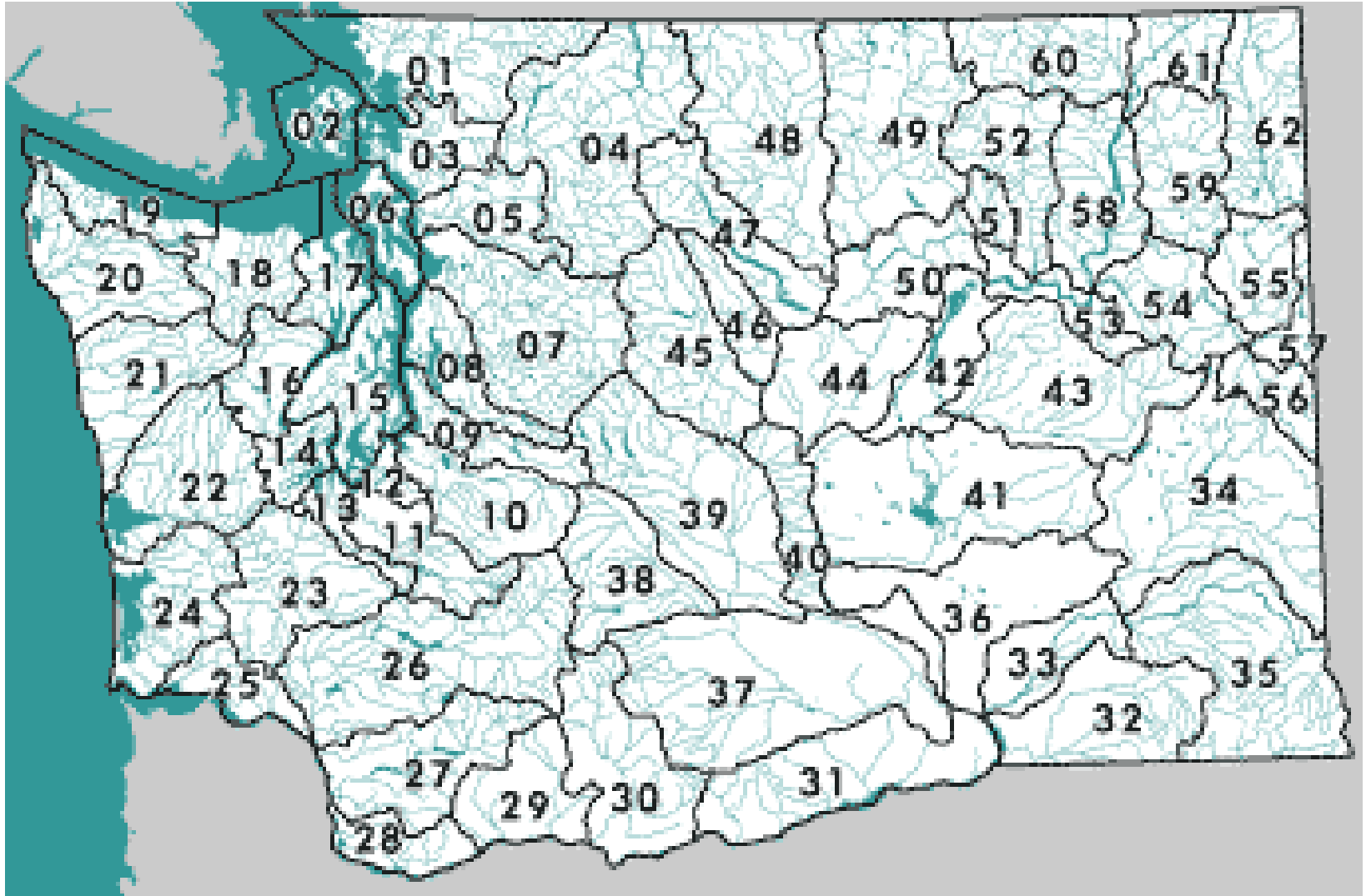


Wenatchee and Icicle Efforts

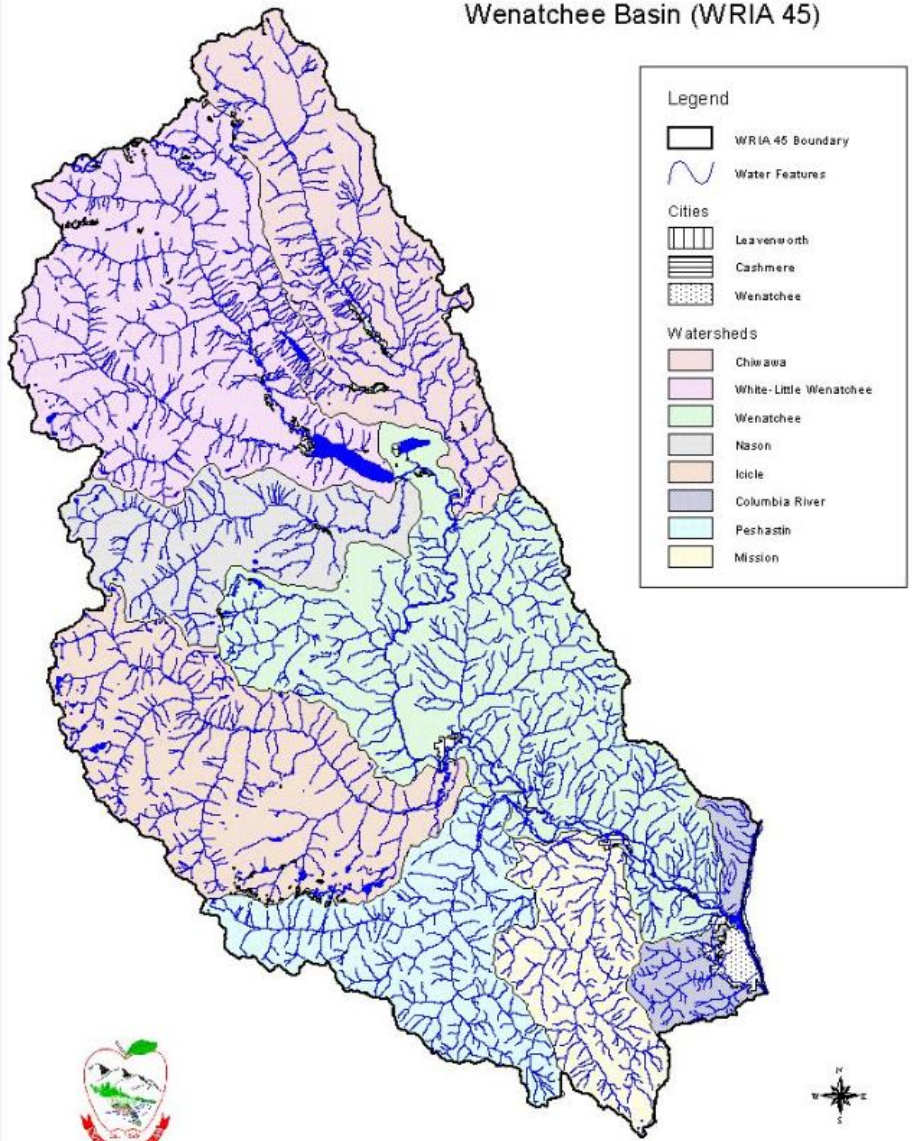


AWRA—Seattle
September 26, 2013





Wenatchee Basin (WRIA 45)



Chelan County Office of Watershed Planning
Cartography by Sarah Marshall
01/2010



Wenatchee Basin

- 1,370 square miles
- 85% USFS-managed
- ~30,000 residents (excluding City of Wenatchee)
- Cities of Cashmere, Leavenworth, Wenatchee
- 9,000 acres of tree fruit production, primarily pears

Wenatchee Basin Planning

- Wenatchee Watershed Plan and Detailed Implementation Plan
- Salmon and Bull Trout Recovery Plan
- Wenatchee Subbasin Plan
- USFS Watershed Plans



Wenatchee Watershed Planning

- Watershed Planning Act (RCW 90.82)
- Process began in 1999
- Plan approved by planning unit and county commissioners in 2006
- Detailed Implementation Plan completed in 2008
- Revised Wenatchee Instream Flow Rule adopted in 2009
- Plan addresses water quantity, instream flows, water quality and fish & wildlife habitat

Initiating Governments

- Chelan County (Lead Agency)
- City of Wenatchee
- Wenatchee Reclamation District

Planning Unit Membership

Governmental Members

- Chelan County*
- Wenatchee Reclamation District*
- City of Wenatchee*
- Chelan PUD
- City of Cashmere
- City of Leavenworth
- Chelan County Conservation Dist.
- Chelan-Douglas Health District
- *Washington State Agency Caucus*
- Yakama Nation
- US Forest Service
- US Fish and Wildlife Service
- US Bureau of Reclamation
- Cascade-Orchard Irrigation Co.
- Jones-Shotwell Ditch
- Icicle Irrigation District

