

WENATCHEE WATERSHED COMMUNITY MEETINGS

Learn about upcoming stream and forest restoration projects and water resource management in your area.



NEED MORE INFORMATION?

Please contact:

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Visit our website for meeting
information

www.co.chelan.wa.us/natural-resources



Nason Creek

Saturday, May 14th, 10:00 am to noon

Lake Wenatchee Fire Hall (FD #9)

Chumstick Creek

Wednesday, May 18th, 6:30 pm to 8:30 pm

Leavenworth Fire Hall (FD #6)

Upper Wenatchee River (including Lake Wenatchee, Little Wenatchee River, White River and Chiwawa River)

Saturday, May 21st, 10:00 am to noon

Lake Wenatchee YMCA Camp

Mission Creek

Wednesday, May 25th, 6:30 pm to 8:30 pm

Cashmere Riverside Center

Lower Wenatchee River (Leavenworth to Columbia River)

Wednesday, June 1st, 6:30 pm to 8:30 pm

Cashmere Riverside Center

Peshastin Creek

Wednesday, June 8th, 6:30 pm to 8:30 pm

Dryden Fire Station (FD #6)

Topics discussed at Watershed Community

Meetings will include:

- Updates on completed and proposed stream restoration projects
- Updates on water resources and forest management projects



NASON CREEK COMMUNITY MEETING

- WELCOME AND INTRODUCTIONS
- BACKGROUND ON WATERSHED PLANNING AND SALMON RECOVERY PLANNING
- IMPLEMENTATION PRIORITIES
- COMPLETED AND ONGOING PROJECTS
- FUTURE EFFORTS AND OPPORTUNITIES



WATERSHED PLANNING WENATCHEE RIVER WATERSHED

- PLANNING PROCESS BEGAN IN 1999 UNDER RCW 90.82
- PLAN APPROVED IN 2006 BY LOCAL STAKEHOLDER GROUP
- ALL 4 ELEMENTS INCLUDED: WATER QUANTITY, INSTREAM FLOWS, WATER QUALITY AND HABITAT

ENDANGERED SPECIES ACT (ESA)

- UPPER COLUMBIA SPRING CHINOOK – 1999 ENDANGERED
- UPPER COLUMBIA STEELHEAD – 1997 ENDANGERED, RE-CLASSIFIED AS THREATENED
- BULL TROUT - THREATENED

ESA EFFORTS

- DEVELOPMENT OF FEDERAL RECOVERY PLANS
- NOAA-FISHERIES AND US FISH AND WILDLIFE SERVICE
- WATERSHED PLANNING UNITS/WATERSHED ACTION TEAMS
- UPPER COLUMBIA SALMON RECOVERY BOARD

IMPLEMENTATION

- MEETINGS, COORDINATION, PARTNERS
- FUNDING MECHANISMS
- FOCUS ON RESTORING NATURAL PROCESSES IN HIGH PRIORITY AREAS.



Wenatchee River Basin **Restoration** Priorities

Assessment Unit	Priority
Nason Creek	1
Upper Wenatchee River	2
Icicle Creek	3
Peshastin Creek	4
Lower Wenatchee River	5
Mission Creek	6
Little Wenatchee River	Not a priority at this time
White River	Not a priority at this time
Middle Wenatchee River	Not a priority at this time
Chumstick Creek	Not a priority at this time
Chiwawa River	Not a priority at this time

Wenatchee River Basin **Protection** Priorities

Assessment Unit	Priority
Nason Creek	1
White River	1
Upper Wenatchee River	1
Chiwawa River	1
Little Wenatchee River	2
Middle Wenatchee River	2
Icicle Creek	3
Lower Wenatchee River	3
Peshastin Creek	4
Mission Creek	4
Chumstick Creek	4

RESTORATION STRATEGY - REGIONAL TECHNICAL TEAM -

NASON CREEK (PRIORITY 1):

1. PERIPHERAL AND TRANSITIONAL HABITAT (SIDE CHANNEL AND WETLAND)
2. CHANNEL STRUCTURE AND FORM (INSTREAM COMPLEXITY)
3. RIPARIAN CONDITION

