— BUREAU OF —
RECLAMATION

Chad Stuart | 509-573-8101

DEPARTMENT OF
ECOLOGY
State of Washington

Larry Mattson | 509-907-1340

Agenda
Yakima River Basin Water Enhancement Project
Workgroup Meeting

Heritage University Conference Room | 3240 Fort Road, Toppenish, WA 98948
June 18, 2025; 9:30 AM to 12:30 PM | Teams info below

9:30 – 9:45 **Welcome/Introductions and Agenda Overview**
Anna Marandi, HDR

9:45 – 10:10 **Executive and Implementation Committees Updates**
Chad Stuart and Candy Carmack, Reclamation; Larry Mattson, OCR/ Ecology; Joe Blodgett, Yakama Nation

10:10 – 10:45 **Groundwater and Hydrogeology Presentation**
Jeff Dermond, OCR/ Ecology

10:45 – 11:00 **Public Comment**[1]

11:00 – 11:15 **Break**

11:15 – 11:30 **YBIP Project Updates**
Mike Shane, City of Yakima – Nelson Dam Phase II

11:30 – 11:50 **Springwood Celebration and Cle Elum Tour Recaps**
Lottie Sam, Yakama Nation; Jennifer Johnson, Washington Department of Fish & Wildlife

11:50 – 12:30 **Celebrating Tom Tebb's YBIP Leadership**

12:30 **Adjourn**

Upcoming 2025 YRBWEP Workgroup Meetings –
September 10 *(Legends Casino, Toppenish), and* ***December 10*** *(Yakima Valley College, Yakima)*

For additional information, see the reports and documents available at this link:
http://www.usbr.gov/pn/programs/yrbwep/2011integratedplan/index.html

Microsoft Teams
Join the meeting now
Meeting ID: 217 590 699 066

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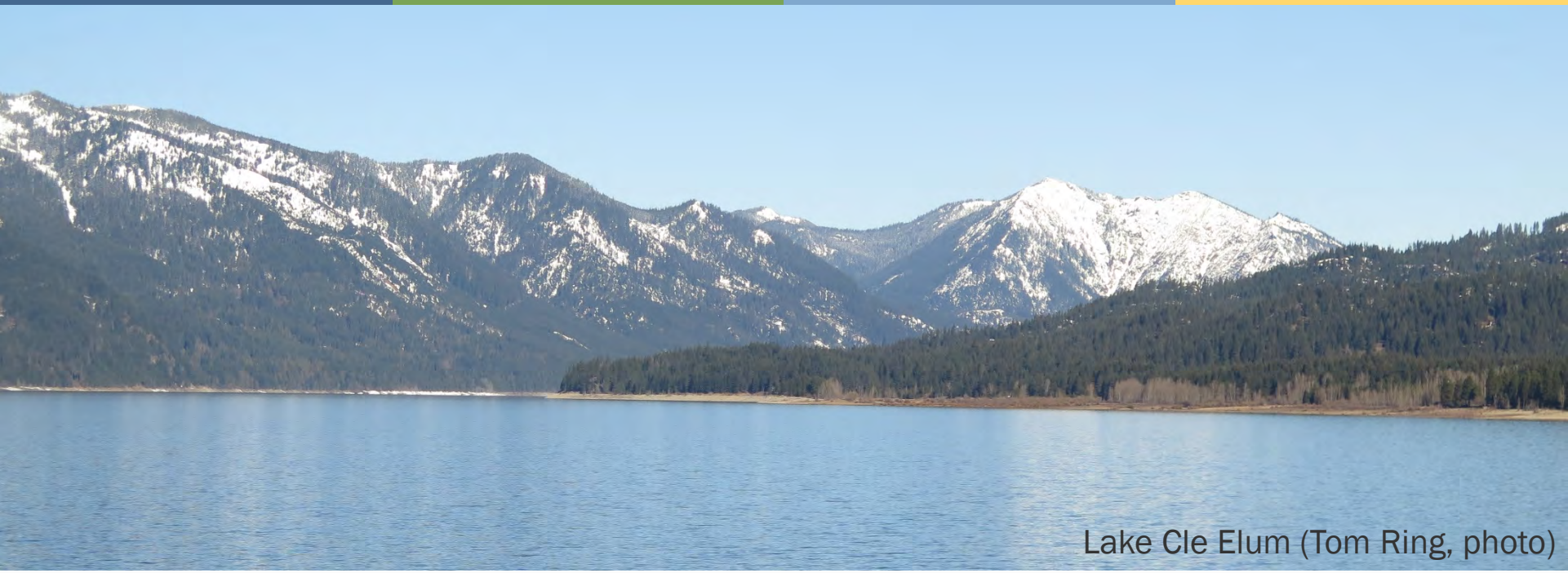
[1] Those wanting to provide public comment can do so during the designated agenda item. Each commenter will be limited to 2 minutes for comments (depending upon number of commenters) to maintain meeting schedule. Additional written material can be submitted with comments for inclusion in the meeting notes. Previously provided comments are noted and not necessary to repeat.



Lake Cle Elum (Tom Ring, photo)

DEPARTMENT OF ECOLOGY
State of Washington

Chasing the Yakima Basin's "Sixth Reservoir" with Groundwater Storage

Jeff Dermond, Office of Columbia River

YBIP Workgroup

June 18, 2025

Outline

1. Water Supply
2. Some Data Morsels
3. The Chase
4. Groundwater Solutions

Ecology's mission and vision

Our Mission

To protect, preserve, and enhance Washington's environment for current and future generations.

Our Vision

Our innovative partnerships protect and sustain healthy land, air, and water in harmony with a strong economy.

Ecology's strategic priorities

Support and engage our communities, customers, and employees

Prevent and reduce toxic threats and pollution

Protect and manage our state's waters

Reduce and prepare for climate impacts

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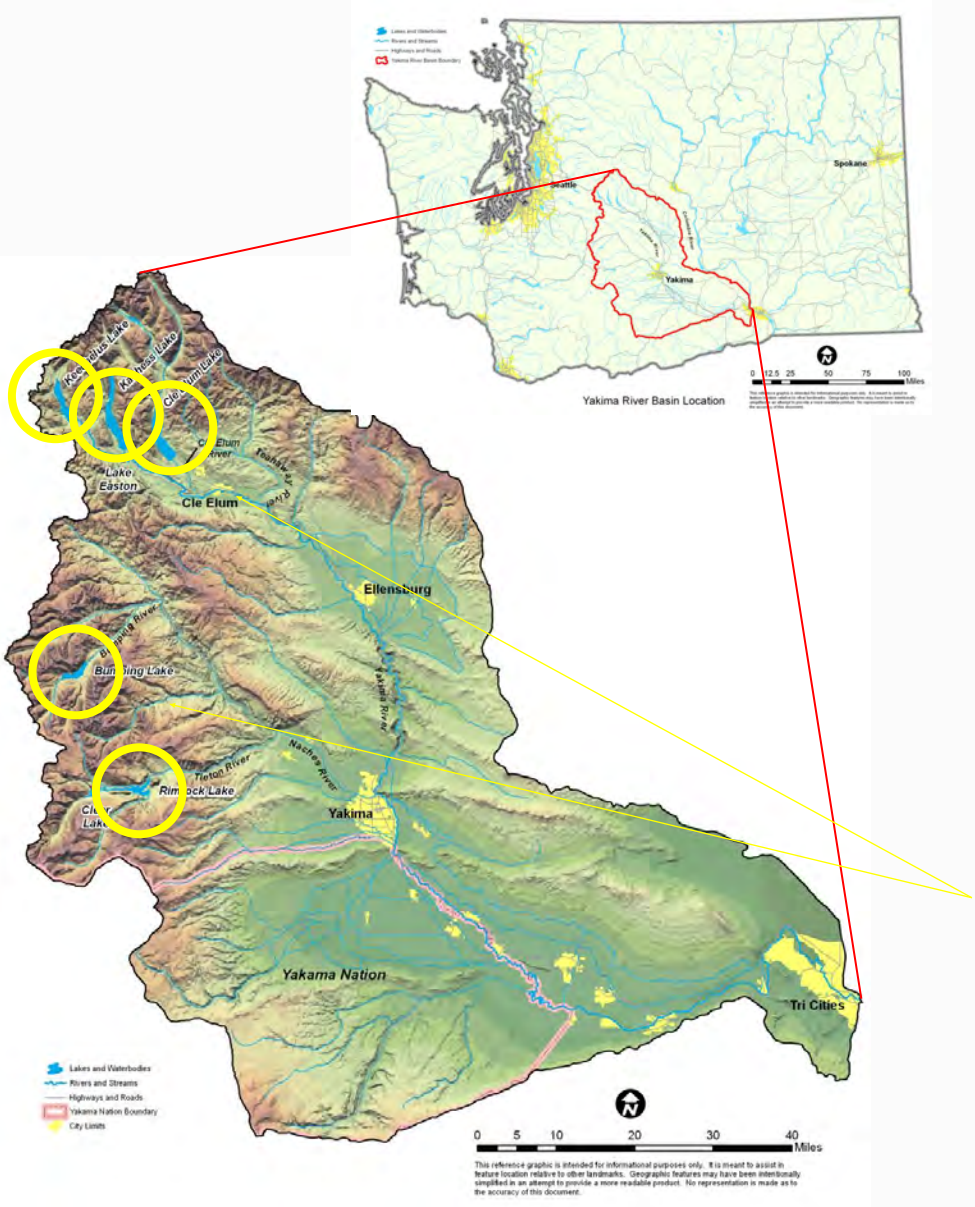
Yakima River Basin



- Basin size: 6,155 sq. miles
- Population: 400,000
- $4.5 billion agriculture economy
- Historically, second only to Snake River in supporting Columbia Basin salmon and steelhead runs
- Adjudicated 1977
- 5 USBR reservoirs

Yakima Basin Surface Storage (6/12/25)

- 1.06M Acre-Feet
- 67% Full

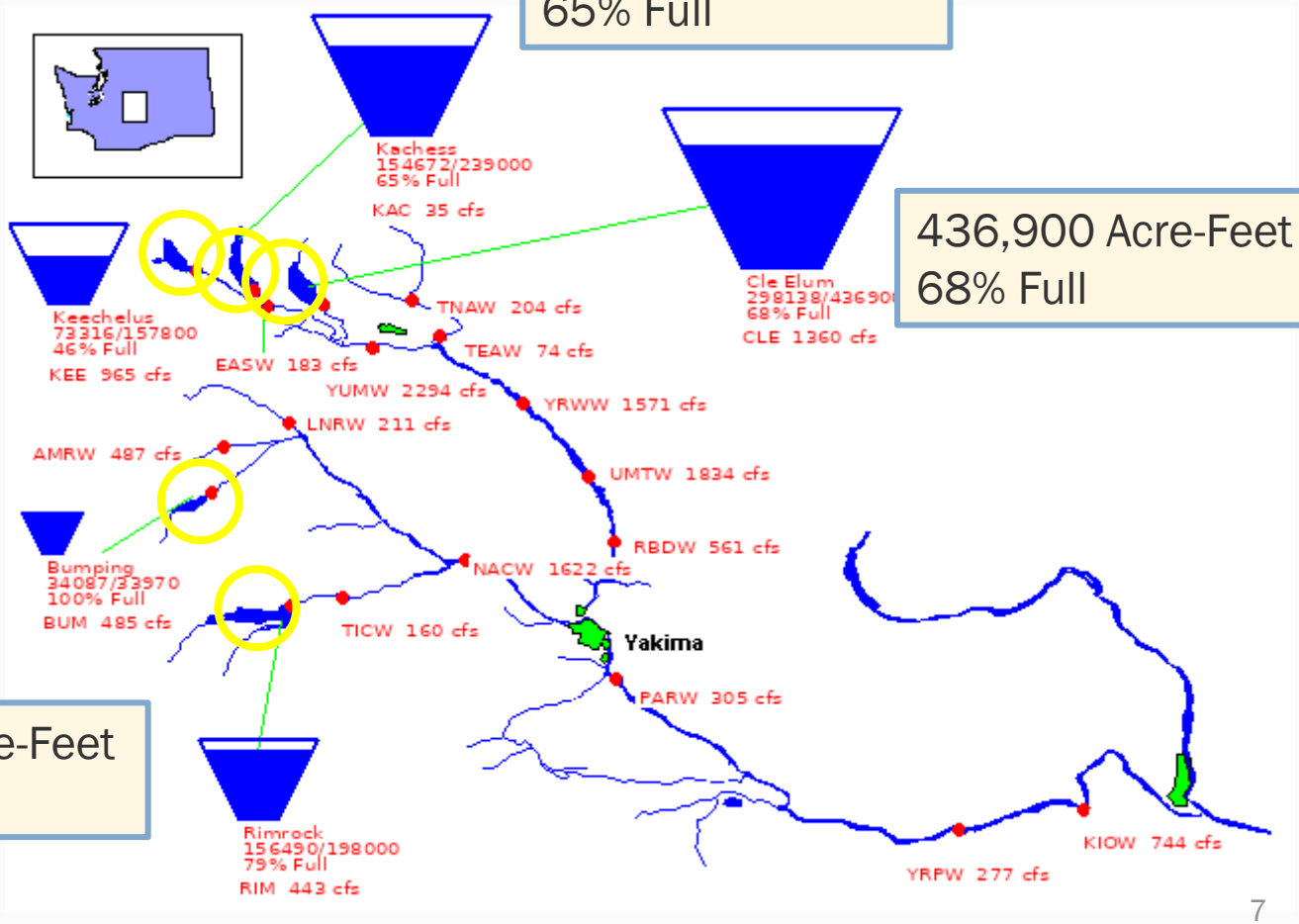
239,000 Acre-Feet
65% Full

157,800 Acre-Feet
46% Full

436,900 Acre-Feet
68% Full

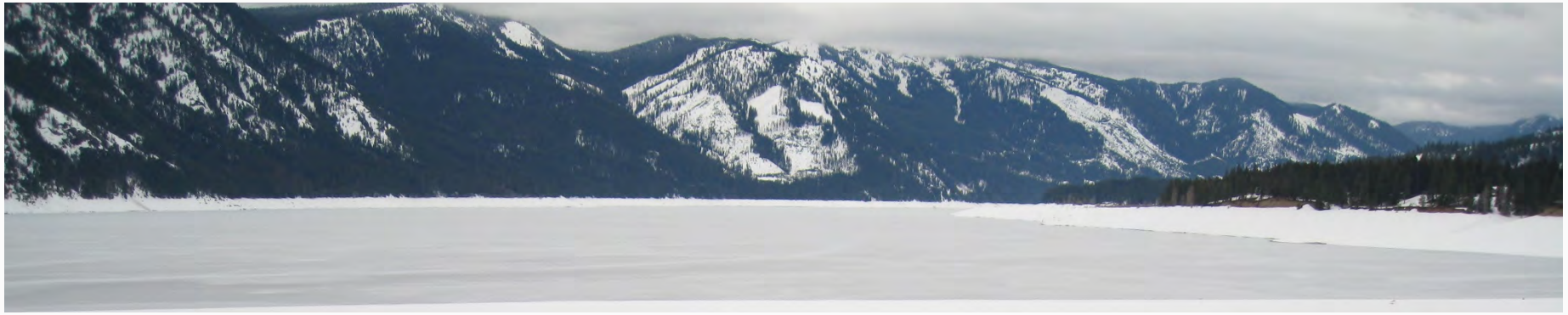
33,970 Acre-Feet
100% Full

198,000 Acre-Feet
79% Full



Snow: The Sixth Reservoir

- Five USBR Reservoirs: 1,065,400 AF
- Yakima River Entitlements: 2,406,917 AF
  (~55% Proratable)



What the heck is an acre-foot?

- 1 acre = 43,560 ft^2

What the heck is an acre-foot?