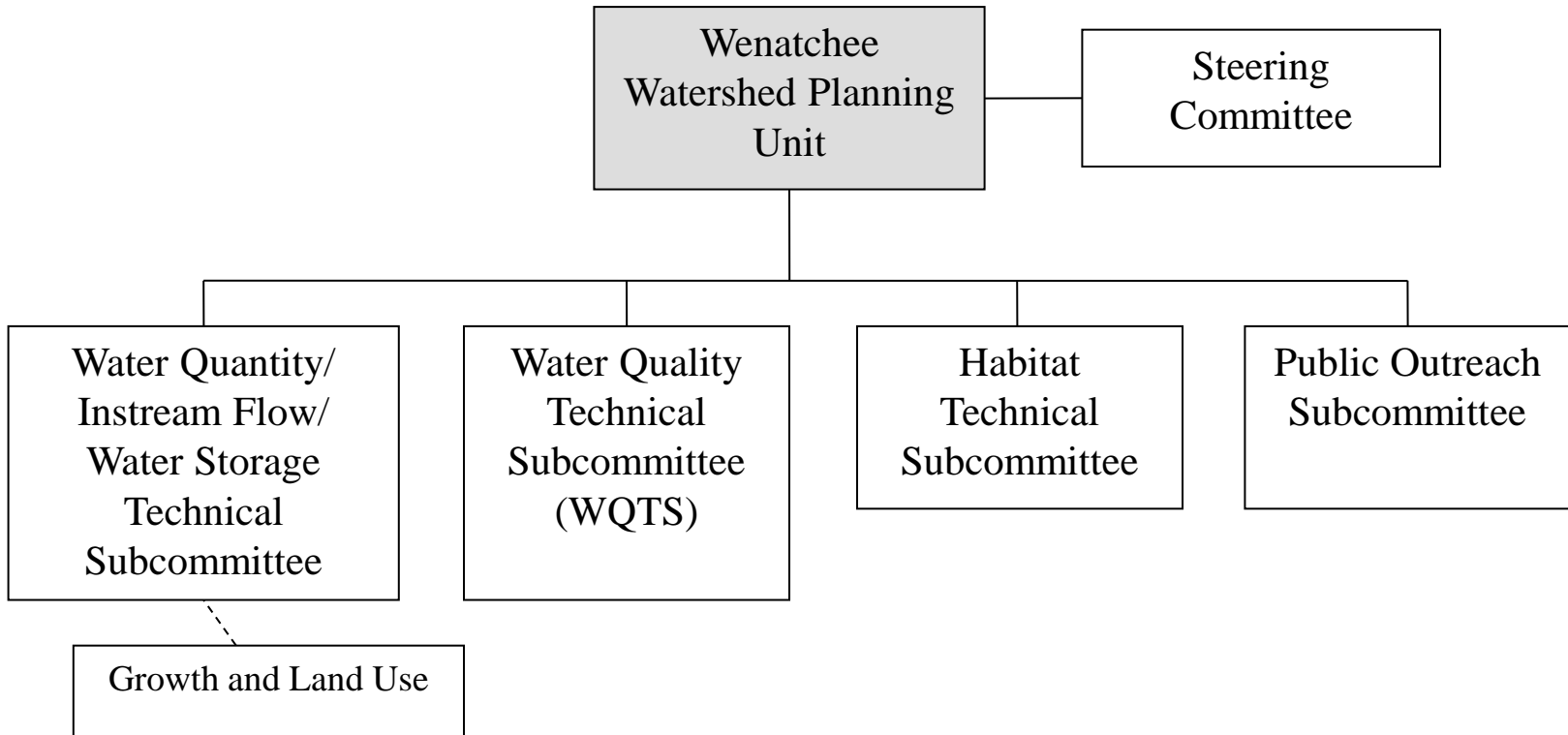
Governmental Members continued

- Peshastin Irrigation District
- Wenatchee-Chiwawa Irrigation Dist.

Non-Governmental Members

- Blue Star Growers
- Washington Growers Clearinghouse Association
- Longview Fibre Company
- North Central Washington Audubon Society
- Citizens/Landowners
- North Central Washington Association of Realtors
- North Central Washington Home Builders Association
- Center for Environmental Law and Polity

Wenatchee Watershed Planning Organization



Highlights

- Instream Flow Rule and Reservation (OCPI)
- Wenatchee Regulatory Strategy (TMDL)
- Habitat Projects
- Storage Analysis

Reservation Details

- Watershed Wide: up to 4 cfs
- Icicle Creek: up to 0.1 cfs
 - An additional 0.4 cfs will be considered after completion of flow restoration efforts targeting habitat between the city of Leavenworth and IID's diversion and the hatchery return.
- Mission: up to 0.03 cfs interim for 2 years
- Chumstick: up to 0.043 cfs interim for 3 years

Wenatchee Water Work Group

- Municipal suppliers, County, irrigation districts
- Instream flow rule reserve: coordinated cost reimbursement
- Interlocal agreement
- Local water control authority

Cost-Reimbursement Processing

(RCW 90.03.265)

- Process where a prequalified consultant hired by Ecology processes applications.
- An applicant pays for his application and Ecology's review time.
- An applicant may also have to pay for other senior applicants unless:
 - There is no diminishment of the source.
 - Ecology runs a coordinated cost-reimbursement process.

Coordinated Cost-Reimbursement

- In “coordinated” processing, everyone pays their own processing or gets out of line.
- Each applicant chooses to be “in” or “out”.
 - If “in”, they pay their own way.
 - If “out”, they stay in line and retain their priority date.
- Processing ranges from \$5,000 to \$15,000 per application.

