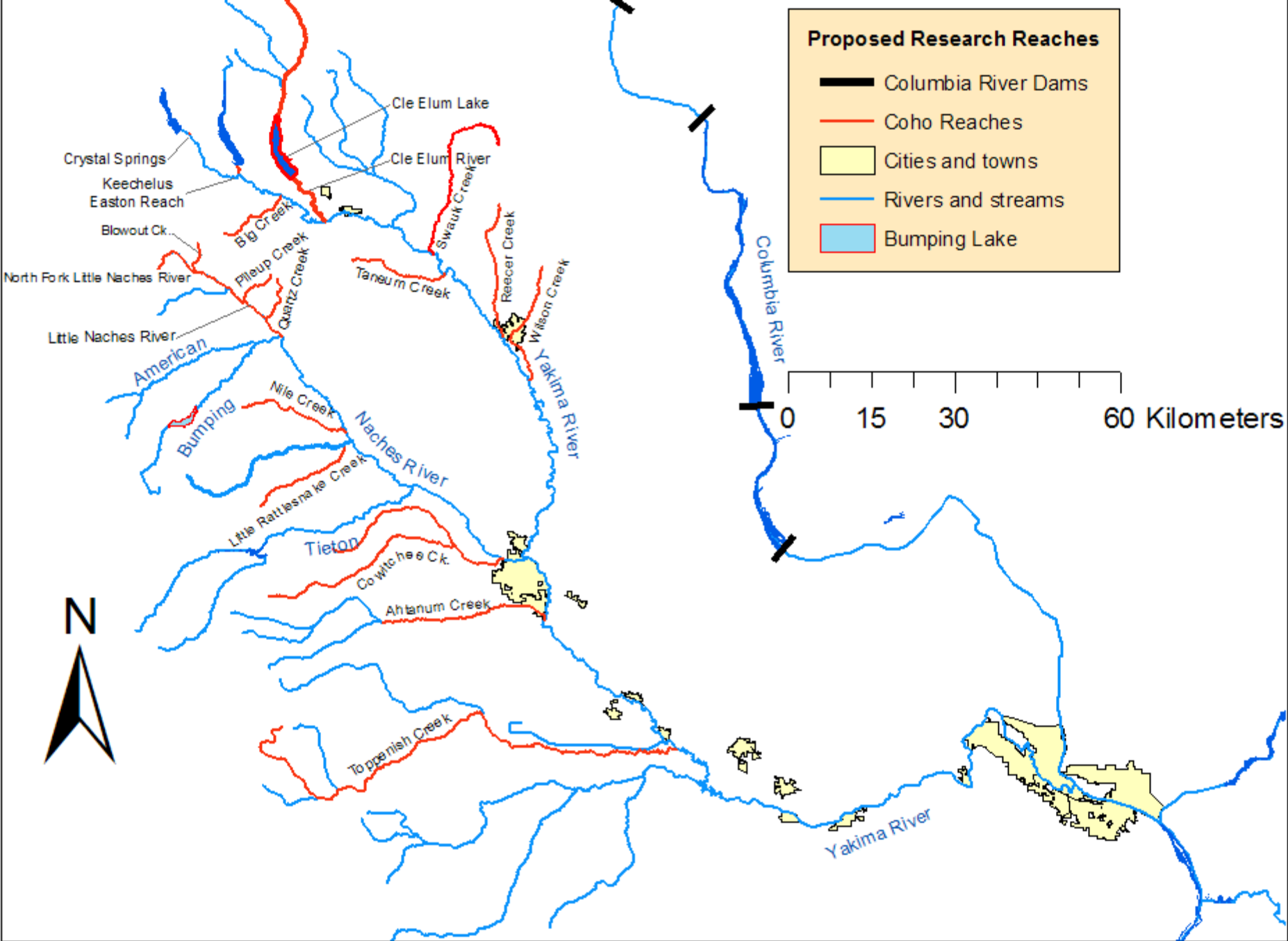
- 1 Yr Old 4515/244
- 2 Yr Old 1867/25
- 3 Yr Old 1299/1

Phase II (2007-2011)

- Objectives
 - Identify Key Tributaries offering the highest potential for Coho Reestablishment
 - Evaluate interactions with resident and anadromous fish already residing in tributaries
 - Increase the resiliency, and robustness of the Coho population in the Yakima Basin