- 1 acre = 43,560 ft^2

Or roughly…

- A football field without the endzones
- A softball field (HS or college)
- Ellensburg Rodeo Arena (no bleachers)
- Toppenish Safeway

Snow: The Sixth Reservoir

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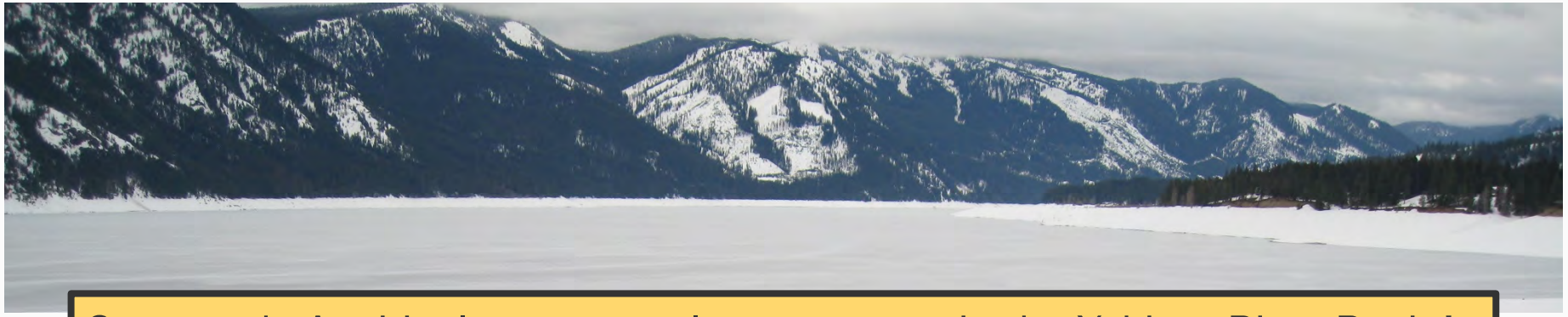
2.3x



Snowpack: A critical water supply component in the Yakima River Basin!

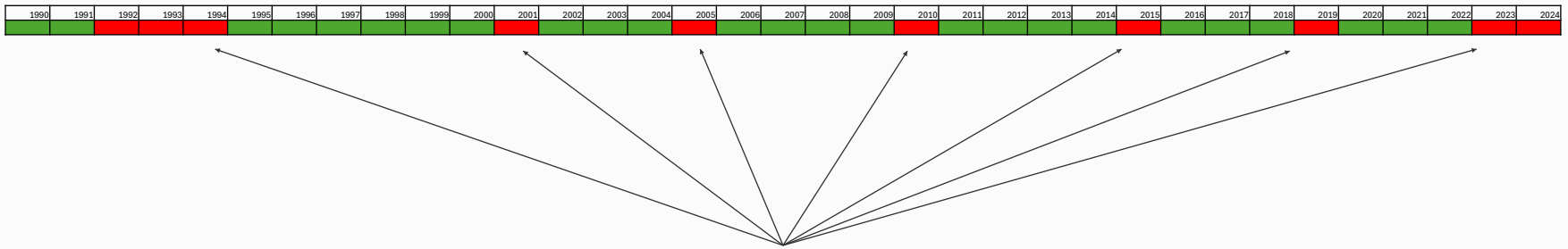
The Sixth Reservoir: Not Ideal

- Highly vulnerable to climate change

- Multiple threats to water supply:
  - Dry winters – very little snow
  - Warm winters – rain instead of snow
  - Spring heat waves – rapid early melt

Prorationing: Last 34 Years

1991 2004



10 years
(30%)

Average Temperature

Half-months,
March – July
1990 – 2024

> 35°F

> 40°F

> 50°F

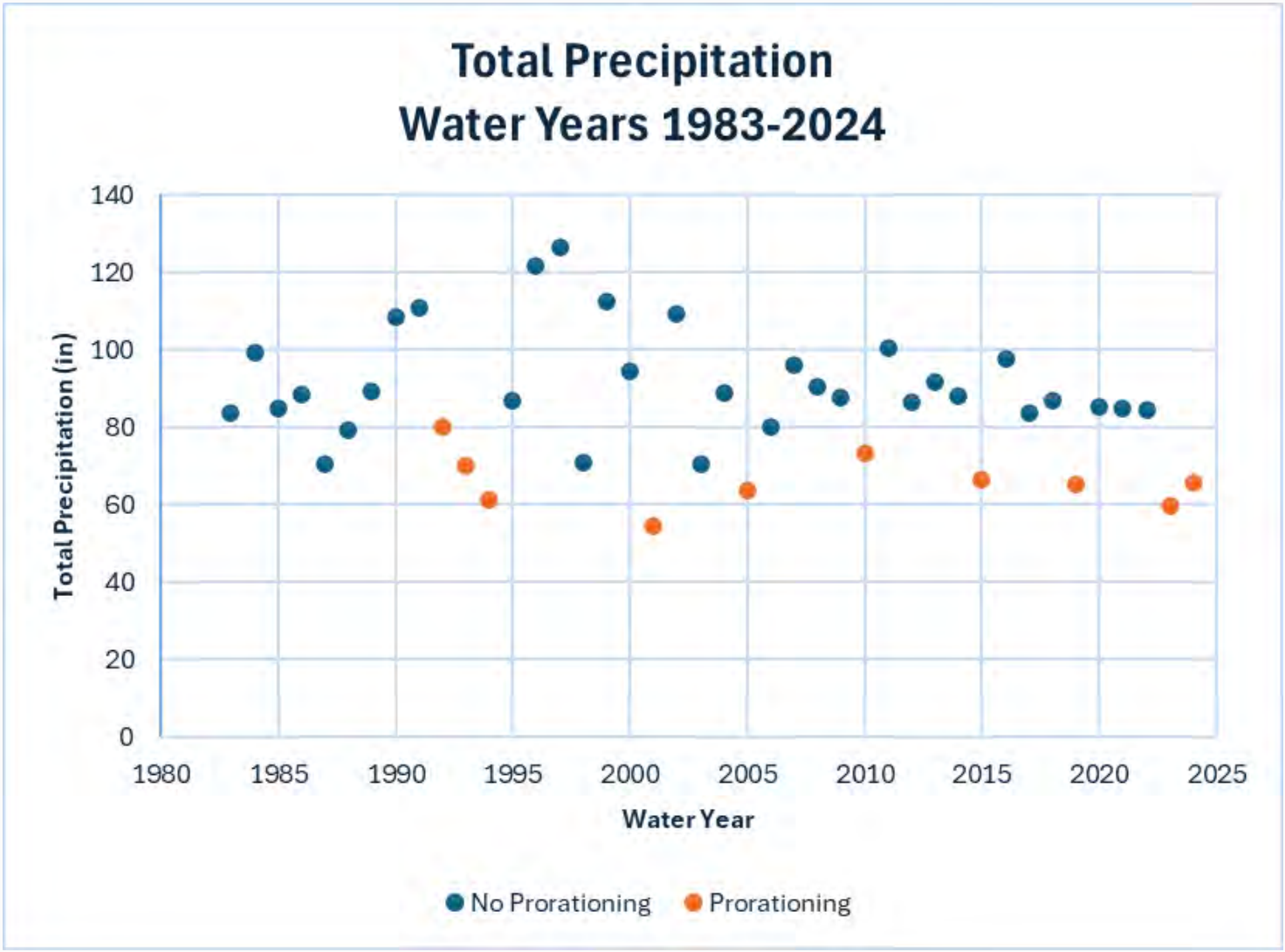
Irrigation season

	March		April		May		June		July	
1990	30.5	37	42.4	37.2	39.9	40.1	42.2	52.5	57.8	59.4
1991	27	31.9	**32.7**	38.5	39.2	39.5	42.8	47	56.7	
1995	30.1	**34.2**	33.2	39	41.3	50.3	46.4	52.2	52.6	56.8
1996	34.1	30.4	**39.4**	34.5	36	40.4	50.3	46.2	59.3	59.3
1997	27.1	**33.8**	**32.3**	36.2	46	44.3	46.7	44.6	51.2	56.3
1998	31.3	**32.6**	**32.5**	43	41.8	40.6	48.6	49.6	53.8	64.3
1999	27.5	32.1	31.5	38.4	32.6	43.5	44.2	43.6	50.5	55.6
2000	29.1	31	38.8	37.8	38.2	41.7	44.7	54	48.9	57.4
2002	26.4	28	35.5	**34.6**	35.1	42.8	46.9	50.8	55	57.2
2003	**32.1**	**32.7**	**33.4**	35.9	37.2	44.7	51.9	51.2	54.4	61.9
2004	**33.3**	**34.1**	39.6	39.9	41.4	41.2	45.3	58	53.7	61.7
2006	26.7	31.9	**33.8**	38.5	40.4	45.7	46.1	54.3	55.7	59
2007	31.4	**34.2**	**33.3**	35.3	40.1	44.2	45.9	47.2	60.7	54
2008	30.1	25.5	30.9	30.3	37.8	46.1	37.7	51.9	56.5	51.6
2009	23.6	27.7	**32.7**	37	36.5	48.3	52.1	47.2	54.8	64.5
2011	27.8	30.3	29.1	30.3	36.8	37.4	42.7	45.6	50.3	51.4
2012	27.5	28.4	**33.9**	38.5	40.6	41.1	41	47.2	55.4	54.5
2013	32.3	31	**33.8**	35.4	48.4	39	47.6	51.7	56.1	58.6
2014	31.2	30.6	36.4	35.3	44.2	44.2	47.5	48.1	62	56.5
2016	31.3	**33.7**	40.5	42.6	48.7	42.2	50.8	49.9	49	56.1
2017	30.2	30.8	**32.7**	**34.9**	39.5	49.4	45.3	55.3	56.7	56.9
2018	29.5	30.6	32.7	38.6	48.1	46.8	44	51.7	56.2	63.3
2020	27.3	**32.1**	**34.4**	39.5	42.2	44.3	42.6	51.7	49.3	60.7
2021	31.1	30.4	**33.7**	41.9	41	42	46.1	64.2	58.2	59.3
2022	30.7	34.8	28.3	32.7	35.2	39.3	44.3	50.8	54.7	63.5
1992	38	38.3	36.2	40.1	47	51.1	48.7	58.2	50.9	59.6
1993	**32.6**	**32.9**	**34**	36.4	43.5	51.2	44.6	48.1	46.3	48.2
1994	35.2	35	**34.6**	42.5	46.2	44.1			52.8	61.4
2001	30.5	**33.3**	**29.6**	38.7	40.2	46.7	40.9	49.4	55.9	49.5
2005	39.9	30	**31.5**	42	45.4	45.7	41.6	51.1	51.5	58.7
2010	31.2	32.7	30.7	36.8	37	38.9	43.2	47.3	52.9	57.5
2015	38.4	37.5	**31.9**	40.6	43.5	51	54.3	59.4	62.2	57
2019	22.3	38	**34.6**	37.6	46.9	46.7	50.5	46.7	51.6	54.7
2023	25.3	31.1	30.2	37.5	46.4	49.5	51	50.3	59	57
2024	26.9	37.3	35.5	35.2	43.7	38.7	47.2	50.6	62.6	57.5

No Prorationing
(24 years)

Prorationing
(10 years)

Data from Stampede Pass SNOTEL Station, NRCS



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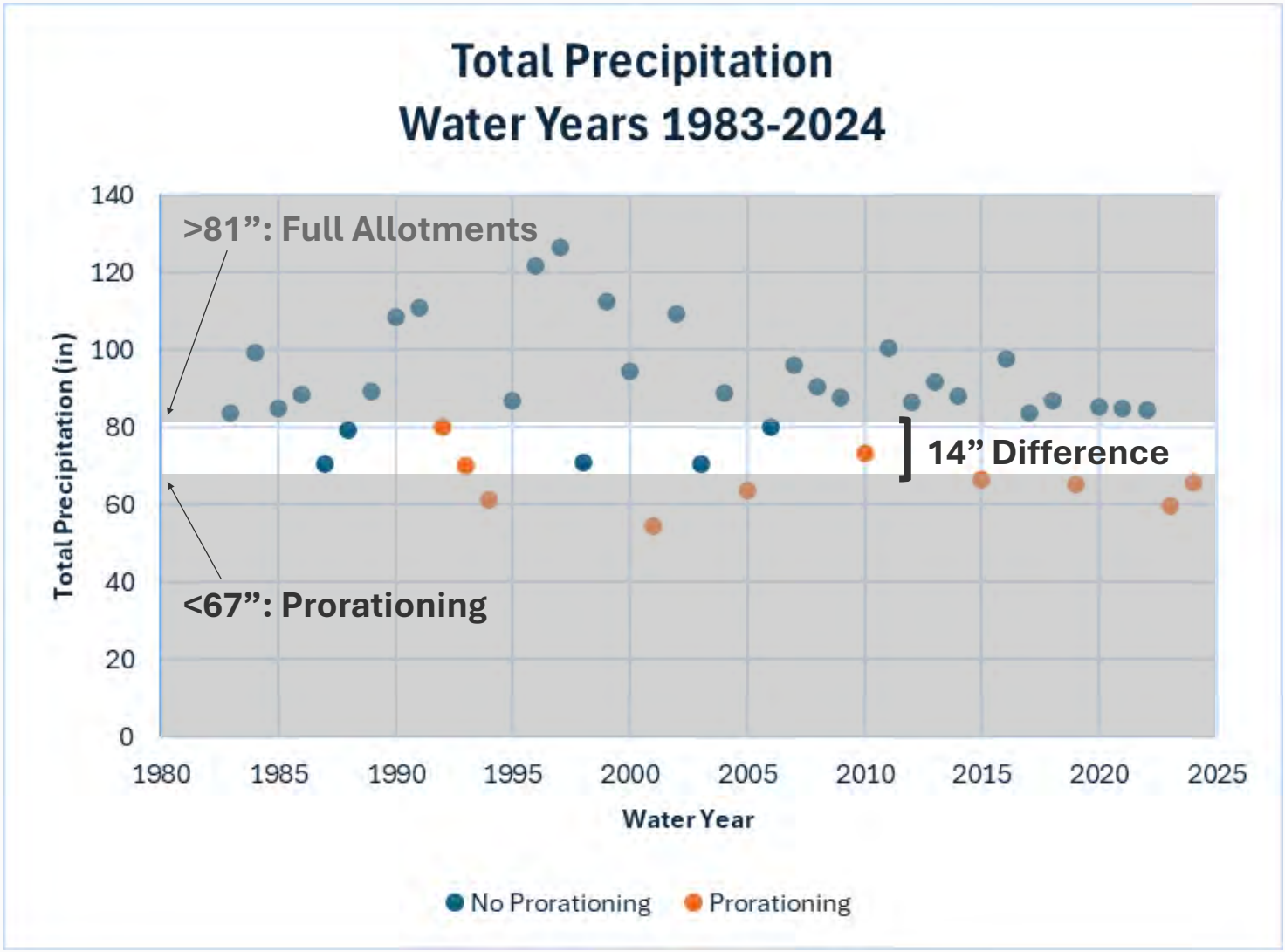

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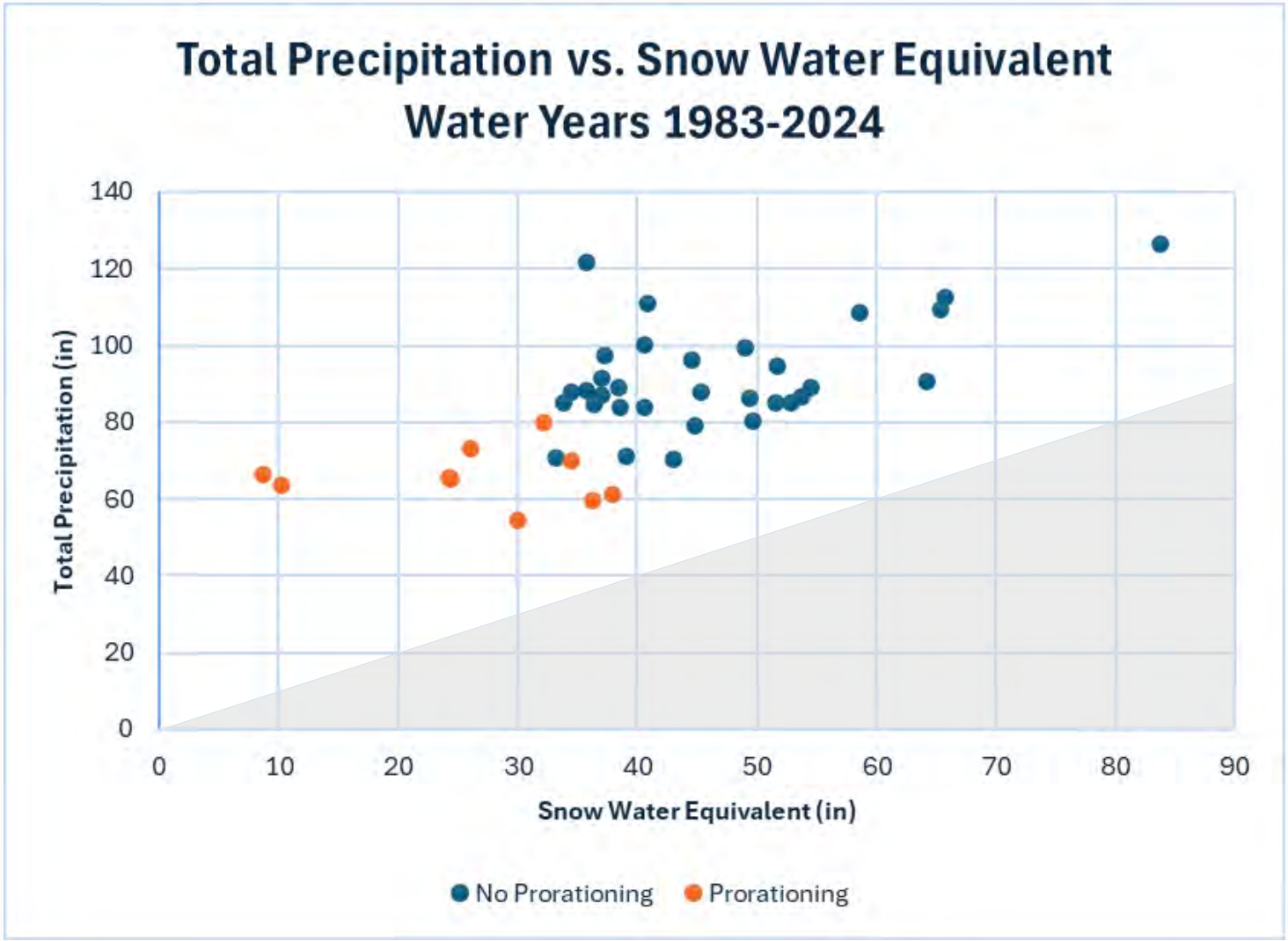

