AGENDA
EXECUTIVE COMMITTEE

DoubleTree San Pedro Port of Los Angeles
San Pedro, California

September 25, 2025

Call to Order at: 12:00 a.m. (Pacific Daylight Time) Galletti Room
Conducting: Julie Cunningham, Chair

TAB

1. **Welcome and Introductions**
2. **Approval of Minutes**
3. **Strategic Directions Discussion**
4. **Water Data Exchange Discussion**

D 5. **Report on Budget, Finances, and State Dues**

E, H, M 6. **Executive Director's Report/WSWC Activities and Events**

F 7. **Future WSWC Meetings**

B 8. **Council Membership Update**

G 9. **Changes to FY2025-2026 Committee Work Plan**

XYZ 10. **Sunsetting Positions for Spring 2026 Meetings** – #490-#503

Position #490 - water quality standards and federal reserved treaty rights for tribes
Position #491 - urging Congress to support subseasonal to seasonal weather research, forecasting, and innovation
Position #492 - regarding the USBR's maintenance, repair and rehabilitation needs
Position #493 - regarding the Reclamation Safety of Dams Act of 1978
Position #494 - regarding the transfer of federal water and power projects and related facilities
Position #495 - regarding the National Levee Safety Act of 2007, levees and canal structures
Position #496 - regarding the clean and drinking water state revolving funds and state and tribal assistance grants
Position #497 - regarding the rural water and wastewater project/infrastructure needs and USDA programs
Position #498 - supporting national dam safety programs
Position #499 - opposes any federal legislation intended to preempt state water law
Position #500 - supporting NOAA data, forecasting, and research programs
Position #501 - requests Congress fully appropriate receipts accruing to the Reclamation Fund for their intended purpose
Position #502 - support federal authorization and financial support through the USGS for State Water Resources Research Institutes
Position #503 - regarding water-related federal rules, regulations, directives, orders and policies

11. **Other Matters**

2:15 p.m. **Adjourn**

Tab D – Budget

d Budget Income and Expenses (July 2025 -June 2026)

	FY2025-26 Approved Budget	WSWC Income & Expenses	WaDE Income & Expenses	FY2025-26 To Date	WSWC Income & Expenses	WaDE Income & Expenses
INCOME						
Member States Assessments	$ 648,000.00	$ 648,000.00	$ -	$ 378,000.00	$ 378,000.00	$ -
Miscellaneous Income	$ -	$ -	$ -	$ -	$ -	$ -
PTIF Interest	$ 28,000.00	$ 28,000.00	$ -	$ 11,000.00	$ 11,000.00	$ -
WellsFargo Interest	$ 30.00	$ 30.00	$ -	$ 5.13	$ 5.13	$ -
Joint Meeting Income	$ -	$ -	$ -	$ -	$ -	$ -
Council Meeting Sponsors	$ 6,750.00	$ 6,750.00	$ -	$ -	$ -	$ -
Symposium/Workshop Sponsors (CA S2S San Diego)	$ -	$ -	$ -	$ -	$ -	$ -
NARF WSWC Symposium (net)	$ -	$ -	$ -	$ -	$ -	$ -
USBR Water SMART ($200k/2 years)	$ -	$ -	$ -	$ -	$ -	$ -
Water Foundation Grant	$ -	$ -	$ -	$ -	$ -	$ -
BHP Foundation - Duke Year 5 funds availability (Oct 1, 2025)	$ 37,500.00	$ -	$ 37,500.00	$ -	$ -	$ -
BHP Foundation - Duke Year 4/5 ($37,500) beginning Oct. 1, 2025	$ 17,056.40	$ -	$ 17,056.40	$ -	$ -	$ -
USBR Water SMART ($400k/2 years)	$ -	$ -	$ -	$ -	$ -	$ -
WSWC Water SMART match	$ -	$ -	$ -	$ -	$ -	$ -
Lincoln Institute CSG/USBR Subcontract (thru 9/25)	$ 49,919.28	$ -	$ 49,919.28	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL INCOME	$ 787,255.68	$ 682,780.00	$ 104,475.68	$ 389,005.13	$ 335,005.13	$ -
EXPENSE						
Accounting	$ 4,725.00	$ 4,725.00	$ -	$ -	$ -	$ -
Annual & Sick Leave Funding	$ -	$ -	$ -	$ -	$ -	$ -
Audit	$ 3,500.00	$ 3,500.00	$ -	$ -	$ -	$ -
Contingencies	$ 6,000.00	$ 6,000.00	$ -	$ 850.00	$ 850.00	$ -
Contract Services (Independent Contractors)	$ 5,000.00	$ 5,000.00	$ -	$ 5,625.00	$ 5,625.00	$ -
Contracted Office Maintenance	$ 3,780.00	$ 3,780.00	$ -	$ 900.00	$ 900.00	$ -
Equipment Replacement Fund	$ -	$ -	$ -	$ -	$ -	$ -
Furniture-Equipment	$ 500.00	$ 500.00	$ -	$ -	$ -	$ -
Internet & Email (Comcast & UT Div. Tech Services) + Uinta Services	$ 8,175.00	$ 8,175.00	$ -	$ 1,292.02	$ 1,292.02	$ -
Insurance	$ 1,850.00	$ 1,850.00	$ -	$ -	$ -	$ -
Meetings & Arrangements	$ 30,000.00	$ 30,000.00	$ -	$ 2,186.62	$ 2,186.62	$ -
Office Supplies	$ 1,800.00	$ 1,800.00	$ -	$ 52.76	$ 52.76	$ -
Payroll Benefits						
Dental Insurance	$ 2,025.00	$ 2,025.00	$ -	$ 684.50	$ 580.84	$ 103.66
Life Insurance	$ 330.00	$ 324.55	$ 5.45	$ 81.75	$ 65.40	$ 16.35
LT Disability Insurance	$ 1,500.00	$ 1,259.66	$ 240.34	$ 519.86	$ 441.65	$ 78.21
Medical Insurance	$ 74,400.00	$ 74,400.00	$ -	$ 20,509.96	$ 18,116.70	$ 2,393.26
Pension	$ 57,660.00	$ 49,488.39	$ 8,171.61	$ 17,675.18	$ 15,016.17	$ 2,659.01
Payroll Salaries	$ 385,000.00	$ 336,931.72	$ 48,068.28	$ 103,971.65	$ 88,330.38	$ 15,641.27
Payroll Taxes (unemployment ins)	$ 24,860.00	$ 20,999.33	$ 3,860.67	$ 8,254.24	$ 7,366.75	$ 887.49
Pension Management	$ 6,500.00	$ 6,500.00	$ -	$ 220.91	$ 220.91	$ -
Postage & Freight	$ 500.00	$ 500.00	$ -	$ 102.38	$ 102.38	$ -
Printing & Reproduction	$ 700.00	$ 700.00	$ -	$ 69.82	$ 69.82	$ -
HOA Fees (w/o Property Tax)	$ 4,000.00	$ 4,000.00	$ -	$ 927.00	$ 927.00	$ -
Property Tax	$ 3,400.00	$ 3,400.00	$ -	$ -	$ -	$ -
Storage Rent	$ 2,400.00	$ 2,400.00	$ -	$ 1,094.00	$ 1,094.00	$ -
Reports & Publications	$ 6,500.00	$ 6,500.00	$ -	$ 5,293.01	$ 5,293.01	$ -
Symposium (Nat'l Water Data Workshop)	$ -	$ -	$ -	$ -	$ -	$ -
Symposium (CDWR-S2S)	$ -	$ -	$ -	$ -	$ -	$ -
Symposium (WSWC / NARF)	$ -	$ -	$ -	$ -	$ -	$ -
Telephone (UBS)	$ 1,750.00	$ 1,750.00	$ -	$ 420.00	$ 420.00	$ -
Travel	$ 30,000.00	$ 30,000.00	$ -	$ 4,166.40	$ 4,166.40	$ -
Utilities (Questar & Murray Power)	$ 2,000.00	$ 2,000.00	$ -	$ 310.19	$ 310.19	$ -
Other - Software & Licensing	$ 14,000.00	$ 3,200.00	$ 10,800.00	$ 2,291.93	$ 986.00	$ 1,170.00
WaDE Accelerator & Consulting (DPL)	$ 8,000.00	$ -	$ 8,000.00	$ 2,960.00	$ -	$ 2,960.00
WestDAAT 2.0 Update (DPL) & Maintenance	$ 12,000.00	$ -	$ 12,000.00	$ 7,760.00	$ -	$ 7,760.00
WestCAT Key Crossover Questions (DPL)	$ -	$ -	$ -	$ -	$ -	$ -
WestCAT Development (DPL) & Maintenance	$ 6,000.00	$ -	$ 6,000.00	$ 3,440.00	$ -	$ 3,440.00
SWCA Contractor Payments	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL EXPENSES	$ 708,855.00	$ 611,708.65	$ 97,146.35	$ 191,659.18	$ 154,414.00	$ 37,109.25
Balance	$ 78,400.68	$ 71,071.35	$ 7,329.33	**$ 197,345.95**	$ 180,591.13	$ (37,109.25)
	FY2025-26 Proposed Budget	**WSWC Income & Expenses**	**WaDE Income & Expenses**	**FY2025-26 To Date**	**WSWC Income & Expenses**	**WaDE Income & Expenses**