ACTION

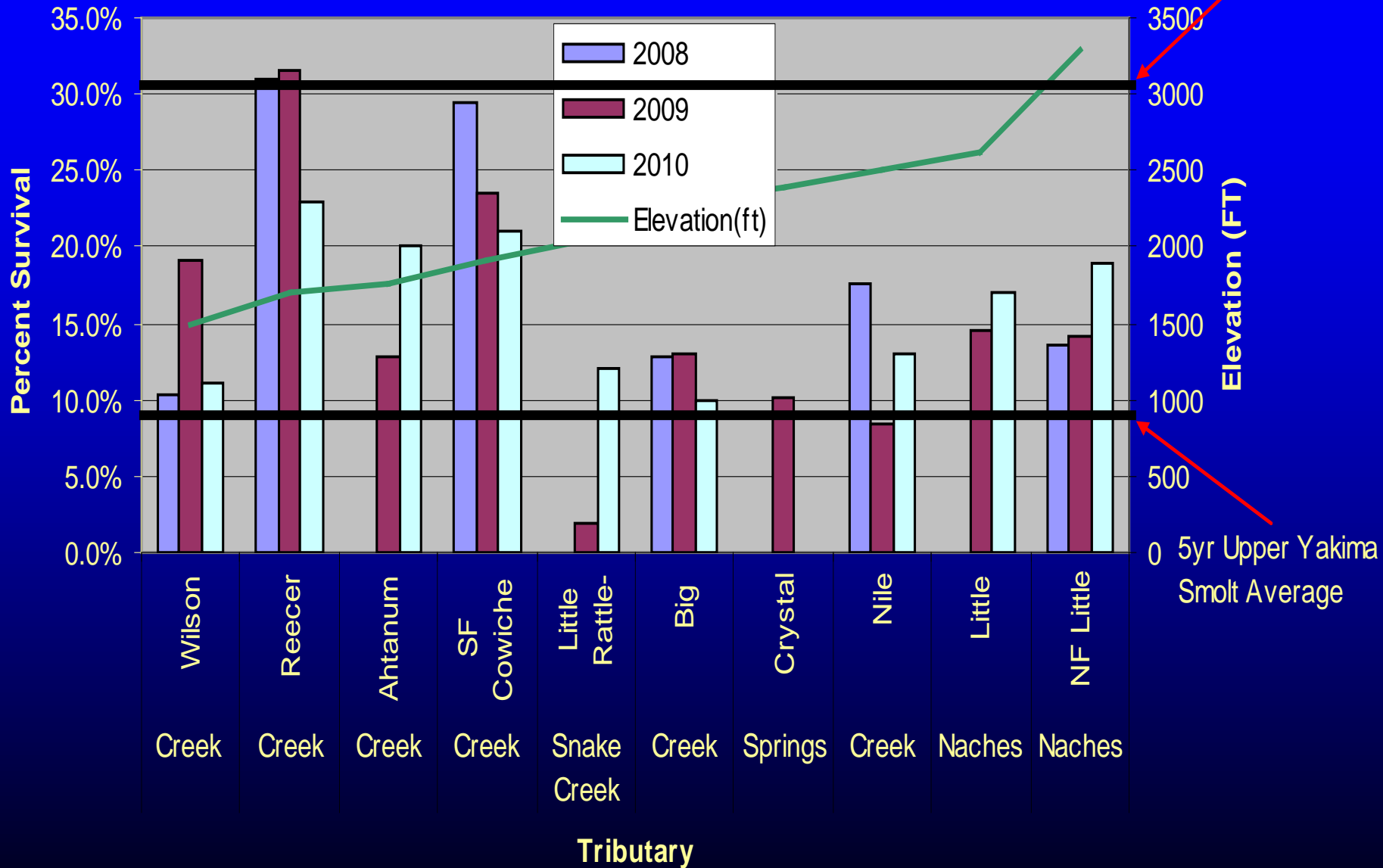
- Monitor Tributary Parr Releases
- Monitor Tributary Adults Releases
- Continue In Basin Brood Stock Development
- New Smolt Acclimation Areas (spread out the risk and increase survival)



Parr Releases 3,000 Pit tagged Coho per Tributary (70-85mm)





Summer Parr Survival To McNary Dam



Adult Out Planting



 **FISHERIES**
YAKAMA NATION

 Washington
Department of
FISH AND
WILDLIFE

Study In Progress

Please Do Not Disturb!

This is a research site designed to evaluate the spawning success of coho salmon and the future interactions of their offspring with other resident fish species. This research is being conducted by the Yakama Nation Fisheries (YN) and the Washington Department of Fish and Wildlife (WDFW).

Please do not disturb racks, site, or fish.

