

# *2014 Yakima Basin Coho Reintroduction*

**Presented By:**

**Todd Newsome**

**Fisheries Biologist for the Yakama Nation**





# Acknowledgements

## YN:

Joe Blodgett  
Sonny Fiander  
and Prosser Crew

Joe Jay Pinkham III

Conan Northwind

Quincy Wallahee

Andrew Lewis

Brady Carl

Gene Sutterliet

Sarah Sohappy

Nate Pinkham

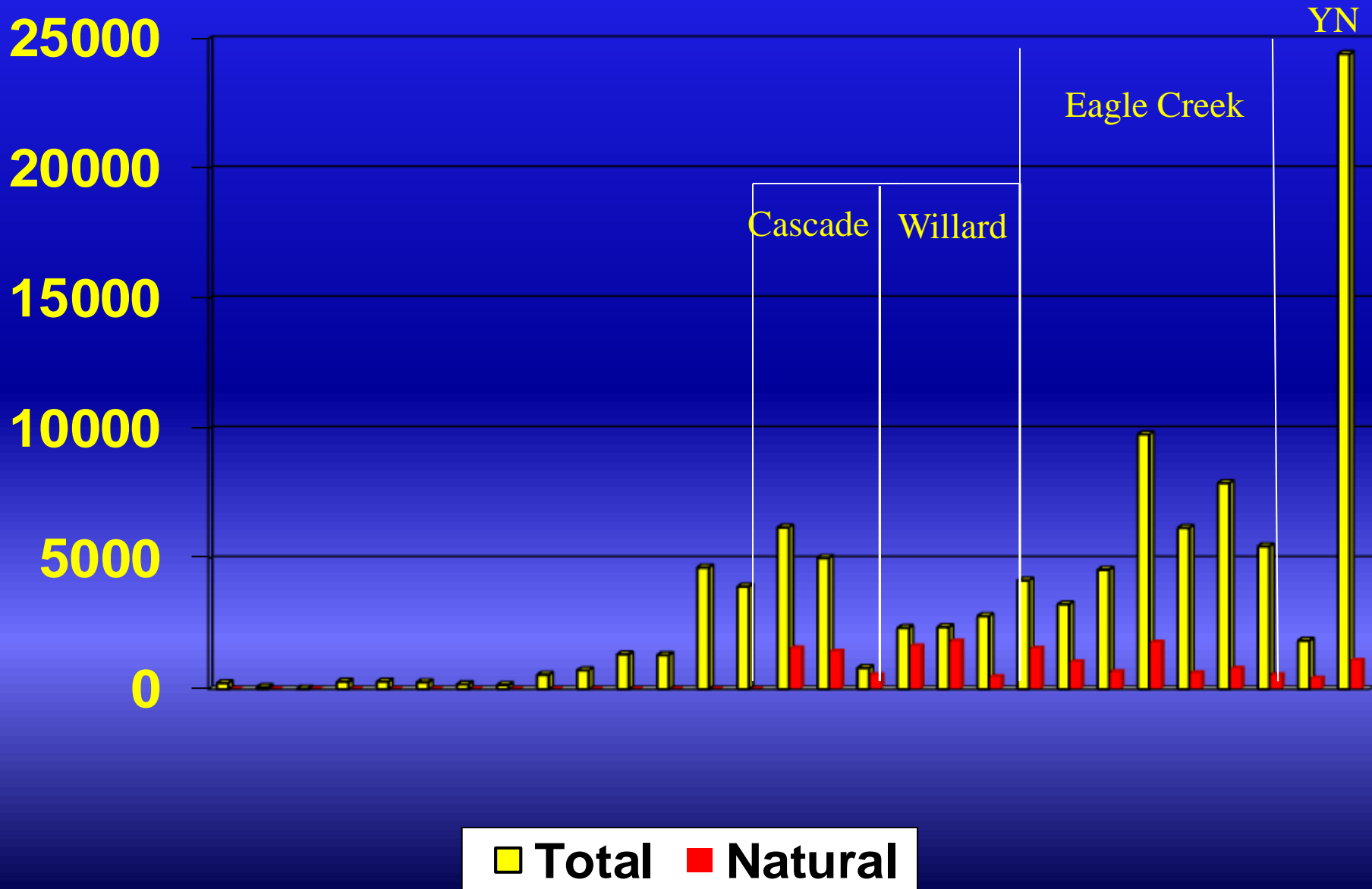
## WDFW:

Gabe Temple

Chris Johnson

Trenton DeBoer

# Upper Yakima Coho Returns, 1986 – 2014



# 2014 Hatchery Coho Juvenile Acclimation Sites Yakima Basin

Volitional Release, April 15, 2014

Holmes, 92,105

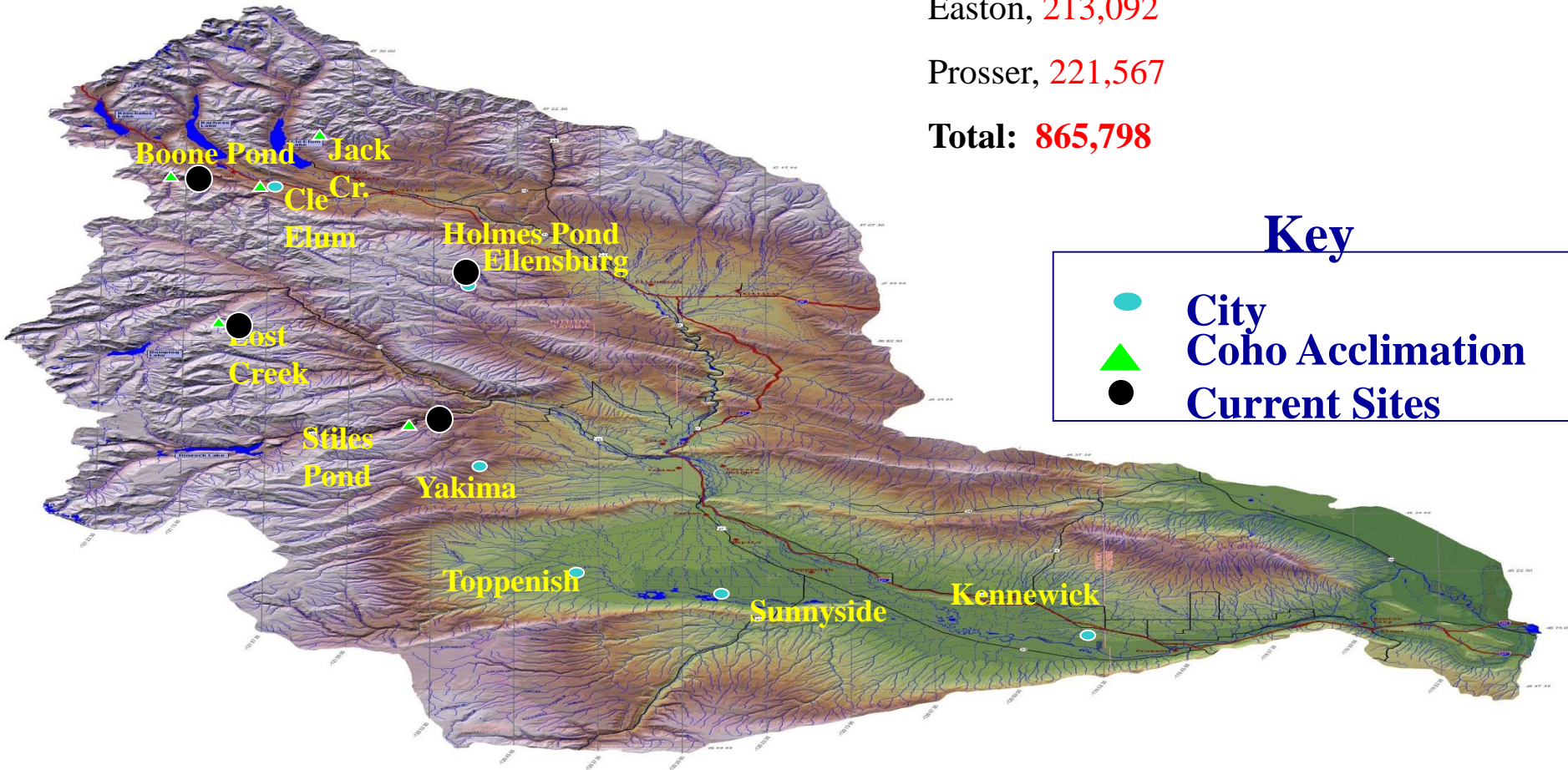
Lost Creek, 94,680

Stiles, 200,946

Easton, 213,092

Prosser, 221,567

**Total: 865,798**

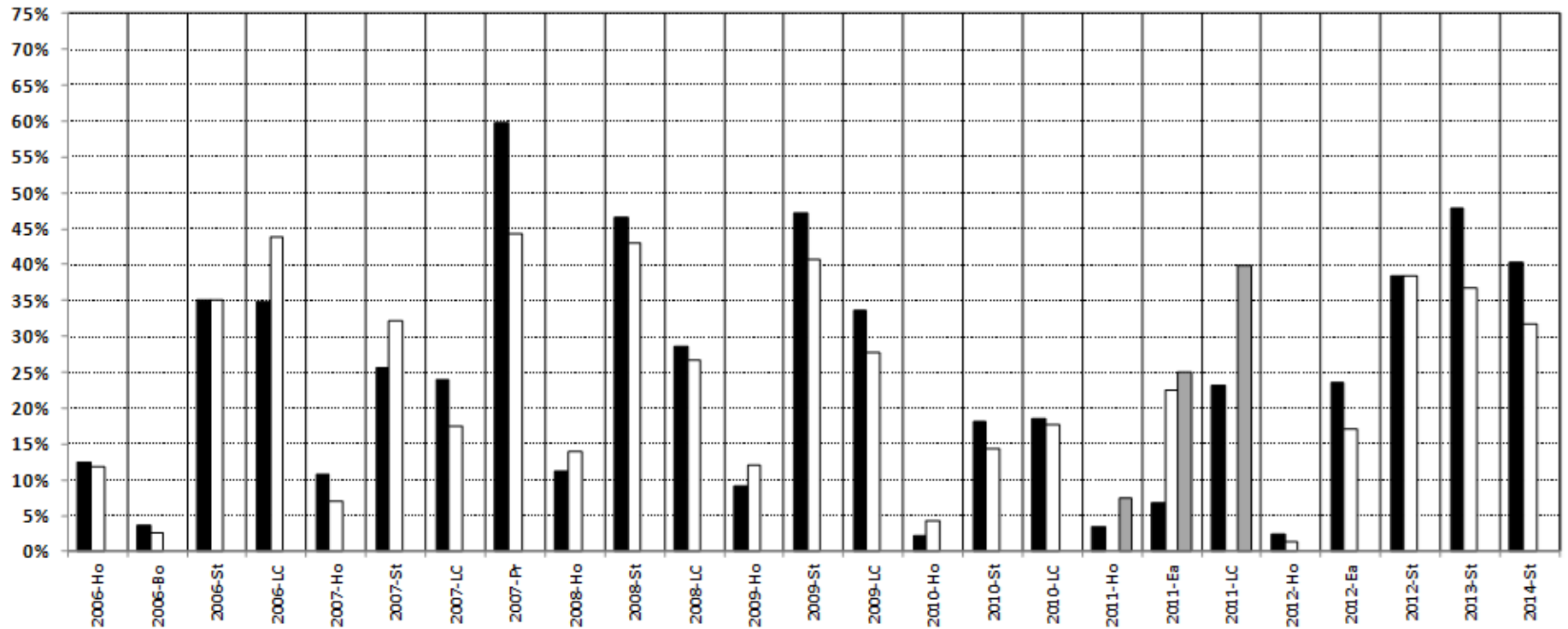