Tab E – WSWC Activities and Events

Western States Water Council Summary of Activities
June 2025 – September 2025

ADMINISTRATION/CONGRESSIONAL OUTREACH

On June 2, WSWC sent a letter to EPA leadership regarding Waters of the United States (WOTUS) expressing the need for robust consultation and continued access to federal technical and financial assistance. WSWC expressed support for the development of geospatial datasets and mapping of jurisdictional waters and the development of a dispute resolution mechanism.

On September 7, WSWC sent a letter to EPA to engage in the federalism consultation triggered by the establishment of the public docket on Implementation Challenges Associated with Clean Water Act (CWA) §401.

WESTERN GOVERNORS' ASSOCIATION COORDINATION

On June 23-25, WSWC Executive Director attended the WGA Annual Meeting in Santa Fe, New Mexico.

WSWC staff coordinate with WGA staff on policy letters, positions, statements, and testimony.

WSWC staff have regular monthly calls with the WGA's Water Policy Advisor.

The WSWC is a member of the Western Policy Network, led by WGA, and participates in quarterly calls and provides information for the Network's Roundup Monthly Newsletter.

WSWC CALLS, MEETINGS, SURVEYS, SYMPOSIA AND WORKSHOPS

On June 10-12, the WSWC held its Summer (207th) Meetings and 60th Anniversary in Snowbird, Utah.

On August 6, the WSWC and Native American Rights Fund (NARF), co-sponsored a 1-day virtual Symposium on the Settlement of Indian Reserved Water Rights Claims.

WSWC staff continue to work on a summary of results from a past survey designed by the Legal Committee on various aspects of state water rights administration, law, management, and regulation.

The WSWC hosted a second discussion in Snowbird related to current WSWC operations and strategic plans for future directions and prepared a draft report.

COORDINATION with WESTFAST AGENCIES

WSWC and WestFAST leadership communicate weekly and via monthly WestFAST calls as needed.

WSWC Deputy Director/General Counsel has participated in a Managed Aquifer Recharge (MAR) group that is assessing the state of the science, gaps, and obstacles for existing and future MAR projects.

