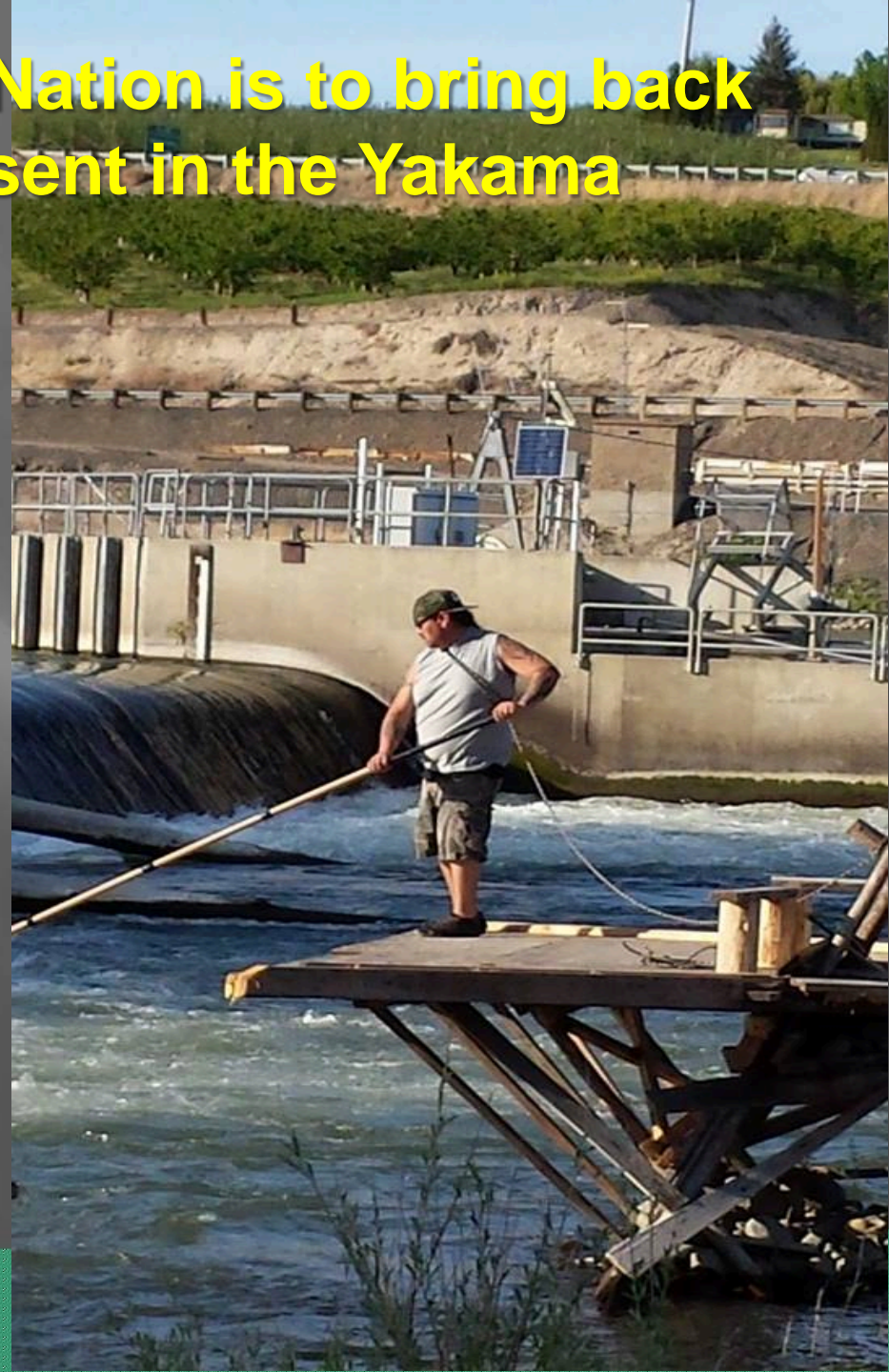


Yakima River Summer/Fall Chinook Program 2014-15

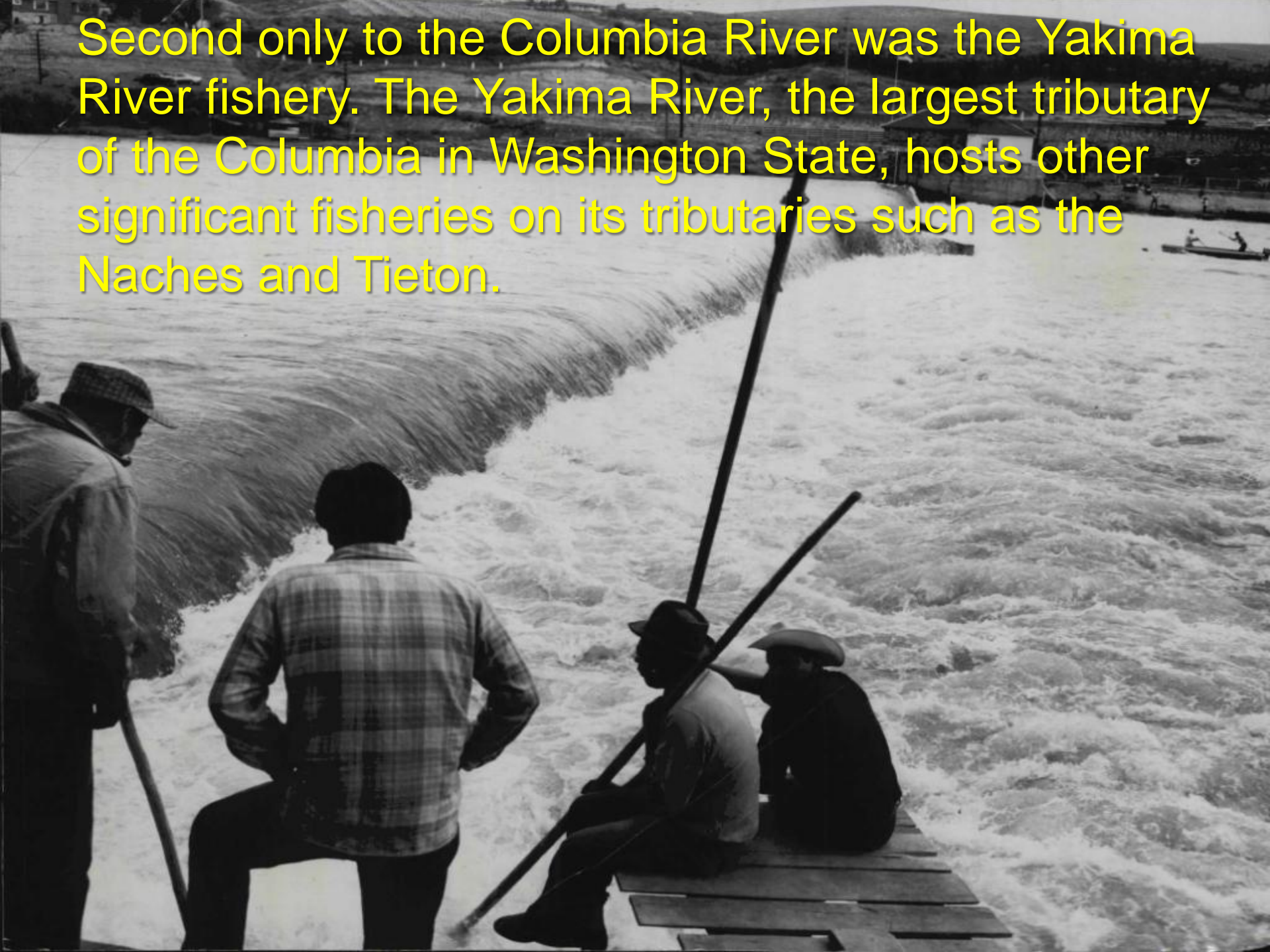
by Melinda Davis
Yakima Klickitat Fisheries Project (YKFP)

