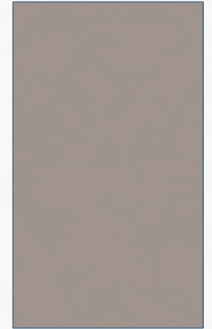


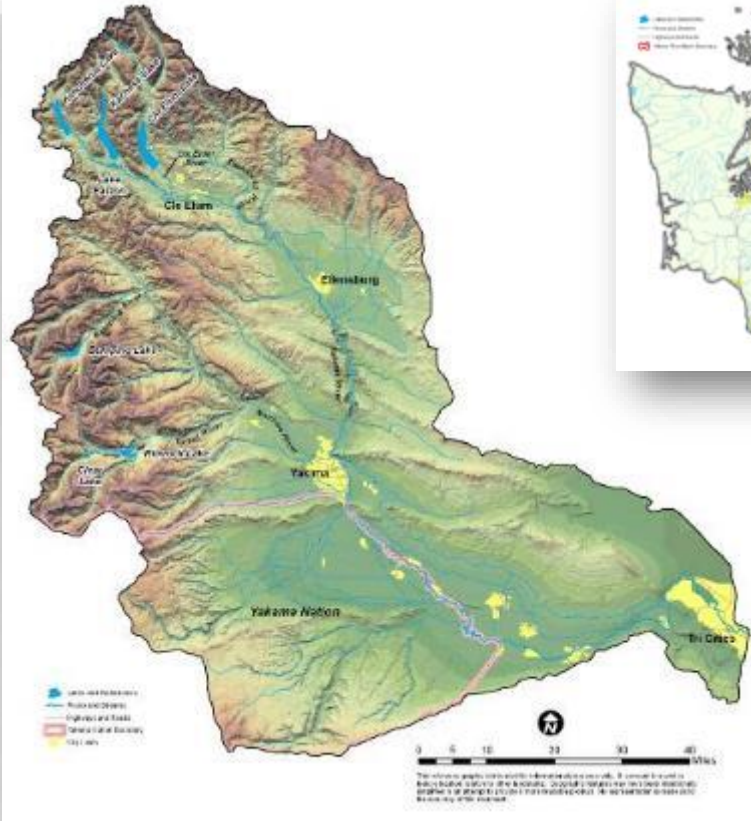
YAKIMA BASIN INTEGRATED PLAN



WASHINGTON STATE WATER RESOURCES ASSOCIATION –
DECEMBER 3, 2025



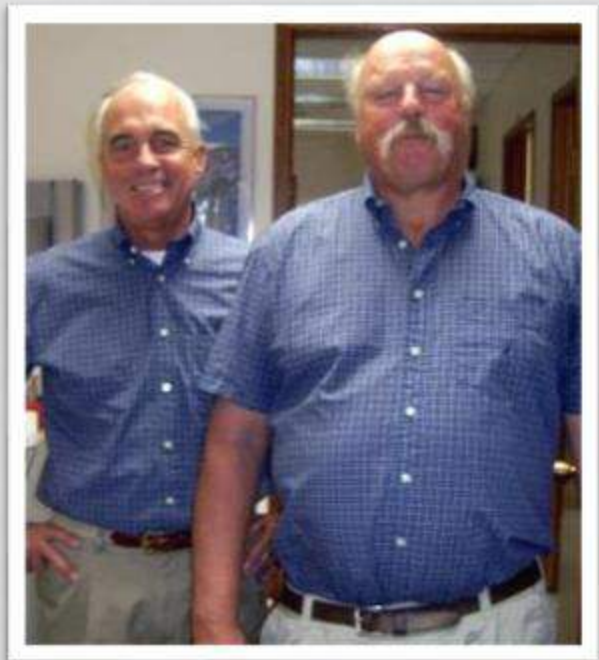
YAKIMA RIVER BASIN OVERVIEW



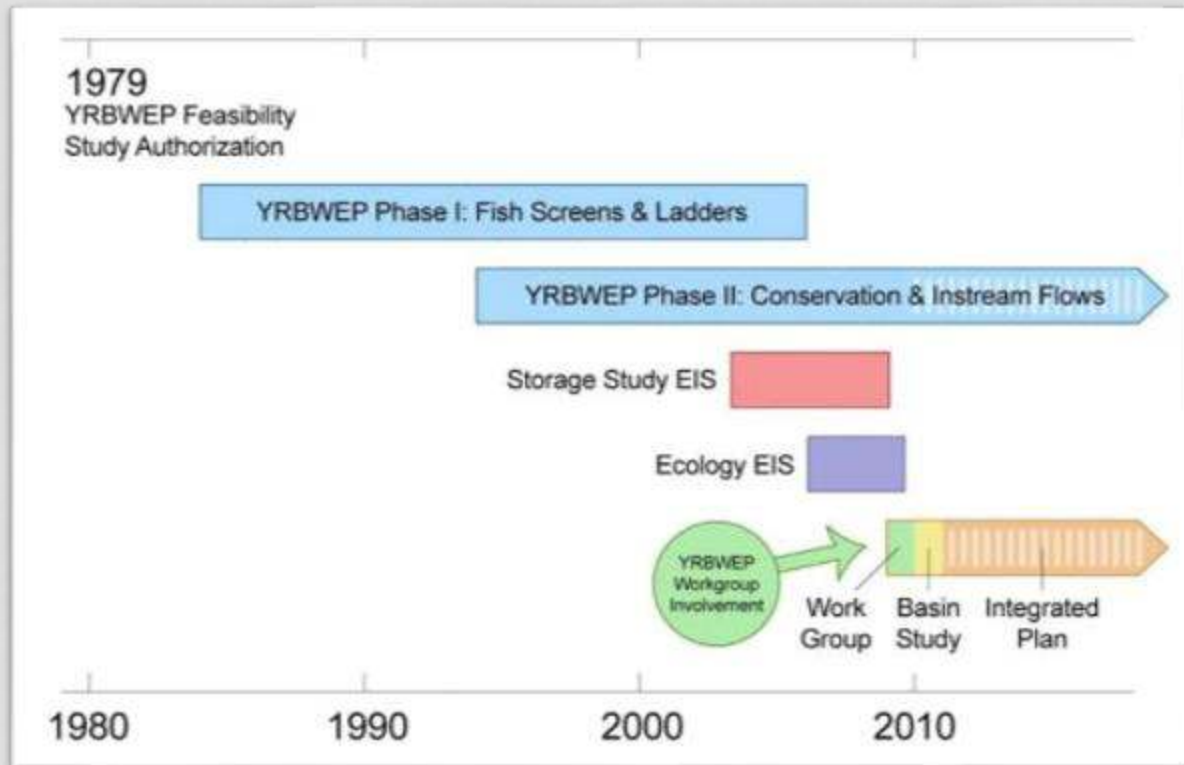
Yakima Project - 1905
&
Yakima River Basin Water
Enhancement Project -
1979

- 6,155 sq. miles w/464,000 irrigated acres
- 5 reservoirs w/ 1M AF capacity, irrigation deliveries 2.3M AF
- \$4.5 Billion agriculture economy
- Historically, second only to Snake River in supporting Columbia Basin salmon and steelhead runs

STRATEGIZING - YRBWEP PHASE III (AKA: YAKIMA BASIN INTEGRATED PLAN)