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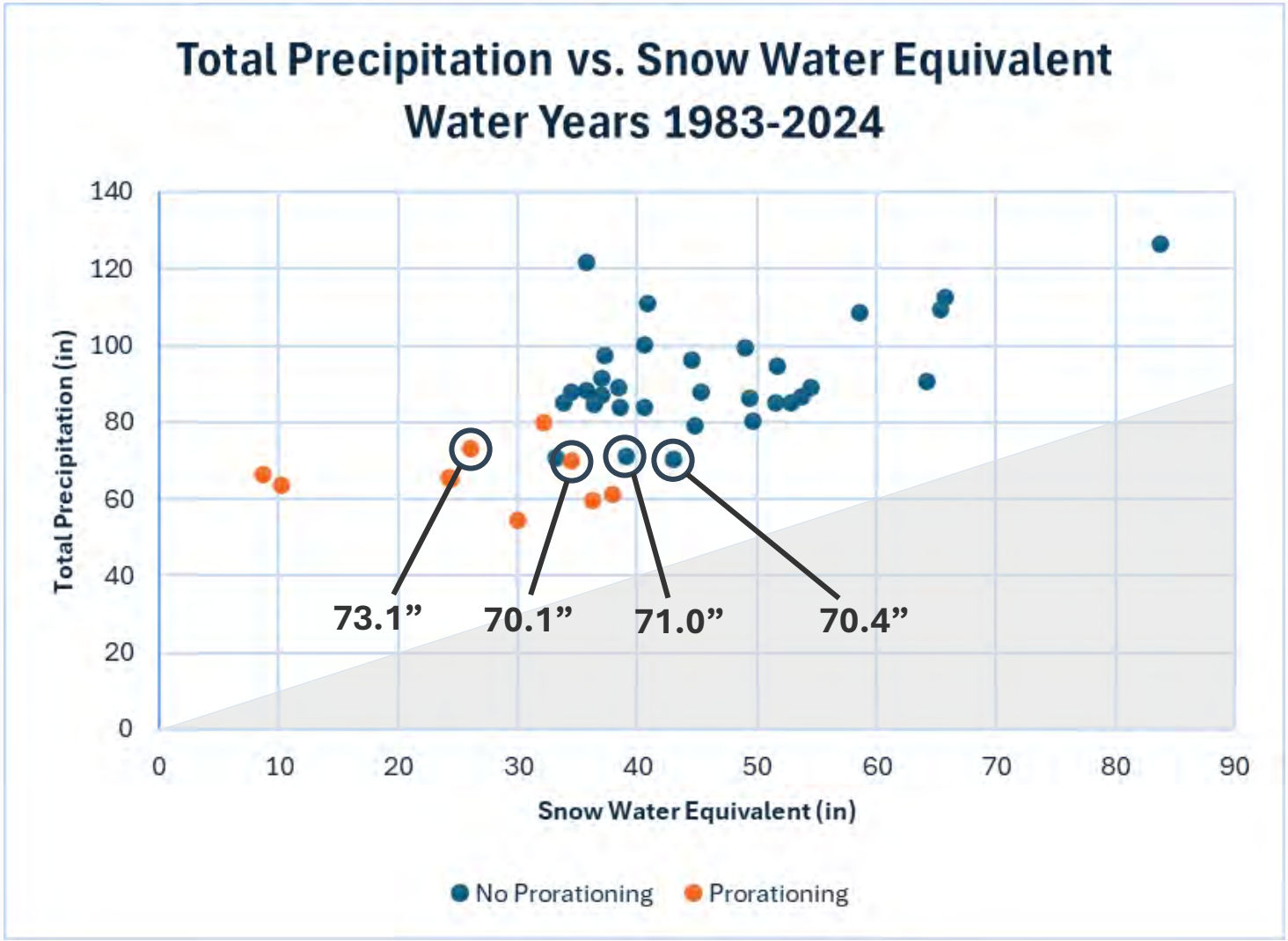

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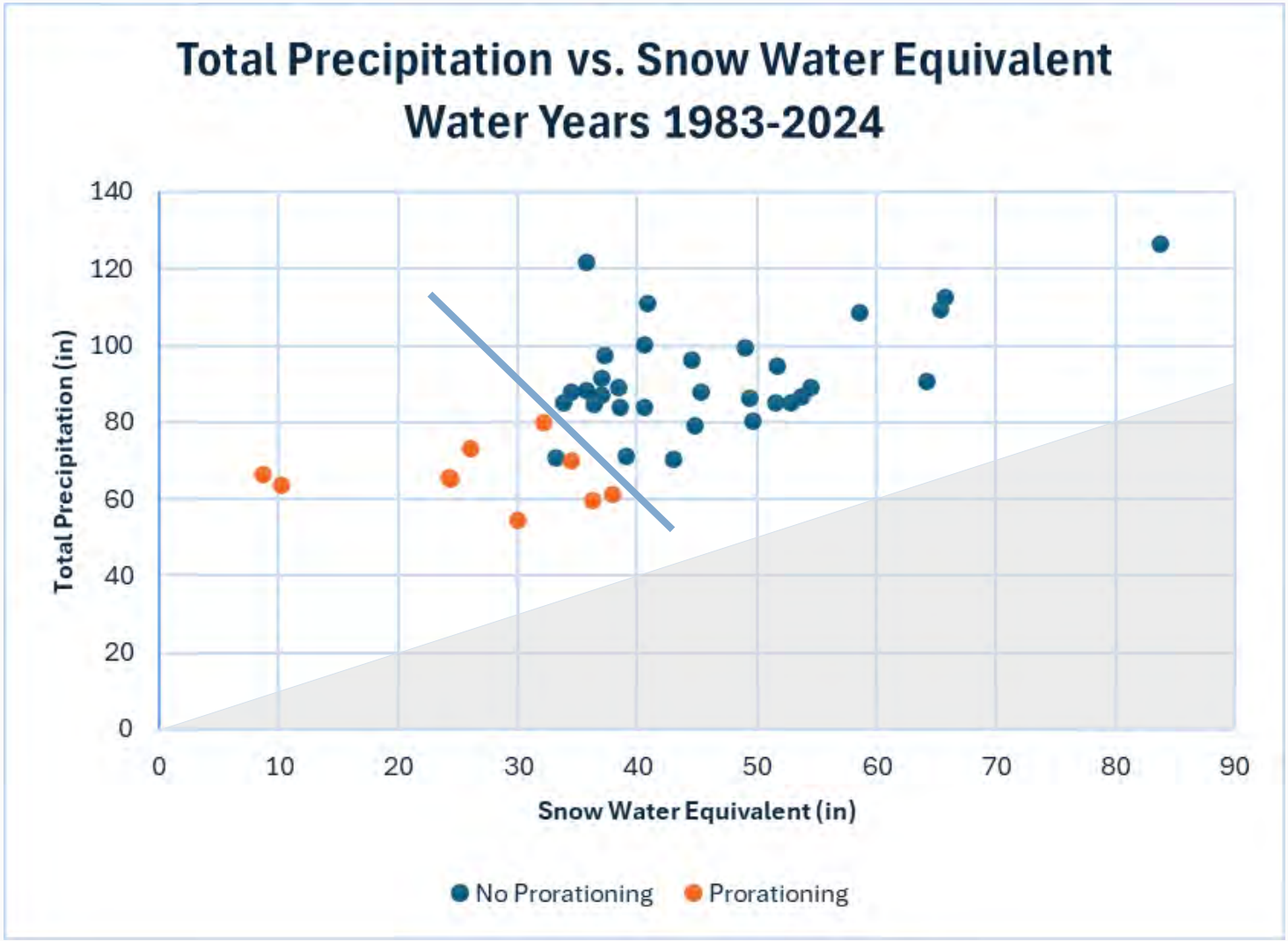

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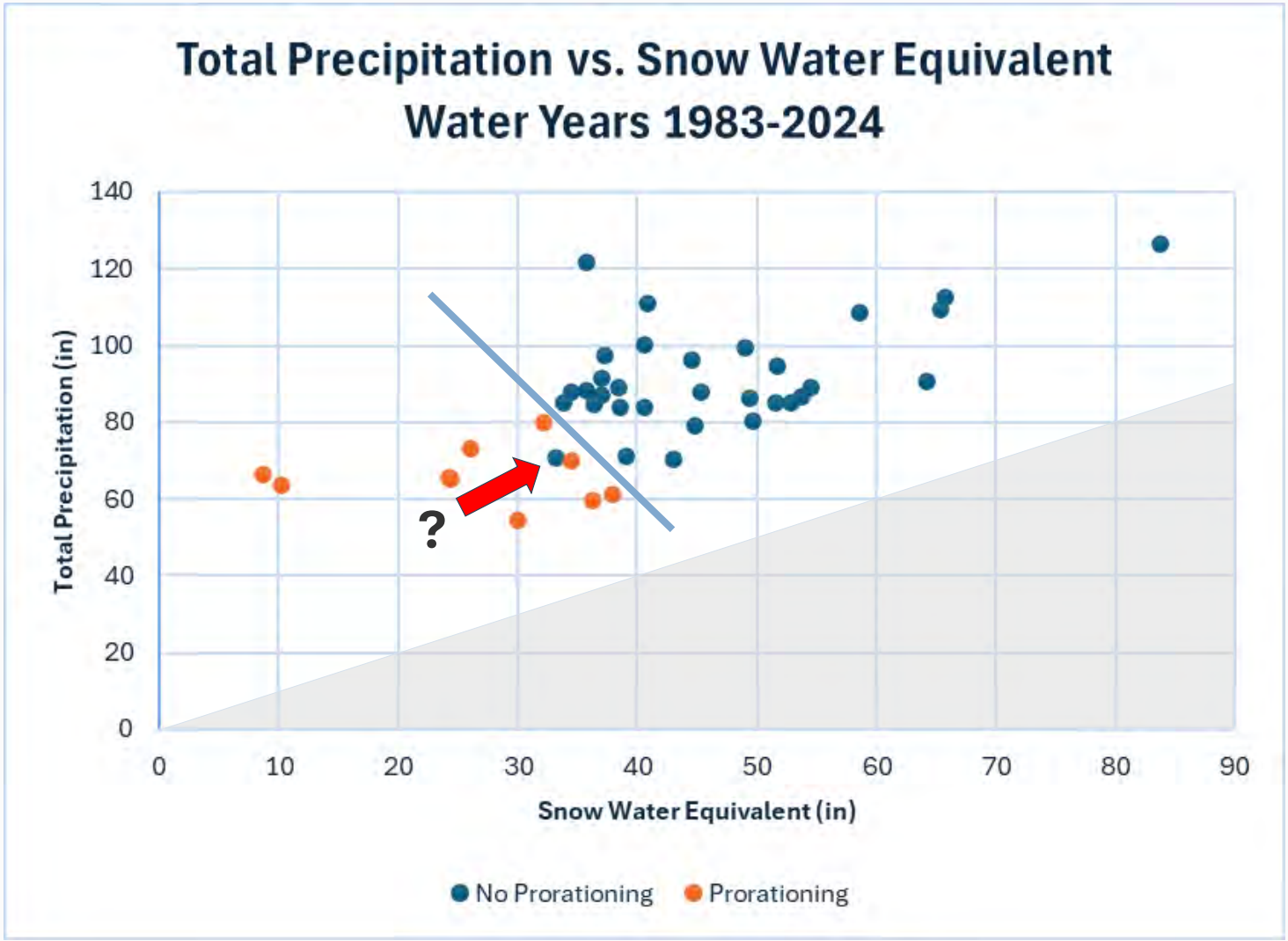

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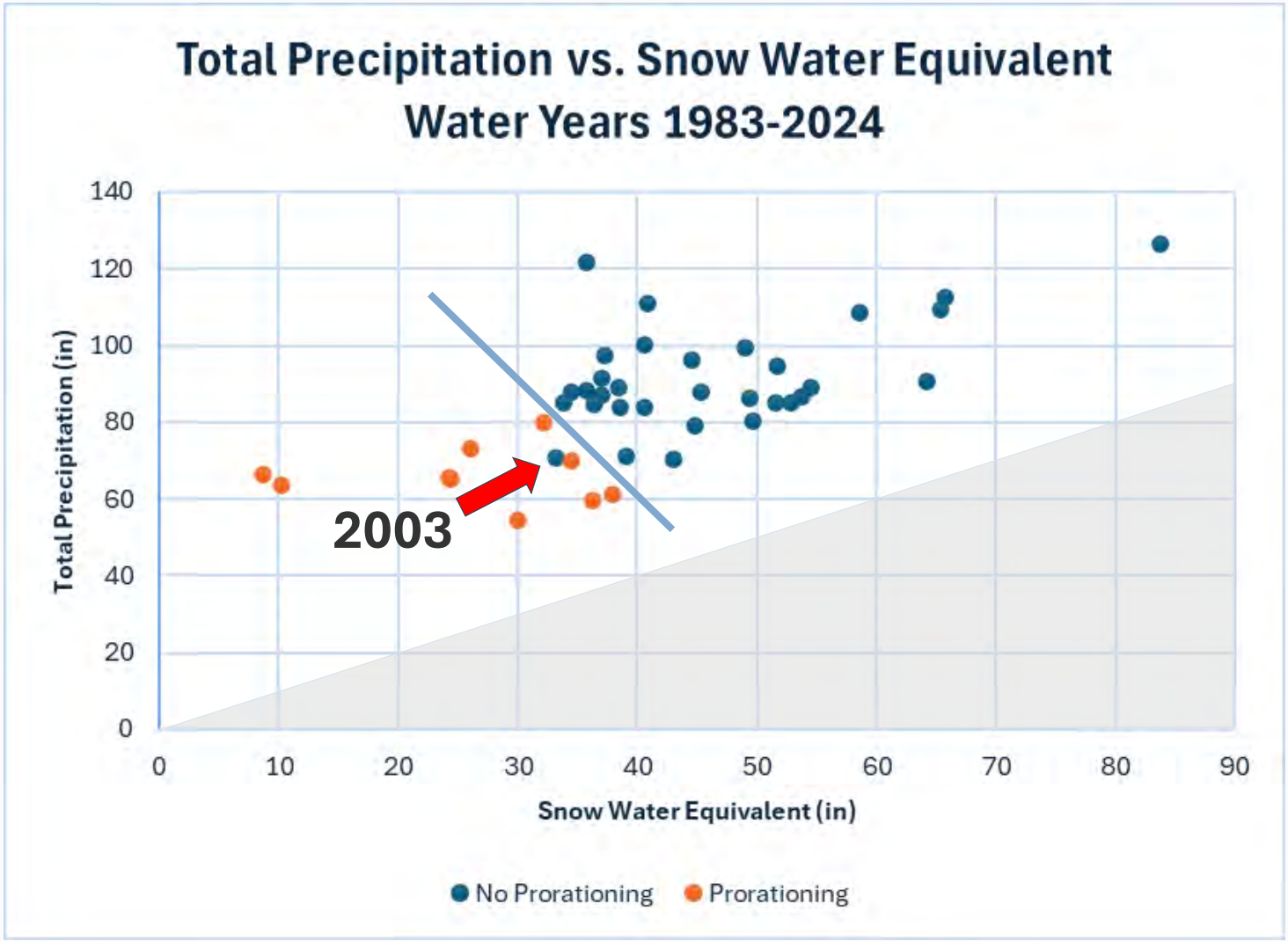