COORDINATION WITH OTHER ORGANIZATIONS

On July 21-22, the WSWC Executive Director attended the Annual Summit of the Pacific Northwest Economic Region (PNWER), held in Bellevue, Washington and presented on the WSWC and its activities, particularly our WaDE, WestDAAT and WestCAT efforts, as part of a featured panel on the future of water policy. Other panelists included Sara Larsen, OpenET, Grant Hunter, Deputy Minister for Water, Alberta, CA, and the Washington State Conservatist. Both of the which expressed interest in WSWC and OpenET tools.

On July 29-31, the WSWC Executive Director attended and presented at the annual meeting of the National Water Resources Association in Park City, Utah on the WSWC's history, vision and principles, as well as WestDAAT and WestCAT and other activities. Separately, presentations by the Great Salt Lake Commissioner and Director of the Utah Department of Natural Resources, and subsequent discussions led to invitations to present to both on WestCAT.

On September 16-19, the former WSWC Executive Director attended the Council of State Governments (CSG) West 2025 Annual Meeting of state legislators by invitation in recognition of our longstanding collaborative relationship.

WSWC participates in the Western Regional Partnership's (WRP) Water Security Deep-Dive calls. WRP is a collaboration initiative involving the U.S. Department of Defense, other federal agencies, the States of Arizona, California, Colorado, Nevada, New Mexico, and Utah, as well as tribal entities to advance shared strategic planning, land management and policy goals.

WaDE DEVELOPMENT AND OUTREACH

The WSWC continues to lead efforts to make state water-related data Findable, Accessible, Interoperable and Reproducible (FAIR) through its Water Data Exchange (WaDE) and Western States Water Data Access and Analysis Tool (WestDAAT), the preeminent source of data on western state water rights.

Western States Water Data and Analysis Tool Version 2.0

WestDAAT 2.0 is an update that allows access to site-specific time-series data, to the extent it is provided by States in a machine-readable format. WestDAAT 2.0 improvements include access to all WaDE recorded data including: (1) querying historical water supply/water use data available in the WaDE database; and (2) visualizing how administrative and regulatory overlay information relates to water rights. In addition, WestDAAT's existing water right visuals have been expanded to include new filter options, and the WaDE APIs capabilities and services have been redeveloped to follow Open Geospatial Consortium (OGC) Standards. WSWC committed $200,000 dollars towards the updates.

The WaDE team scheduled three separate demonstrations to showcase the developments for WestDAAT 2.0 (one demo on March 27th and two demos on April 1st). Demonstrations included a brief presentation on new features, a live demo, followed by an open discussion where attendees had access to WestDAAT 2.0 in a stagging environment. Attendees were asked to provide feedback on useability, neatness, and suggestions on improvements to better visualize and access the data.

Western States Water Conservation Application Tool

With support from a $400,000 WaterSMART applied science grant from the U.S. Bureau of Reclamation and philanthropic partners matching funds, the WSWC has developed and is deploying a Western States Water Conservation Application Tool (WestCAT), designed to facilitate temporary, voluntary, compensated water exchange programs using state water rights data and evapotranspiration (ET) data from OpenET as a surrogate for consumptive use, field-by-field, and reasonable beneficial use.

On August 19, WSWC staff presented a demonstration of WestCAT to the Great Salt Lake Deputy Commissioner and staff at the Utah Department of Natural Resources, and discussed its potential use in managing Utah's agricultural water optimization and conservation programs.

Internet of Water Coalition

WSWC Executive Director and WaDE Program Manager share updates and participate in Internet of Water (IoW) bimonthly check-in calls related to WaDE progress as a major IoW data hub, and IoW Coalition Steering Committee meetings.

Western Water Data Hub for the Bureau of Reclamation

WSWC staff are also working with the Lincoln Institute of Land Policy and its Center for Geospatial Solutions (CGS) to provide state-based data on reservoir storage and releases, streamflow, and water use from WestDAAT 2.0 for a Western Water Data Hub funded by the U.S. Bureau of Reclamation. WSWC staff participate with Lincoln CGS and Reclamation on WaDE and Internet of Water coordination calls to discuss development of the Hub and outreach plans.

COMMITTEES, TASK FORCES AND WORKGROUPS

WSWC staff participate as members of the following:

Ad Hoc Group on Indian Water Rights Settlements – WSWC Executive Director/Deputy Director

American Water Resources Association (AWRA) – WSWC Executive Director

Internet of Water (IOW) Coalition Steering Group – WSWC Executive Director

National Integrated Drought Information System (NIDIS) Executive Council – WSWC Executive Director, Co-Chair

USGS Water Use Data and Research (WUDR) Open Forum

Western Association of Fish and Wildlife Agencies (WAFWA) – WSWC Executive Director (liaison)

Western Policy Network – WSWC Executive Director

Western Regional Partnership – WSWC Executive Director/Deputy Director

Tab H – Groundwater Workshop Report

DRAFT

Proceedings
of the
Western States Water Council

Groundwater Workshop
April 22, 2025

Contents

Introduction

Workshop Background

During the summer of 2024, following a year of scrutiny from media and the federal government over state and local groundwater practices, the members of the Western States Water Council (WSWC) expressed interest in holding a workshop, or series of workshops, to learn from one another how each state is meeting the challenges of groundwater management.