Wenatchee Watershed Work Completed to Date

Table 11. Comparison of Projects Completed to Priorities Identified in Table 7 of the Biological Strategy (UCRTT 2013)

Sub-Watershed	# Projects	Amt Spent	Ecological Concern												
			Channel Structure and Form	Peripheral and Transitional Habitat	Riparian	Habitat Quantity	Water Quantity	Water Quality	Sediment Conditions	Injury Mortality	Food	Species Interaction	Protection		
Nason	10	\$7,962,563	.37 mile	51 logs/log structures	202.38 acres										80 acres
Upper Wenatchee	5	\$2,322,313	.2 mile	7 ELJ's			8 barriers removed								
Icicle Creek	6	\$741,663				0.69 miles	3								286 acres
Peshastin	8	\$1,774,533			0.3 acres		9 barriers removed	1.2 cfs							
Lower Wenatchee	30	\$8,318,978	.39 miles	16 large wood structures	1.98 miles	11.6 acres		16 cfs			1				3.5 acres
Mission Creek	10	\$514,948	.62 miles			3.66 acres	3 barriers removed								
Little Wenatchee		\$0													
White River	17	\$4,387,028		128 logs/log structures		0.81 acres	12 barriers removed			1.46 miles					601.4 acres
Middle Wenatchee															
Chumstick	15	\$5,843,670				6.54 acres	36 barriers	0.02 cfs			1 screen				
Chiwawa	7	\$914,514				32.6 acres	5 barriers removed			2.5 miles	1 structure upgrade				
Total		\$32,780,211													

Restoration Priorities:

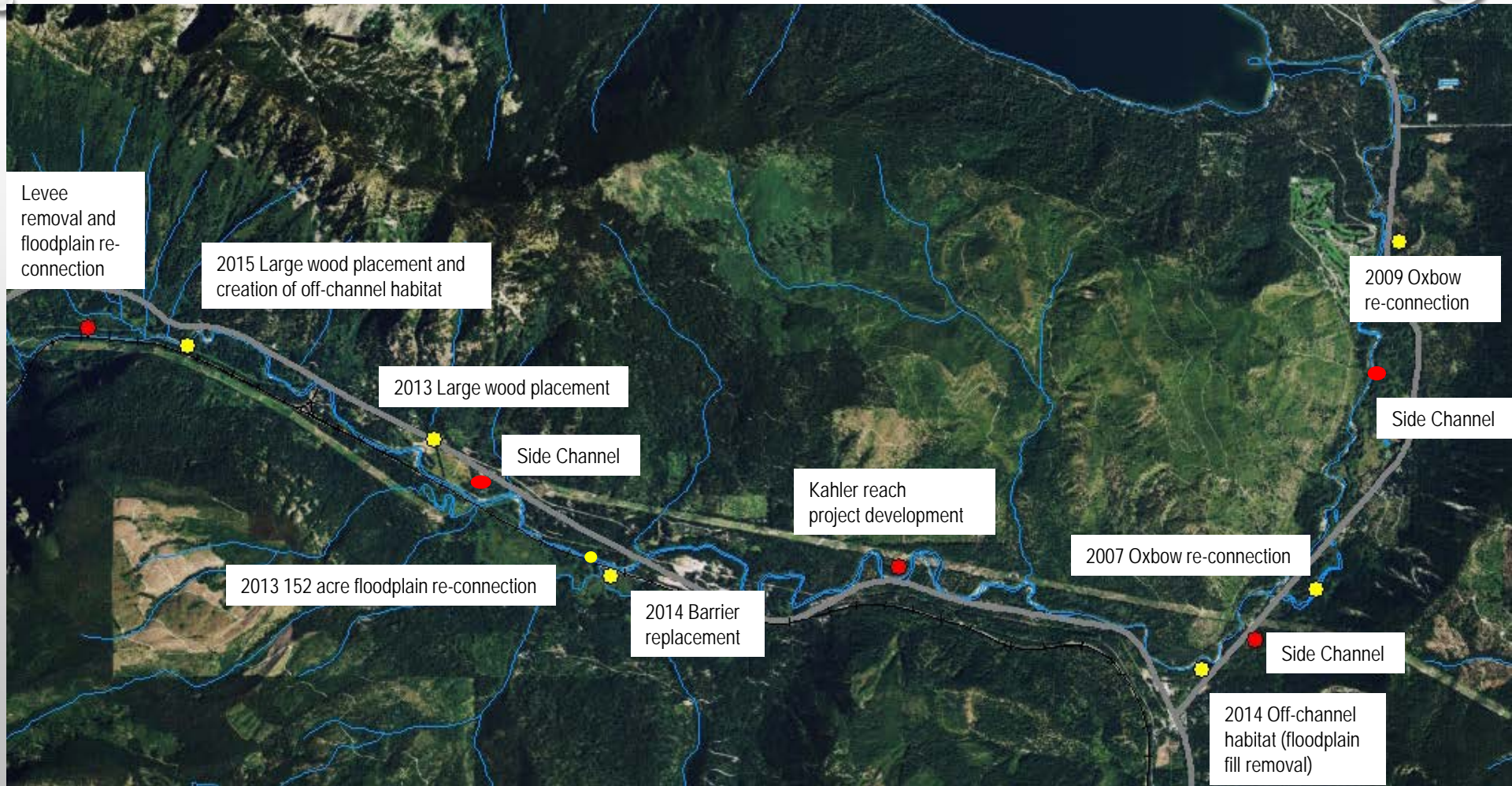
- #1 Ecological Concern to be addressed
- #2 Ecological Concern to be addressed
- #3 Ecological Concern to be addressed