Timeline of Efforts

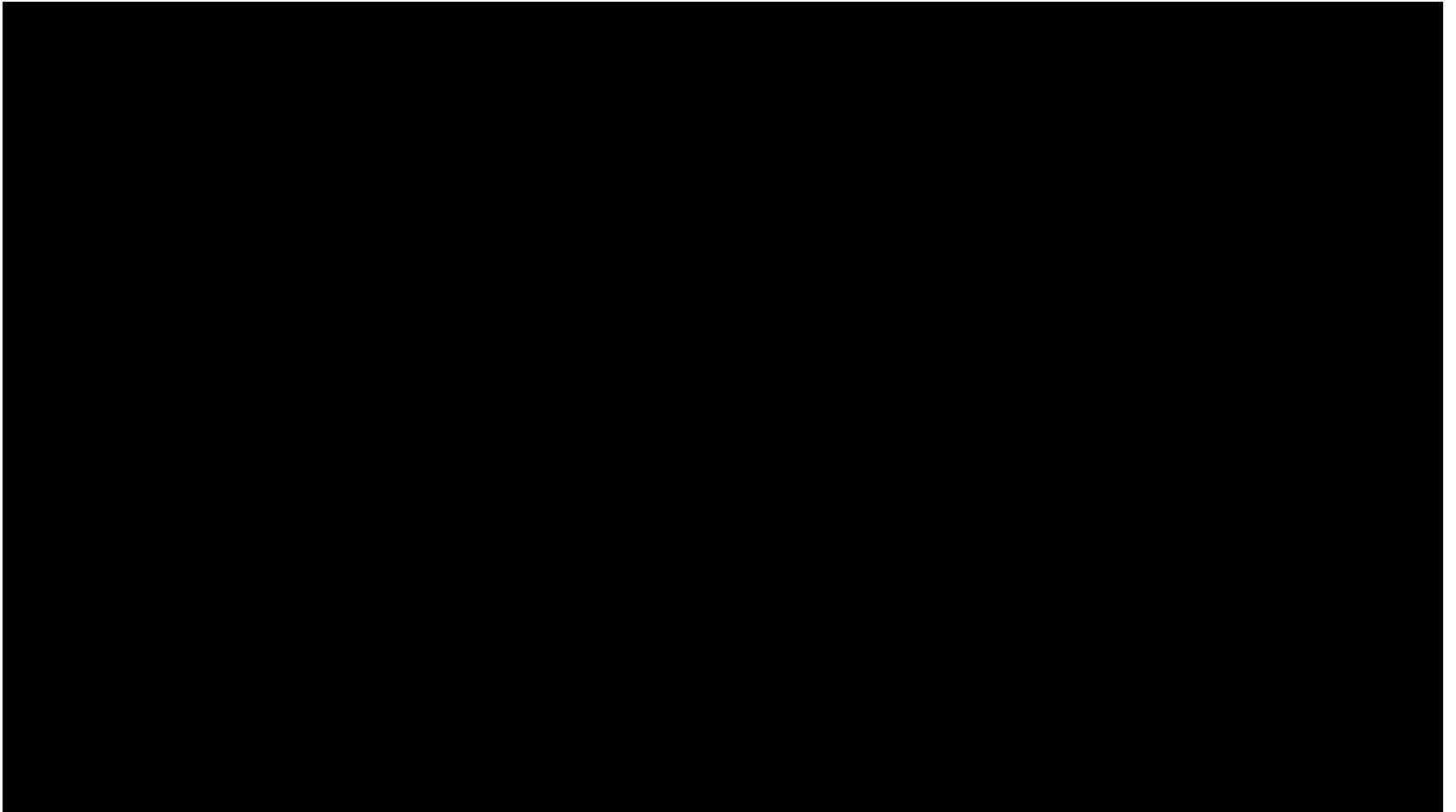
- Approximately 150 applicants notified of opportunity to participate this week.
- Responses verifying contact information and initial interest due January 25, 2013.
- Processing of assignments, development of template Report of Examination, and final cost development in February / March 2013.
- Formal letter for program sent in April, 2013.
- Processing of applications starts in June 2013.

Icicle Creek

- Comprehensive Water Resource Plan
- History of conflict and ongoing litigation
- Icicle Work Group
- Conveners: OCR and County



Colchuck Lake



Icicle Participants

- Yakama Nation
- Icicle/Peshastin Irrigation Districts
- Chelan County
- Icicle Creek Watershed Council
- Wild Fish Conservancy
- NOAA-Fisheries
- Confederated Tribes of the Colville Reservation
- Cascade Orchard Irrigation Company
- Alpine Lakes Protection Society
- US Forest Service
- Trout Unlimited
- WA Water Trust
- WDFW
- Center for Law and Environmental Policy
- Department of Ecology
- City of Leavenworth
- USFWS—Leavenworth National Fish Hatchery
- US Bureau of Reclamation
- Aspect and Anchor QEA
- Cascadia Law Group
- Dally Environmental
- Office of the Columbia River

Icicle Guiding Principles

1. Streamflow that:
 - a. Provides passage,
 - b. Provides healthy habitat,
 - c. Serves channel formation function,
 - d. Meets aesthetic and water quality objectives,
 - e. Solutions that are climate change resilient.
2. Sustainable hatchery that:
 - a. Provides healthy fish in adequate numbers,
 - b. Is highly efficient,
 - c. Significantly reduces phosphorus loading,
 - d. Has appropriately screened diversion(s),
3. Tribal Treaty Rights are met at all times (harvest).
4. Meet municipal and domestic demand.
5. Improved agricultural reliability that is:
 - a. Operational,
 - b. Flexible,
 - c. Decreases risk of drought impacts,
 - d. Economically sustainable.