Several states expressed interest in sharing state-specific challenges and solutions, including administrative best practices, conjunctive management, state legislation and litigation, and addressing over-appropriation. **Oregon** wanted to share and learn about different administrative approaches to managing "critical groundwater areas" and other overdrawn basins. This includes discussing what processes are working, what challenges have been encountered, and how to improve tools for groundwater allocation rulemaking. **Nevada** and **Nebraska** were interested in discussing the integrated management of surface and groundwater. Nevada has a Supreme Court decision affirming its authority to do this, while Nebraska has a long-standing, successful system in place. They wanted to share their experiences and learn from others. **California** was approaching the 10-year anniversary of its Sustainable Groundwater Management Act (SGMA) and wanted to offer updates on the litigation and challenges arising from new local agencies being required to manage groundwater. **Idaho** wanted to explore how other states are dealing with the interface between groundwater and surface water under state law, especially in times of crisis. **Nevada** has been considering ways to reduce "paper water rights" that aren't being used to divert wet water and to address over-appropriated basins, as their current forfeiture process is not effective. This was noted a common challenge others could learn from. Several states wanted to learn about strategies for minimizing conflict, such as allowing shortage sharing agreements in overdrawn basins, as it's a growing issue in groundwater management.

The states were also interested in scientific advancements in data needed for effective groundwater management, including the different factual and modeling approaches used. **Nebraska**, for example, has models for every major aquifer and is willing to share its expertise. **Oregon** has faced pushback from the U.S. Geological Survey (USGS) on peer-reviewing their groundwater work and is looking for other opportunities to collaborate with states on this.

Some states also expressed a desire to use a workshop to demonstrate to the federal government that groundwater management is already being effectively handled at the state and local levels. They want to show that a vast network of experts exists within states and that federal assistance should be focused on supporting existing state efforts rather than imposing new regulations. They saw the exchange of information at the workshop as an opportunity to educate the public and the federal government about the nuances of water in the West, particularly regarding groundwater and jurisdiction. This would help explain what states are already doing and what resources they need from the federal government.

Who We Are

The WSWC was established by western governors in 1965 to advise them on water issues in the West. The members of the Council are appointed by the governors. The Council's purpose is "to accomplish effective cooperation among western states in matters relating to the planning, conservation, development, management, and protection of their water resources, in order to ensure that the West has an adequate, sustainable supply of water of suitable quality to meet its diverse economic and environmental needs now and in the future."

Western Policy on Groundwater

States have exclusive and primary authority over the allocation, administration, and management of groundwater within their borders. This authority is supported by historical legislation like the Desert Land Act of 1877 and Supreme Court decisions. The WSWC opposes any federal efforts that would establish a federal ownership interest in groundwater or diminish the states' authority. The regulatory reach of federal statutes, such as the Clean Water Act and the Endangered Species Act, was never intended to infringe upon state or private ownership of groundwater.

States are in the best position to manage groundwater because conditions affecting supplies and demands vary considerably across the West and even within individual states. While the states are willing to work cooperatively with federal partners to address federal needs, they believe this should be done through existing state laws and authorities. See Position #515, State Primacy over Groundwater; and Position #506, Asserting State Primacy on Protecting Ground Water Quality.

Roundtable: State Challenges and Opportunities

The WSWC kicked off the Groundwater Workshop with a roundtable discussion that brought together perspectives from water managers, legal advisors, and scientists from various agencies and states regarding their most pressing groundwater challenges and opportunities. The conversation revealed common themes across the West, despite the sometimes unique legal and hydrological characteristics of each state.

Legal and policy challenges included grappling with conjunctive management, outdated laws, exempt wells, continuing or restricting the allocation of groundwater rights, and compliance with interstate compacts. While states like Nebraska, North Dakota, and South Dakota have long managed their groundwater and surface water conjunctively, other states are in the early stages of grappling with litigation and adequate authority, funding, and science to effectively manage water conjunctively. Idaho's long-standing litigation over conjunctive management has led to large-scale curtailment orders, while Montana's policy on exempt wells and mitigation has been repeatedly debated and failed to result in new legislation in the legislature. Oklahoma's water law, largely unchanged since 1972, is creating conflicts between different water users and hindering effective management. Nevada, Montana, and Oregon have biennial legislatures, and Utah has a very short annual legislative session. This creates challenges to managing orderly updates to laws, policies, regulations, and legal traditions.

Montana, Washington, Oregon, and Idaho identified the cumulative impact of exempt wells for rural or domestic use as a significant and recurring policy challenge, often leading to litigation and legislative gridlock. Oregon is facing the difficult process of implementing its first spatial groundwater regulations in the Harney Basin, while Oklahoma is bracing for potential reduced allocations as new aquifer studies are completed. Nebraska has a long history of litigation related to integrated management and interstate compacts, such as the Republican River Compact, which highlights the need for a robust regulatory framework.

Several states also expressed their water quality and environmental concerns with groundwater. Nitrate contamination was identified as a major concern in multiple states, including Nebraska, Kansas, and Washington. Nebraska is in the initial stages of collaborating with its health department on the land application of industrial sludge/biosolids, while Washington is struggling with how to integrate nitrate monitoring into its groundwater permitting process.

Emerging contaminants, such as PFAS, and Clean Water Act compliance are ongoing concerns. Nevada is facing new challenges with lithium brine mining and the financial and environmental risks posed by bankrupt hard rock mining operations. The state is re-evaluating its bond estimates to accurately reflect the costs of managing contaminated water. Nevada is working to reconcile the implications of the *Sackett* and *Maui* Supreme Court decisions with its state regulations. States emphasized the need for better integration between water quality and quantity management. Historical disinvestment in water quality has impacted states' ability to address pressing issues.

Montana and North Dakota mentioned their public education efforts. North Dakota's "Know Your Aquifer" campaign successfully educated the public and legislators, demonstrating the value of proactive communication. The Montana DNRC is also building its communication workforce to address a widespread lack of public understanding about water rights. The increasing availability of water monitoring and water rights data online is seen as a key opportunity for improving understanding

Metering for better water resource decisionmaking has been a contentious topic in some states, while other states such as North Dakota and Nebraska have embraced and benefited from a pervasive metering culture for many years. Oklahoma noted that metering is now being discussed among irrigators, reflecting a significant change in attitude.