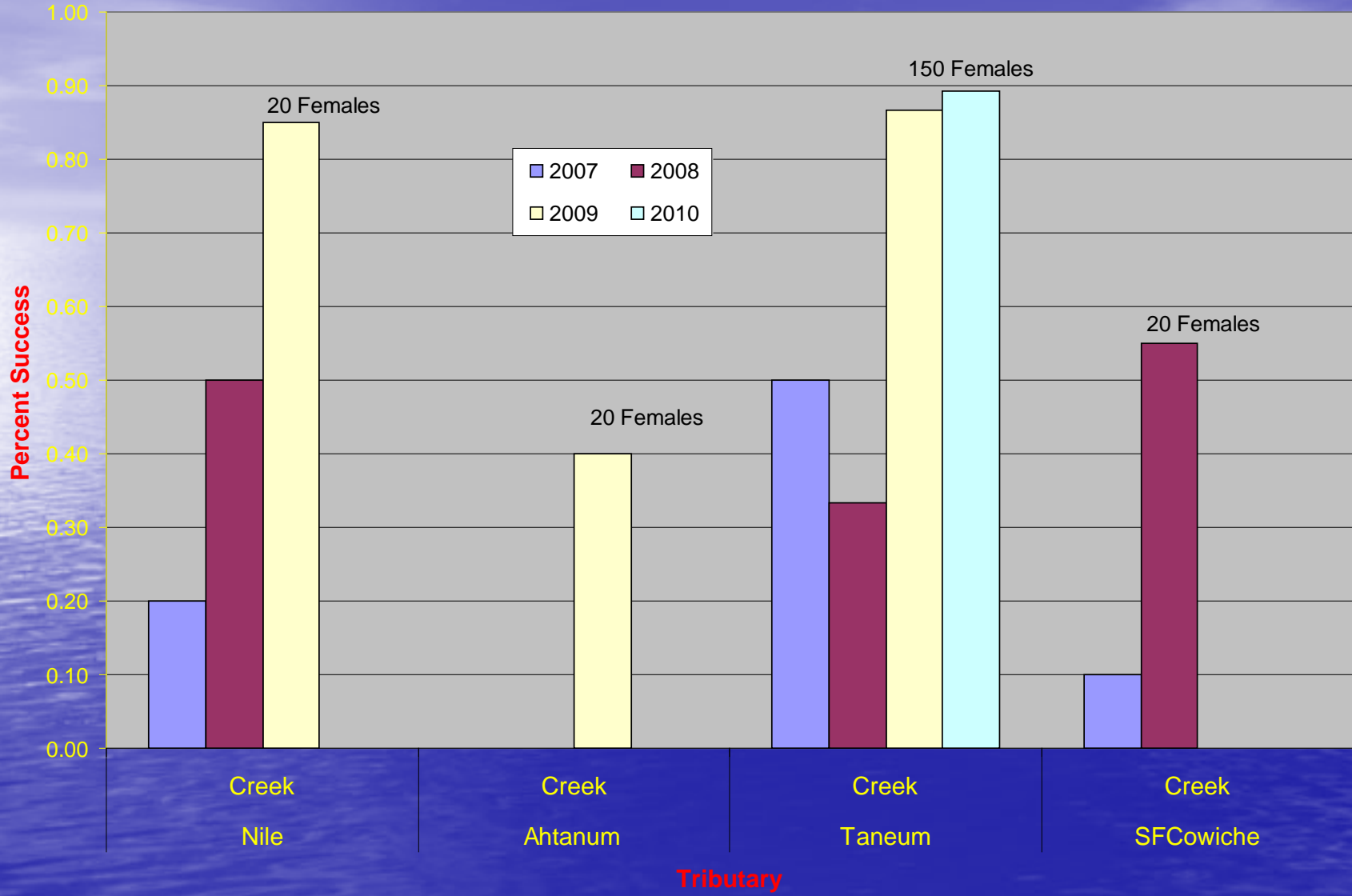
NOTE: FISH HAVE BEEN TREATED WITH CHEMICALS AND ARE NOT EDIBLE!

Please direct questions to:
YN: 509-865-6262 Todd Newsome
WDFW: 509-925-4467 ext#4