Problem	Scope / Parameters (e.g. location and quantity)	Data	Tools
Inadequate Flow	<p>RM 0 to 2.7 (68,000 ac-ft?). WAC* 173-545 flows on the order of 267 cfs to 550 cfs (Aug-Oct).</p> <p>RM 2.7 to 4.5 (3,600 + IFIM ac-ft?); WAC 173-545 flows on the order of 267 cfs to 550 cfs (Aug-Mar).</p> <p>RM 4.5 to 5.8 (? ac-ft)</p>	<p>IFIM (estimated completion July 2013)</p> <p>Water re-use pilot LNFH (2013 – 2018?)</p> <p>401 Cert studies</p> <p>BiOps (Bull Trout, New NOAA)</p> <p>Boulder field study (estimated completion April 2013).</p>	1, 2, 3, 4, 5, and 8.
Habitat improvements	<p>RM 0 – RM 2.7</p> <p>RM 2.7 – RM 4.5</p> <p>RM 4.5 and above</p>	<p>RTT Biological strategy revisions</p> <p>IFIM (estimated completion July 2013).</p> <p>USFS info.</p>	7
Fish Passage, Impediments, Distribution, and Movement Issues	<p>Structure 5 @ RM 2.7 (movement)</p> <p>Structure 2 @ RM 3.7 (impediment and distribution)</p> <p>Hatchery Intake @ RM 4.5 (impediment)</p> <p>Boulder field @ RM 5.6 (impediment)</p>	<p>Boulder field study (estimated completion April 2013)</p> <p>401 Cert studies</p> <p>Wild Fish Conservancy studies</p> <p>US F&W Service studies.</p>	6
Screening	<p>LNFH/COIC Intake structure</p> <p>Icicle/Peshastin ID intake</p>	<p>Studies complete per WDFW, USFWS, and NOAA criteria.</p>	7
Municipal and domestic needs	<p>0.1-0.5 cfs (73-365 ac-ft) in reserve through 2025</p> <p>City of Leavenworth 800 ac-ft need</p> <p>Municipal/domestic 1,400 ac-ft need through 2050.</p>	<p>Established in or extrapolated from existing planning documents.</p>	1, 2, 3, 4, 5.
Agricultural needs	<p>Restore 1,000 ac-ft additional storage, increased automation and reliability.</p>	<p>Continue the optimization storage study. Perform a reservoir refill and climate change resiliency study.</p>	1, 2, 3, 4, and 5.

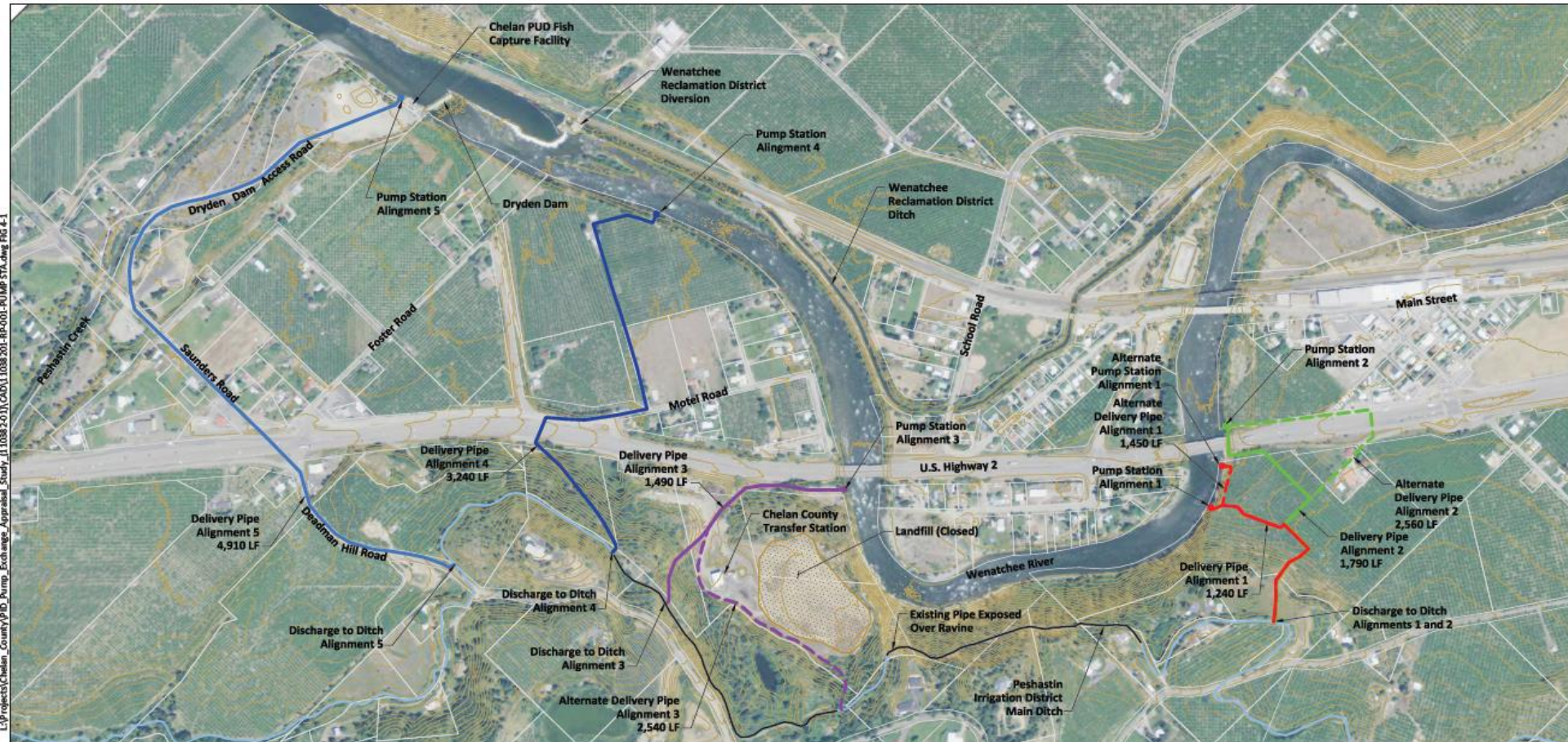
Wenatchee Initiatives

- Instream flow improvement
- Habitat improvements
- Irrigation district projects
- Community Lands Plan