Derek Sandison (Ecology) and Jerry Kelso (Reclamation) - June 2009

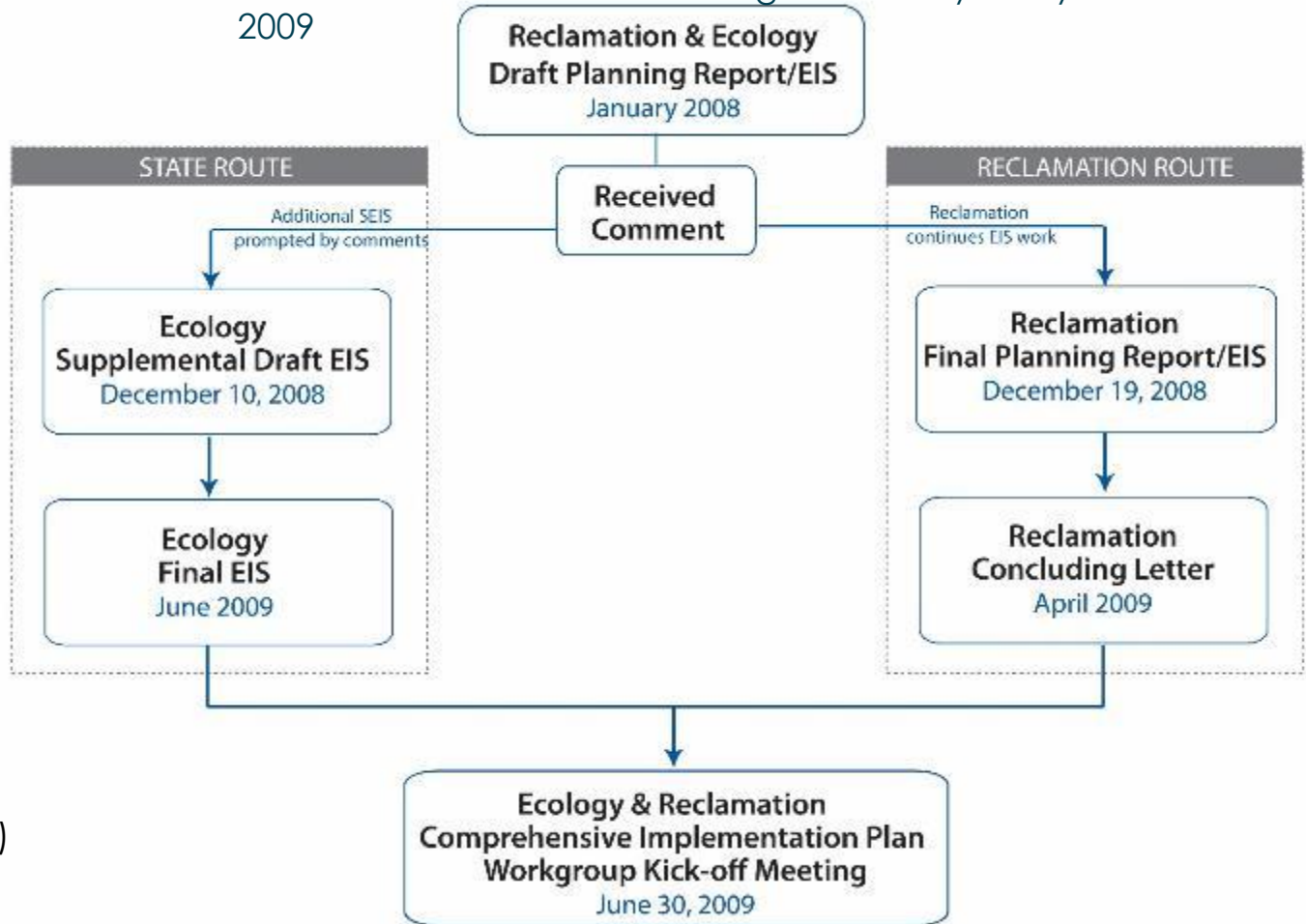


TIPPING POINT 2008



Derek Sandison (Ecology)
Ron Van Gundy (Roza)
Phil Rigdon (Yakama Nation)
June 2012

Yakima River Basin Water Storage Feasibility Study 2003-2009



YAKIMA WATER RIGHTS



Roza and KRD are 100% Prorable Water after April 1



REPEATED DROUGHTS PRORATABLE RIGHTS SUPPLY



Year	Proratable Supply
1973	80%
1977	70%
1987	68%
1988	90%
1992	58%
1993	71%
1994	37%
2001	37%
2005	42%
2015	47%
2019	72%
2023	73%
2024	52%
2025	40%