YAKAMA NATION

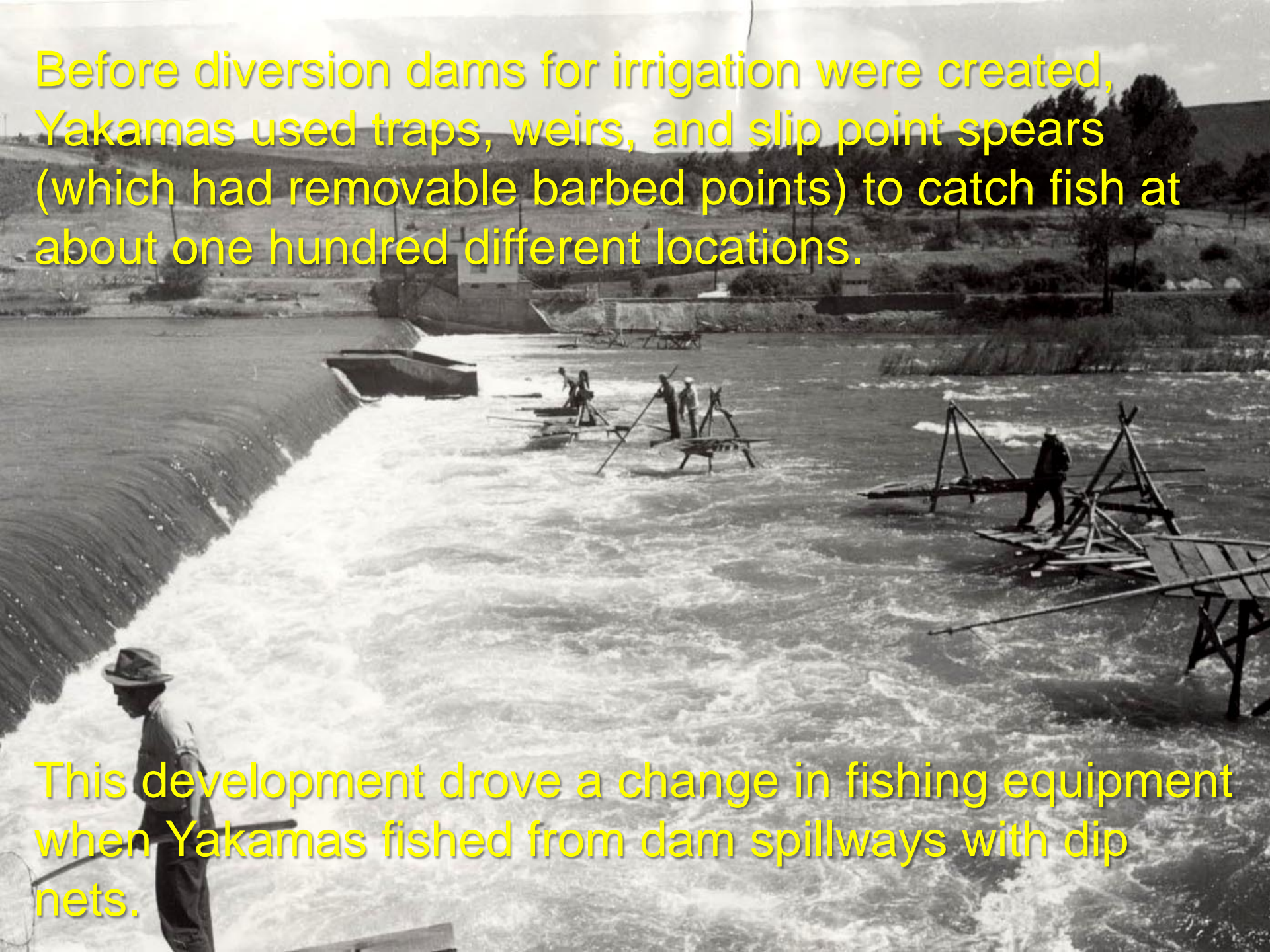
The vision of the Yakama Nation is to bring back *all species* previously present in the Yakama Basin.



Second only to the Columbia River was the Yakima River fishery. The Yakima River, the largest tributary of the Columbia in Washington State, hosts other significant fisheries on its tributaries such as the Naches and Tieton.



Before diversion dams for irrigation were created, Yakamas used traps, weirs, and slip point spears (which had removable barbed points) to catch fish at about one hundred different locations.



This development drove a change in fishing equipment when Yakamas fished from dam spillways with dip nets.

Yakima River Fall Chinook Historical

- Historically ~132,000 adults returned to spawn.
- Summer Chinook *extirpated* early 1970s.
Reintroduction effort began in 2008.
- Early 80s adult returns went low as 600 adults
- Mid-80s were averaging 2-3,000 adult returns
- Restoration *through acclimation* began in 1994.
- Currently average about 3,518 since
supplementation releases began in 1999.

Goals and Objectives

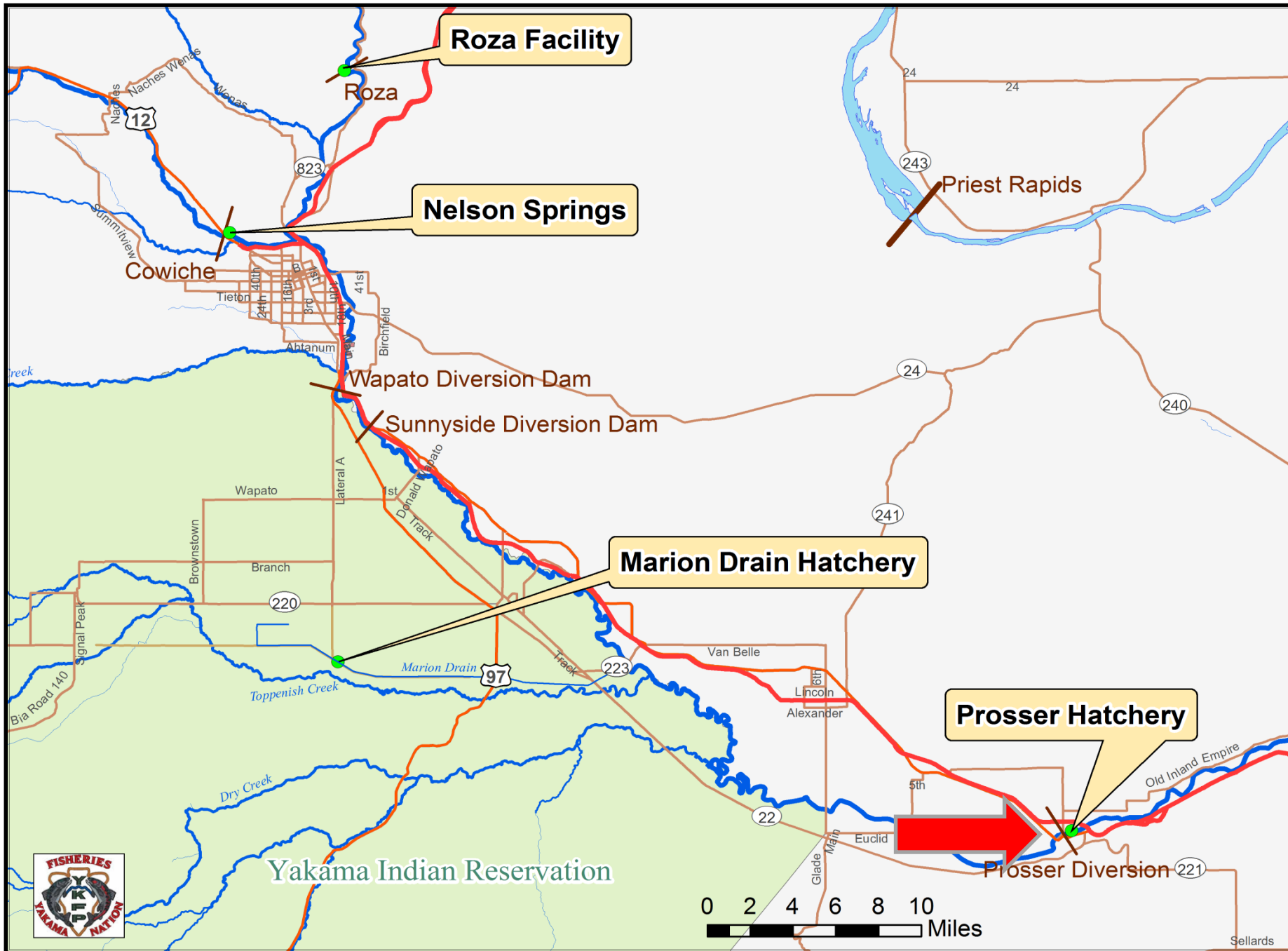
Conservation: 1) increase population viability (abundance, diversity and spatial distribution) by moving to a locally adapted fall Chinook brood stock and by re-establishing a summer run component, and