Protection Priorities: Tier 1 = Nason, White, Upper Wenatchee, Chiwawa, Tier 2 = Little Wenatchee, Middle Wenatchee, Tier 3 = Icicle Creek, Lower Wenatchee, Tier 4 = Mission, Chumstick, Peshastin

Table 21. Cost Spent to Date to Address each Ecological Concern and Summary Metrics

Ecological Concern	Amount Spent to Date	Notes
Channel Structure and Form	\$2,897,283	To add wood to 3.38 miles of stream habitat
Habitat quantity (Fish passage)	\$9,828,956	76 barriers removed or replaced with fish passable structures to open up over 63.41 miles (5 projects are missing metrics for miles opened up above barrier) Need to add Icicle barriers
Injury and mortality	\$134,226	This cost is for 4 structures, screens, modifications; likely more have been implemented that are not entered in Habitat Work Schedule
Peripheral and transitional habitat reconnections	\$7,847,384	219.35 acres and 3.32 miles of off-channel or side channel re-connection
Protection	\$5,075,936	971.35 acres of acquisition and conservation easements
Riparian	\$1,511,360	59 acres of riparian planting (some acres estimated based upon 35 wide planting width)
Sediment Reduction	\$247,750	Only have project cost data for 2/4 projects and one other project estimated for a total of 3.96 miles of road work (need to add chumstick numbers)
Water Quantity	\$4,987,316	Amount spent on water quantity (5 projects to restore 17.22 cfs)
Total	\$32,530,210	Total amount spent since about 2006 (plus a few older projects)

PROJECTS OVERVIEW



Legend:

- Proposed projects (in progress)
- Completed projects

Completed Channel Structure and Form (Large Wood) Projects



2014 Oxbow Enhancement	28	logs	0.05	mile
1st Bend Habitat Restoration	5	ELJ's	0.11	mile
UWP Reaches 3 and 4	18	ELJ's	0.20	mile
Total	51	logs	0.37	mile

