

# Rural and Municipal Water Supply Issues in Yakama Country



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# Focus of Presentation

- Present Yakama Nation work in east slope watersheds
- What's working and why
  - Successes
  - Works in Progress
- Remaining challenges
- I will not be delving into recent court cases



The Yakama Nation holds Treaty water rights for irrigation as well as fish and other aquatic life



This presentation is a compilation of activities and observations of Yakama Nation Department of Natural Resources staff who are working throughout Central Washington to protect and enhance Yakama Nation Treaty resources.

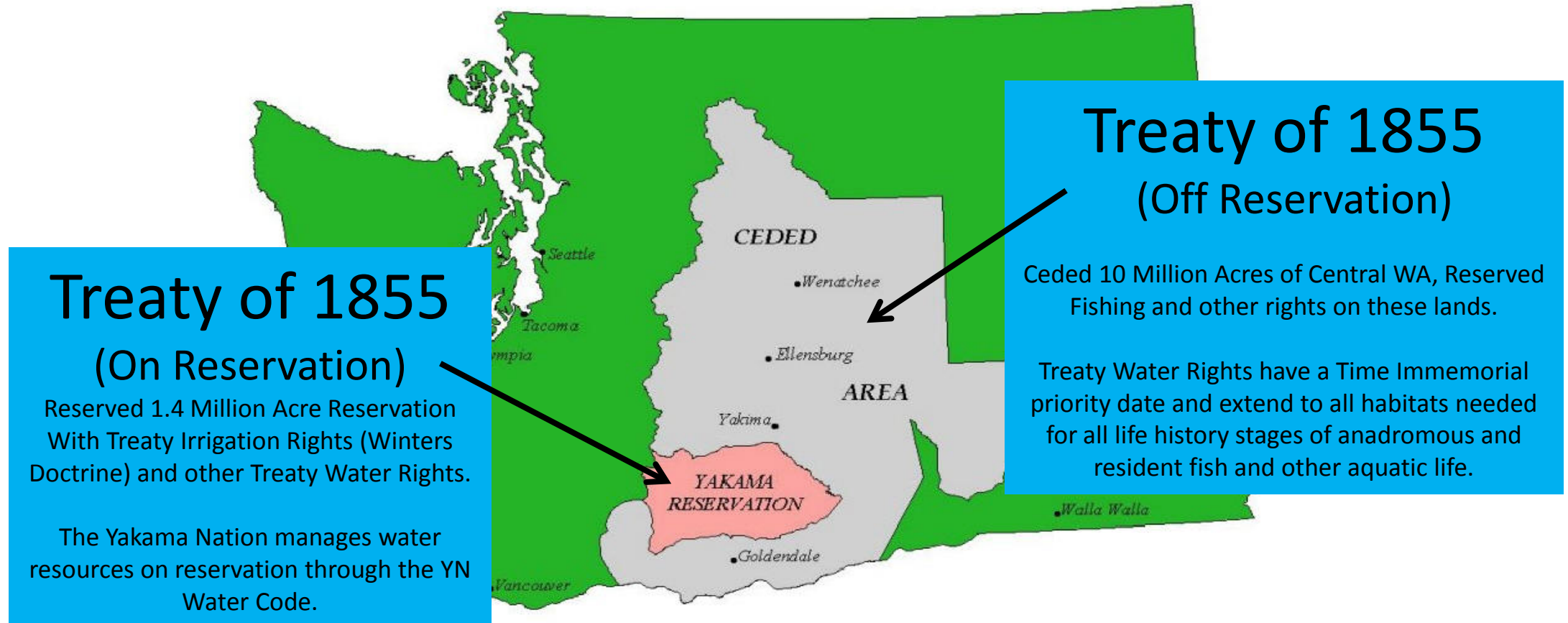


Sockeye reintroduced to Cle Elum River by Yakama Nation

# The Yakama People have lived in the Columbia Basin since Time Immemorial

YN rights on this landscape were reserved in perpetuity by Treaty

YN is working to protect natural and cultural resources in all watersheds in Central Washington on and off reservation