2) ensure that population size remains large enough to allow the population to maintain itself



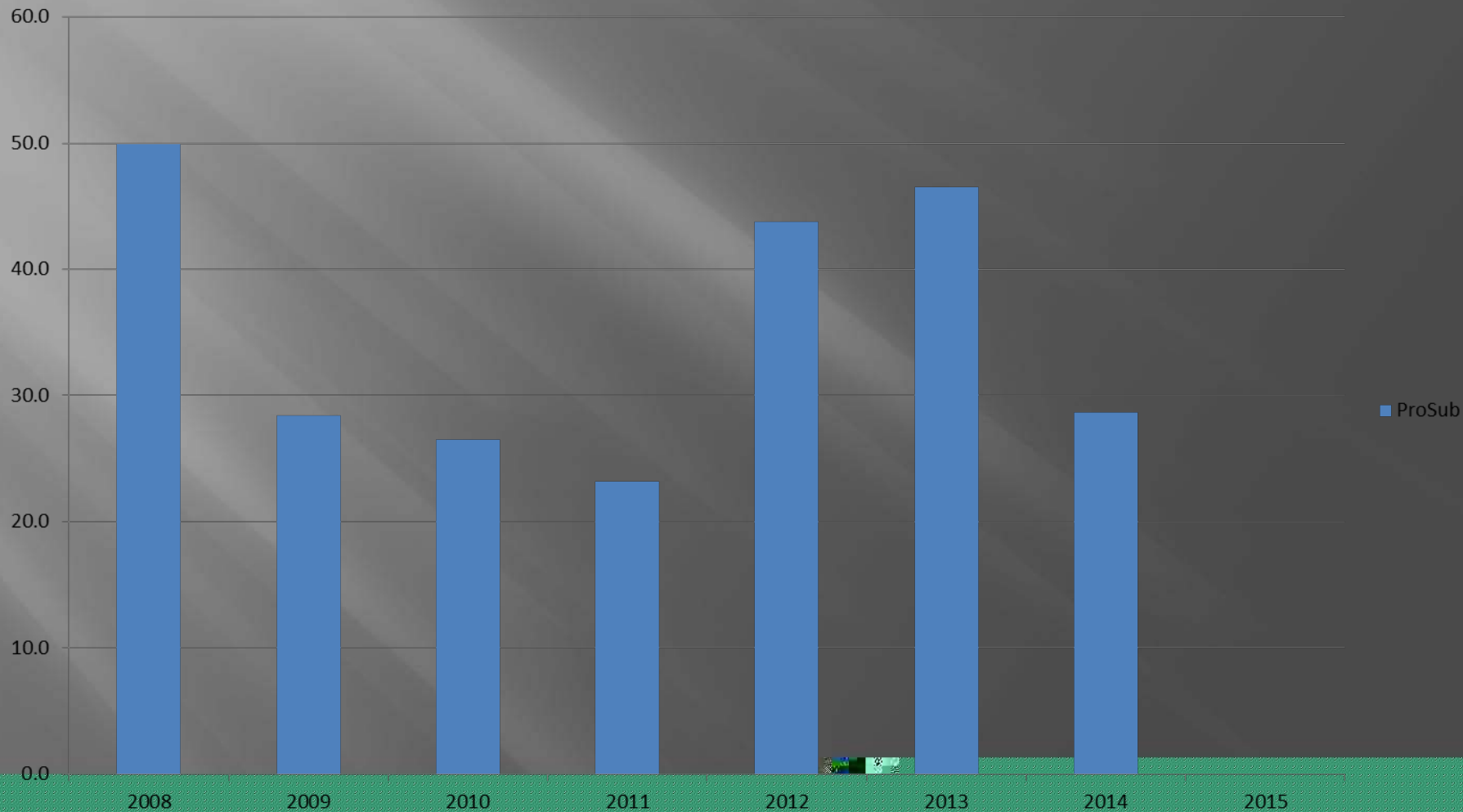
Yakima River Releases 2010-15

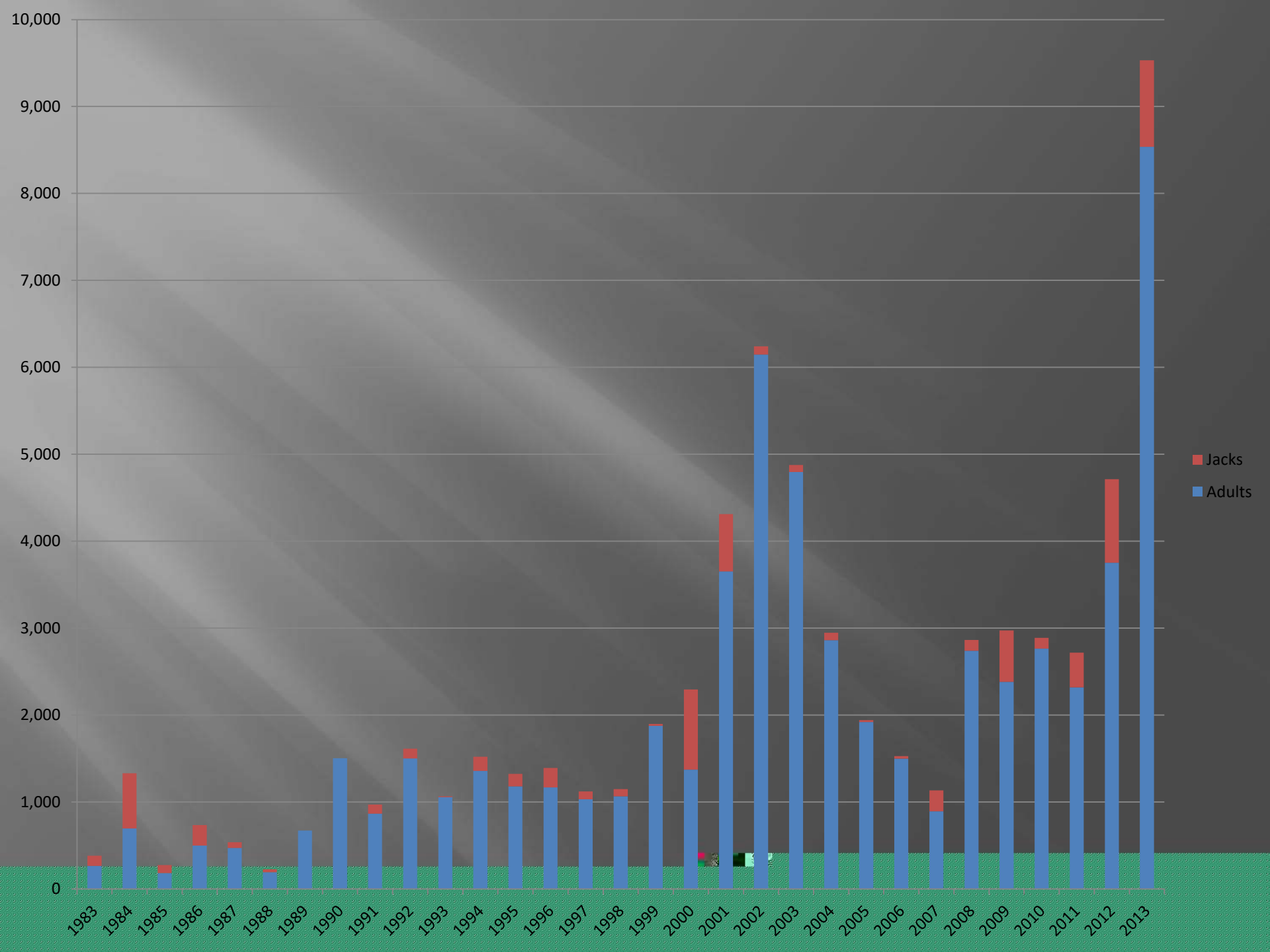
Fall Chinook RELEASE SUMMARY						
Released	LWH	PRH	PROsub	PROyear	Marion	TOTAL
2010	1,680,045		290,282	12,167	22,945	2,005,439
2011	1,699,944	503,772	620,952	22,857		2,847,525
2012	1,200,000	405,000	269,633	19,432		1,894,065
2013	1,506,725		184,949	22,735		1,714,409
2014	1,542,702	379,970	445,347			2,368,019
2015	1,653,495	479,708	584,397			2,717,600