Completed Fish Passage Projects



Fish passage projects completed

WSDOT Mill Creek Culvert Replacement

7.10 miles

Lower White Pine Reconnection

1.00 miles

Coulter Creek Barrier Replacement

1.60 mile

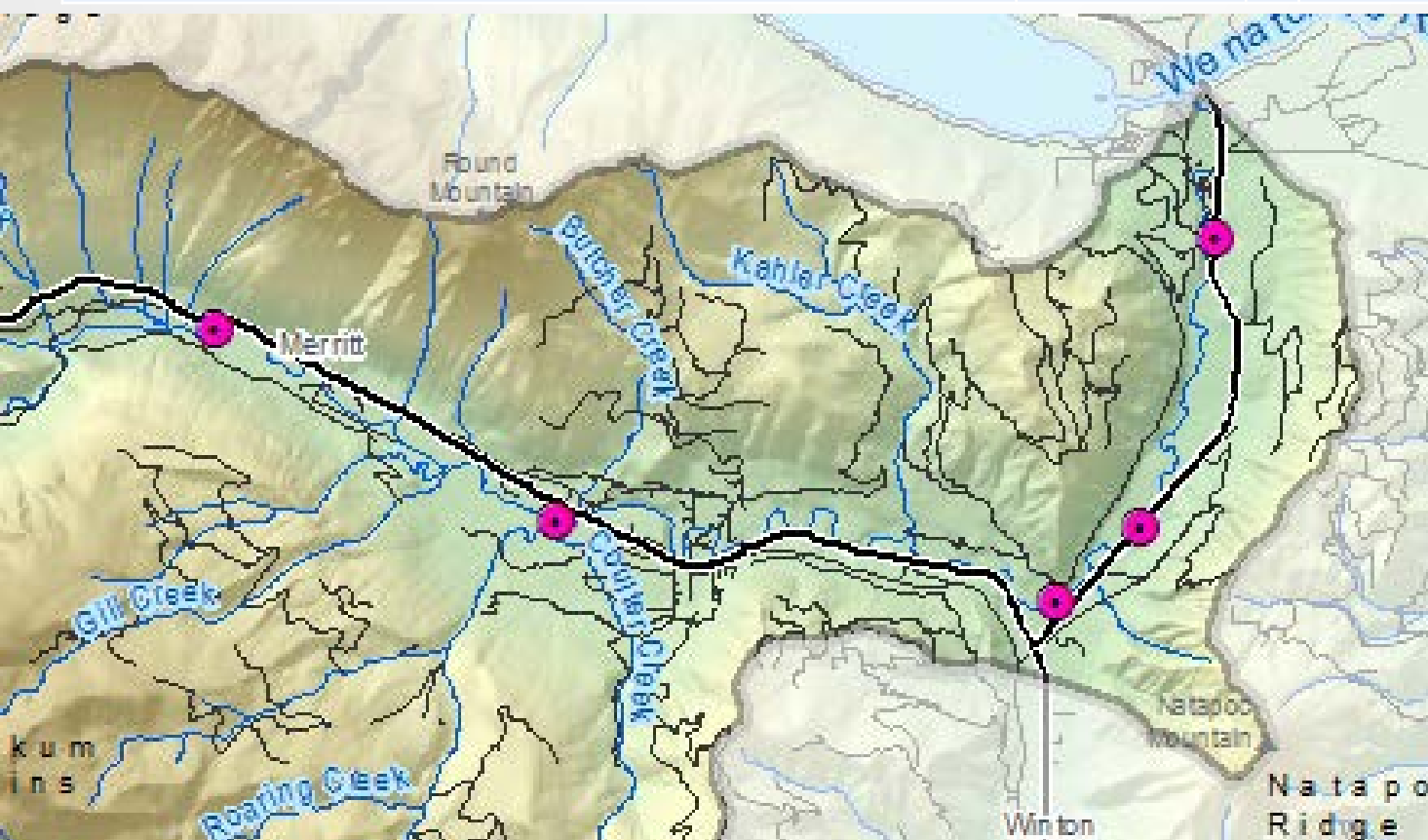
Total

3 culverts

9.70 miles

Completed Side Channel and Off-Channel Habitat Projects

2007 Oxbow Reconnection		44.00	acres
2009 N4 oxbow reconnection		1.15	acres
2013 Lower White Pine Reconnection		152.00	acres
2014 RM 4.7 Fill Removal		0.64	acres
2015 RM 13-14 Project		4.59	acres
	Total	202	acres



Land Protection Projects

Grant PUD/CDLT Godwin		62	acres
Lower White Pine Alcove Acquisition		18	acres
	Total	80	acres