# Key Principles

- Where we have had success, we recognize consistent principles
  - Capture of streamflow by wells (hydraulic continuity) is a fact and disputing it just delays the inevitable.
  - Small impairment is still impairment. De minimis is a dead end.
  - No “balancing” of Treaty Rights versus new demands. Our resources have been decimated for more than a century. Our goal is restoration and protection, not trading gains in one place for further degradation elsewhere.

# Key Principles

- In kind, in place, in time mitigation has been successful and should be pursued first.
- One size fits one. Each basin and tributary presents different challenges and opportunities.
- Respect the science.
- Use all the tools in the toolbox, e.g. the Yakima Basin Integrated Plan.
- Involve tribes at the outset, don't bring a fait accompli. This is why the Yakima Basin Integrated Plan is working.



# Yakima River Basin

- The Yakima basin has unique plumbing, water management and legal systems.
- There are no instream flows set by state rule in the Yakima.
  - There are federal target flows and adjudicated Treaty instream flow rights.
- Large storage reservoirs and diversions have adversely altered the hydrograph, but also provide potential solutions for rural water supply.
- Total Water Supply Available (TWSA), unique to the Yakima basin.
  - The system is operated as “one bucket”, meaning all sources (snowmelt, reservoir storage, and return flows measured at Sunnyside Dam (Parker gage) are managed as a single resource.
  - Because of this, foregone consumptive use anywhere above Parker can mitigate for TWSA.



Locations of Yakima Basin Reservoirs, Irrigation Diversions, and Parker gage

# Yakima Basin Tools

- The Water Transfer Working Group has been in place since 2001.
  - Water users review all transfers according to consensus criteria including water budget neutrality and no adverse change to streamflow.
  - Only consumptive use can be transferred to new consumptive uses such as rural and muni supply.
- Surface water rights have been adjudicated, so extent and validity is an easier determination.
- A water storage contract between Ecology and Reclamation allows physical banking of acquired water rights and release for mitigation.
  - This allows in-kind, in-time, in-place mitigation to occur using acquired water rights with different place and season of use.



# Local (Tributary) Impacts:

## A Different Set of Challenges

- Reservoir storage is not available on many Yakima basin tributaries.
- Retiring tributary irrigation water rights provides irrigation season mitigation in many tribs e.g. Teanaway.
- Wood placement projects (such as William Meyer is discussing) can improve base flows. This is being used for in-kind mitigation for post-irrigation season impacts in the Teanaway basin.





# Using infrastructure to provide mitigation

It has proven practical to use infrastructure to supplement flow in tributaries where irrigation canals cross tributaries

- e.g. Kittitas Reclamation District augmenting flow in 9 fish streams during 2015 drought and 2016 (for which Urban Eberhard received AWRA award last year).
- Yakima Tieton Irrigation District dropping water in Cowiche Creek)



Manastash Creek before and after flow augmentation by Kittitas Reclamation District





# Kittitas County

- The petition to close the upper Kittitas County to new exempt wells was filed by others. The Yakama Nation response was
  - GW pumping captures surface water
  - No surface water is available for appropriation
  - Mitigation is the answer
- The Yakama Nation has participated with Reclamation, Ecology, Kittitas County and the Water Transfer Working Group to approve hundreds of Water Budget Neutral Determinations.
- The county worked closely with the Yakama Nation to develop a mutually acceptable mitigation program for the lower county.



Tillman Creek, (foreground) before flow augmentation.

New domestic wells are being mitigated by flow augmentation from adjacent non-fish stream and Kittitas Reclamation District canal



# Yakima County

- As you have heard, Yakima County is working on a process similar but different from Kittitas.
- Similar to Kittitas County, Yakima County mitigation is needed for Total Water Supply Available and adverse tributary impacts.
- We look forward to reviewing the technical and legal details when they are available.