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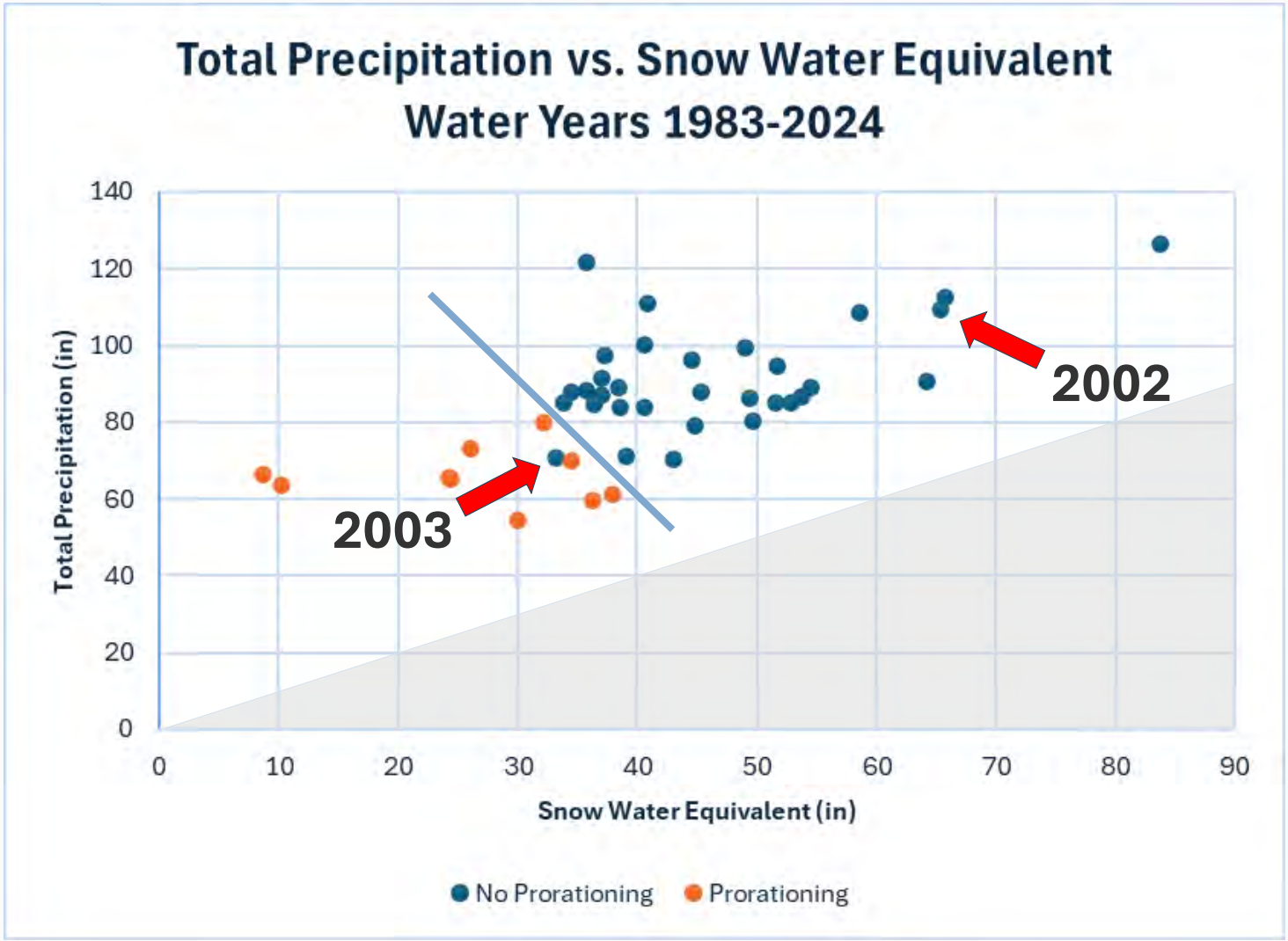

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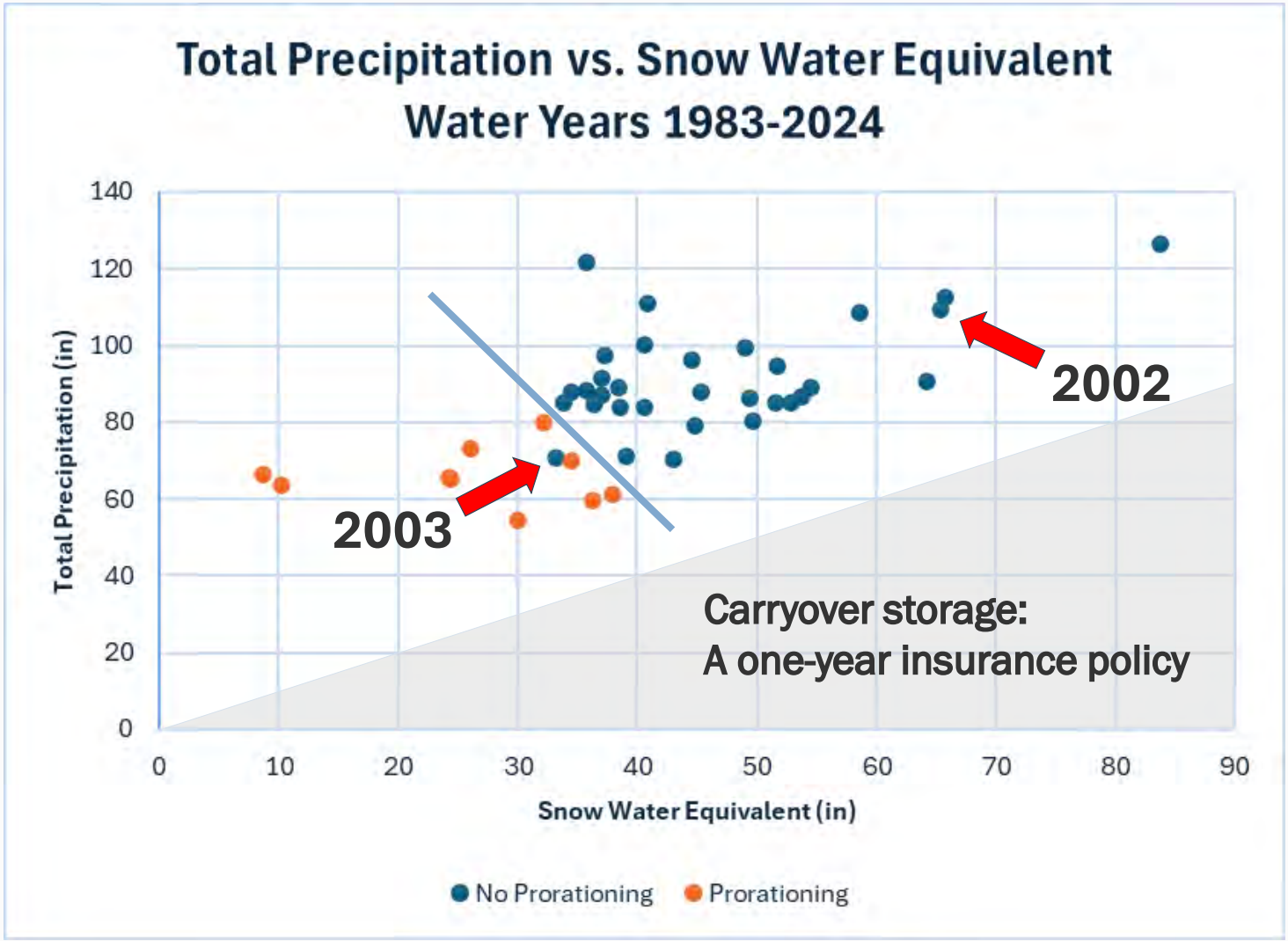

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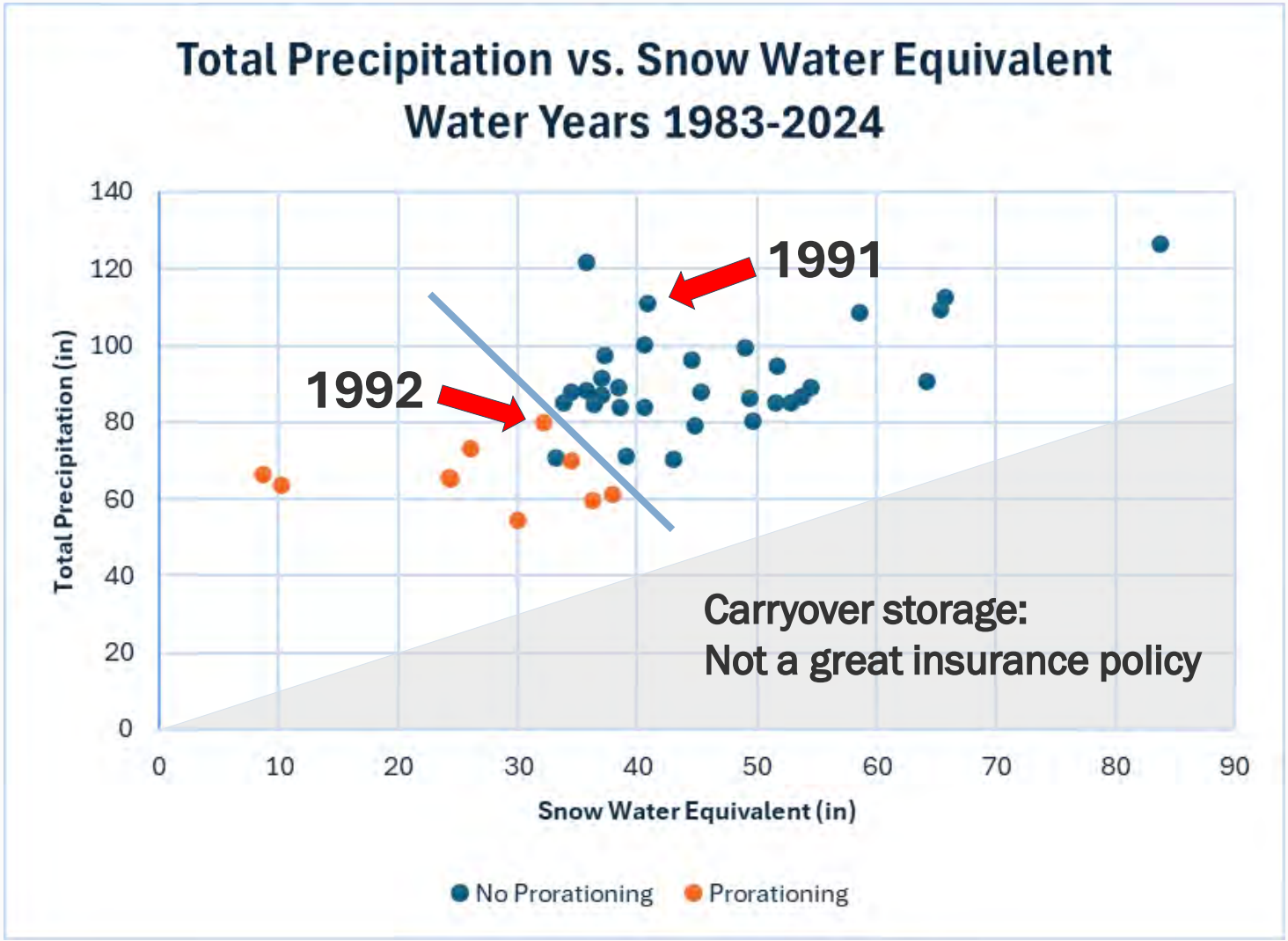

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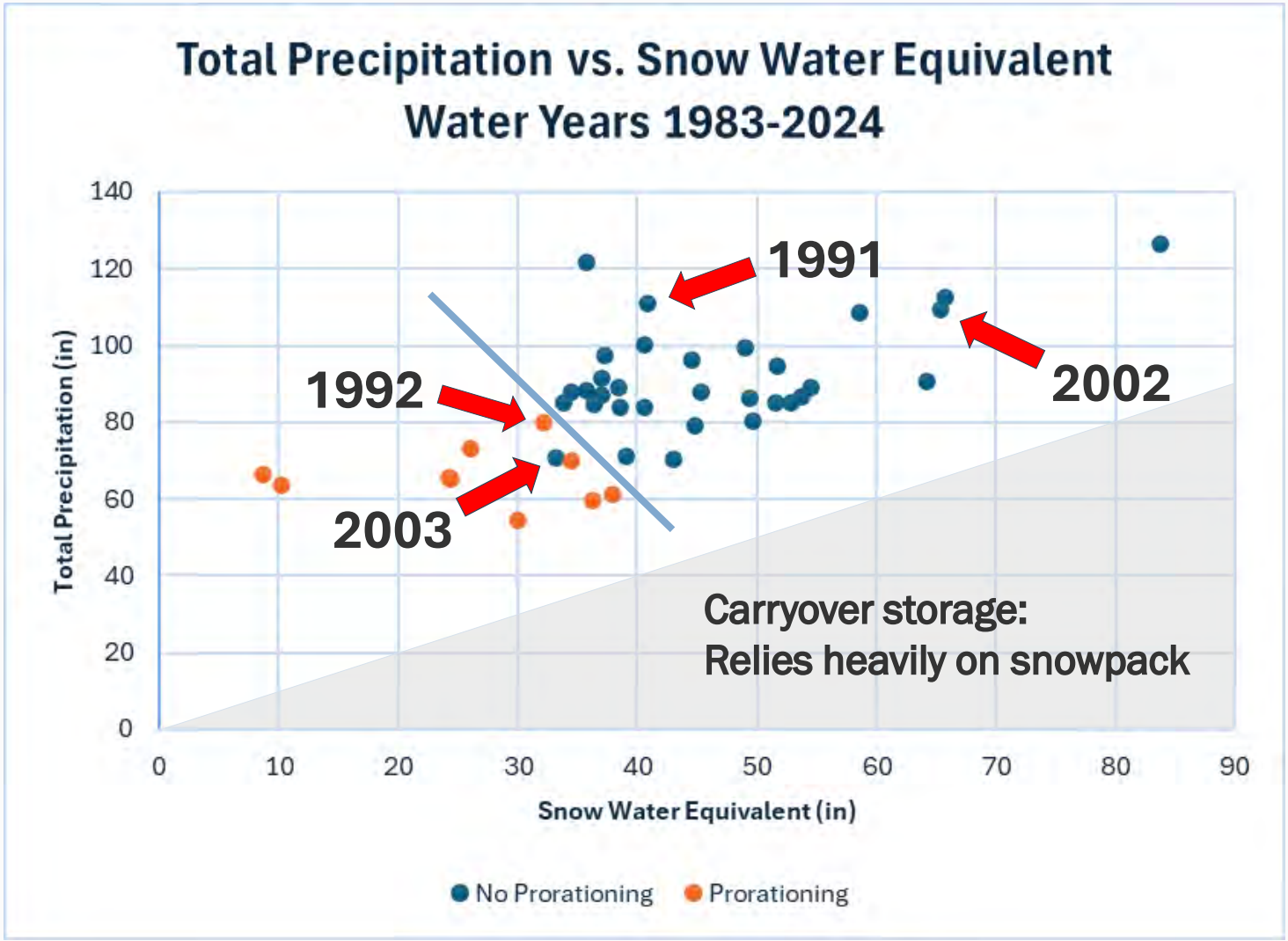

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The Chase

- Rainy winters and early spring melting events move large volumes of water out of the basin in March and April.

- Irrigators need large volumes of water from July through September.

- Q: How to retime water on a basin-wide scale?

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- Rainy winters and early spring melting events move large volumes of water out of the basin in March and April.

- Irrigators need large volumes of water from July through September.

- Q: How to retime water on a basin-wide scale?