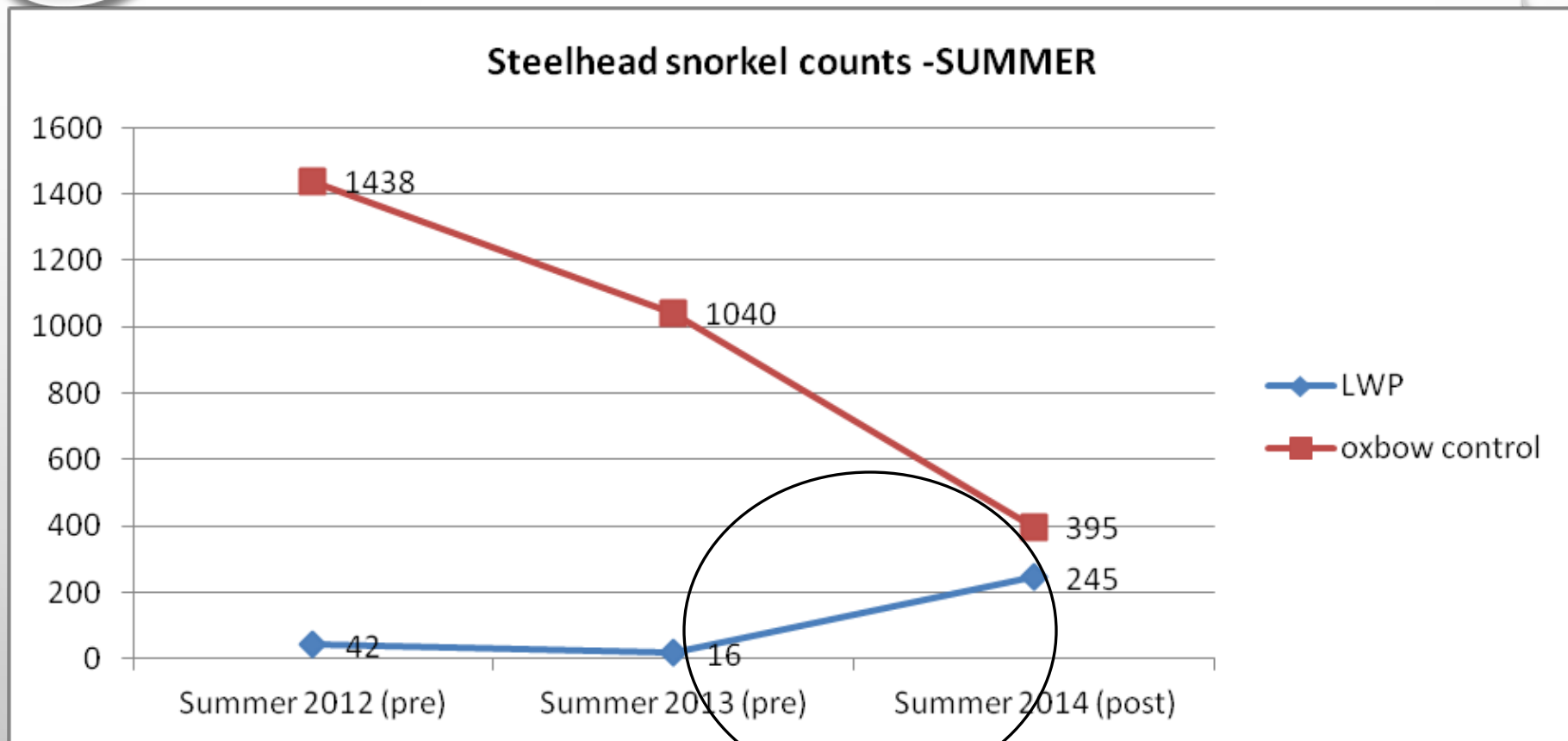


● In progress

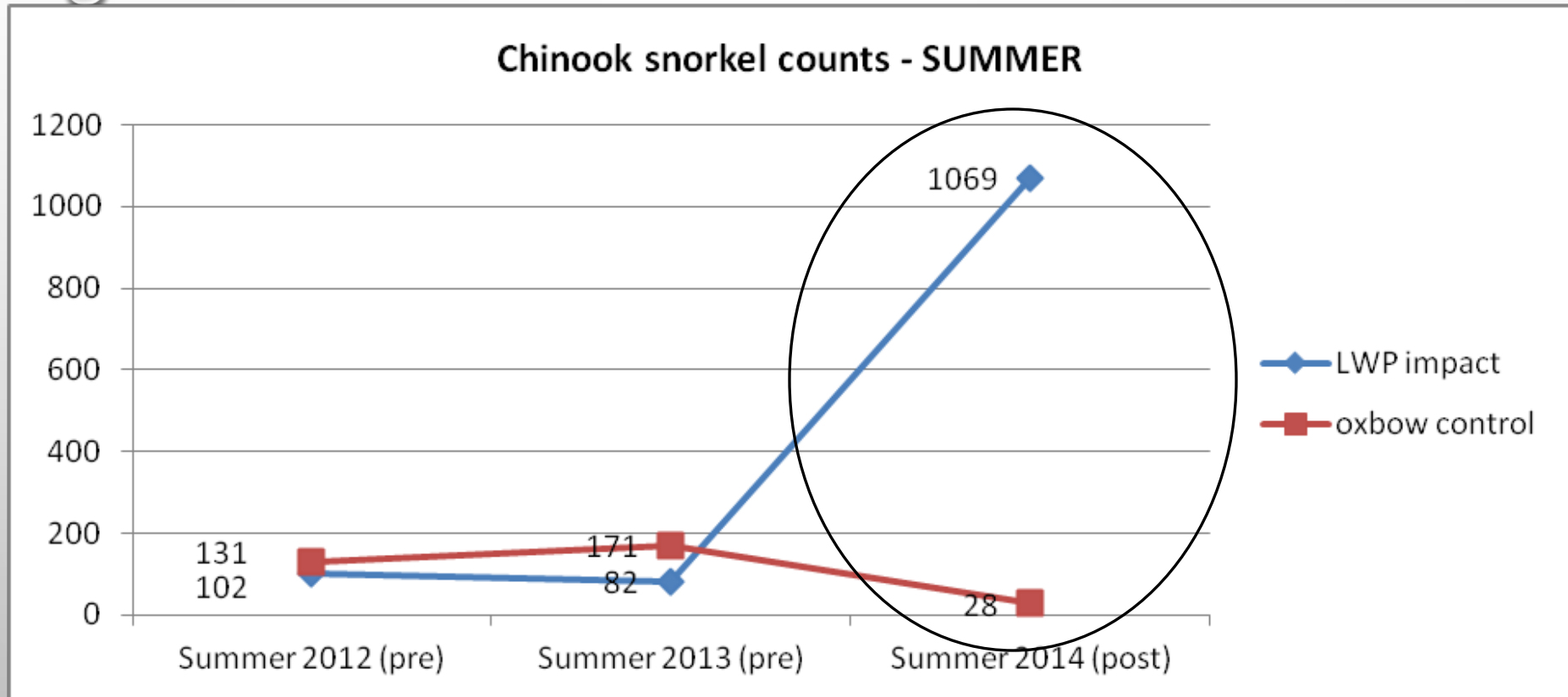
ARE FISH USING THE 2013 LOWER WHITE PINE BNSF RECONNECTION?



Lower White Pine, >200 more steelhead post construction



Lower White Pine Increased spring Chinook pre → post construction



ARE FISH USING THE 2007 OXBOW RECONNECTION?