## Key

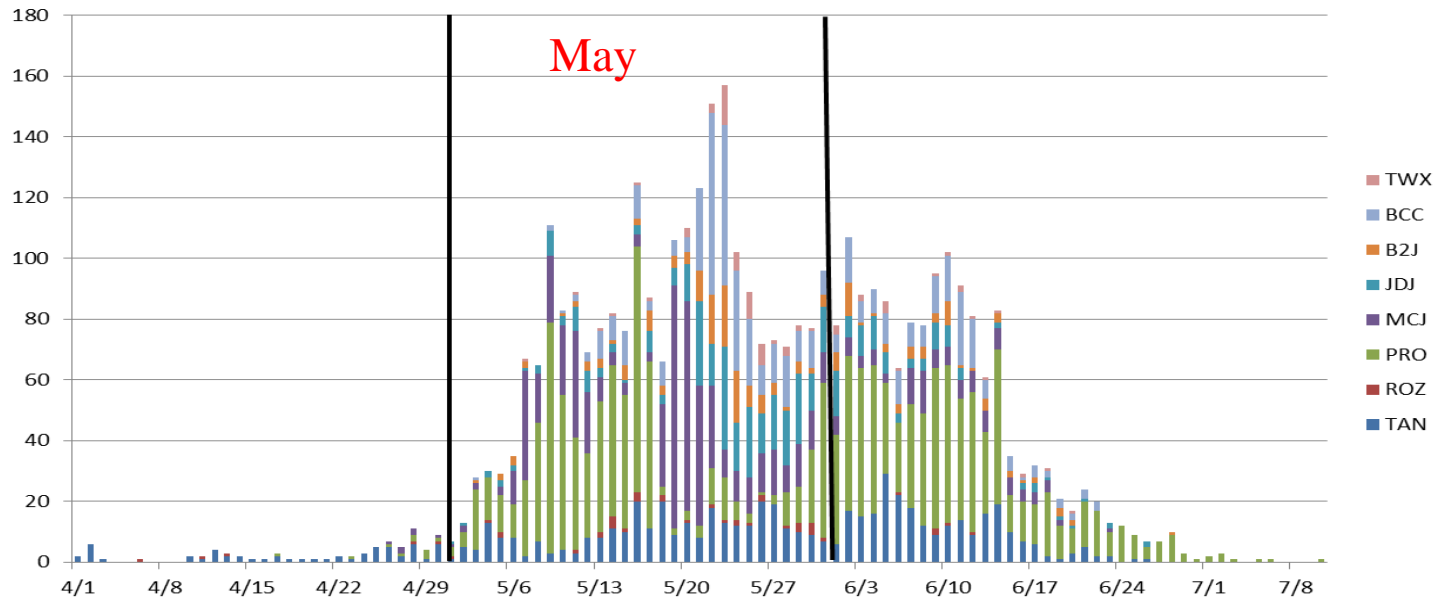
- Blue Circle: City
- Green Triangle: Coho Acclimation
- Black Circle: Current Sites

# Outmigration-Year Coho 2006-2012 (2004-2012 Brood) Time-of-Tagging-to- McNary Smolt Survival

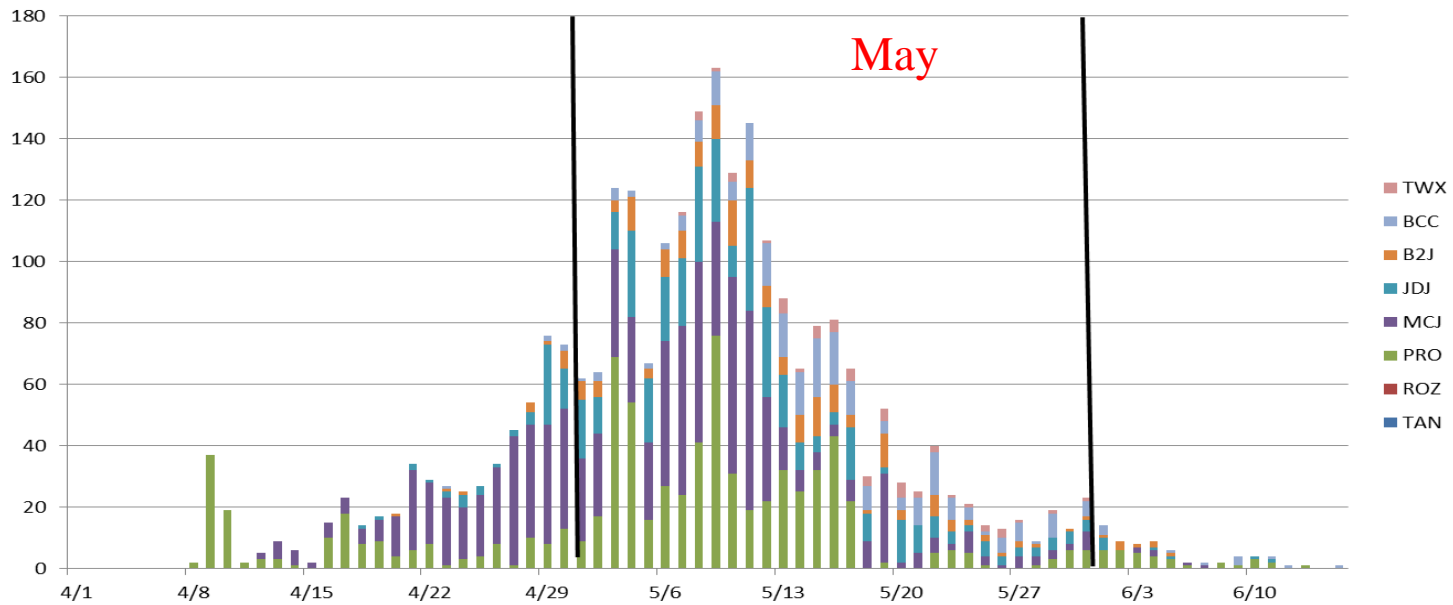
Yakama Stock: Black  
Eagle Creek Stock: White  
YN/EC Cross Stock: Outlined