30 10:11PM



Adult Outplant Spawning Success



Mobile Acclimation

Rattlesnake Creek



Mobile Acclimation Results

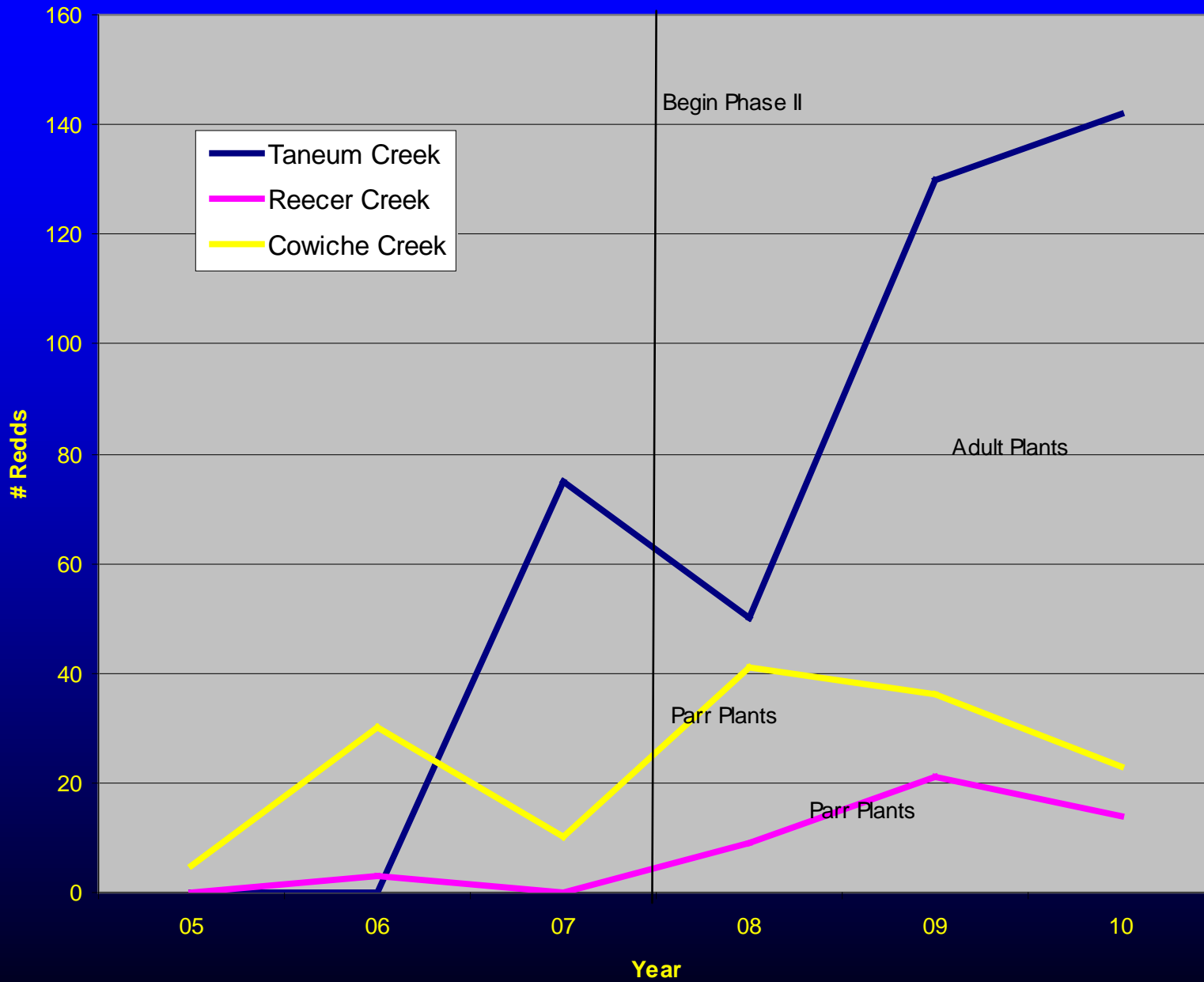
- 2009 South Fork Cowiche Creek
 - 10,000 Smolts Acclimated March 16 – April 6
 - 47% Survival to McNary Dam
- 2010 Survival to McNary Dam
 - 10,000 Smolts each, Acclimated
 - SF Cowiche Creek (23%)
 - Rattlesnake Creek (8%)