More detailed comments from each state are summarized below.

Arizona
All groundwater in Arizona is protected as drinking water, given the state's limited surface water resources and reliance on groundwater for drinking water systems. Arizona has its own groundwater program, in addition to the Clean Water Act and Safe Drinking Water Act programs. They are interested in hearing and learning from other states.

Idaho
Idaho has faced long-standing conjunctive management issues in the Eastern Snake Plain Aquifer, with extensive litigation stemming from delivery calls by senior surface water users against junior groundwater users since 2005. The aquifer has some unique interactions with the surrounding surface water, and some junior groundwater users also have senior rights to surface storage water. In 2025, senior delivery calls required pumping curtailment orders affecting about 500,000 acres of irrigated land. They recently reached a large settlement agreement. Under a new statute, Idaho is expanding the administrative boundary of their conjunctive management plan to include 13-15 tributary basins, a collaborative effort to ensure all users contribute to mitigation. Public meetings have involved some difficult conversations, with water users understandably resistant to potential reductions in pumping as well as increased costs. Administering water rights based on combined priority dates across a large area is complex, and establishing effective water districts has been challenging. Aquifer recharge with underground injection control wells has become a hot topic, creating tension between those wanting to recharge water affordably, and the concerns of domestic and municipal well users regarding the quality of injective surface water in sole source aquifers.

Kansas
Kansas has two primary concerns: long-term groundwater depletion in the western third of the state, and groundwater-surface water interaction in the central region, where groundwater pumping often impacts senior surface water rights within their conjunctive water rights system. On the water quality side, their primary concern is nitrates in agricultural areas with shallow groundwater. They are encountering emerging issues of naturally occurring sulfate and uranium due to the continued use of groundwater for irrigation.

Nebraska
Managing groundwater and surface water conjunctively can be comparatively straightforward, thanks to the hydrology of the Ogallala Aquifer, state statutes, and lessons learned from past water disputes. They had various compact issues, such as the Republican River Compact, which further emphasized the need for regulations that would address the physical availability of water in aquifers and streams and the ability of the state to meet its legal obligations. Nebraska's LB962 legislation, which integrated surface and groundwater management, has been a successful model for managing a complex system, and its relative peace from litigation over the last six years is a testament to its effectiveness. Nebraska has depended on federal data collection and other essential programs, and is interested in recent developments at the federal level. Nitrate contamination in groundwater is a key concern in Nebraska. A more recent challenge is the land application of industrial sludge, including food waste and biosolids. This practice raises questions about whether these materials are classified as waste or product, and leads to potential health impacts. The water quality and health agencies are collaborating to improve the management and risk assessment associated with this land application.

Nevada
Water quality and quantity matters fall under different offices. On the water quality side, they are working to reconcile the *Maui* and *Sackett* decisions, which appear somewhat contradictory. Their drinking water program is focused on recent rules and amendments on PFAS and the Lead and Copper Rule. An increase in lithium brine mining is impacting groundwater resources. Direct lithium extraction involves the pumping of water, removal of lithium, and the brine is reinjected, with implications for Nevada's Underground Injection Control (UIC) program. This represents a distinctly new direction from traditional hard rock mining. In the past couple of years, a hard rock mining operation declared bankruptcy with very little advance notice. The monthly costs for managing fluids to prevent a catastrophic release until the mining bond goes into effect have ranged from $400,000-$500,000, rapidly exhausting the state's interim fluid management account established 20 years ago with $1.4M Consequently, Nevada is re-evaluating its bond cost estimates and the fluid management account to more accurately reflect inflation and the true costs of managing contaminated water during the initial reclamation phases of a mining property. The biennial legislature meets for 120 days, and this short time frame and high turnover of legislators makes it difficult to discuss complex topics in depth. They have 20 water-related bills introduced covering various issues, such as the State Engineer's efforts to modernize, minimizing processing times and streamlining procedures, but with limited resources to do so. In recent years, they have shifted from allocating water to primarily managing change applications and existing allocations, which involves significant conflict mitigation, management, and analysis. Nevada's laws are rooted in tradition and sometimes misinformation. Tools like curtailment by priority, forfeiture, abandonment, and cancellation are not very strong or have not been used. They frequently face legal challenges when attempting to remove unused water from the books. The State Engineer successfully defended its authority to manage surface and groundwater conjunctively. A stakeholder group in the Humboldt River system is working to develop conjunctive management strategies, and is being watched statewide as a potential model. The Nevada Water Initiative, which aimed to update the state's baseline science, highlights the potential of federal funding (e.g., ARPA funds) to support critical water resource projects, while also underscoring the risk when state investment is not sustained. While southern Nevada relies heavily on Colorado River water, groundwater still constitutes 10% of their water resources.

North Dakota
North Dakota's Rockford River is at or near full appropriation, which has prompted a significant exploration of options for managed aquifer recharge. They completed a statewide assessment in 2024, and are delving deeper into specific pilot project locations in the central and eastern parts of the state. They manage their groundwater and surface water conjunctively. In an effort to improve understanding of groundwater and aquifers, North Dakota launched a public education campaign called "Know Your Aquifer" targeting the general public, legislators, and water managers. The initiative included various one-page documents and email updates. It proved to be very successful, garnering considerable positive feedback, and they are now exploring other opportunities for educational campaigns. More information is available on the North Dakota Department of Water Resources website.