## 2014 Detections of 2013 Coho Parr Releases



## 2014 Detections of Coho Smolt Releases

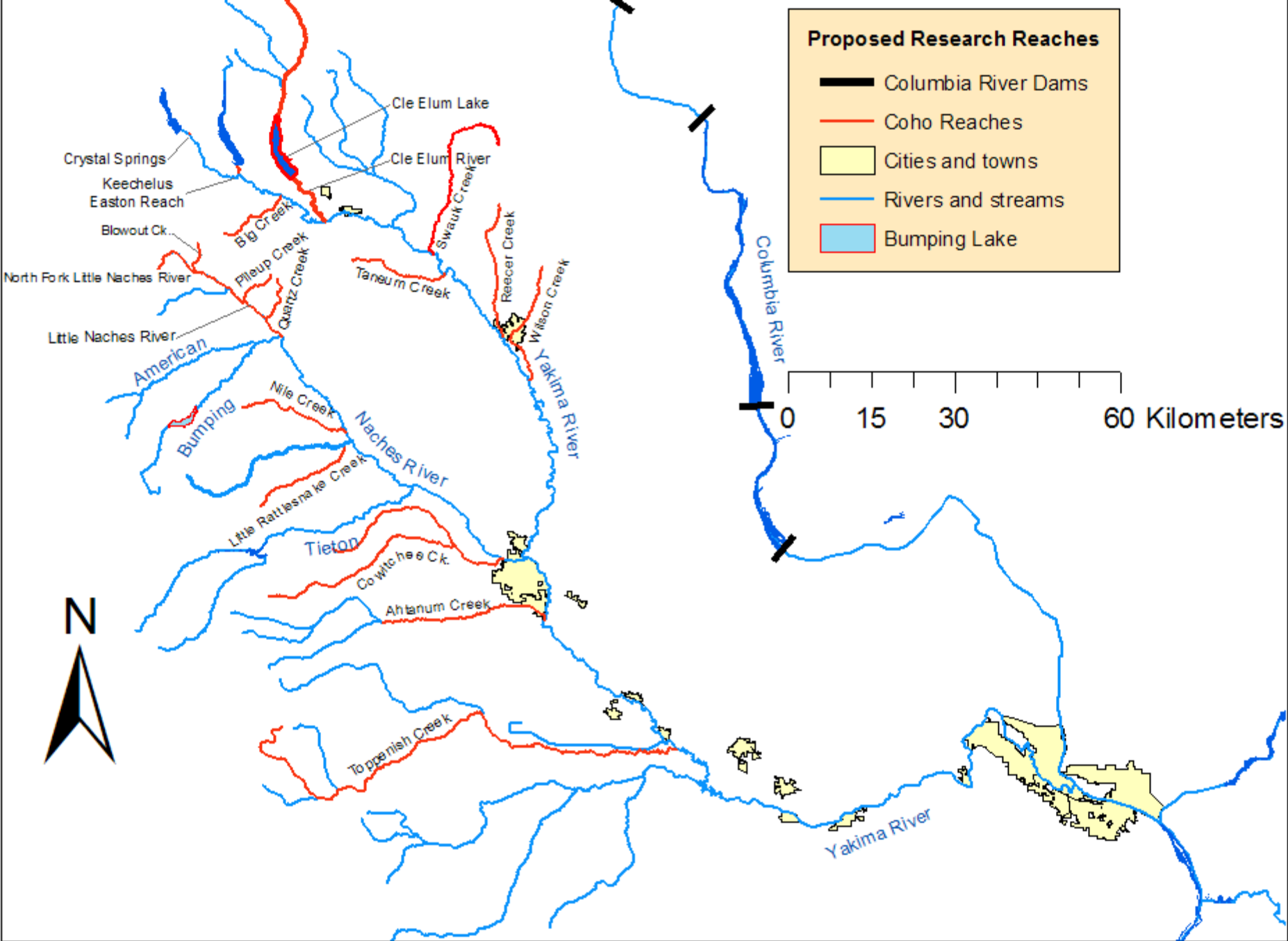


# Continuing Coho Work

- Adult Planting
- Parr Planting
- Mobile Acclimation
- Egg to Fry





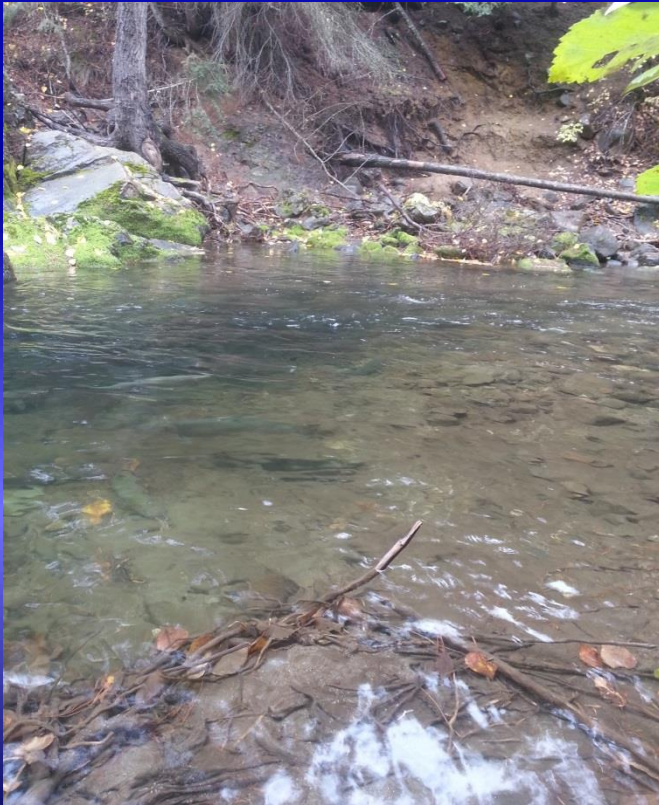


# Taneum Creek Coho Reintroduction

## YN and WDFW cooperative Project

Coho are planted the last week of October and are now part of a continuing maintenance project to monitor fish populations in Taneum Creek.

- **2013** - (9 females and 11 males)
- **2014** – (360 females and 200 males)      Redds found 105



# Taneum Creek Adult Coho Salmon out-planting Results

Year	Adult Females	Redds	Number of coho Pit Tagged	Migration Year	Survival to McNary Dam