A: **Storage. Lots of it.**

Water Storage Options

Existing USBR Reservoirs

- High in the system
- Limited capacity

New Surface Reservoirs

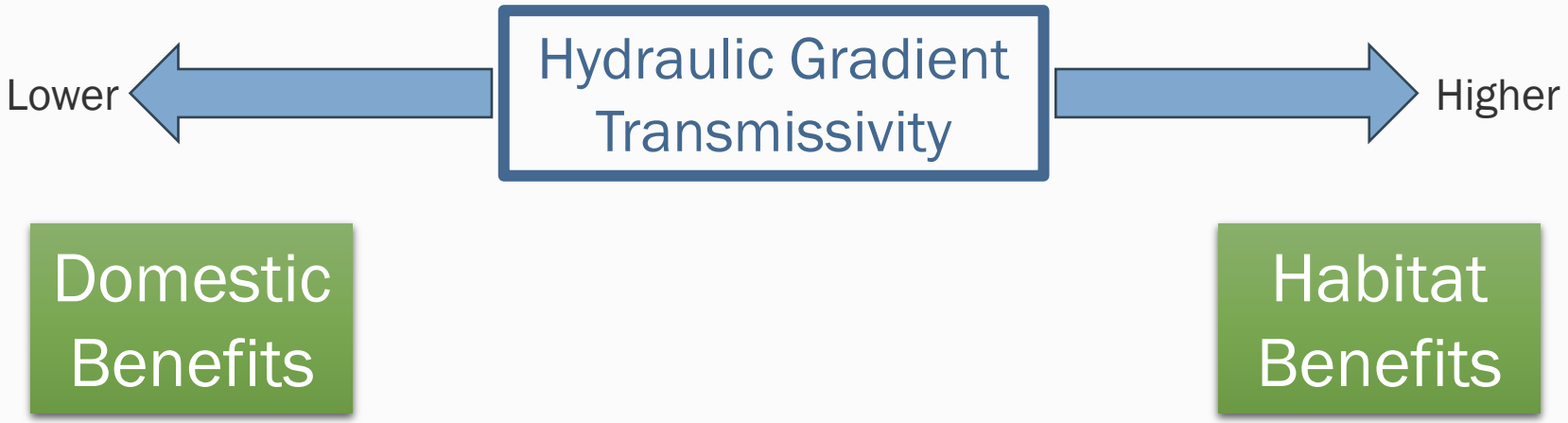
- Challenging to site (geology, topography, ownership, etc.)
- Decade-scale project timeline
- Expensive
- Springwood – 20,000 AF, $400M+

Groundwater Storage

- Aquifer Storage and Recovery (ASR)
- Shallow Aquifer Recharge (SAR)

Shallow Aquifer Recharge

- Intentionally introducing water to an unconfined aquifer via infiltration
- Setting and desired outcome need to match



SAR for Habitat Benefits

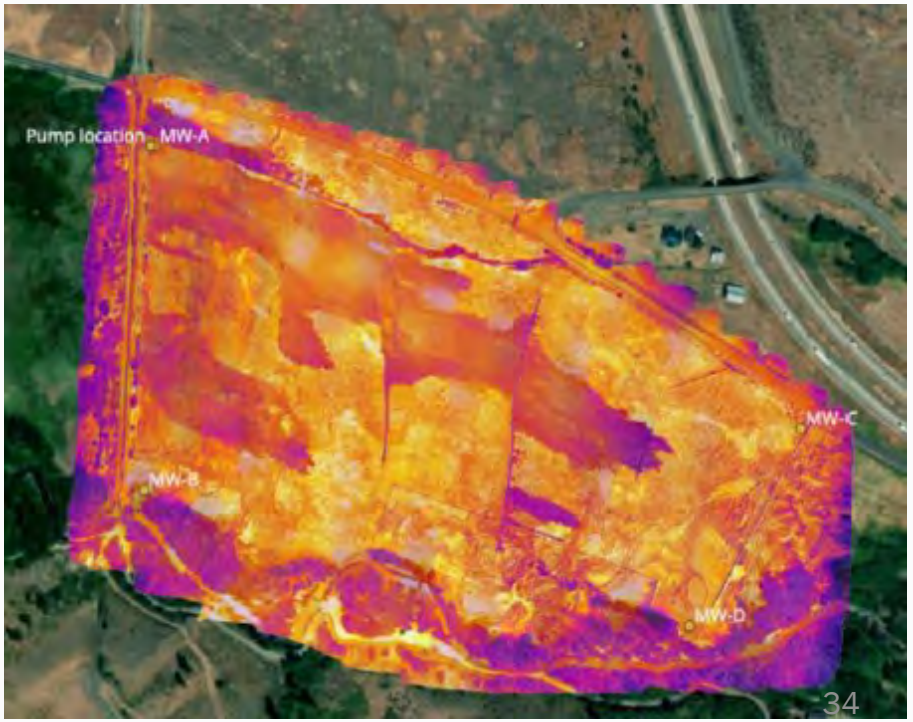
- Kittitas Reclamation District
  - Taneum Creek (Phase 2)
  - Whiskey-Currier (Feasibility)
  - Springwood (Feasibility)

  - Source water monitoring (Ongoing through 2027)

- Trout Unlimited
  - South Fork Cowiche Creek (Feasibility)

Case Study: Taneum Creek

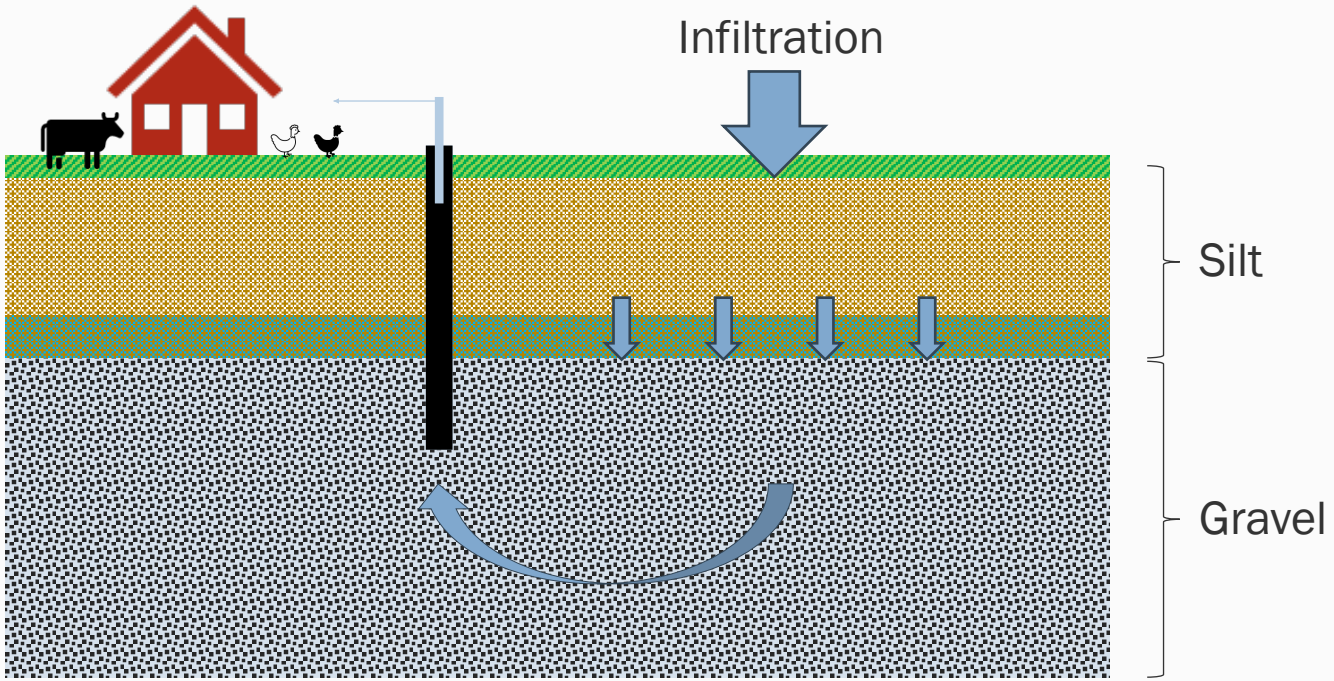
- 2020 – Site identified as favorable
- 2023 – Feasibility and Pilot Test
  - ~50 acre-feet over 7 days
  - No impact to groundwater quality
  - Retiming estimated at 6-8 weeks
- 2024 – Phase 2 (ongoing)
  - MOU
  - Permitting
  - Surveys
  - Design
- 2025 – Phase 3
  - Infrastructure
  - Operation at scale



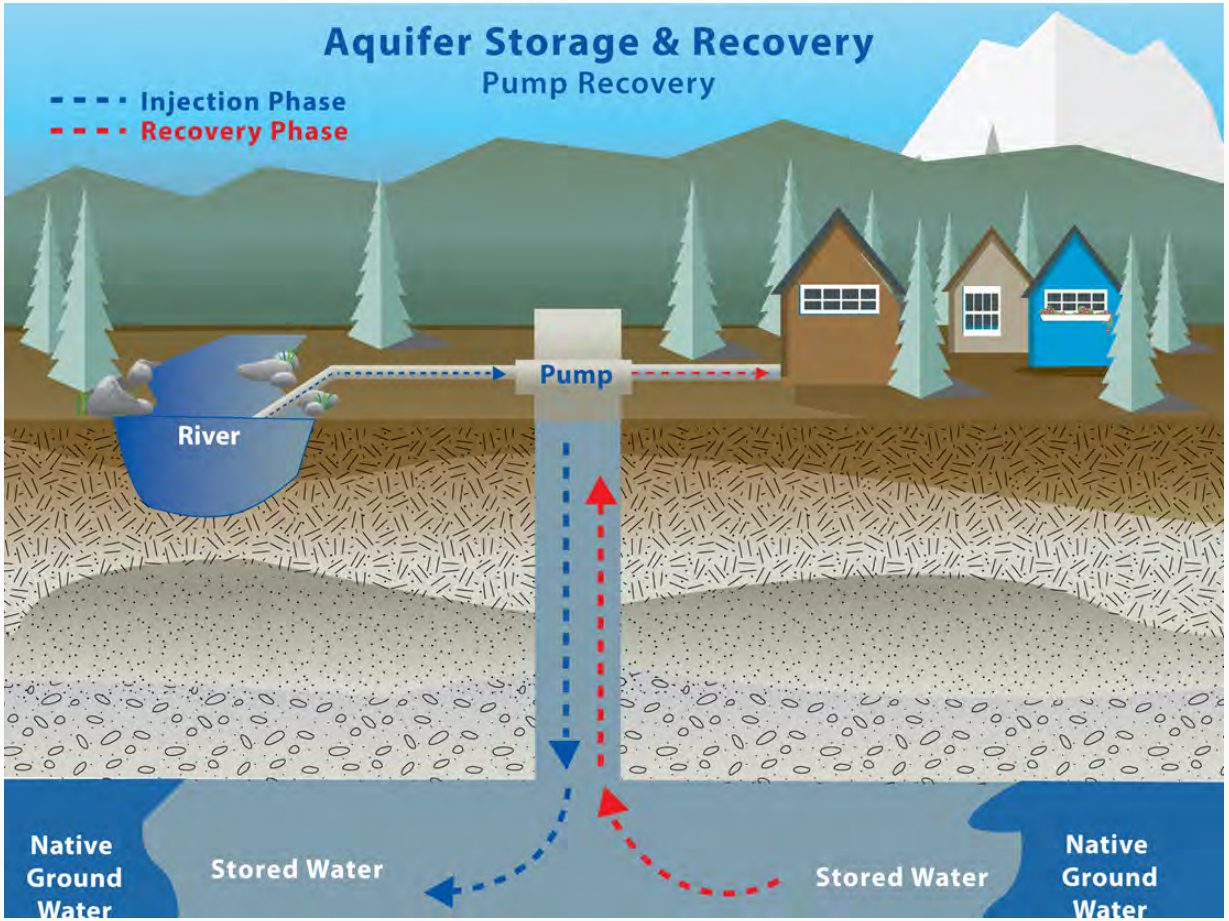
Thermal image from pilot test.
KRD, 2023

SAR for Domestic Benefits

- Kennewick Irrigation District
  - Badger Coulee (Feasibility)



Aquifer Storage and Recovery



A Creative Approach to ASR

Q: Where does all the early melt water end up?

A Creative Approach to ASR

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A: Mainstem Yakima River

A Creative Approach to ASR

- Mainstem Yakima River = Irrigation Arterial

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- USBR delivers irrigation water April-October

A Creative Approach to ASR

- Mainstem Yakima River = Irrigation Arterial
- USBR delivers irrigation water April-October
- Existing infrastructure
  - Diversions
  - Conveyance

A Creative Approach to ASR

Solution: Use the existing infrastructure!

- Capture water from the Yakima River
  - During “shoulder seasons”
  - Prior to irrigation season
- Convey that water to ASR injection points adjacent to irrigation canals

YBIP ASR Projects

- City of Yakima
  - Operational since 2017
  - Up to 14,400 AF/year of storage
  - Treatment system upgrades in 2025-26

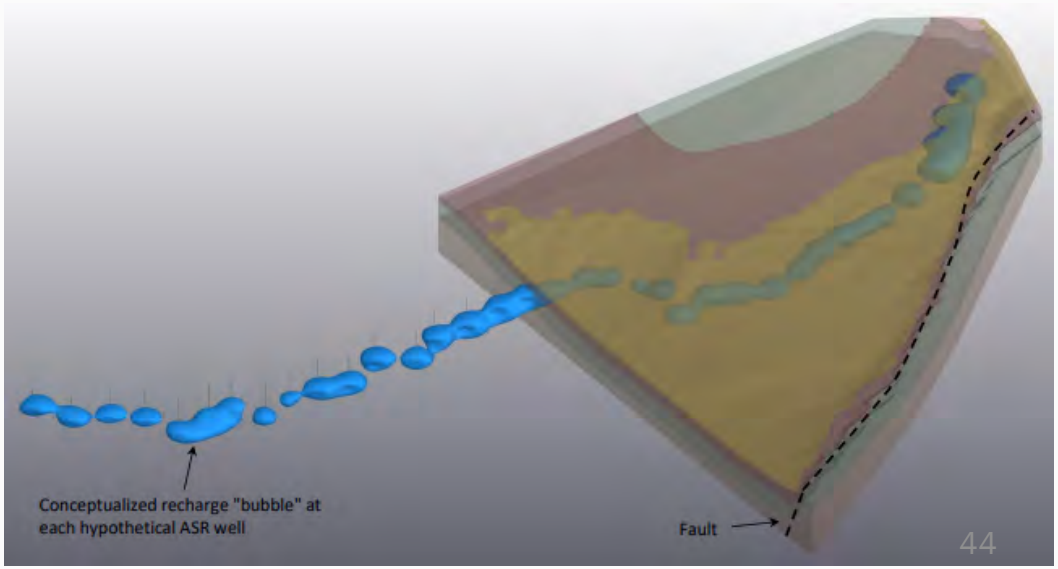
- City of Ellensburg
- City of Prosser
- City of Moxee
- Roza Irrigation District

Feasibility studies nearing completion. Next steps: temporary reservoir permit and pilot testing!

Case Study: Roza ASR

- 2022 – Feasibility Study Launched
  - Led by Central Washington University
  - Funded by Ecology via YBIP Groundwater Subcommittee

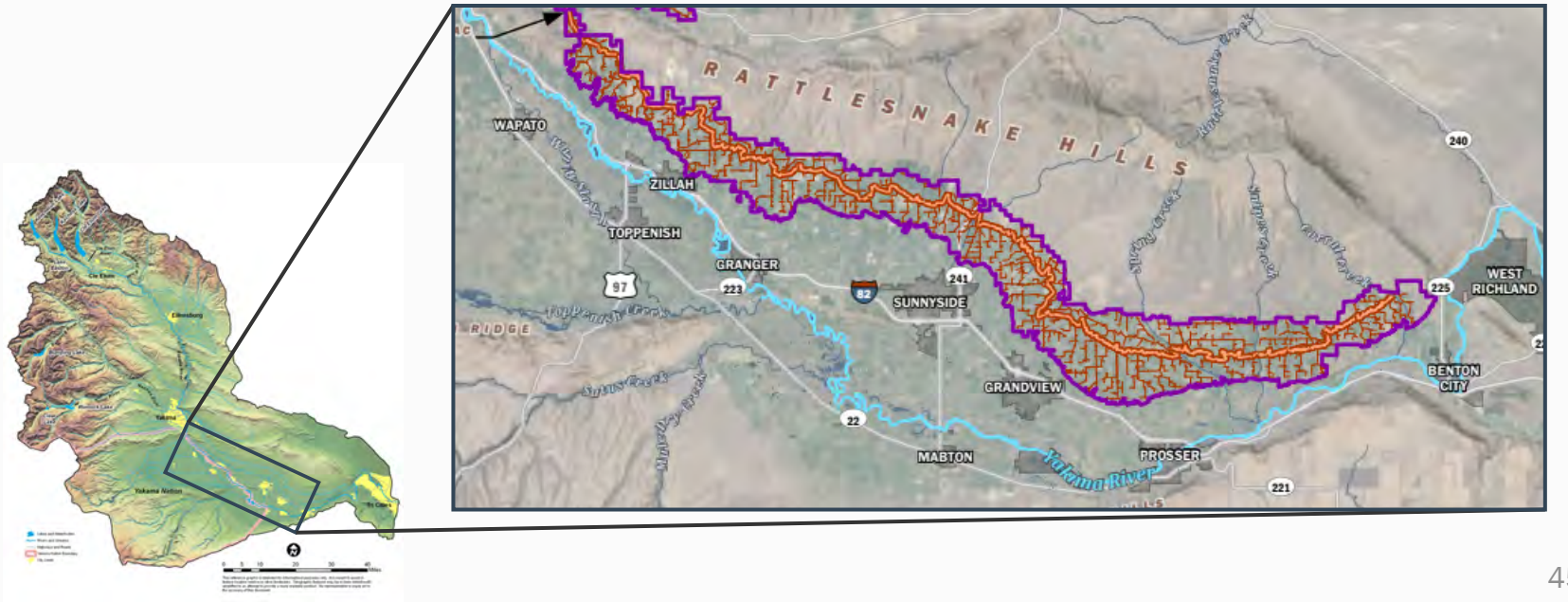
- 2024 – Feasibility Report Published
  - Geology
  - Hydrogeology
  - Geochemistry
  - Water Quality
  - Operational Analysis