Montana
Montana's water quality and water rights are handled by separate agencies. About 4-5 years ago, their Water Sciences Bureau initiated a comprehensive water review involving stakeholders to streamline their water rights permitting process. One of the significant challenges identified was a surge in exempt groundwater use, defined as a flow rate of 35 gallons per minute or less, or less than 10 acre-feet per year. Given Montana's conjunctive management of surface and groundwater, nearly all new groundwater use impacting surface water requires mitigation, which has proven difficult, particularly with the increase in more populated areas. Bills to address this challenge have been introduced in the biennial legislature for the past ten years without success. This year a group of stakeholders including senior water right holders, conservation groups, and the development community sought to develop a compromise bill balancing their interests, but that has fallen apart during the legislative process. Due to some litigation last year curtailing a perceived development loophole in phased subdivisions and combined appropriations, Montana is anticipating an increase in lawsuits. They are hoping to proactively address this issue and are keen to learn from others' experiences.

Oklahoma
Oklahoma's water laws have not been substantially updated since 1972, which contributes to ongoing water conflicts between irrigators, commercial users, and domestic groundwater users. Groundwater is considered private property. The current legislature has introduced 31 water-related bills this session. The state has made progress on its aquifer studies to determine maximum annual yields. They are moving toward a public process that will likely result in reduced allocations for some aquifers. They welcome advice from other states on navigating public engagement through curtailments. The state is also experiencing an unfamiliar drought-flood cycle that has led to an increasing number of discussions with stakeholders having diverse perspectives. They are grappling with how to effectively manage various stakeholders. There is a growing interest in understanding groundwater laws, forming interest groups, developing groundwater management and regulation, and even considering metering, which was once a taboo subject.

Oregon
Oregon's water quality and water rights are managed by separate agencies. Their first groundwater regulations were implemented in the Harney Basin in the 1990s, and the challenges

there have been a difficult and ongoing process. OWRD is adjusting to new groundwater allocation policies. Their biennial legislature has been working to address some significant water challenges, led by bipartisan legislators with a strong water vision. This has resulted in a rapid succession of bills that requires considerable effort to manage. Some aspects of ODEQ's authority and operational procedures under the existing water quality statutes and regulatory framework could be more effective, and the legislature is working on those. There is also a great need to invest in the state's capacity to tackle pressing water quality issues. They are engaging in collaborative efforts to manage areas with significant nitrate contamination.

South Dakota
South Dakota faces a challenge similar to many western regions regarding the availability of water and getting to where it is needed. One of their strengths is that they do conjunctively manage their surface water and groundwater.

Utah
Utah has required groundwater applications since the 1930s. A recent challenge has been the increased number of requests for exemptions from the regulatory process, primarily from energy production, geothermal, and mining interests seeking access to deep aquifers or brines. The legislature has been focusing on this lately. Utah's annual legislative sessions are limited to 45 days, so it is a constant effort to keep up with evolving needs. Utah faces the challenges of managing groundwater in areas where aquifers are not a single large system, and developing groundwater management plans in overdrafted areas that can gain public acceptance.

Washington
Washington is also grappling with nitrates in groundwater and their impact on drinking water. They've encountered some difficulties trying to integrate water quality monitoring into their groundwater permitting process. Their CAFO permit has been appealed due largely to compliance issues. A key aspect of work on the water rights side is balancing in-stream needs with out-of-stream uses, particularly related to ESA-listed salmon species and treaty tribes with unquantified water rights to fisheries and their supporting environments. Conjunctive management of groundwater and surface water is an ongoing challenge. There are ongoing collaborative efforts in the Walla Walla Basin. Several watersheds have in-stream flow rules with specific targets for the mainstem rivers, sometimes leading to closures of new appropriations. Some of the mitigation plans submitted by applicants use groundwater models, and the consulting community has developed a practice of setting error bar thresholds, leading to determinations that pumping impacts to surface water are insignificant if they fall within the model's error bounds. This poses a problem under recent court decisions in 2001 and 2015, which establish a strict 100% mitigation standard (in time, in kind, in place), making mitigation options nearly impossible to achieve. One key challenge is the significant deep groundwater declines over the past 50 years in the basalt aquifers in eastern Washington's agricultural centers. Maintaining data and finding options for irrigators is difficult. One ongoing issue is a permanent permitting exemption for rural housing development established in the 1990s. Despite a court ruling that the exemption is limited to one per development, the state continues to seek new policy solutions.

WestFAST

Bureau of Land Management: Widespread misunderstanding of the impact of well pumping is a significant challenge. It is difficult to intuitively grasp and forecast the consequences, and to determine sustainable levels of groundwater development. One of the key challenges for BLM is providing the appropriate context for the physical and legal availability of groundwater in environmental compliance documents for proposed land uses like energy development and grazing. The complexities of state water management challenges, such as curtailments and over-appropriated basins, are difficult to convey. Another challenge is ensuring consistency across the agency for water right applications and adjudications. The increasing availability of water monitoring and water rights data online, along with remote sensing capabilities, is an opportunity to improve our understanding of groundwater resources and sustainability.

U.S. Forest Service: The USFS plays a crucial role in sustaining the nation's water supply, with 46% of available water supply originating from 193 million acres of public lands in the West, and serving 90% of the population’s public drinking water systems in the West. Understanding these relationships can aid the agency and its partners in restoration, fuels reduction, and post-fire stabilization efforts. Some challenges include the agency's continued lack of a national groundwater stewardship policy, and recent uncertainty related to organization, staffing, and funding to carry out the mission and work of the agency.

U.S. Air Force: Most of the Air Force's owned and operated water supplies in the West are groundwater sources, and they rely heavily on these resources to support their mission, making state groundwater management a high interest topic.