<b>2007</b>	<b>150</b>	<b>75</b>	<b>1299</b>	<b>2009</b>	<b>16%</b>
<b>2008</b>	<b>150</b>	<b>50</b>	<b>1868</b>	<b>2010</b>	<b>10%</b>
<b>2009</b>	<b>150</b>	<b>130</b>	<b>4515</b>	<b>2011</b>	<b>13%</b>
<b>2010</b>	<b>150</b>	<b>134</b>	<b>1054</b>	<b>2012</b>	<b>26%</b>
<b>2011</b>	<b>150</b>	<b>100</b>	<b>743</b>	<b>2013</b>	<b>12%</b>
<b>2012</b>	<b>60</b>	<b>54</b>	<b>1941</b>	<b>2014</b>	<b>12%</b>
<b>2013</b>	<b>9</b>	<b>11</b>	<b>231</b>	<b>2015</b>	

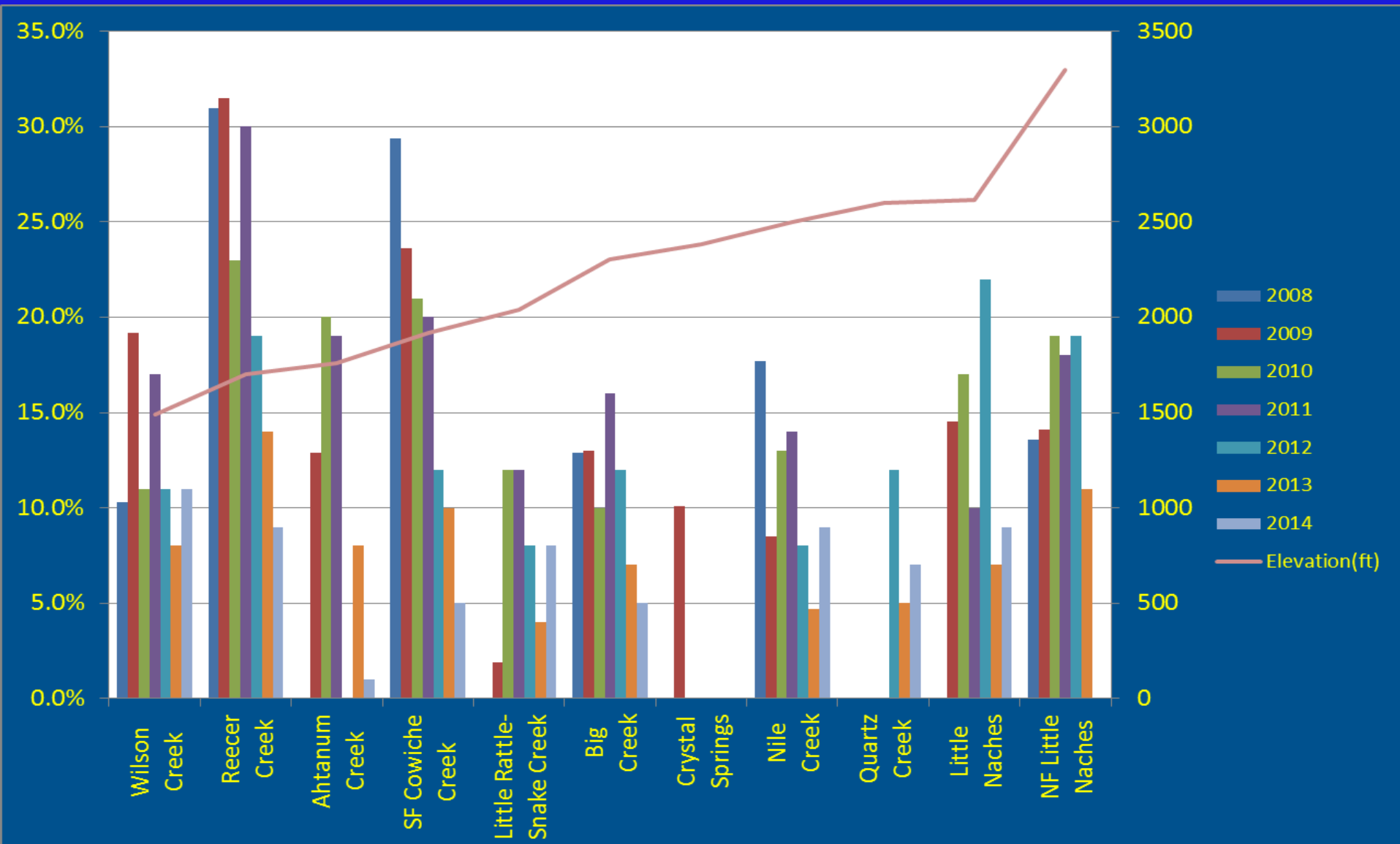
# Taneum Creek Adult Returns 2014

- Bonneville- 12
- McNary- 9
- Prosser- 7
- Roza- 7
- Taneum Creek- 3
- Prosser to Prosser Smolt to Adult return  
2.62%