Modeled ASR injection array
Geosyntec, 2024

Feasibility Study Parameters

- Array of 20 ASR wells adjacent to ~35 miles of mainline irrigation canal
- 20,000 AF/year injection capacity
- Restore declining basalt aquifer in good years, offset prorationing in drought years



Momentum

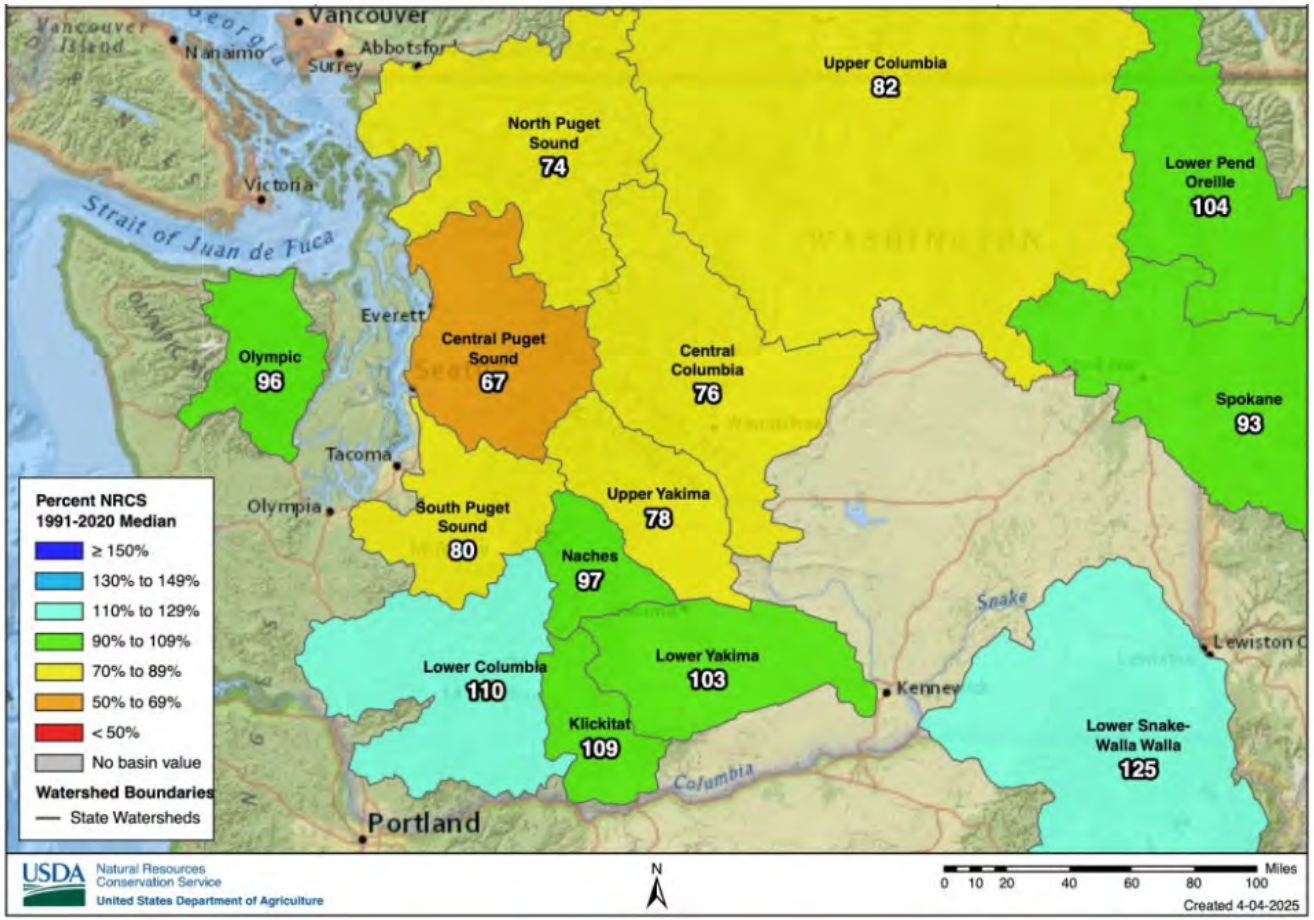
- 2025 – Roza ASR Pilot Test
  - Led by Roza Irrigation District
  - Early private partnership and funding
  - Additional Ecology funding via YBIP
- 2027 – Phase 2
  - Full Reservoir Permit
  - Programmatic EIS
- 2029 – Phase 3
  - Project Build-Out

Roza ASR Odds and Ends

- First large-scale irrigation ASR project in Washington (Several municipal ASR projects)
- Many possible benefits from stored water
  - Offset prorationing
  - Mitigate for emergency drought wells
  - Outmigration pulse flows
  - Slow, halt, or reverse declines in confined aquifer
  - Green energy production during injection phase

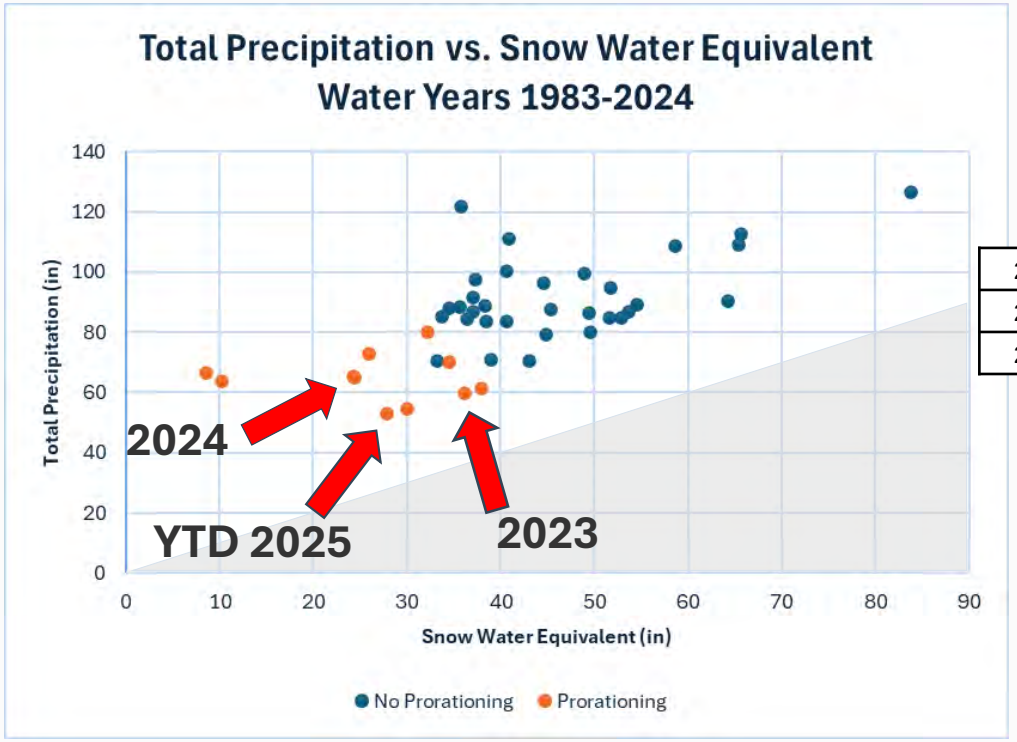
2025 Snowpack

April 1, 2025



2025 Water Supply

65 Days Later… Prorationing at 43%



	March	
2023	25.3	31.1
2024	26.9	37.3
2025	32.4	33.9

April	
30.2	37.5
35.5	35.2
35.3	40.1

May	
46.4	49.5
43.7	38.7
42.4	44.7

June	
51	50.3
47.2	50.6
55.7	

DEPARTMENT OF ECOLOGY
State of Washington

Thank you!