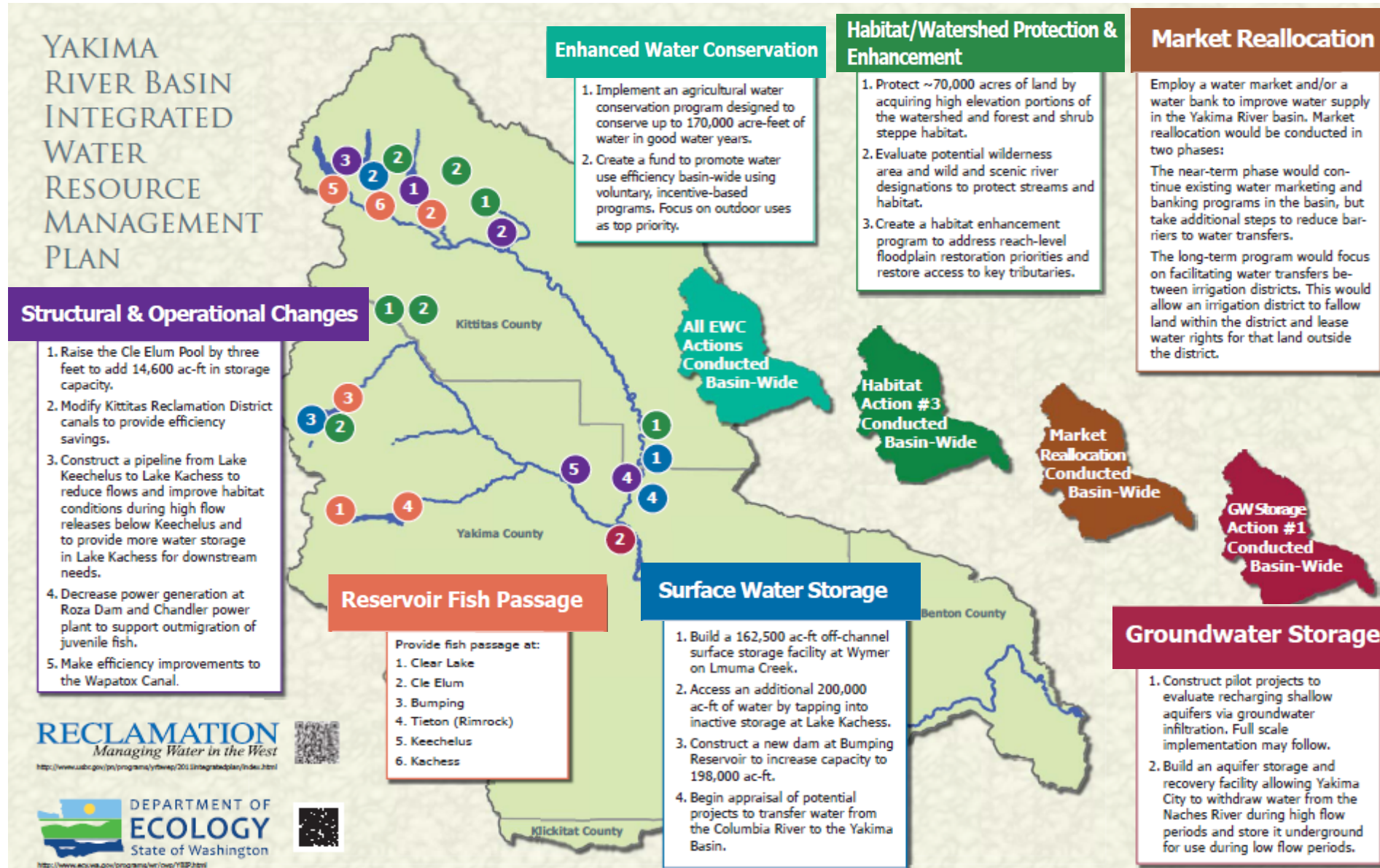


Yakima County floodplain restoration project



# The Big Fix: The Yakima Basin Integrated Plan

Storage, Conservation, Structural and Operational Changes and Market Reallocation all have benefits to domestic water supply and mitigation