2025 DROUGHT - 40%



Keechelus Reservoir



Kachess Reservoir



Cle Elum Reservoir

2025 DROUGHT – 40%



- Third Consecutive Drought
- 40% of TWSA (3rd worst on record)
- KRD shut off August 13th
- RID shut off September 24th
- SVID Fallowed land for over 2000 AF of instream flow
- Reservoirs drained (Operational minimum)
- Storage Control declared on October 6th
- Historically dry September and October
- Ecology issues almost 1400 curtailment orders
- Unprecedented Senior Water Rights curtailment
- Title XII flows adjusted to maintain fish life



YAKIMA RIVER BASIN INTEGRATED WATER RESOURCE MANAGEMENT PLAN

Structural & Operational Changes

1. Raise the Cle Elum Pool by three feet to add 14,600 ac-ft in storage capacity.
2. Modify Kittitas Reclamation District canals to provide efficiency savings.
3. Construct a pipeline from Lake Keechelus to Lake Kachess to reduce flows and improve habitat conditions during high flow releases below Keechelus and to provide more water storage in Lake Kachess for downstream needs.
4. Decrease power generation at Roza Dam and Chandler power plant to support outmigration of juvenile fish.
5. Make efficiency improvements to the Wapatox Canal.

Reservoir Fish Passage

Provide fish passage at:

1. Clear Lake
2. Cle Elum
3. Bumping
4. Tieton (Rimrock)
5. Keechelus
6. Kachess

Enhanced Water Conservation

1. Implement an agricultural water conservation program designed to conserve up to 170,000 acre-feet of water in good water years.
2. Create a fund to promote water use efficiency basin-wide using voluntary, incentive-based programs. Focus on outdoor uses as top priority.

Habitat/Watershed Protection & Enhancement

1. Protect ~70,000 acres of land by acquiring high elevation portions of the watershed and forest and shrub steppe habitat.
2. Evaluate potential Wilderness, Wild and Scenic River, and National Recreation Area designations to protect streams and habitat.
3. Create a habitat enhancement program to address reach-level floodplain restoration priorities and restore access to key tributaries.

Market Reallocation

Employ a water market and/or a water bank to improve water supply in the Yakima River basin. Market reallocation would be conducted in two phases:

The near-term phase would continue existing water marketing and banking programs in the basin, but take additional steps to reduce barriers to water transfers.

The long-term program would focus on facilitating water transfers between irrigation districts. This would allow an irrigation district to fallow land within the district and lease water rights for that land outside the district.

Surface Water Storage

1. Build a 162,500 ac-ft off-channel surface storage facility at Wymer on Lumma Creek.
2. Access an additional 200,000 ac-ft of water by tapping into inactive storage at Lake Kachess.
3. Construct a new dam at Bumping Reservoir to increase capacity to 190,000 ac-ft.
4. Begin appraisal of potential projects to transfer water from the Columbia River to the Yakima Basin.

Groundwater Storage

1. Construct pilot projects to evaluate recharging shallow aquifers via groundwater infiltration. Full scale implementation may follow.
2. Build an aquifer storage and recovery facility allowing Yakima City to withdraw water from the Naches River during high flow periods and store it underground for use during low flow periods.



YAKIMA RIVER BASIN OVERVIEW



YBIP GOALS

- Reliable Irrigation Water Supply
 - 70% delivery in dry years to proratable rights
- Increase Municipal Water Supply
 - Authorize M& I use
 - 50,000 acre-feet
- Restore Fishery
 - “Self-sustaining harvestable populations”
 - Fish passage
 - Habitat protection and restoration
- Adapt to Climate Change
 - Increase storage
 - Make best use of existing supplies
- Robust Economy

YRBWEP WORKGROUP MEMBERS



- **Federal Agencies**
 - Bureau of Reclamation
 - National Marine Fisheries Service
 - U.S. Fish and Wildlife Service
 - U.S. Forest Service
 - U.S. Army Corps of Engineers
- **Yakama Nation**
 - Yakama Nation Natural Resources
 - Yakima/Klickitat Fisheries Project
- **Washington State Agencies**
 - Department of Ecology
 - Department of Agriculture
 - Department of Fish and Wildlife
 - Department of Natural Resources
- **Local Governments**
 - Benton County
 - Kittitas County
 - Yakima County
 - City of Yakima
- **Irrigated Agriculture**
 - Kennewick Irrigation District
 - Kittitas Reclamation District
 - Roza Irrigation District
 - Sunnyside Valley Irrigation District
 - Yakima-Tieton Irrigation District
- **Other Stakeholders**
 - American Rivers
 - Yakima Basin Fish & Wildlife Recovery Board
 - Yakima Basin Storage Alliance
 - Trout Unlimited



Everyone will get some of what they need, but not everything they want.