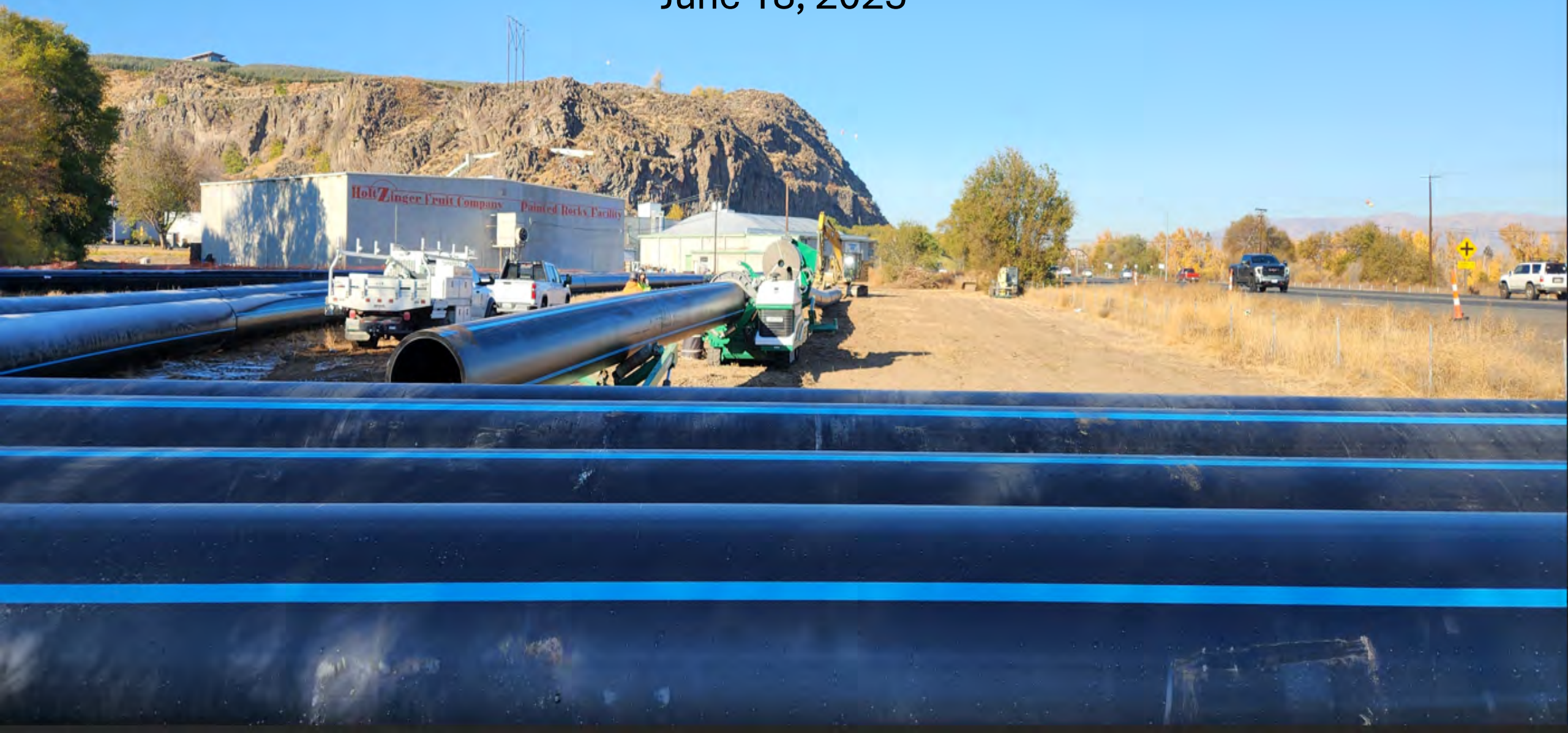
Jeff Dermond

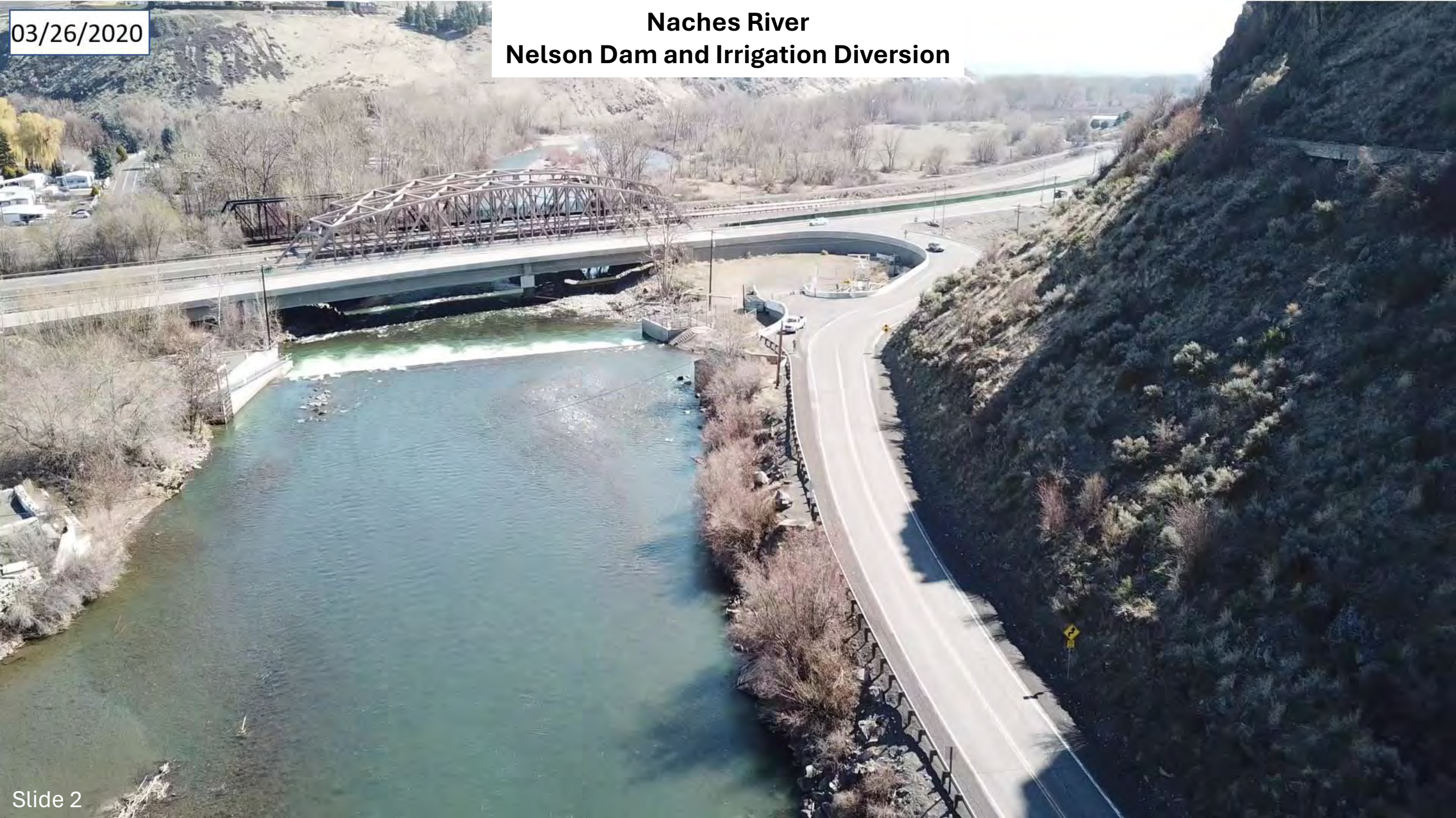
jeff.dermond@ecy.wa.gov

Nelson Ph. 2 Project Update

Yakima River Basin Water Enhancement Project Workgroup Meeting

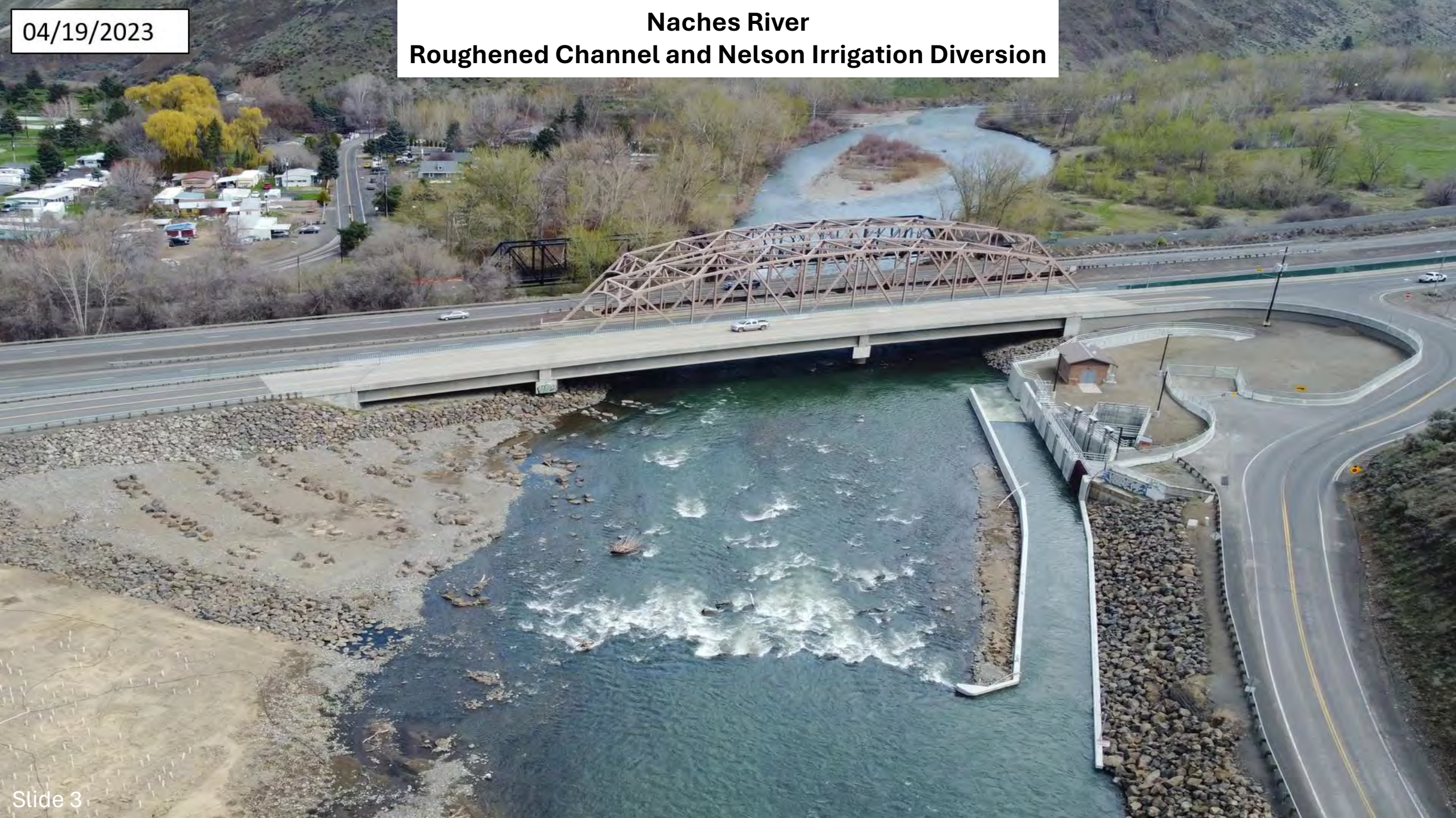
June 18, 2025

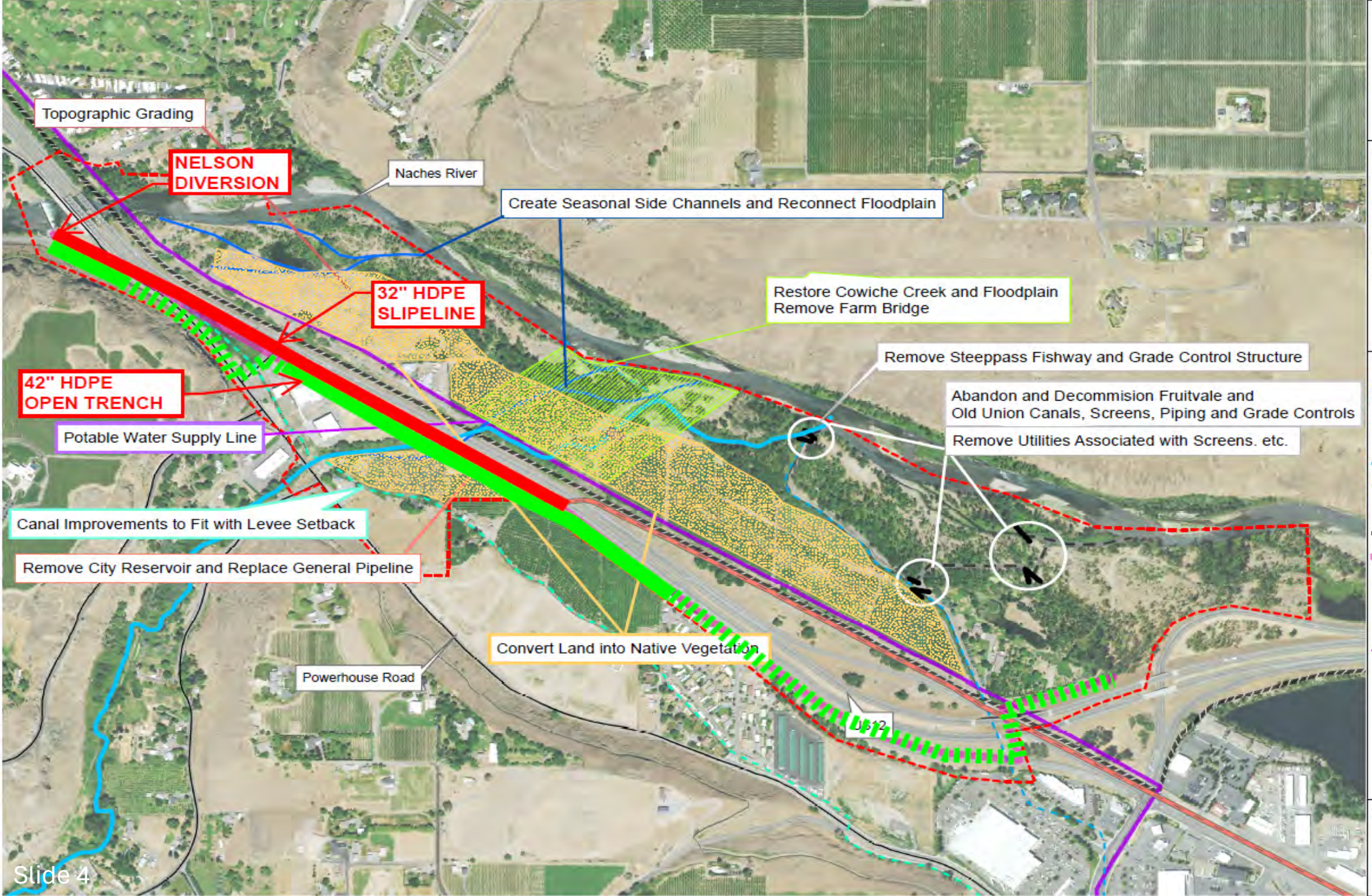



03/26/2020
Naches River
Nelson Dam and Irrigation Diversion

04/19/2023

Naches River
Roughened Channel and Nelson Irrigation Diversion





Water Resources Division

Project Title:
Cowiche Confluence Complex

Figure Title:
Construction Elements

Map Prepared by: Kory G
Map Prepared: 05/30/2023

Legend

- Project Area
- Excluded Area
- Sedimentation Pond
- Cowiche Creek
- Cowiche Creek Proposed
- City Irrigation Piping
- Obstructions
- Nelson Pipeline
- Old Union Canal
- Fruitvale Canal
- Nelson Dam Pipeline
- 48" Potable Main
- Yakima Greenway Path
- Irrigation Return Channels

N
W E
S

2021 Aerial Photo

Feet
0 500 1,000

10/18/2024
Slide 5

10/23/2024
Slide 6

10/25/2024

11/27/2024

11/22/2024
KOMATSU
Slide 9

12/9/2024

12/14/2024
Slide 11

12/20/2024

2/25/2025

4/8/2025
KOMATSU
CAT

Apr 9, 2025 at 2:29:58 PM
5501 W Powerhouse Rd
Yakima WA 98908
United States

6/4/2025

6/4/2025

Washington Department of
FISH & WILDLIFE

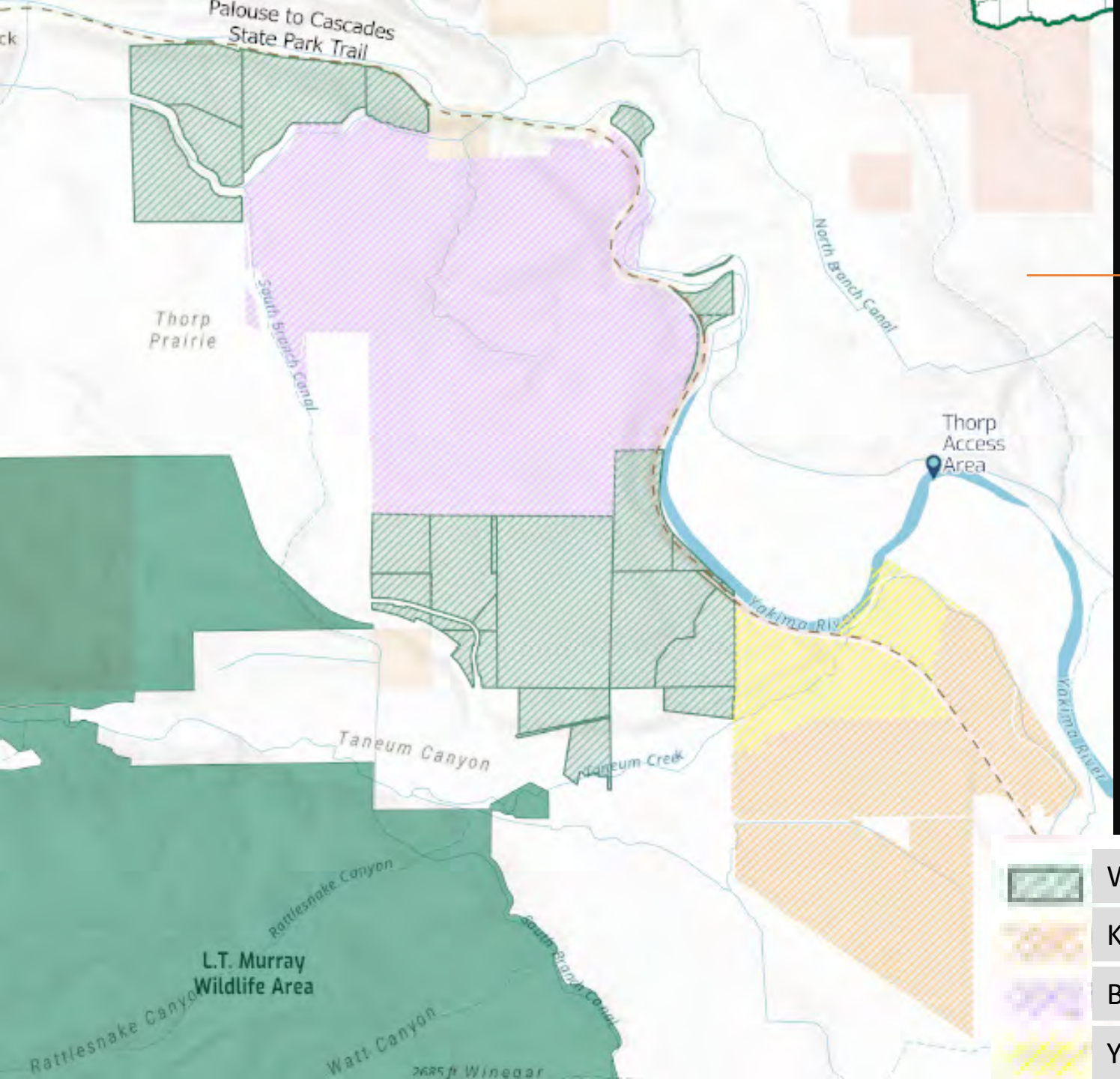
Springwood Ranch Celebration

Yakama Nation Fisheries, WDFW

Yakima Basin Integrated Plan

June 18, 2025

Where is Springwood Ranch?



Owners, partners, and land boundaries

WDFW
Kittitas County
BOR/KRD
Yakama Nation

How we got here

- 3,600 acres: all or nothing
- Legislative Proviso
- TPL Purchase: 2023
- TPL transfer of ownership: October 2024
- MOU and lands planning

4 partners collaboration

- Kittitas County
- The Kittitas Reclamation District
- The Confederated Bands and Tribes of the Yakama Nation (Yakama Nation)
- WDFW
- Huge support from TPL!

Yakama Nation and WDFW joint ownership

First of its kind

Reflects our commitment to a reservoir for instream flow needs for fish

Unique opportunity to provide quality access for general and tribal publics

May 2 Celebration

SLIDE SHOW – MICHAEL DAVID BUSHMAN

Juvenile Fish Passage Helix Tour

The Columbia River Inter-Tribal Fish Commission's quarterly meeting on April 22 included a tour of the juvenile fish passage helix at Lake Cle Elum.

The tour overlapped with a visit from northern Syilx First Nations, Okanagan National Alliance representatives.

Restoring fish populations

“The Yakama Nation should be proud of the progress they have made through their unwavering efforts to take care of the land, water and all living things. It is great to see another huge milestone completed in their dedication to restore all native fish populations.”

- Chad Fuller, ONA Fisheries Program Manager

FROM THE YBIP FAMILY

TOM TEBB

WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

Building A Future for Water, Wildlife and Working Lands
Yakima River Basin Integrated Water Resource Management Plan
Enhanced Water Conservation
Habitat/Watershed Protection & Enhancement
Market Reallocation
All BWC Actions Conducted Basin-Wide
Habitat Action #3 Conducted Basin-Wide
Surface Water Storage
Kittitas County
Yakima County
Benton County
Klickitat County
Building A Future for Families
Basin Integrated Water Resource Management
UNITED STATES

BUILDING A FUTURE FOR FARMS
YAKIMA RIVER BASIN INTEGRATED WATER RESOURCE MANAGEMENT PLAN
BUILDING A FUTURE
WILDLIFE AND WORK
YAKIMA RIVER BASIN INTEGRATED WATER RESOU
UNITED STATES

Building A Future for Water, Wildlife and Working Lands
Yakima River Basin Integrated Water Resource Management Plan
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 area and wild and scenic river 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.
Kittitas County
Yakima County
Benton County
Klickitat County
All EWC Actions Conducted Basin-Wide
Habitat Action #3 Conducted Basin-Wide
Market Reallocation Conducted Basin-Wide
GW Storage Action #1 Conducted Basin-Wide
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.
Surface Water Storage
1. Build a 162,500 ac-ft off-channel surface storage facility at Wymer on Lmuma 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.
PARTMENT OF ECOLOGY
Tom Tebb

PVCU
120069 3
12G1
MAX GR
TARE
NET
CU CAP
REAR

Cle Elum Dam Fish Passage
YAKIMA BASIN
BUILDING A FUTURE FOR WATER, WILDLIFE & WORKING LANDS
THE OFFICE OF COLUMBIA RIVER
DEPARTMENT OF ECOLOGY
State of Washington
Water for Families, Farms, and Fish
CONFEDERATED TRIBES AND BANDS
YAKAMA NATION
Washington Department of FISH and WILDLIFE
RECLAMATION
Managing Water in the West
Tom Tebb