State Presentations

Oregon Groundwater Allocation Rules

Justin Iverson, Groundwater Section Manager at the OWRD, provided an overview of the new statewide groundwater allocation rules approved by their Water Resources Commission. The rules are the result of a two-and-a-half-year process involving a large team of stakeholders, tribal representatives, and public comments. The rules were prompted by the increasing over-allocation of groundwater across Oregon, leading to a rise in dry well complaints and a decline in stream flows. Oregon operates under a conjunctive use system, where groundwater and surface water are strongly interconnected. The summer dry season, combined with peak irrigation, has led to a significant reduction in stream flow, impacting established senior surface water rights and water quality. The new rules aim to achieve three main objectives: (1) promote sustainable groundwater use while upholding the prior appropriation doctrine; (2) base the new changes on Oregon-specific groundwater data, science, and law; and (3) issue new water rights only where sufficient information confirms water availability.

This marks a significant shift from the previous approach, which often required evidence of over-allocation before denying a new water right, with the default that water was otherwise available. The new rules are proactive, focusing on assessing water availability before allocation. Two major changes to definitions in the rules are defining “reasonably safe water levels,” and redefining “potential for substantial interference.”

A long-standing legislative policy from 1955 required the determination of “reasonably stable water levels,” but this term was never formally defined. The new rules establish a definition based on historical data from over 300 wells with at least 25 years of records. The new criteria include: (1) a decline of less than half a foot per year over a five to twenty-year period; and (2) a total decline of 25 feet or less. This test will be used to assess water availability from a storage perspective.

Previously, the rules allowed groundwater right impacts on surface water because they focused on a specific timeframe or a quarter-mile radius from the well to determine the potential for substantial interference. The new rules revise this, stating that when groundwater discharges to a surface water, the surface water availability must be assessed before issuing a new groundwater right. This change means that groundwater availability will now align with surface water availability. The new rules will only apply to new permits and will not affect existing groundwater rights or exempt uses.

The new rules signify that Oregon is moving away from issuing new water rights and toward managing transfers and other alternative water supply solutions. The state anticipates that water transfers will become a significant tool for meeting demand. Currently they have one basin with an established mitigation program and anticipate developing more such programs across the states. Additionally, OWRD is exploring water reuse and other options in collaboration with the Oregon Department of Environmental Quality. The map of surface water availability shows a

significant reduction in the areas where new groundwater rights will be available, which underscores the shift toward a more sustainable and cautious approach to water allocation.

Following the presentation, participants asked questions regarding how the rules handle surface water depletion, the process for defining sustainability, and how the rules apply to both new and existing water rights.

Does OWRD view pumping as a 1:1 depletion of surface water, or does it account for return flows (e.g., from a septic system)?

- Iverson clarified that the agency operates within the allocation framework. If a surface water source is already fully appropriated, any new impact—even if only partially consumptive—is considered a burden on the system. The division chose to avoid specific impact thresholds (e.g., a minimal percentage impact) to prevent potential disputes and conflicts among consultants and stakeholders.

What was the process and timeline for defining "sustainability" and was it challenging to reach a consensus?

- Iverson explained that the rule-making process took about two and a half years. The process was highly transparent and involved a large Rules Advisory Committee with 35 representatives from various sectors, including irrigators, municipalities, and tribal representatives. The agency presented a data-driven, 40-page paper on their approach, which was peer-reviewed by the USGS. The goal was to define a "reasonably stable water level," and the extensive data on long-term climate responses helped achieve a strong consensus without significant disagreement.

Will the new rules would apply to existing diversions?

- Iverson confirmed that the new rules do not apply to existing diversions or water rights. The primary goal is to prevent the problem from worsening by stopping new allocations in over-allocated areas. The agency is currently using other processes to address over-allocation in specific areas, such as the southeast, where water levels have been declining for decades. These curtailment efforts are a separate, difficult, and ongoing process.

Who determines the allowable amount of stream-flow depletion for new permits?

- Iverson stated that the new rules essentially answer this question. The agency, under the direction of its commission, created these administrative rules. He explained that the previous rules, in place since the late 1980s, had specific thresholds for "*de minimis* impacts," but these were removed in the new set of rules. This change was a paradigm shift driven by concerns from senior water rights holders whose rights were already being curtailed due to over-appropriation. The new rules, therefore, do not set specific thresholds for allowable depletion, instead focusing on preventing any further impact on already strained summertime base flows.

Nebraska Aquifer Monitoring for Water Management

Jesse Bradley, Interim Director, Nebraska Department of Natural Resources, outlined Nebraska's unique and comprehensive approach to water management, with a strong emphasis on aquifer monitoring and the role of Natural Resources Districts (NRDs).

Nebraska is a large, predominantly rural state with a population of about 2 million, half of whom live in the Omaha area. The state is a major agricultural producer, with approximately 20 million cropped acres, half of which are irrigated. Meat production (predominantly cattle) is the largest agricultural sector. There's a significant precipitation gradient from west (12-13 inches annually) to east (36 inches), making irrigation essential for crop production in the western half of the state. The state's unique Sandhills region acts as a major recharge zone for the High Plains Aquifer, with some areas having over 1,000 feet of saturated thickness. Nebraska holds a substantial portion of this aquifer's recoverable storage (two billion acre-feet out of three billion). The vast majority (94-95%) of both surface water and groundwater is used for agriculture. Almost all municipalities rely on groundwater for drinking water, though nitrate contamination is a growing concern. Nebraska is the most heavily irrigated state in the country, with over 100,000 groundwater wells.

Nebraska uses an "integrated management" or "conjunctive management" approach to address the connection between groundwater and surface water. Surface water is managed under a prior appropriation system ("first in time, first in right"). Groundwater is managed by NRDs under a correlative system, where all users in a management area are subject to the same regulations, regardless of when their well was drilled. Created in the 1970s, the 23 NRDs are a cornerstone of Nebraska's water management. These local, elected boards have significant authority and are funded by local property and occupation taxes, which allows them to leverage state and federal funds for projects.