Example: Peshastin Pump Exchange

- Serve Peshastin Irrigation District
- Pump from Wenatchee River (Dryden)
- Peshastin Creek channel modifications
- Icicle Creek operational flexibility

Peshastin Pump Exchange



L:\Projects\Chelan County\PD_Pump_Exchange_Apraisal_Study_11.03.2011\0011\0011-001-001-STA.dwg FIG 1-1

SOURCE: Drawings with 2005 NAD spatial photography and 10-foot contours. LEGEND:

Wenatchee Basin Projects

- Partners: TU, WWT, Cascadia CD, Cascade Columbia FEG, Chelan County, USFS, YN (Accords), WFC
- Funders: BPA, YN, Bureau of Reclamation, SRFB, PUD Tributary Committees, Ecology/Office of the Columbia River



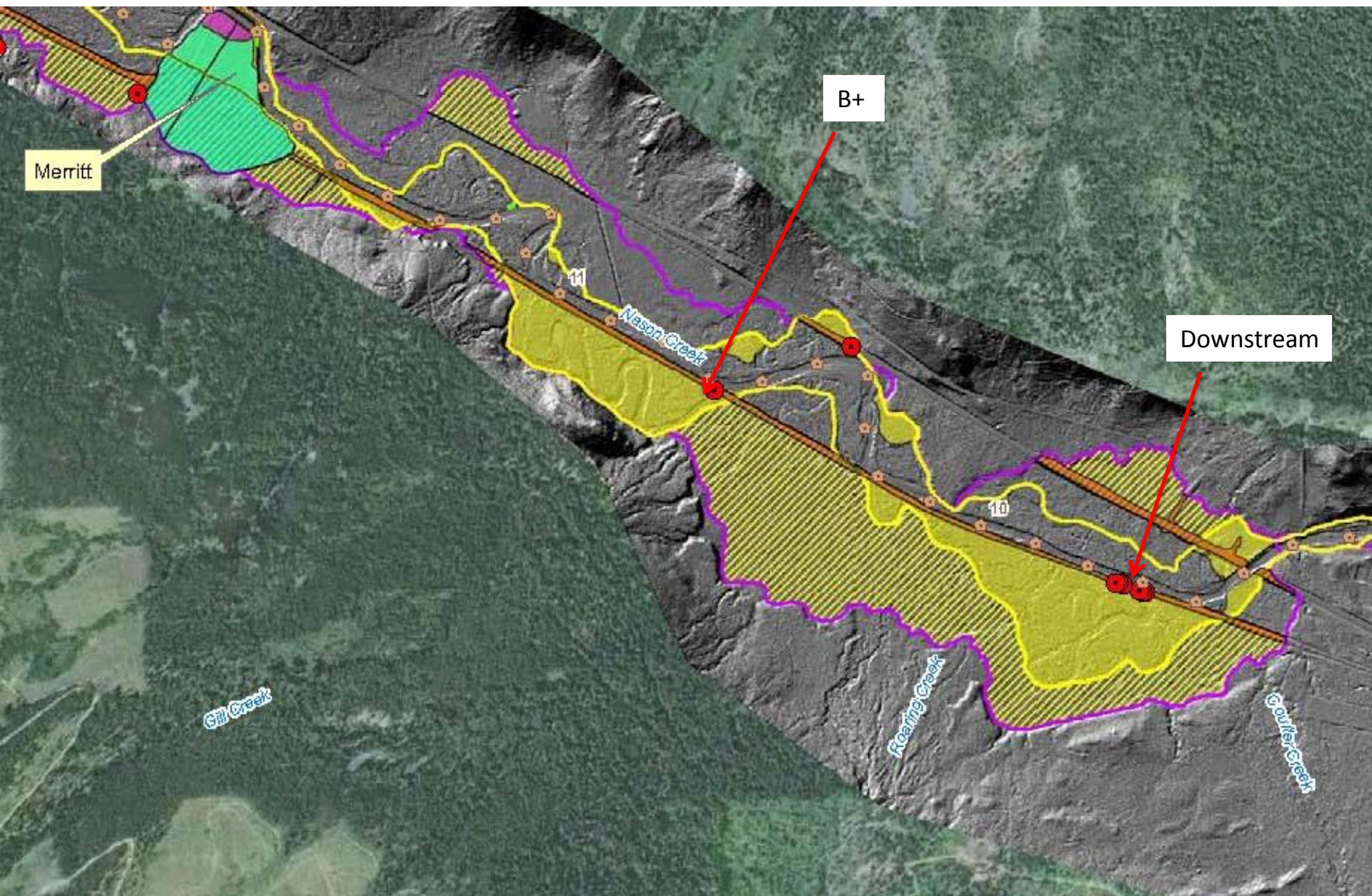
15/10/2011











Merritt

B+

Downstream

Gill Creek

Nason Creek

Rearing Creek

Couthy Creek

11

10







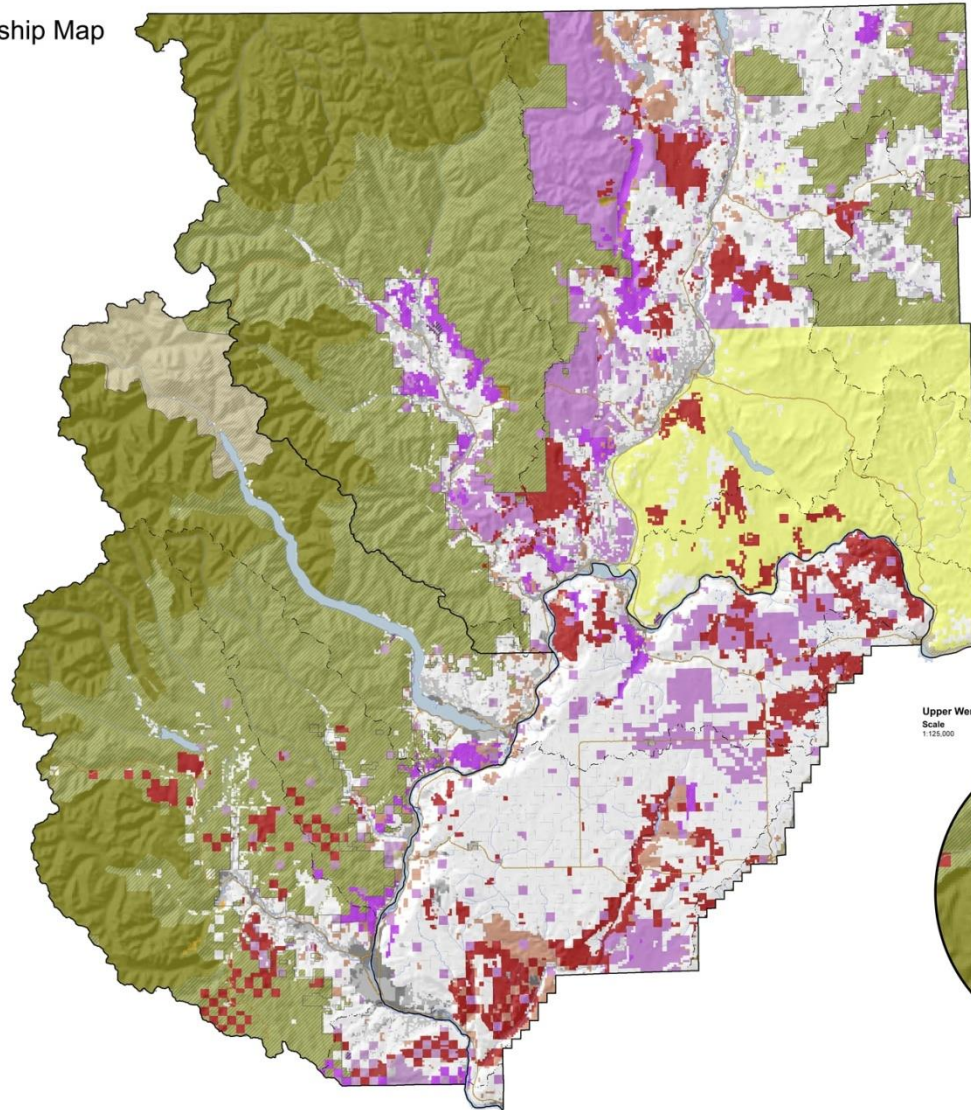


Example: Wenatchee Community Lands Plan

- Land Protection and Utilization Assessment
- TPL “Greenprinting”: Stemilt Partnership
- NCW Forest Collaborative
- Chelan County Lands Dialogue: Land Exchanges and Transfers

Preliminary Tri-County Land Ownership Map

- Legend**
- County Boundary
 - Water Resource Inventory Assessment Boundary
 - Roads
 - City Area
 - Urban Growth Boundary
 - Rivers and Streams
 - National Forest
 - National Forest Boundary
 - Federal Other - National Recreation Area
 - Federal Other - National Park
 - MANAGEMENT TYPE**
 - Fish Hatchery
 - Non Designated Forest
 - Park/Non Wilderness
 - Recreation
 - Wilderness
 - Wildlife Area
 - Wildlife Refuge
 - MANAGER, OWNER**
 - Federally Owned
 - National Park Service, US Federal Government
 - US Bureau of Land Management, US Federal Government
 - US Fish and Wildlife Service, US Federal Government
 - US Forest Service, US Federal Government
 - Washington State Department of Fish and Wildlife, State
 - Washington State Department of Fish and Wildlife, Washington State
 - Washington State Parks and Recreation Commission, CO
 - Washington State Parks and Recreation Commission, Washington State
 - Washington State Department of Natural Resources
 - Private Land Holdings Above 5,000 Acres