YAKIMA BASIN INTEGRATED PLAN GOALS



- **Reliable Irrigation Supply**
- **Increase Municipal Supply**
- **Restored Fishery** - “Self-sustaining *harvestable* populations”
- **Climate Resilience**
- **Robust Regional Economy**
- **Collaborative Implementation**



YAKIMA BASIN INTEGRATED PLAN STRATEGY



Water Supply Reliability

- Best use of existing supplies
- Storage (surface and groundwater)
- Markets
- Regulatory risk management (ESA)

Fishery Restoration

- Safe Passage (upstream and downstream)
- Flow Improvements
- Habitat Protection and Restoration

Habitat

- Acquisitions (Forest, Riparian, Shrub Steppe)
- Restoration – Mainstem + Tributary
- Forest Management
- Designations

YAKIMA BASIN INTEGRATED PLAN

ACCOMPLISHMENTS 2013-2025



- **Fish Passage**
 - Complete Construction: Naches, Cle Elum (2026/27)
 - Finish construction: Roza Screens (2025)
 - In design: Tieton
- **Water Supply Reliability**
 - Conservation - 76,000 acre-feet
 - Cle Elum Pool Raise - 14,600 acre-feet (in construction)
 - Kachess Drought Relief Pumping Plant - 200,000 ac-ft (feasibility)
 - Groundwater - 670 acre-feet
 - Springwood - up to 100,000 acre-feet (feasibility)
- **Habitat**
 - 40+ restoration projects
 - 100,000 acres acquired
- **Yakama Nation**
 - Wapato Irrigation Project Modernization Plan
- **\$850M + in federal and state funding**
- **\$38M + FY25 WaterSMART funding to YBIP**
- **\$16M + FY25 Inflation Reduction Act**



WaterSMART Workshop - November 2022

YBIP INFRASTRUCTURE BIL “SHOVEL WORTHY” PROJECTS



• Project Types

- Water storage
- Fish passage
- Habitat
- Water conservation
- Structural/operational

• YBIP Projects

FY22-26

- 96 projects identified
- \$1.237 Billion



Kittitas Reclamation District South Branch Canal

Results

- 14 Awards, \$45M
 - Gold Creek – USFWS \$5M/USBR \$2.47M
 - Upper Yakima NRCS RCPP \$17.8M
 - Kachess River – USFS \$800k
 - Bateman/Prosser- NOAA \$3.6M
 - Toppenish –NOAA \$1.2M, USFWS \$1.6M, USBR \$3.2M
 - Bull Trout – USFWS \$83k
 - Aquatic Ecosystem - USBR 4 totaling \$7M for YN
 - Water Resources /Ecosystem – USBR 4 totaling \$8.3M, KRD \$3M

DROUGHT/WATER SUPPLY



- **2025 Water Supply - 40%**
 - YBIP goal - 70% tolerable
 - Requires conservation, increase storage, better systems
- **IRA drought proposals - 4 projects, \$16M**
 - Toppenish Fan Aquifer Recharge - \$6M
 - State Drought Plan - \$5M
 - Roza Emergency Drought Funding - \$3.4M
 - KRD North Branch Conservation - \$1.6M



ENHANCED WATER CONSERVATION



- **YBIP Goal**

- 170,000 AF
- 85,000 AF by 2029

- **Accomplishments**

- 193 projects
- \$336M invested
- ~76,000 acre-feet conserved/in progress
- Completed 89% of 2029 goal