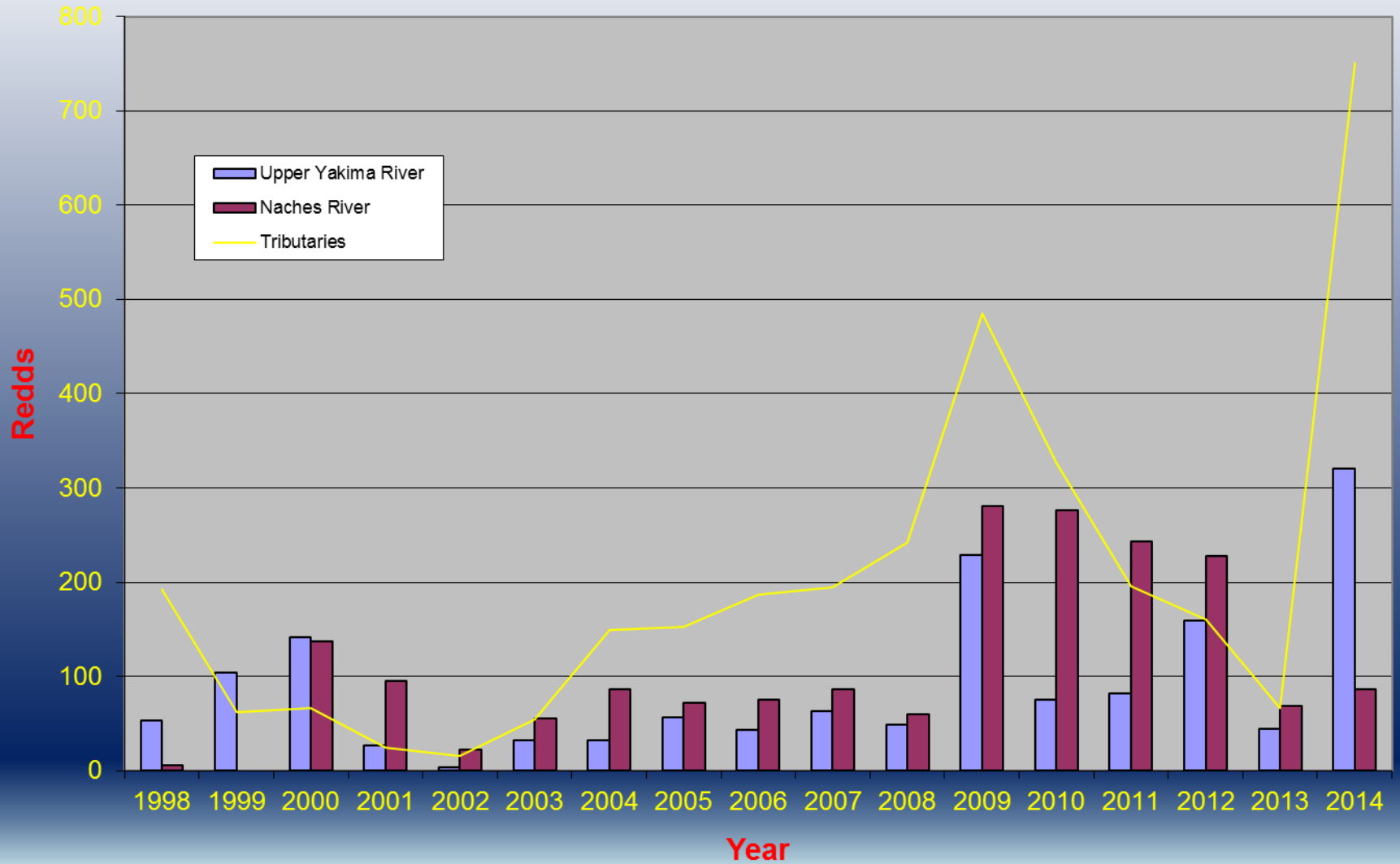
# Summer Parr Plants



# Parr Survival 2008-2014



# Yakima Basin Redd Counts 1998-2014





N47°00'31.68"

N47°00'5.76"

S136°59'39.84"

W120°34'55.2"

W120°34'29.28"

W120°34'3.36"

W120°33'37.44"

W120°33'11.52"

R31  
R30

R27R26  
R28+R29

R21+2  
R23 R20+2  
R25

R19

R18  
R18

R17

R15  
R14  
R13  
R12  
R11



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W120°34'21.12"

221  
221

Naches Heights Rd

W120°34'55.2"

N46°37'50.88"

001 002 003 004 005  
001 002 003 006 009 012 013 014 015 016 018 019

020 021 023 026 027 028 029 030 031

032 033 034 035 036 037 038 039 041

042 046 048 047 049 050

City Reservoir Rd

N46°37'24.96"

W120°34'29.28"

12

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# RIP

Ms. Lou 2002-2014



# Coho Egg-to-Fry Survival

**Trenton De Boer**

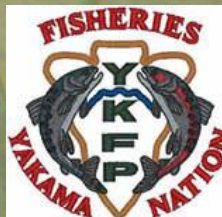
Washington Department Fish & Wildlife

**Todd Newsome**

Yakima Nation Fisheries



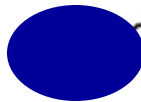
Washington Department of  
**FISH and WILDLIFE**