2007 OXBOW

2007-2010 FISH USE DATA



Species	2007 (pre-project)	2008	2010
Steelhead	16	193	2698
Chinook	20	314	1275

CURRENT AND UPCOMING PROJECTS

DEBRIS REMOVAL AND RIVER CLEAN-UP

- REMOVING 13+ VEHICLES
- REMOVED 10 CABINS
- REMOVED 300 CU/YDS OF DEBRIS



KAHLER REACH GEOMORPHIC ASSESSMENT



Upper White Pine Floodplain Reconnection Project



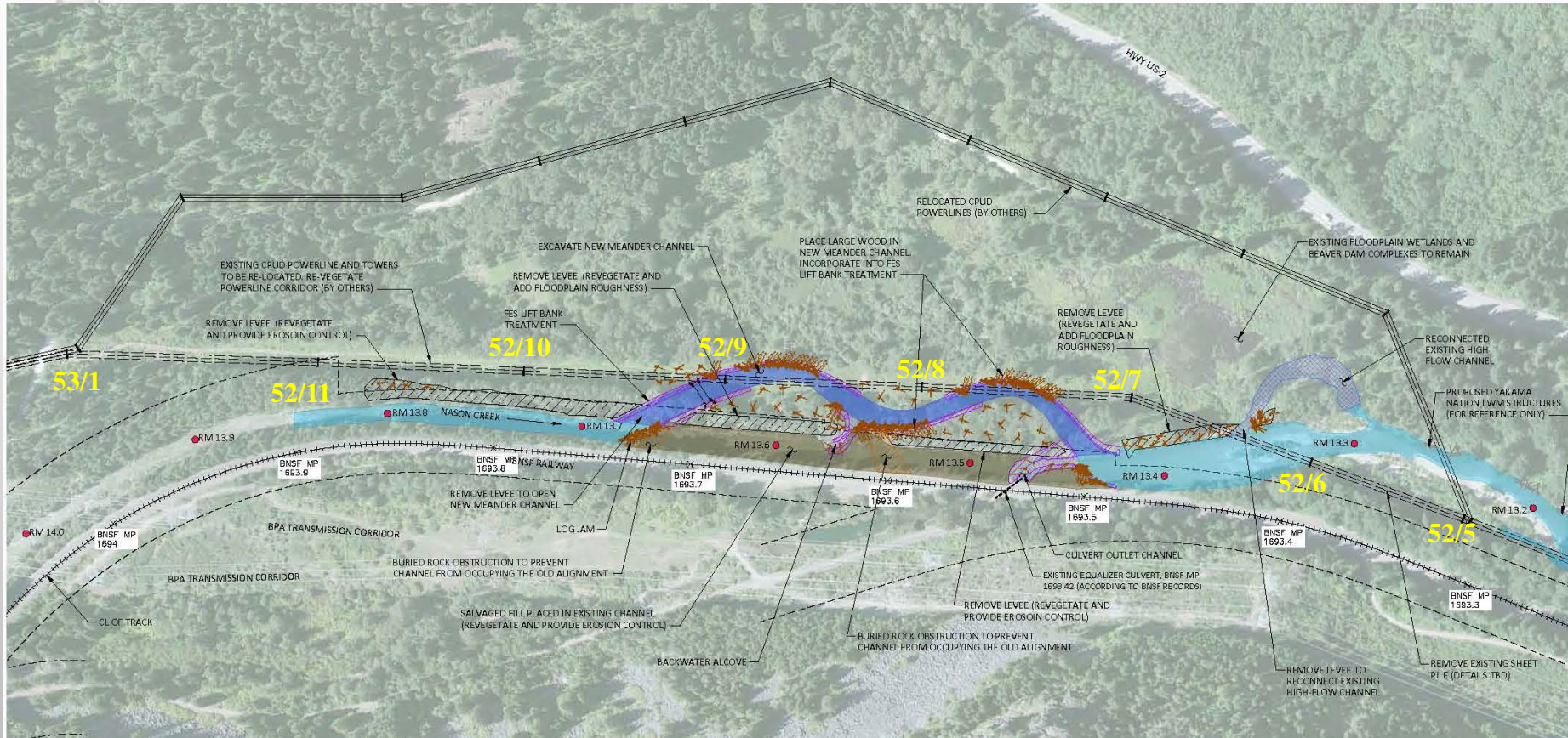
Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Data LDEO-Columbia, NSF, NOAA

Google earth

2005

Imagery Date: 7/15/2014 47°47'17.58" N 120°51'55.89" W elev 2221 ft eye alt 3047 ft

PROPOSED PROJECT



Design Team: Chelan County, Forest Service, Bureau of Reclamation, Interfluve, Chelan Public Utility District

UPPER WHITE PINE PROJECT TIMELINE

Activity	Dates
Tree removal near White Pine Road	July-August 2016
Construction of new powerlines and removal of existing powerlines	June-July 2017
Excavation of new channel, plant banks	July – October 2017
Levee removal, channel backfill, flows into the new channel, planting	July – October 2018
Monitoring and Adaptive Management	2018 - 2033

The background of the slide is a light gray gradient. It is decorated with several realistic water droplets of various sizes, scattered primarily in the top-left and bottom-right corners. The droplets have highlights and shadows, giving them a three-dimensional appearance.