- **Conservation Identified**

- WIP - 165,000 AF
- KRD - 123,000 AF



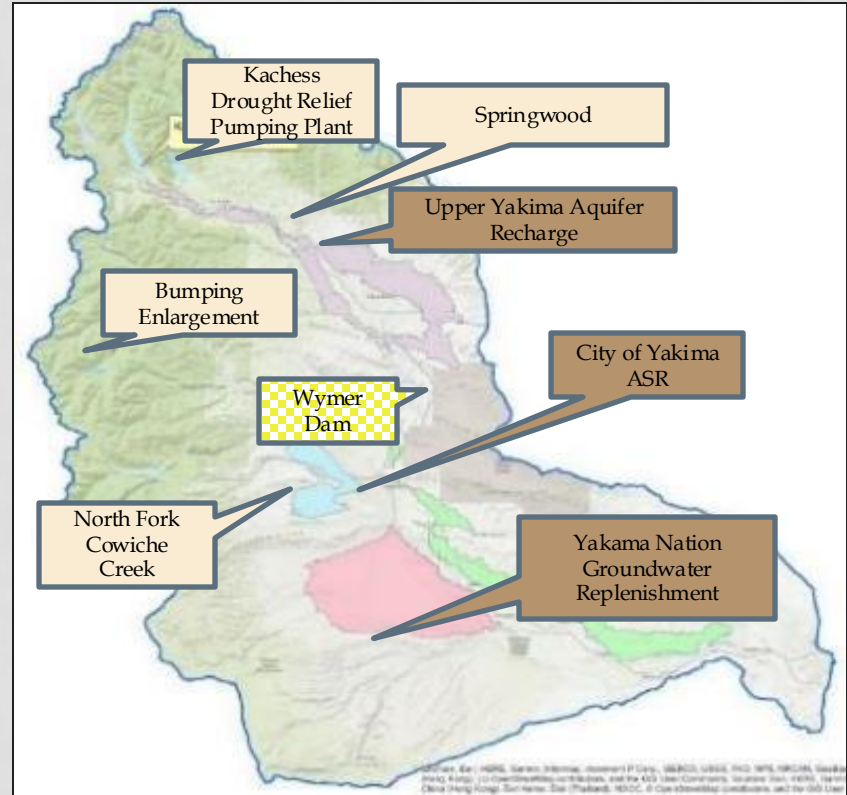
*Kittitas Reclamation District South Branch
Canal lining*