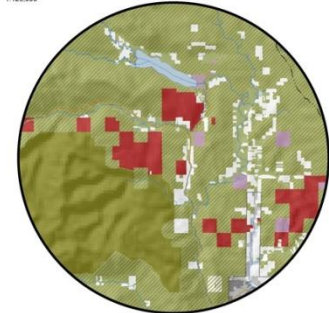
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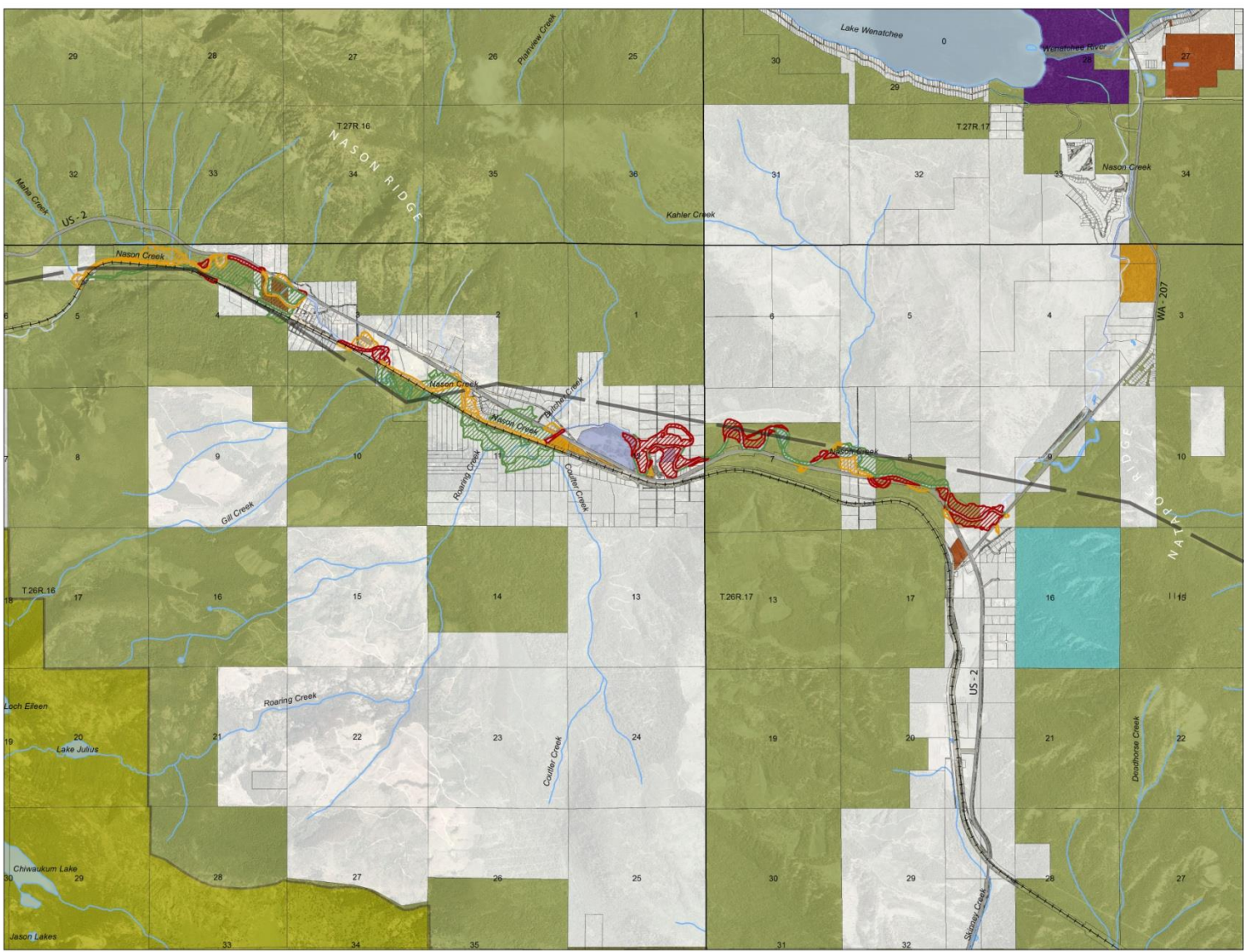
Prepared By:
project
GROUNDWORK

Prepared For:



Upper Wenatchee River Detail Map
Scale
1:25,000





- LEGEND:**
- Roads
 - Watercourse
 - Railroad
 - Power Line Corridor
 - Section Number
 - Township/Range
 - Parcel Owner:**
 - Chelan County
 - Grant County PUD
 - Washington State Misc.
 - Washington DNR
 - Washington State Parks
 - USFS**
 - Designated Wilderness Area
 - Privately Owned Parcel
 - Biological Benefit**
Source: 2005 Jones & Stokes Report
 - High
 - Medium
 - Low

Nason Creek Study Area: Property Ownership

Prepared By: *Project*

GROUNDWORK

MARCH 2011



Original Size:
22"x34"



Ingredients for success

- Strong governance and funding partnership with Ecology
- Local commitment and engagement
- Broad participation
- Transcending personalities
- Consultants

Questions?