YAKAMA NATION PROJECT 2016 CONSTRUCTION SCHEDULE

The background features a light gray gradient with several realistic water droplets of various sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the upper half of the page.

LANDS PLAN UPDATE

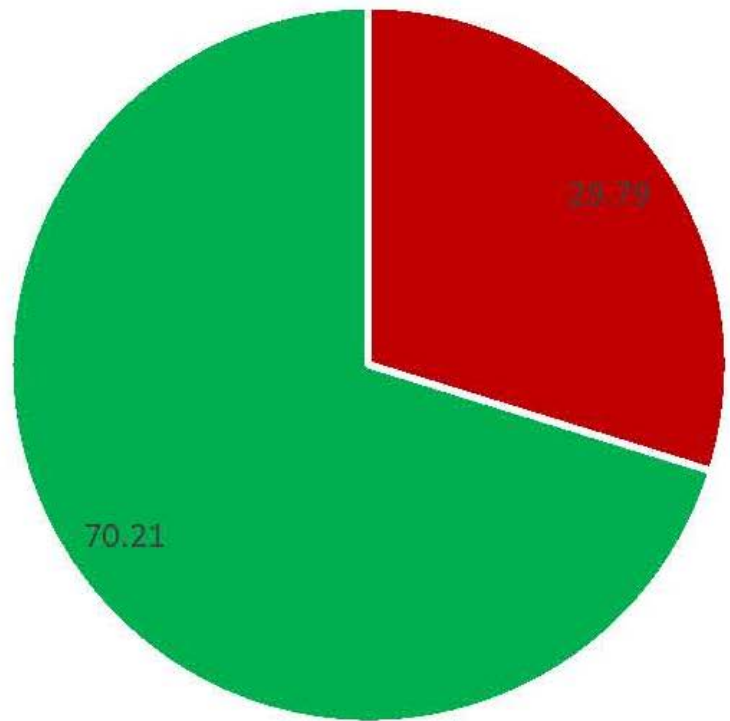
The image features a light gray gradient background with several realistic water droplets of various sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text 'EXTRA SLIDES' is centered in the upper half of the image.

EXTRA SLIDES

Wenatchee Basinwide Monitoring - Where do we find spring Chinook?

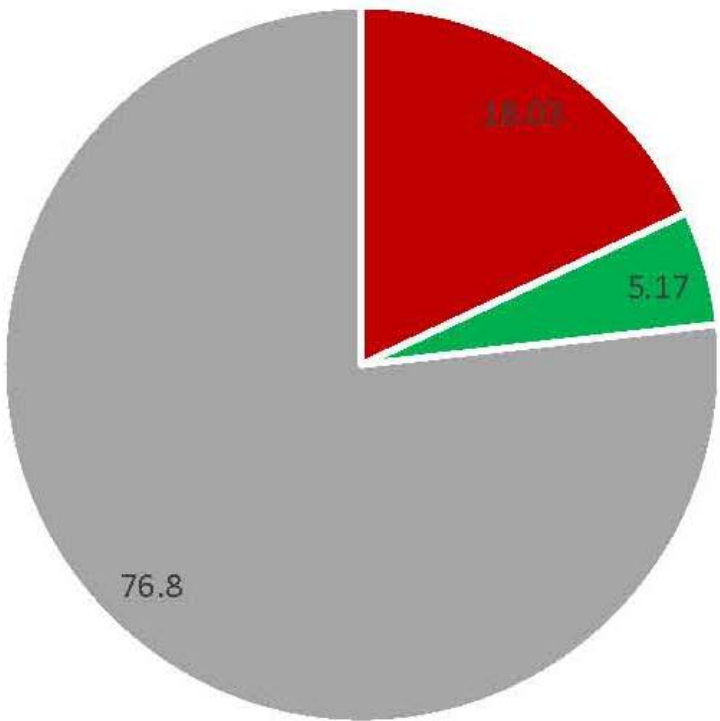
April 2015 (n=10,238)

100% of fish in off-channel habitat



- Natural Off-Channel
- Created Off-Channel
- Mainstem

October 2015 (n=599)



- Natural Off-Channel
- Created Off-Channel
- Mainstem