# Wenatchee Basin

- A rare success in Watershed Planning in Yakama Country
- Chelan County hosted an open, inclusive process
- Planning was based on credible hydrology and habitat studies
- YN joined in consensus
- After Swinomish, YN restated its commitment to the Wenatchee Watershed Plan and worked with Chelan County, Ecology, and Legislature to pass bill in support.
- YN staff working on correcting problems in Icicle Creek while protecting the Treaty fishery in the Icicle.

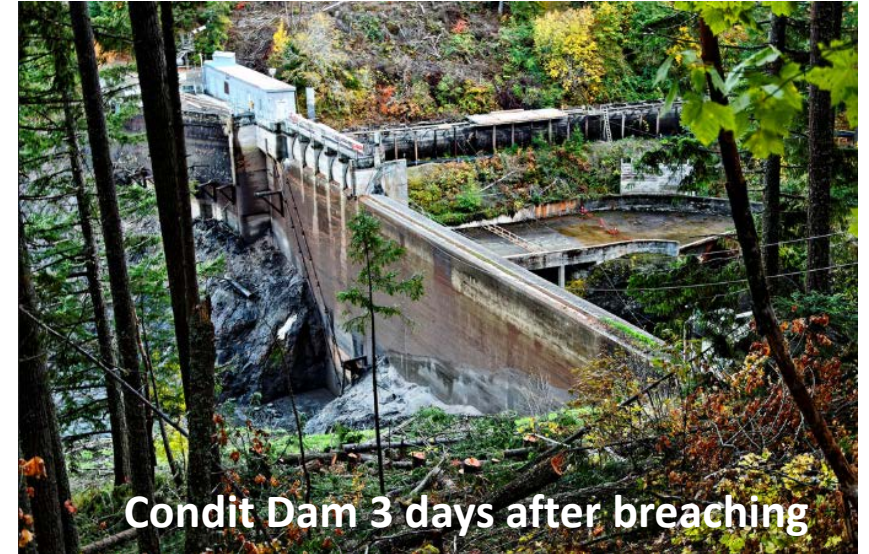


Tribal fishing platforms on Icicle Creek



# White Salmon Basin

- Removal of Condit Dam reopened mainstem and tributaries blocked for a century.
- We are currently discussing projects to restore flow and passage in Buck Creek, a major tributary that is now accessible.
- The City of White Salmon maintains a diversion on Buck Creek as does the White Salmon Irrigation District.
  - Still a work in progress, but we and Ecology are working with the City and Irrigation District exploring the possibility of removing a fish-barrier diversion and locating new diversions on the mainstem White Salmon as a source substitution for Buck Creek and Jewett Springs.



**Condit Dam 3 days after breaching**



**Impassible irrigation diversion on Buck Ck**



# Methow Basin

- YN was not signatory to the Methow Watershed Plan.
- Much successful habitat and flow restoration work being done by YN, Ecology, and many others.
- Yakama Nation Fisheries is using innovative technology (infiltration gallery) to restore floodplain side channels cut off by infrastructure.
- Unresolved challenges remain. It is too early to talk about outcomes there.



1890 Side Channel restoration project  
Yakama Nation Fisheries  
Methow basin



# Conclusion

- The Yakama Nation willing to work with anyone sincere about fixing the resource.
- We continue to work cooperatively to develop mutually beneficial solutions with water users throughout our area.



YN Fisheries staff working with Grant Count PUD on reintroducing Sockeye to Cle Elum Lake



Re-colonized Cle Elum River Sockeye habitat