WATER RELIABILITY: STORAGE

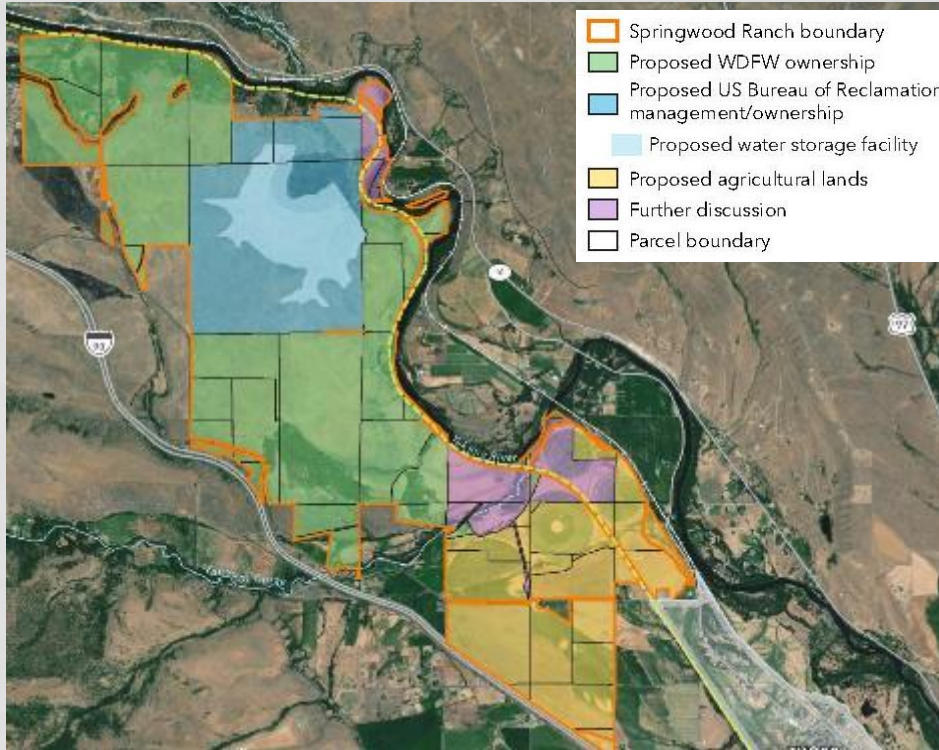


Water Supply Options

- YBIP Goal: 450,000 acre-feet of new storage
- Water Supply Framing process underway
- Range of projects – small, large, surface, groundwater



SPRINGWOOD RANCH PROPERTY ACQUISITION



Private Property Purchase:

- Purchased by Trust for Public Lands March 02, 2023.
- Approximately 3,600 acres
- Ownership transferred October 31, 2024
- Celebration May 2, 2025

CLE ELUM POOL RAISE



CLE ELUM POOL RAISE PROJECT - YAKIMA PROJECT, WASHINGTON -

- **Complete**
 - Night Sky
 - Domerie Bay
 - Morgan Creek
 - Timber Cove
- **In Process**
 - Sandelin
 - Speelyl



Sandelin Lane

SAFE FISH PASSAGE



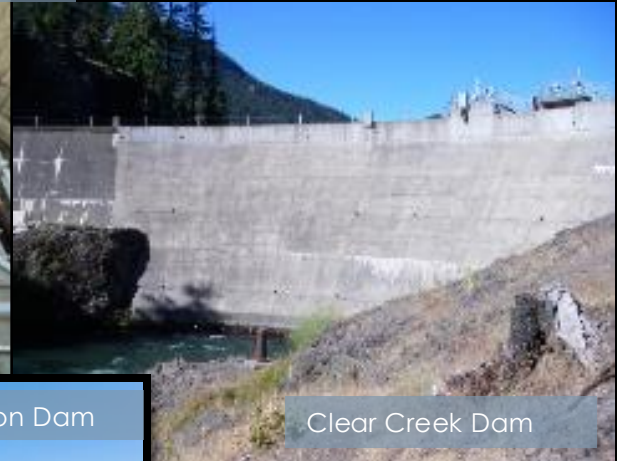
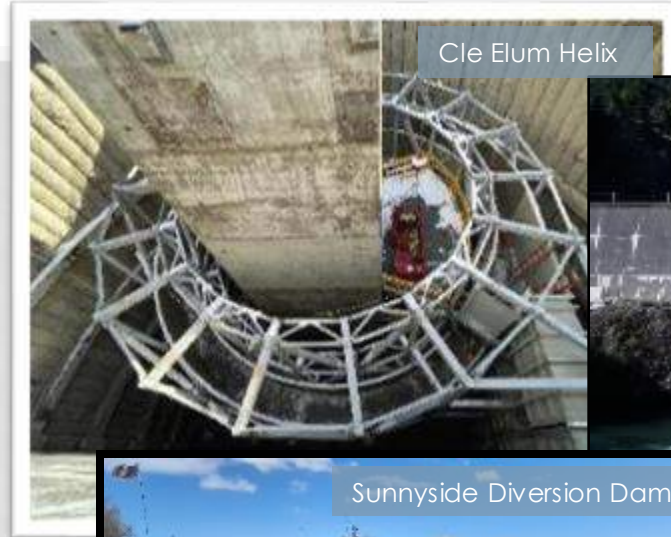
- **Reservoir Passage**

- Cle Elum Dam Fish Passage
- Tieton Fish Passage Complex
 - Clear Creek Dam
 - Tieton Dam
 - S.F. Tieton

- **Lower River Fish Passage Improvements**

- Roza Dam and Diversion
- Wapato Dam and Diversion
- Sunnyside Dam and Diversion
- Prosser/Chandler Dam and Diversion
- Wanawish Dam and Diversion
- Bateman Island