BUILDING A FUTURE FOR W
WILDLIFE AND WORKING

FISH PASSAGE FACILITY
HELIX CHAMBER

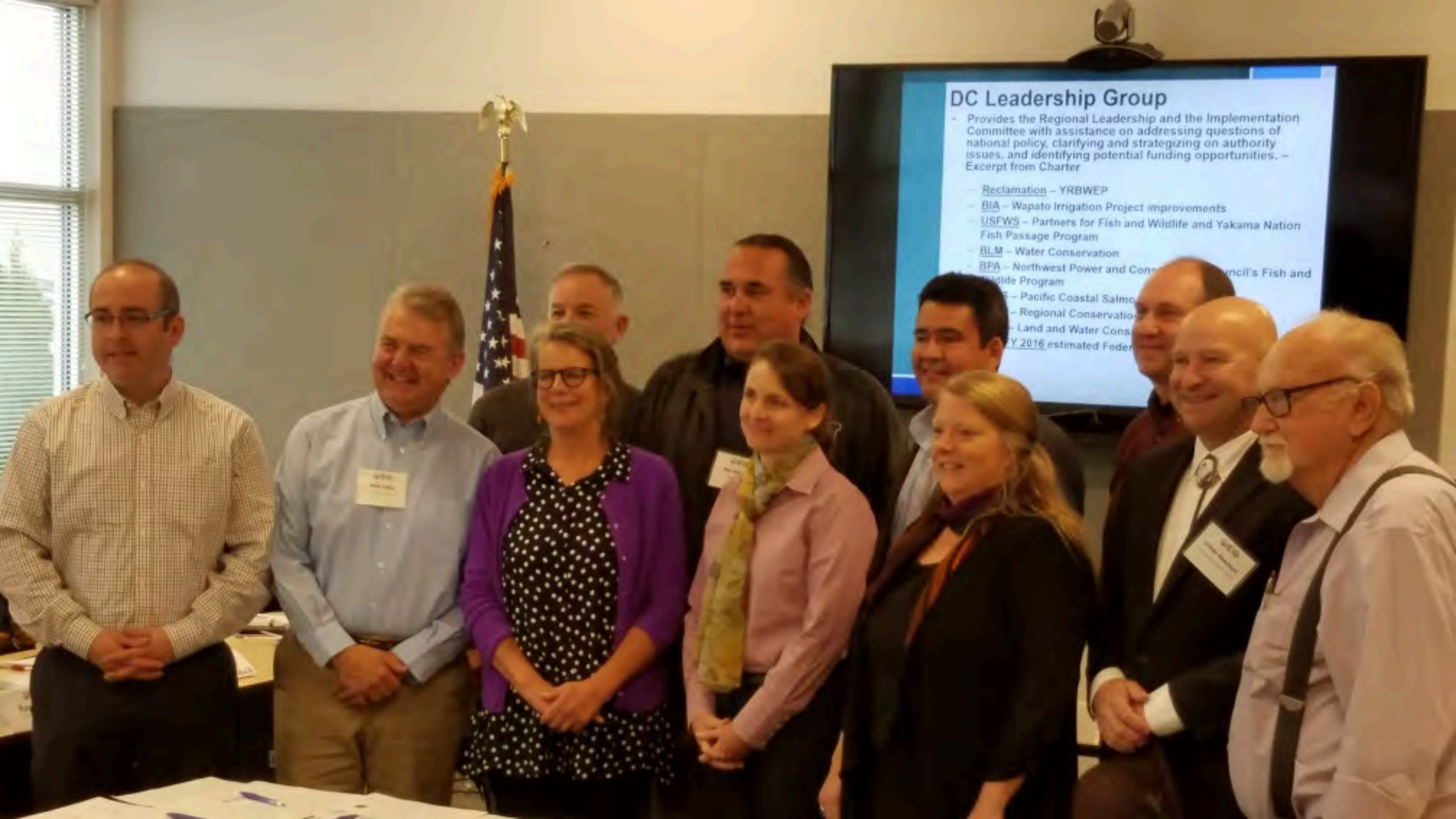
THE NORTH FACE

Kubota
Camp Getaway

THE NORTH FACE

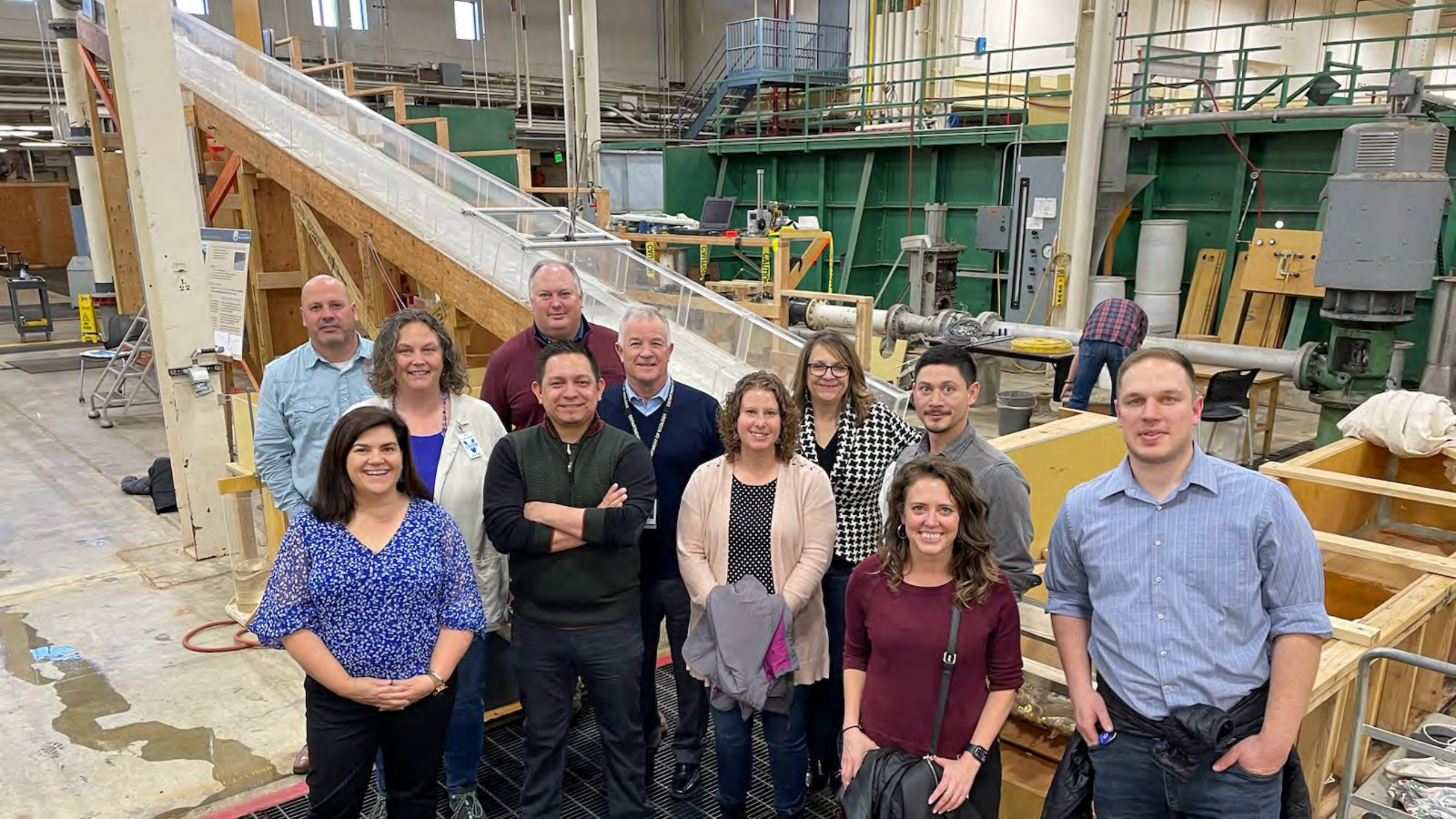
B-D

HOPPER


DC Leadership Group
Provides the Regional Leadership and the Implementation Committee with assistance on addressing questions of national policy, clarifying and strategizing on authority issues, and identifying potential funding opportunities. – Excerpt from Charter
Reclamation – YRBWEP
BIA – Wapato Irrigation Project improvements
USFWS – Partners for Fish and Wildlife and Yakama Nation Fish Passage Program
BLM – Water Conservation
BPA – Northwest Power and Con
ncil's Fish and
Wildlife Program
– Pacific Coastal Salmo
– Regional Conservatio
– Land and Water Cons
Y 2016 estimated Feder

Roza Wasteway 5 Re-Regulation Reservoir Project
$30.8 Million Project Cost
$20.02 Million
Dave Minick
Will Jones

BALDWIN
SATEC
BALDWIN



WENDY
Pac-Van
800.546.1050

DEPARTMENT OF ECOLOGY

BRADY
KENT
DEPARTMENT OF ECOLOGY
TOM
TEBB

The State of Washington
Manastash Creek Conservation and Tributary Enhancement Project

Market Reallocation
Market Reallocation Conducted Basin-Wide
GW Storage Action #1 Conducted Basin-Wide

GMC
B36267S

Tom Tebb
Washington Department
of Ecology

HANFORD PROJECT - KENNEWICK
WASHINGTON STATE DEPARTMENT OF ECOLOGY
*MELODIE SELBY, ENVIRONMENTAL ENGINEER 2, RCRA
*G. THOMAS TEBB, RCRA UNIT SUPERVISOR
*BILLIE MAUSS, CHEMIST 4, CERCLA
*MARISA FULKS, CLERK TYPIST 3, SUPPORT
*GRETA DAVIS, ENVIRONMENTALIST 1, RCRA
*DAVE NYLANDER, KENNEWICK MANAGER
*DOUGLAS PALENSHUS, ENVIRONMENTAL EDUCATION OUTREACH SPECIALIST 2, ADMINISTRATIVE
*DIBAKAR GOSWAMI, ENVIRONMENTALIST 3, CERCLA
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*JEFF PHILLIPS, ENVIRONMENTALIST 2, CERC
*STEVE MOORE, ENVIRONMENTALIST 3, RCRA
*MOSES JARAYSI, ENVIRONMENTAL ENGINEER 2, RCRA
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*JOY KINMARK, SECRETARY 2, ADMINISTRATIVE
Y UZIEMBLO, NMENTALIST 3, CERCLA
*ALAN RAINEY, HYDROGEOLOGIST 2, RCRA
*JEANNE WALLACE, ENVIRONMENTALIST 2, RCRA
*JACK DONNELLY, ENVIRONMENTALIST 3

Irrigation Leader

NEW ZEALAND

Yakima River Basin
Overview
6,155 sq. miles w/464,000 irrigated acres
5 reservoirs w/ 1M AF capacity, irrigation deliveries 2.3M AF
Droughts in 1992-1994, 2001, 2005, 2015 and 2019
Reduced Fisheries
$4.5 Billion agriculture economy
3

Irrigation Leader
Justin Harter
General Manager
Naches-Selah Irrigation District
Irrigation Leader
Tom Tebb

GILLZ
Irrigation Leader
Tom Tebb
Director of Office of Columbia River
Department of Ecology, WA State

Rep. Newhouse signing H.R. 1048 for introduction with members of the Yakima Basin Integrated Plan Implementation Committee

WELCOME TO
ALBERTA
WILD ROSE COUNTRY
INFORMATION CENTRE 4 KM
CROWSNEST PAS
Crowsnest Pass

e-Regulation Reservoir Project
$26 Million Estimated
ROZA
IRRIGATION DISTRICT
$16.9 Million
$4.55 Million
1,600 AF of Storage
Surface Area - 39 Acr
8,284 AF Estimated A
5,523 AF Reduced
Water Conserva
30 Miles of Canal
Miles of Canal L
Automated Check
Re-Regulation Reservoir
$28.7 Million In Total Impr
34,000 AF Conserved Ann

Yakima Tributary Streamflow
Enhancement Projects
ECOLOGY

One Hundred Seventeenth Congress of the
United States of America
Subtitle C—Yakima River Basin Water
Enhancement Project
Tom Tebb
Director of the Office of Columbia River
Washington State Department of Ecology
Maria Cantwell
United States Senator
Dan Newhouse
Congressman WA
Phil Rigdon
Wendy Welbermant

This River Runs Forever
Yakima Basin Integrated Plan
MORE THAN
96,000 JOBS
DEPEND ON WATER
IN THE YAKIMA BASIN
EXIT

David Hu

THE
DAVENPORT
HOTEL

ORCA

DEPARTMENT OF ECOLOGY
DEPARTMENT OF ECOLOGY
TOM
TEBB

Tom Tebb

Cayuse
Umatilla
Walla Walla
CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION
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CAT

YAKIMA BASIN
BUILDING A FUTURE FOR WATER,
WILDLIFE & WORKING LANDS
CONFEDERATED
TRIBES AND BANDS
YAKAMA NATION
TREATY OF
1855
MATION
g Water in the West

PROTECT OAK FLAT!

Yakima Basin Integrated Plan
Initial Development Phase Projects
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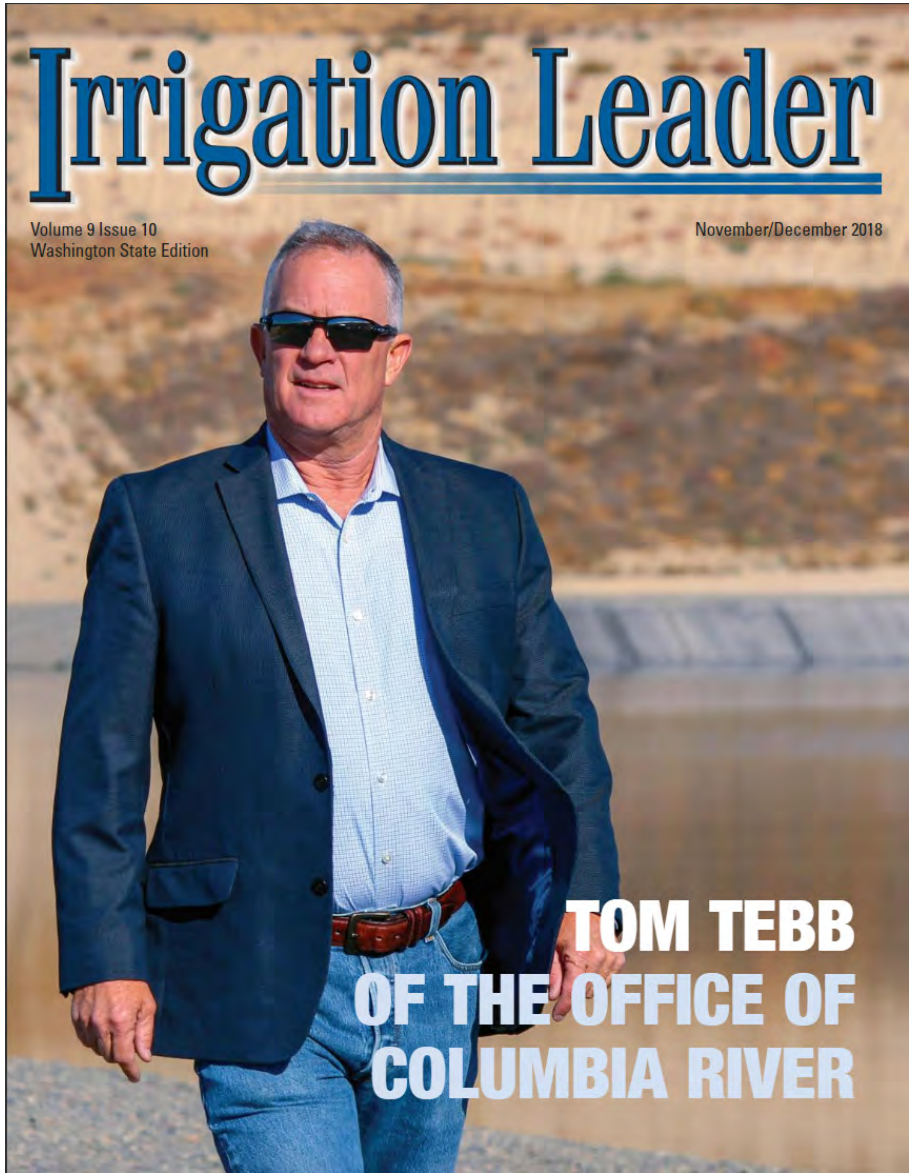
Irrigation Leader
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November/December 2018
TOM TEBB
OF THE OFFICE OF
COLUMBIA RIVER

DEPARTMENT OF ECOLOGY
DEPARTMENT OF ECOLOGY
TOM
TEBB

Windermere
Real Estate
Building A Future for Water, Wildlife, and Work

UNITED STATES SENATE
BUILDING A FUTURE FOR FARMS
BUILDING A FUTURE
WILDLIFE AND WORK

Tom Tebb
Washington Department of Ecology

WENDY
ECOLOGY
carhartt

RESTRICTED AREA
DO NOT ENTER
RESTRICTED AREA
DO NOT ENTER

Yakima Tributary Streamflow Enhancement Projects
Building a Future for Farms
Building a Future for Wildlife
Building a Future for Fish
Big Creek
Little Creek
Spex Arth Creek
Umtanum Creek

*G. THOMAS TEBB,
RCRA UNIT SUPERVISOR

Bill
TOM
TODD
DEPARTMENT OF ECOLOGY
Todd Herman

Columbia River Initiative
Memorandum of Understanding
Ecology & Reclamation
Directors Meeting
October 24, 2017
DEPARTMENT OF
ECOLOGY
State of Washington
DEPARTMENT OF ECOLOGY
Visitor

DEPARTMENT OF ECOLOGY

SAFEWAY
Windermere
Real Estate

DEPARTMENT

420

Cle Elum Da
Adult Fish Passage
Adult Fish Collection Fa
Cle Elum River