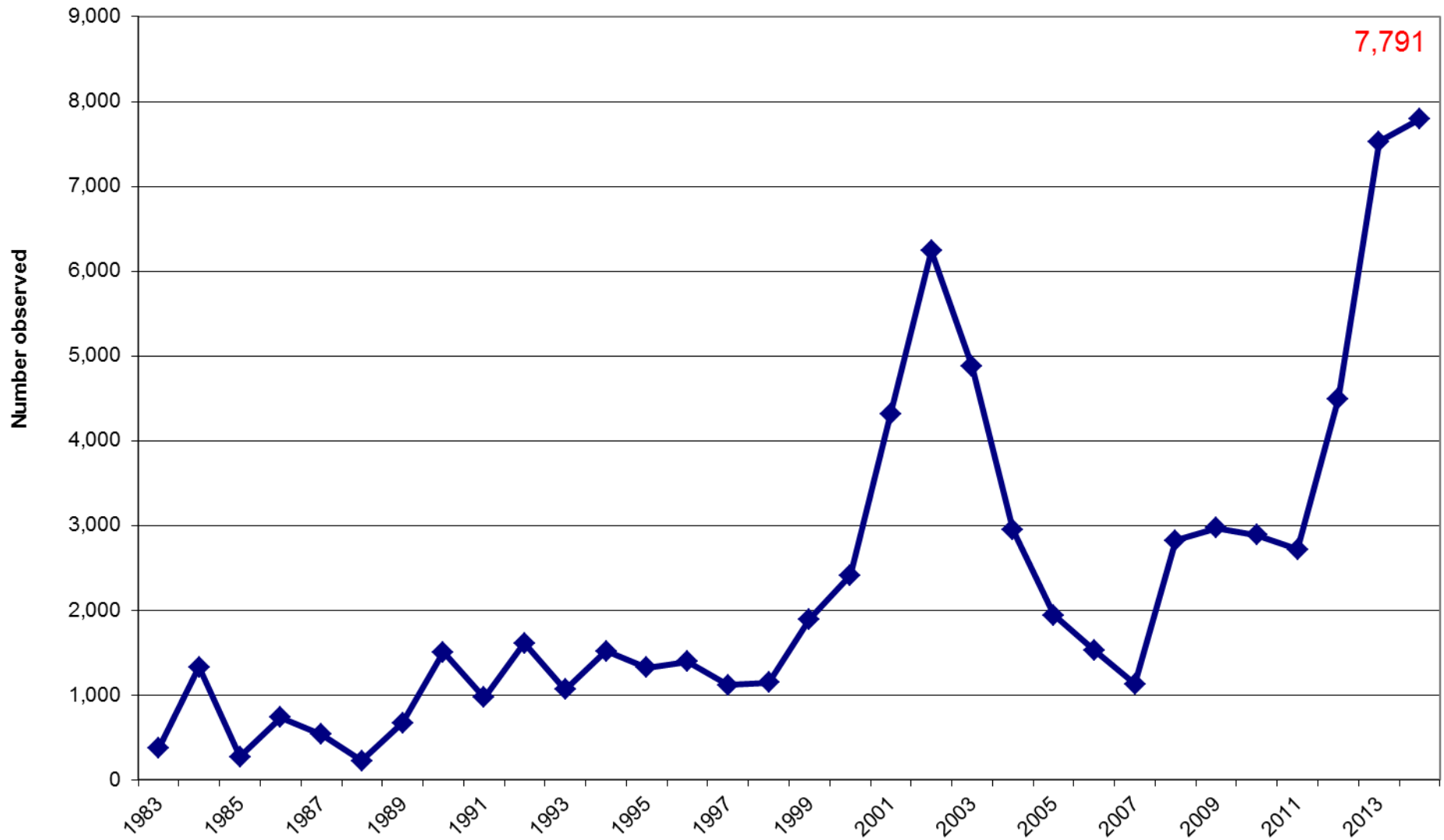
Fall Chinook Volitional Release smolt-smolt survival to McNary