- **Financial Partnership Are Key to Large Infrastructure Projects**



CLE ELUM DAM FISH PASSAGE

- Adult and juvenile passage in process
- \$220M innovative project
- Cost Share Reclamation/WA
- Final contract (adult collection) in construction 2024
- Anticipate operational – 2026/27



CLE ELUM DAM FISH PASSAGE



- Adult Collection Facility

Tle'lam Adult Passage Facility



CLE ELUM DAM FISH PASSAGE: ADULT COLLECTION FACILITY



NEED FOR INTEGRATED, WHOLE SYSTEM APPROACH-PARTNERSHIPS



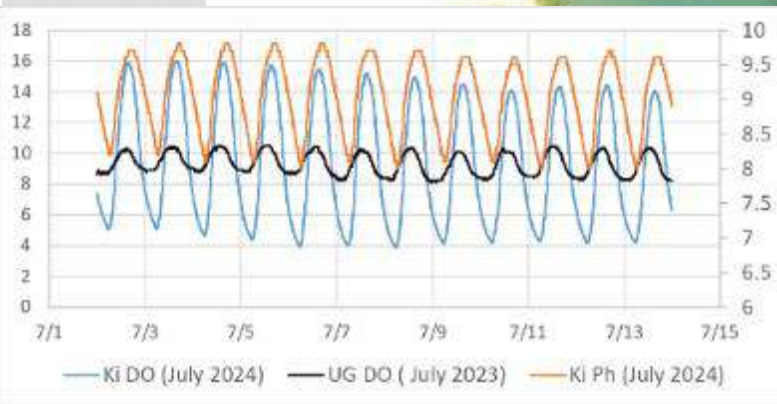
- Streamflow-overarching variable
- Diversions
- Water quality
- Predation
- Stargrass
- Habitat



WATER STARGRASS MANAGEMENT

- Mowing and hand-pulling are in progress (BDC)
- Need to scale up, evaluation is ongoing
- Multi-objective: irrigation, fish migration and spawning, mosquito hazards

Wanawish Dam



Lower river water quality vs reference reach

PROSSER DAM AND DIVERSION



- Biggest impact to juvenile fish among facilities
- Still in pre-design phase, alternatives being evaluated
- Complex: need to eliminate entrainment and predation mortality, maintain monitoring capability in lower River
- Flow considerations are key:
 - Electrification
 - Subordination
 - Power Generation



YAKIMA DELTA



Yakima River Delta is a Chokepoint!

- Every salmon and steelhead must pass through this area twice in their lifecycle
- 100s' of millions of dollars in fish passage & habitat restoration being invested
- USACOE Feasibility October 2024 – Complete!
- Removal - 2025/2026



ESTIMATED TIMELINE FOR LOWER RIVER PROJECTS:



Project/issue	2023	2025	2027	2029	2031	2033	2035	2037	2039	2041	2043	2045
Bateman Island	INFRASTRUCTURE											
Wapato Dam	INFRASTRUCTURE											
Prosser Dam	INFRASTRUCTURE											
Sunnyside Dam		INFRASTRUCTURE										
Wanawish Dam		INFRASTRUCTURE										
Subordination/power nexus	INFRASTRUCTURE											
Habitat	PROJECT-BASED											----->
Predation	ONGOING MANAGEMENT											————>
Star Grass	ONGOING MANAGEMENT											————>
WQ (reach wide temp)	ONGOING MANAGEMENT											————>
Flow management	ONGOING MANAGEMENT											————>
Passage/Survival Monitoring	ONGOING MONITORING											————>

YAKIMA BASIN INTEGRATED PLAN PARTNERS-THANK YOU!



Plus, many others: Benton Conservation District, Mid-Columbia Fisheries Enhancement Group....

THANK YOU!



YAKIMA BASIN
BUILDING A FUTURE FOR WATER,
WILDLIFE & WORKING LANDS

Questions?

Visit:

www.americanrivers.org/2025/10/faces-of-drought-a-crisis-in-the-Yakima/

[American Rivers-Faces of Drought: A Crisis in the Yakima](#)