Yakima Basin Coho Redd Counts

Yearly Yakima Basin Adult Coho Redd Counts

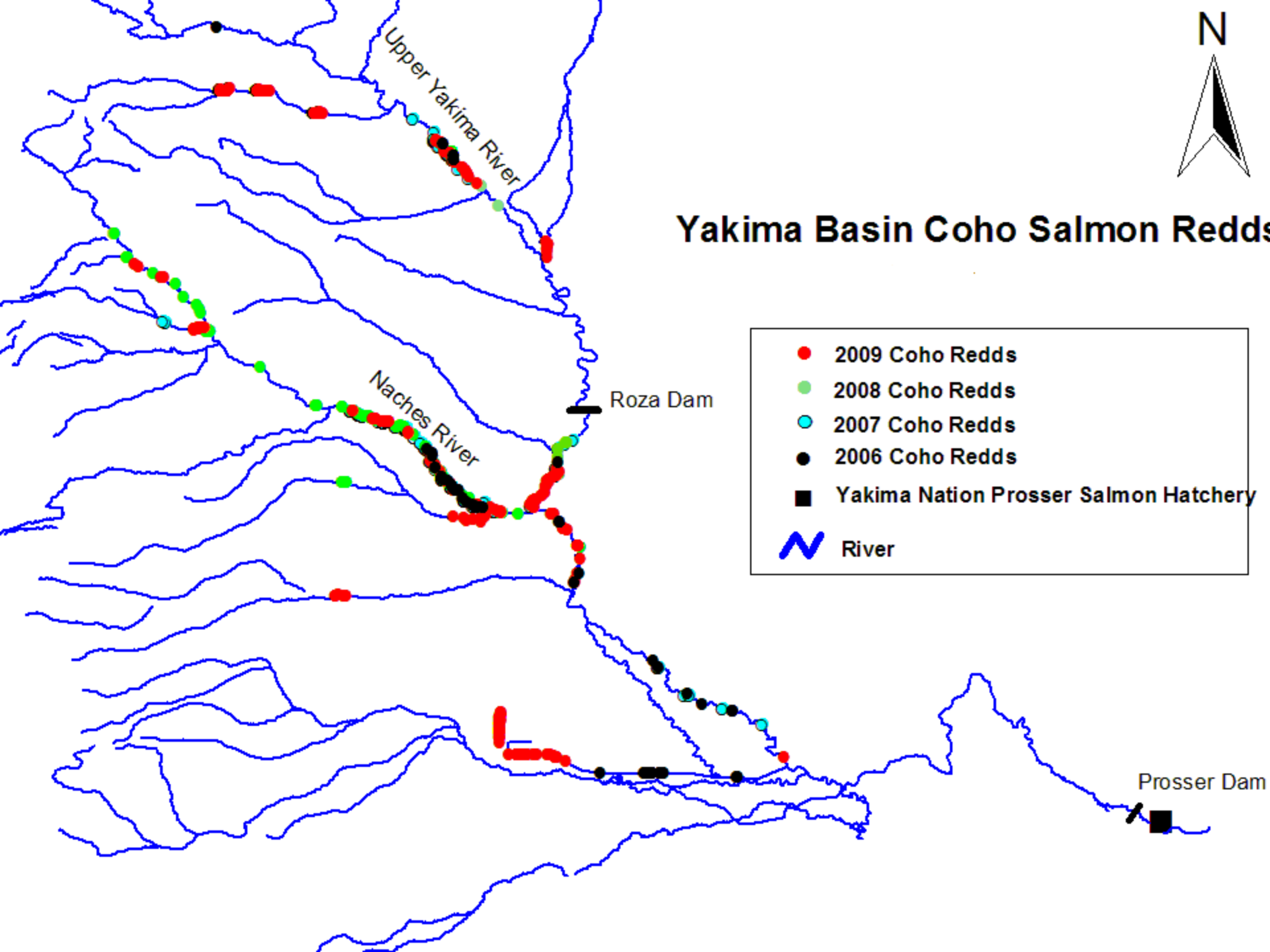
River	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Yakima River	53	104	142	27	4	32	33	57	44	63	49	229	75
Naches River	6	NA	137	95	23	56	87	72	76	87	60	281	276
Tributaries	193	62	67	25	16	55	150	153	187	195	242	485	327
Total	252	151	346	147	43	143	270	282	307	345	351	995	678

Tributary Redd Counts





Yakima Basin Coho Salmon Redds



Local In Basin Brood Development

- 400 YN Hatchery Females Collected
- 350 YN and NOR Males
- Estimated egg take of ~850,000
- 200,000 YN Eyed eggs sent to Eagle Creek National Fish Hatchery
- 420,000 YN Coho on Station at Prosser for 2012

Taneum Creek Coho Reintroduction

YN and WDFW cooperative Project

300 Adult Coho Out planted into 3, 100 meter sections (50 females 50 Males)
Coho are planted the last week of October and the first week of November in 3 consecutive days (100 per day)

- **2007**
 - 75 Redds Located
- **2008**
 - 50 Redds Located
 - 1300 Juvenile Coho Pit tagged
 - 16% survival to McNary Dam
- **2009**
 - 130 Redds Located
 - 1800 Juvenile Coho Pit tagged
 - 620 one year old smolts detected leaving Tanuem Creek
 - 9 Two year old smolts and 1 three year old smolt was also detected
 - 10% Survival to McNary Dam
- **2010**
 - 134 Redds Located
 - 4515 Juvenile Coho Pit tagged