ProSub





Fall Chinook Adult Passage above Prosser Dam

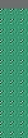


2014 Redd Surveys above Prosser

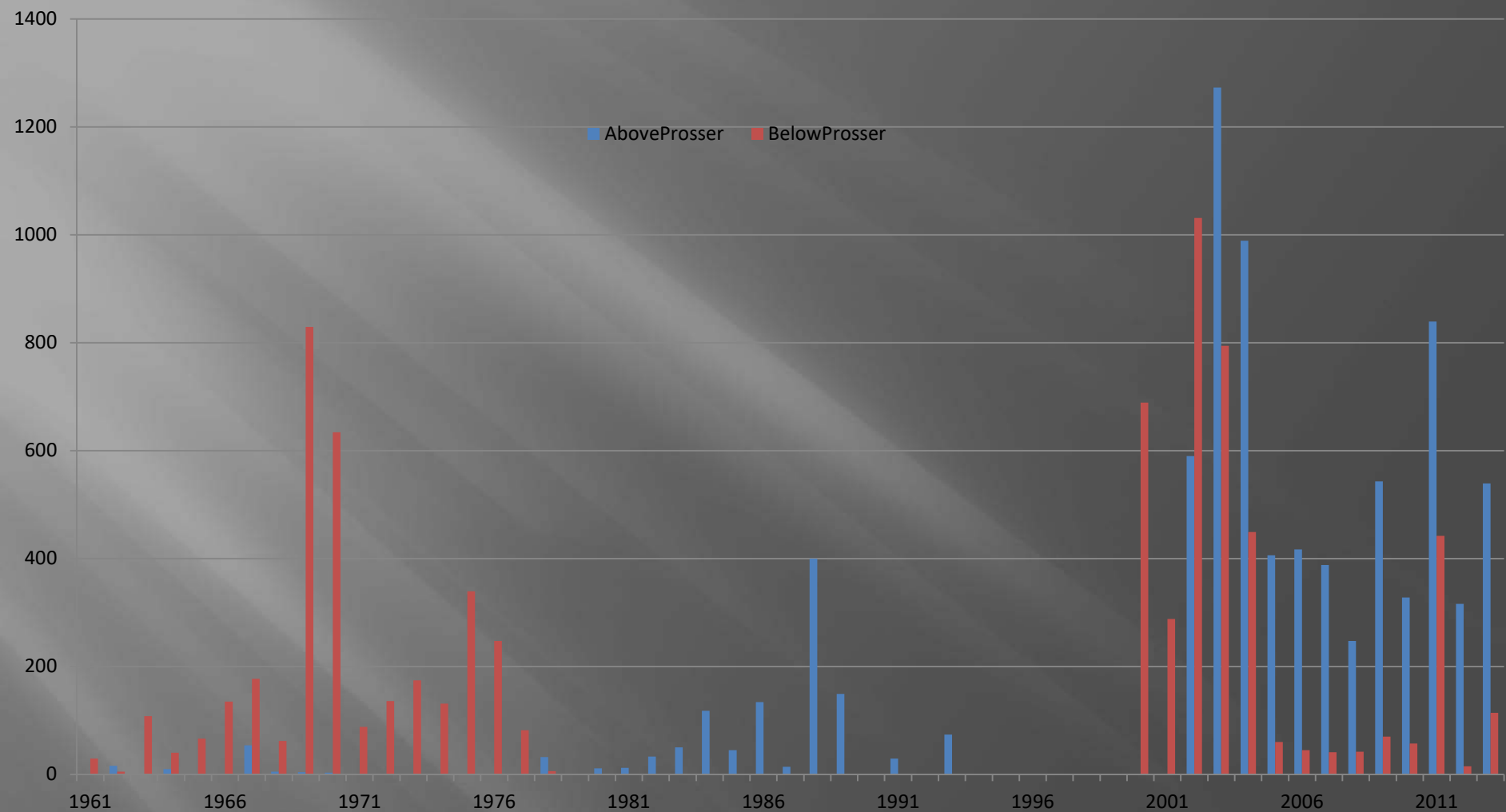
7,791 Adults over Prosser Dam

Yakima River- 411 Redds

Naches River- 0 Redds

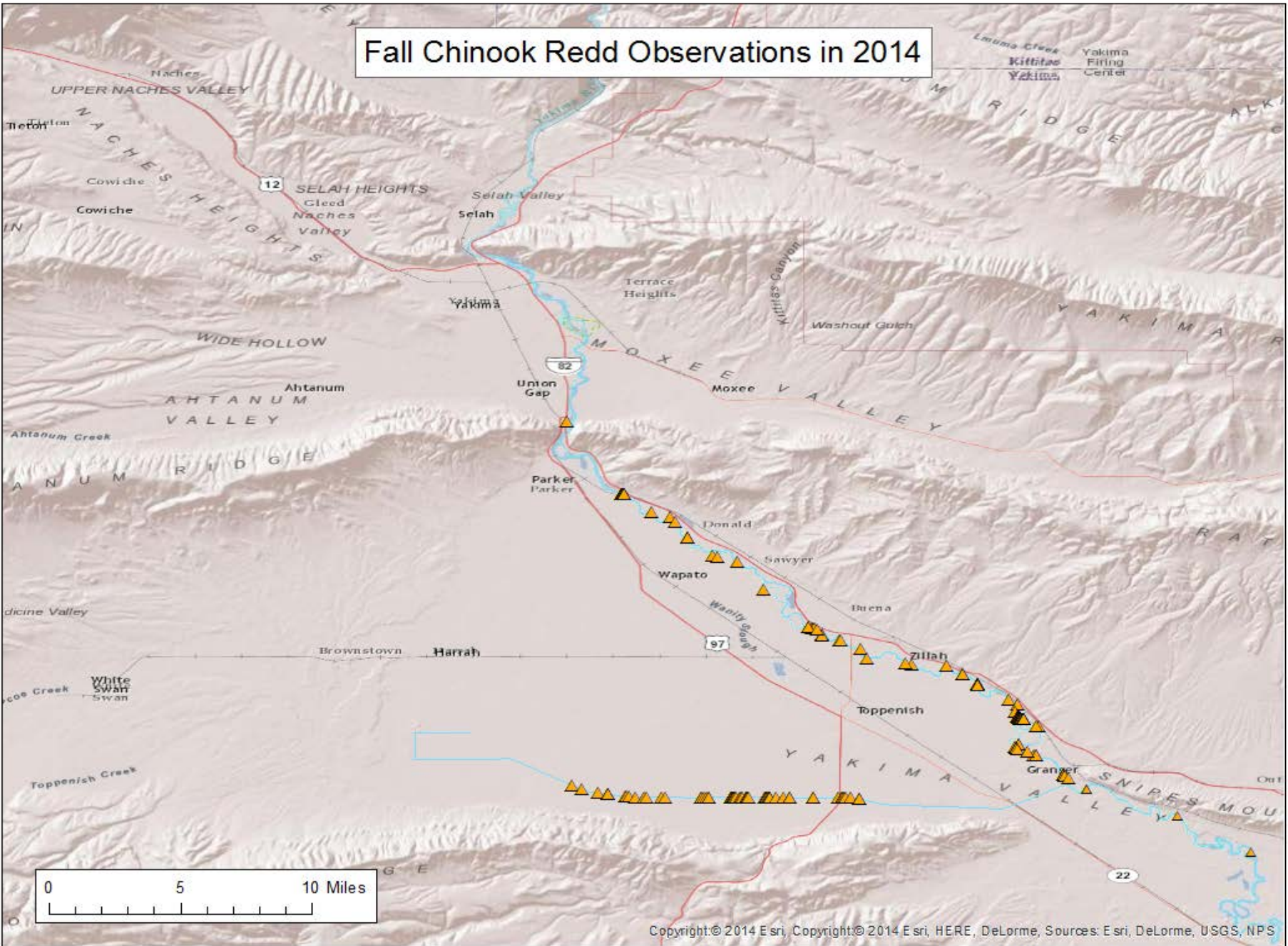


Yakima River Redds above AND below Prosser



Fall Chinook redd counts above and below Prosser Dam, 1961-present, for years in which surveys were conducted and data are available. Data from YN, WDFW, and Pacific Northwest National Laboratory files; survey data are partial or incomplete for most years prior to 2000. (YKFP 2014 Report, Sampson, M.R., D.E. Fast, and W.J. Bosch)

Fall Chinook Redd Observations in 2014



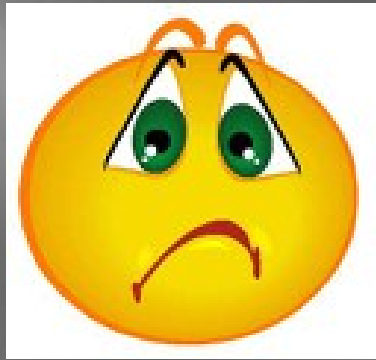
Copyright © 2014 Esri, Copyright © 2014 Esri, HERE, DeLorme, Sources: Esri, DeLorme, USGS, NPS

Marion Drain Redds 2001-2014



2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

The sad news.....



Yakima River Summer Chinook were extirpated in
the early 1970s.

30+years later



hmmmmm

In 2008, it was time to address the question
“Could we *Re-Establish a Summer Run*
component back to the Yakima basin using an
out-of-basin stock??

Given the opportunity, *would* ADULTS
RETURN?



*As a
matter
of fact,
YES!*



*We're
Back!*

The **FIRST** Summer Chinook to return
over Prosser on 7/16/11.

*BY2008 Stiles release observed
at Prosser 7/16/11*

MOTION: POST-ALARM

C03 2011/07/16-04:17:18

Re-Establishing Summer Chinook in the Yakima River

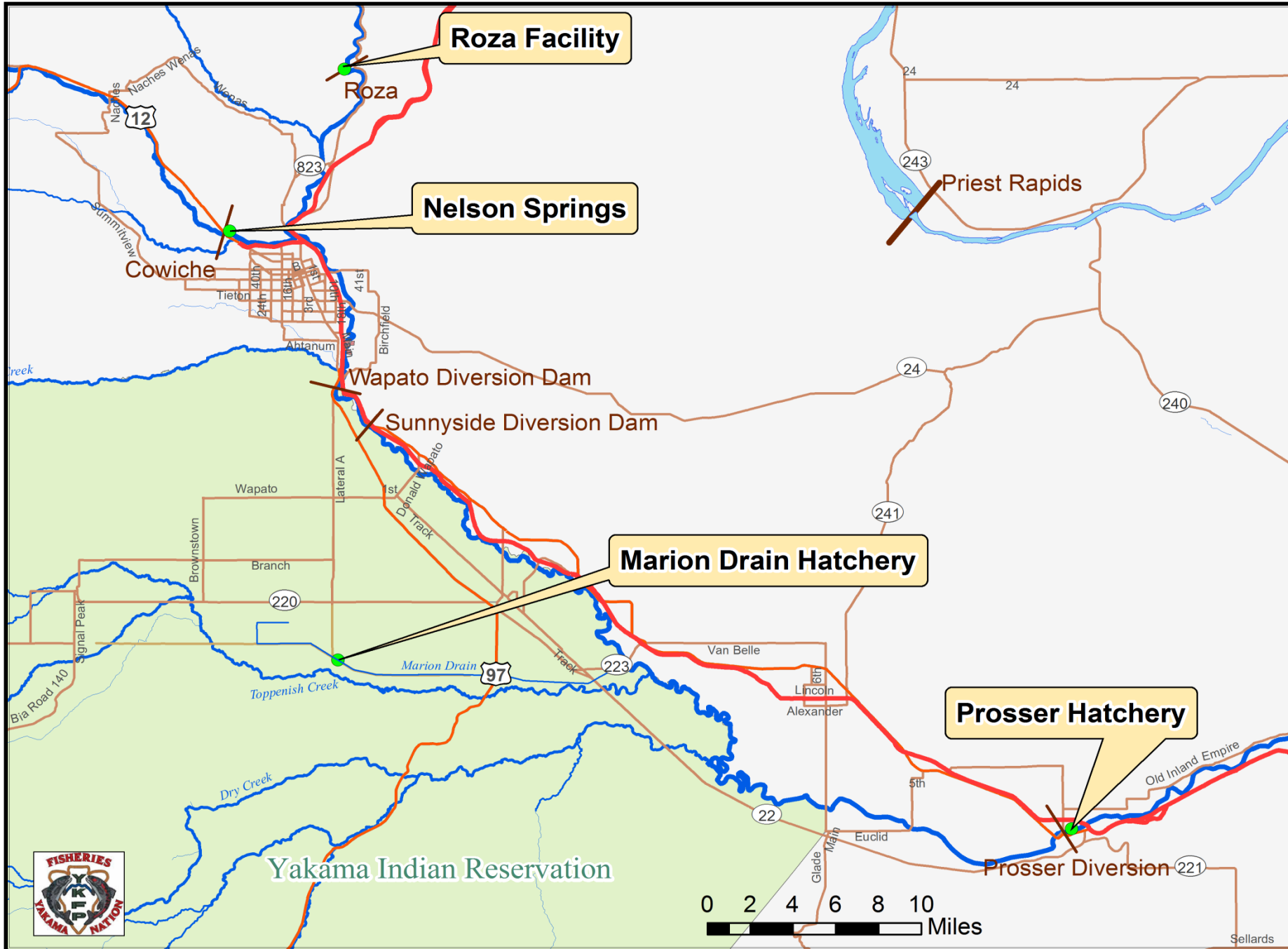
- **Objective:** To initiate investigation of the feasibility of establishing an early-run fall Chinook population in the Yakima River, with the goals being to:
 - Develop a naturally spawning adult population in the Yakima River between Sunnyside Dam and Roza Dam, and in the lower Naches River from the mouth to the Tieton River, and,
 - Increase the number of natural-origin returning summer-run adults in the lower Columbia, Zone 6, and the lower Yakima River contributing to harvest augmentation for both the tribal and sports fishery.