# What's going on...



- Project Background
- Pilot Years



## Multi-year Year Study

- Reaches
- Sites
- Redds
  - 30 redds in 2012
  - 36 redds in 2013
  - 36 redds in 2014

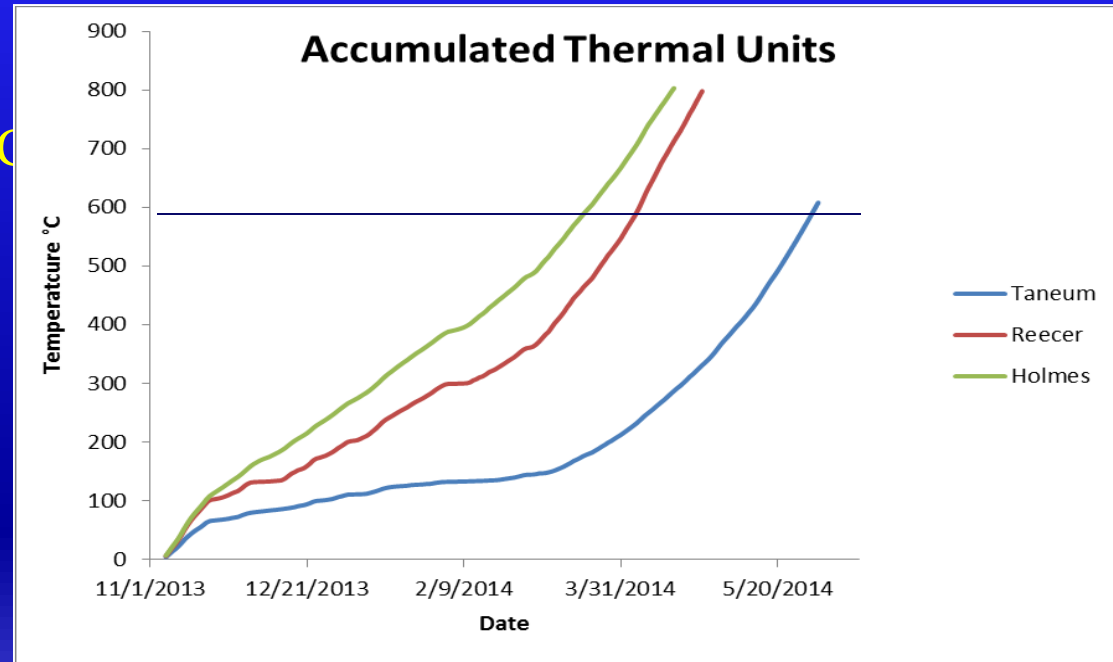
# Site Preparation and Egg Box Placement

- Artificial redd construction
- Gamete collection at Prosser
- Gamete fertilization
- Placement of eggs into pre-constructed redd
- Secondary data collection