WDFW Wells Hatchery

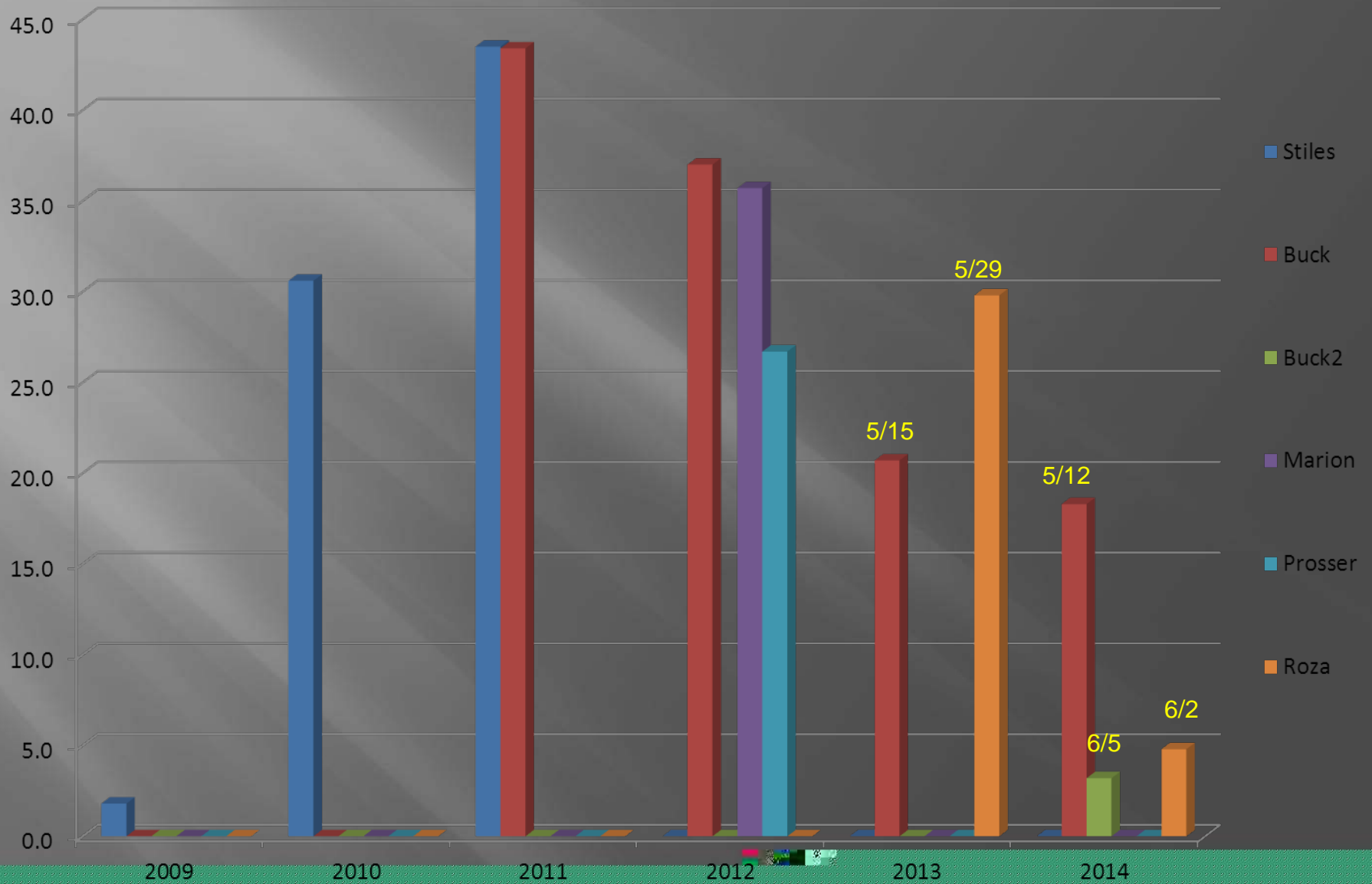


YN Marion Drain Hatchery

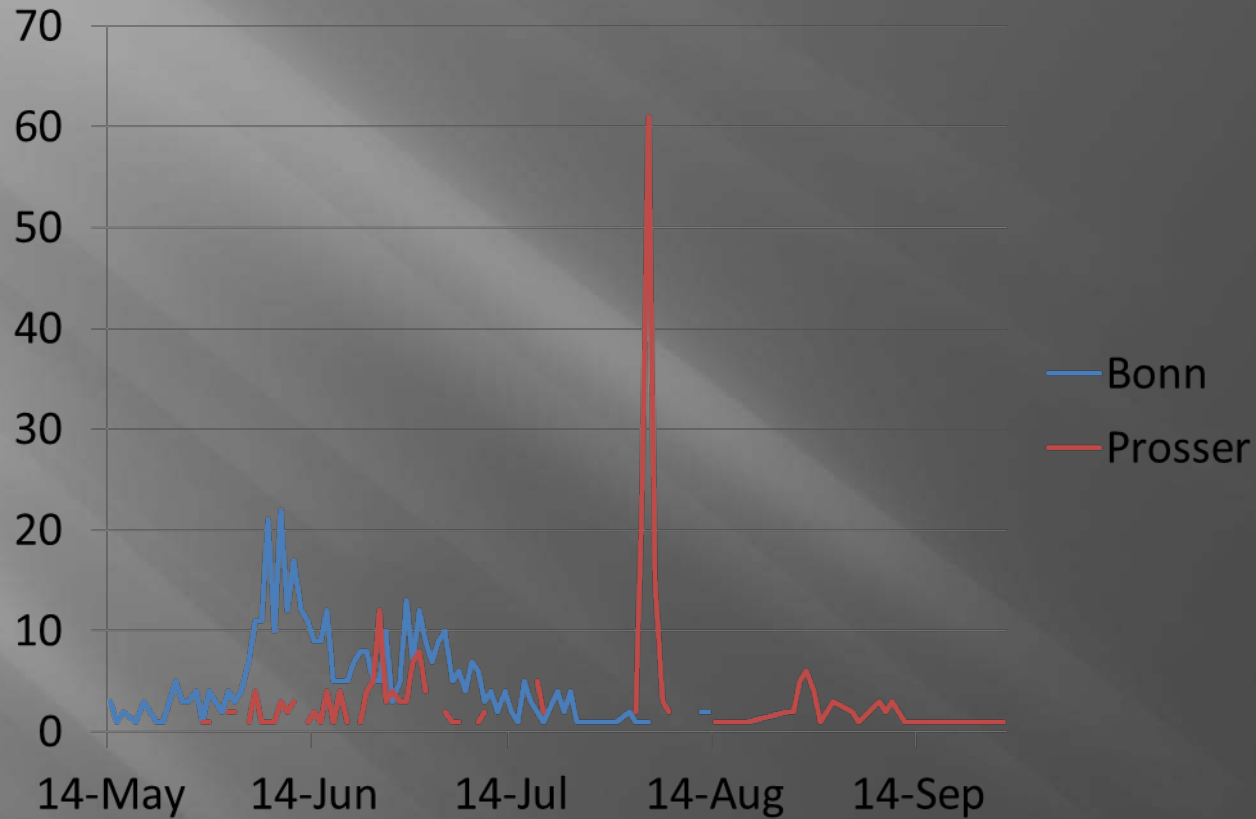




Summer SI to McNary



Summer Chinook PIT-Based Run Timing at Bonneville and Prosser Dams



2015 Redd Surveys above Prosser

1,513 Summer Chinook Adults over Prosser

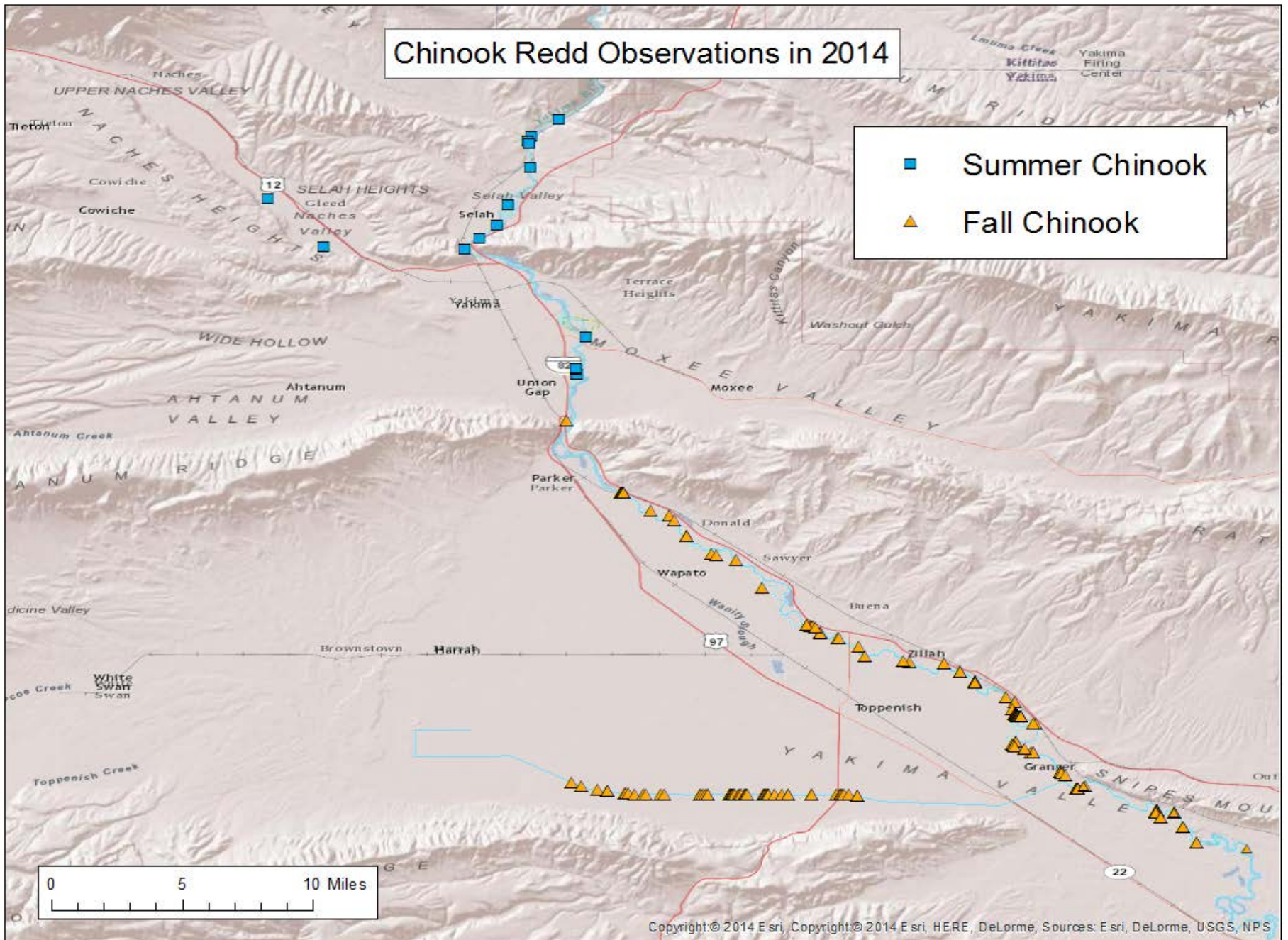


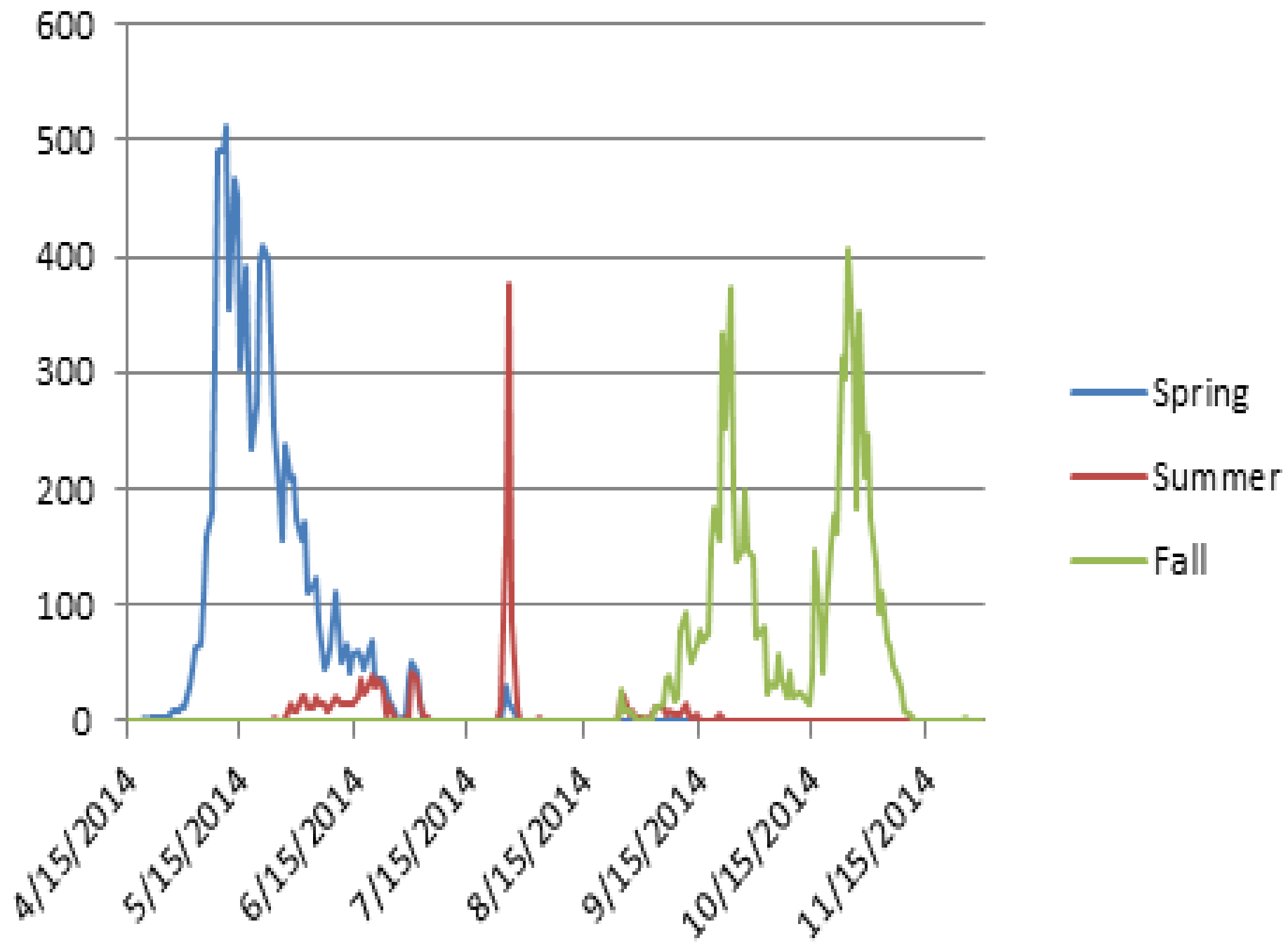
Yakima River- 23 Redds

Naches River- 49 Redds

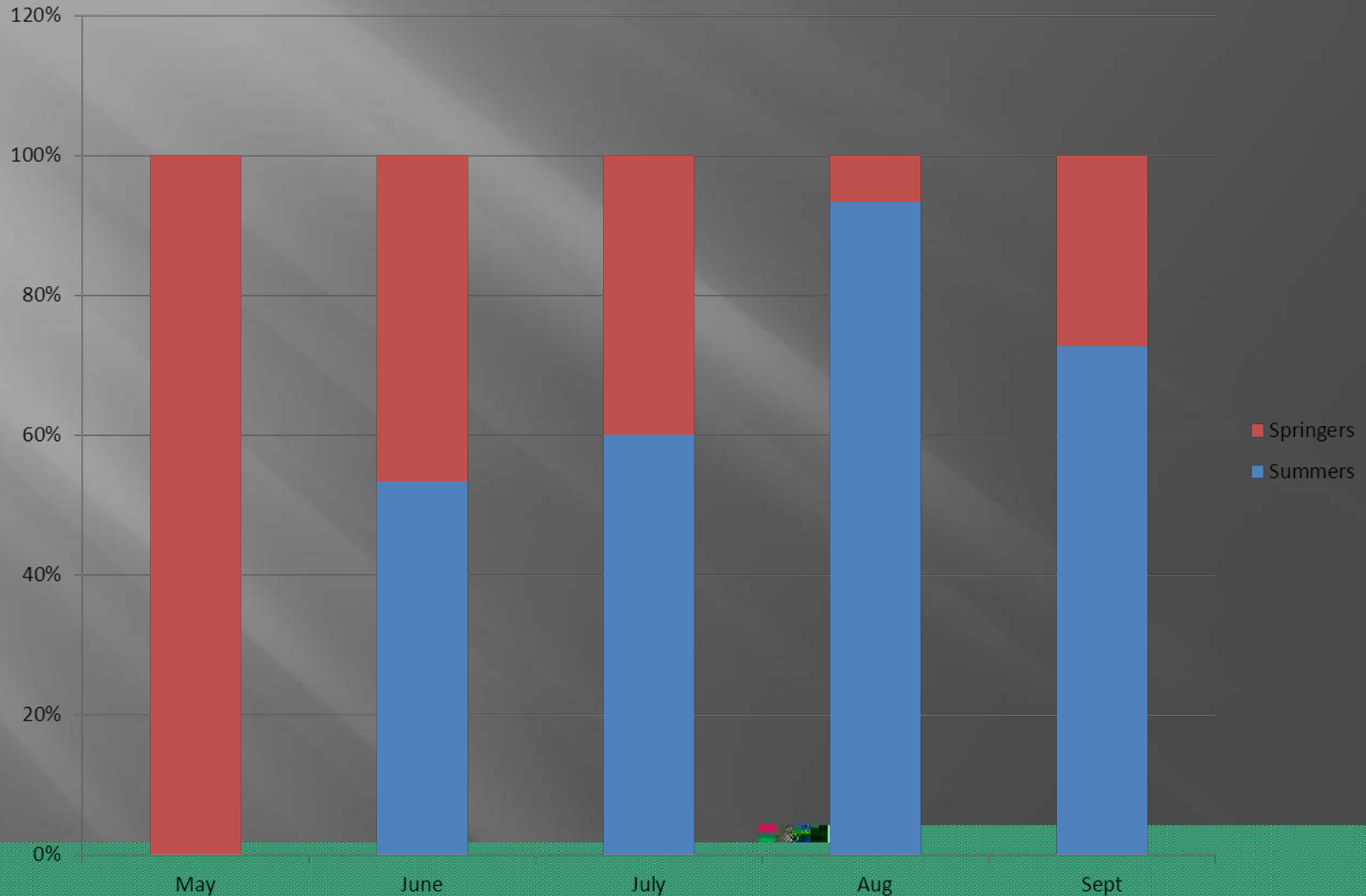
Chinook Redd Observations in 2014

- Summer Chinook
- ▲ Fall Chinook





Timing: Spring vs Summer 2014



[Prosser DVR]CH03-CH3 6/1/2013 1:15:49 PM

Su 6/1/13 1:15pm



MOTION POST-ALARM

SU 5/28/14 1:56:27pm
Eastbank Stiles 5/16/11 BY09



C03[0]5/28/2014 1:56:27 PM

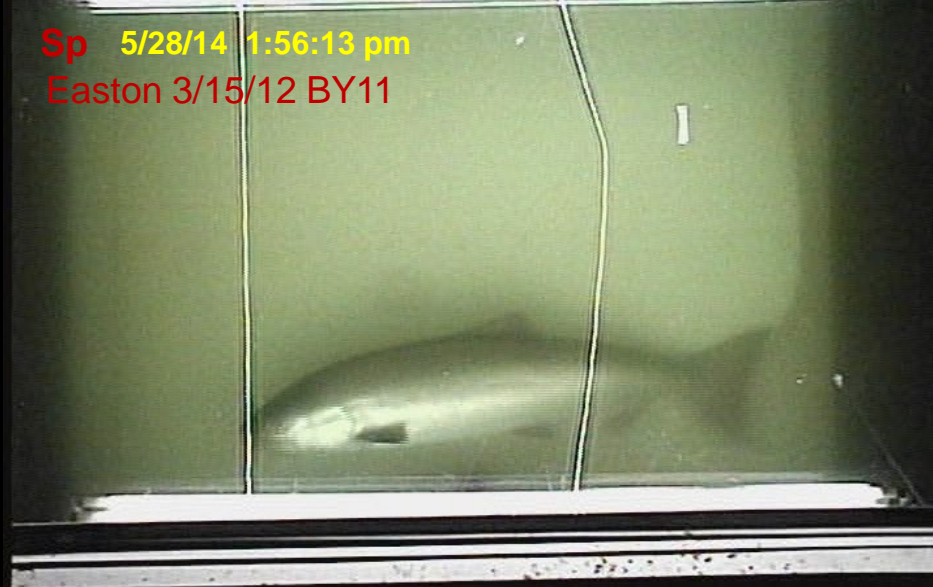
[Prosser DVR]CH03-CH3 6/1/2013 1:24:49 PM

Sp 6/1/13 1:24pm



MOTION POST-ALARM

Sp 5/28/14 1:56:13 pm
Easton 3/15/12 BY11



C03[0]5/28/2014 1:56:13 PM

2013-14 Plans on-going

- Bring in green eggs/milt from Wells Hatchery (MarionD); Final acclimation and release at Nelson and Roza sites.
- Continue In-basin Subyearling releases at Prosser.
- Redd Surveys on the Yakima River between Prosser and Roza Dams and lower Naches River.

2014-15 Future Plans

- Feasibility to Radio Tag Summer Chinook.
- Investigate additional summer chinook mobile acclimation sites for use in the Yakima River above Union Gap, or the lower Naches River.
- Pit-tag a portion of Fall Chinook for release below Wannawish and the Columbia river at the mouth of the Yakima for release at peak passage of Summer Chinook at Prosser Dam.

Acknowledgements

Yakama Nation Tribal Council

Fall Chinook/Coho: Gene Sutterliet Jr., Brady Carl, Joe Jay Pinkham III, Quincy Wallahee and Conan Northwind and Denny Nagle and Christine Arquette who carried out the daily field activities.

Prosser and Marion Drain Hatchery: Joe Blodgett, Michael Fiander and the Hatchery crews

YN: Mel Sampson, Dave Fast, Mark Johnston, Todd Newsome, Bill Bosch, Dave Lind, Doug Neeley, Bill Fiander and Ida Sohappyy-Ike

Chandler Juvenile Monitoring Facility: Leroy Senator, Wayne Smartlowit, Morales Ganuelas and the rest of the crew.

Yakama Nation Museum/Toppenish Museum: Parker Dam and Salmon photos.

WDFW Wells Hatchery

USFWS Fish Health.

BPA

BIG THANKS TO EACH OF YOU!

QUESTIONS??