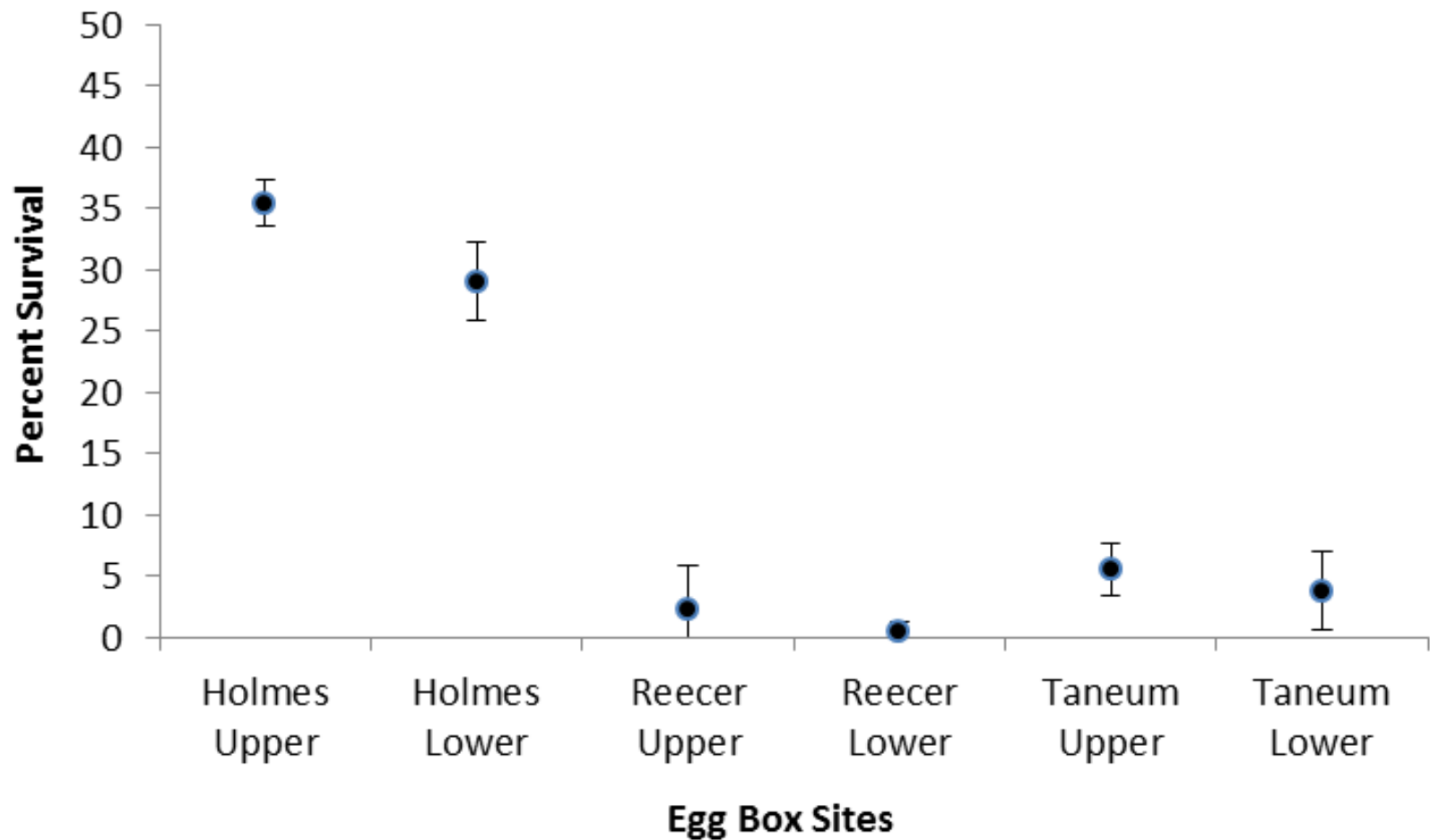


# Egg Box Excavation

- Target Recovery at 600 ATUs (C)
- Locating artificial redds
- Egg box excavation
- Collected field data
- Fry development (kD)

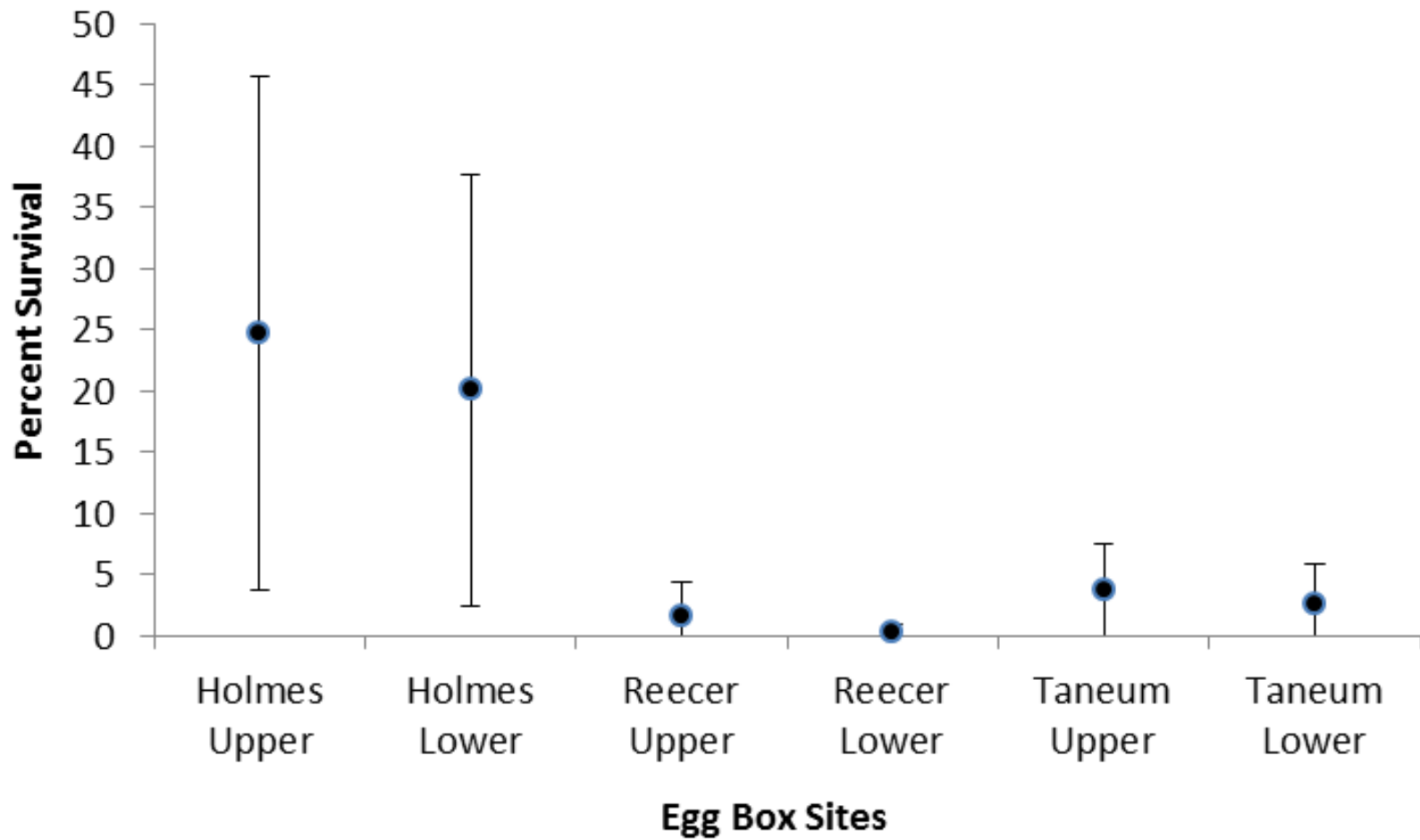


# Survival Results



2012 & 2013

# Survival Results



2012-2014



# Wrapping it up

## Why the poor survival in 2014-15?

- Parental cross?
- Site relocation?
- Elevated water temperatures?

# Acknowledgments

## **WDFW:**

Scott Coil, Ian Coon, Ryan Fifield, Casey Green, Alex Hedrick, Jonathan Hegna, Christopher Johnson, Amy Julsrud, Zach Lessig, Cade Lillquist, Nick Mankus, Nicole Ogan, Sam Roth, Seth Shy, Dan Skillman, Ryan Steele, and Tim Webster

## **YN:**

Brady Carl, Andrew Lewis, Conan Northwind, Joe Jay Pinkham III, Gene Sutterlick, Quincy Wallahee, and Joe Blodgett and the Prosser hatchery crew

## **NOAA:**

Phil Roni

Questions?