The planning process is tiered and iterative, starting with interstate compacts (e.g., Republican River Compact) and agreements (e.g., Central Platte ESA program), followed by basin-wide plans, and finally, individual NRD integrated management plans. This process involves extensive scientific data, modeling, and stakeholder collaboration.

Nebraska has a robust monitoring network, including over 250 state and USGS stream flow gauges and more than 22,000 sites for groundwater monitoring. The state has invested heavily in a statewide network of groundwater models developed in partnership with NRDs. These models are crucial for:

- Assessing objectives: Measuring groundwater depletion and its impact on stream flow.
- Interstate compact compliance: For example, the Republican River Compact has specific accounting requirements based on these models.
- ESA compliance: Ensuring groundwater development does not exceed baseline levels set in 1997.
- Recharge Projects: The models also help manage proactive projects, such as an initiative in the upper Platte area where irrigation districts are paid to recharge the aquifer by diverting water into unlined canals. This has successfully recharged approximately 300,000 acre-feet of water over the past 15 years.

Nebraska's water management is characterized by a tightly coupled approach to aquifer and stream flow management. The successful collaboration between the state DNR and local NRDs is essential for communication and problem-solving. The extensive use of science, monitoring, and modeling provides the necessary data for making informed, and often difficult, management decisions.

The discussion following the presentation addressed the unique legal framework, the role of local NRDs, and the challenges of balancing local control with statewide goals.

Legal and Regulatory Framework

- **Property Rights and "Takings":** Jesse clarified that unlike surface water, which has a vested property right, Nebraska's groundwater law is different. There is no established vested property right for groundwater, which allows for greater flexibility in management and regulation by NRDs without the legal barrier of "takings" claims.
- **Balancing Local Control:** When asked about the pushback from a "takings" argument, Jesse noted that the system's flexibility allows NRDs to address challenges without that specific barrier. NRDs can decide on allocation levels for existing users and how to balance them, sometimes through regulatory routes, incentive-based programs, or a combination of both.
- **Flexible/Inconsistent Approaches:** A speaker questioned the variability in NRD approaches. Jesse explained that this flexibility is a core feature of Nebraska's system. While all NRDs must meet the same compliance goals, they can choose different methods—some favor regulation and allocation to avoid raising taxes, while others use incentive programs. Conflicts across boundaries are handled with joint approvals from both NRDs.

State/NRD Enforcement and Compliance

- **Compliance Framework:** Jesse confirmed that a higher-level basin planning structure ensures all NRDs work within a consistent framework to meet shared objectives, such as complying with interstate compacts. If voluntary efforts fail, the state has mechanisms to ensure compliance.
- **Enforcement Actions:** NRDs have taken significant enforcement actions for violations. Penalties often involve doubling the amount of water used in excess and reducing the next allocation period by that amount. In extreme cases, such as an estate that illegally piped around a meter, the NRD permanently removed the irrigation rights for over 1,000 acres. These administrative orders can be, and have been, appealed to the State Supreme Court.

NRD Operations and Governance

- **Number of Wells/Acres:** Regarding the scale of NRD management. Jesse confirmed that the Central Platte, Upper Big Blue, and Lower Loup NRDs each manage over 1 million irrigated acres. These NRDs are independently responsible for managing all well owners, setting regulations, and enforcing them.

- **Staffing:** Staffing for these large districts varies. Central Platte NRD has 25-30 staff, while a major urban NRD like Papio-Missouri has over 100 staff due to its large tax base. In contrast, smaller NRDs may operate with only a few staff members.
- **Elected Boards:** NRDs are governed by boards whose members are elected in general elections for four-year terms. The composition of these boards varies, with more agricultural representatives in rural areas and a mix of professionals in urban areas.
- **Local vs. State Control:** Jesse acknowledged that citizens do appeal to the state when they are unhappy with their NRDs' decisions. However, local control is highly valued, and NRDs are incentivized to be proactive to avoid potential legislative action from the state government.

Impact of External Factors

- **Drought and Market Irregularities:** Jesse noted that drought and commodity market fluctuations have a visible impact on water use. Higher commodity prices often lead to increased pumping as producers seek to maximize profits. He cited a specific example where an NRD is implementing a drought-phase trigger to allocate water and reduce pumping.
- **Voluntary Integrated Management:** Jesse explained that NRDs in the state's "voluntary" integrated management areas chose to participate proactively to avoid the more stringent regulations and mandated rollbacks that were imposed on districts required to participate by state law. This desire to "get ahead of the train wreck" is a key motivator for districts' voluntary engagement in the process.

California Sustainable Groundwater Management Act

Jeanine Jones, Interstate Resources Manager at the California Department of Water Resources (CA DWR), presented a summary of California's journey toward groundwater sustainability, with a focus on the Sustainable Groundwater Management Act (SGMA).

Most of California's water supply originates in the wet north, while the greatest demand for water is in the dry south, particularly in the Central Valley, which is the heart of the state's agriculture. While surface water has been regulated since 1914, groundwater was historically considered a local issue. This led to a century of unregulated pumping, resulting in significant problems like aquifer overdraft, land subsidence, and saltwater intrusion. Multiple attempts to pass groundwater legislation failed until a severe drought provided the necessary political momentum for SGMA to pass in 2014.

The purpose of SGMA was to transition California from a state with minimal groundwater regulation to one with statewide local regulation, ensuring sustainability over a 20-year period. CA DWR serves as the state's technical and administrative manager, reviewing and approving local plans and providing support. The Groundwater Sustainability Agencies (GSAs) are local agencies, often formed as joint powers authorities, and are responsible for developing and implementing Groundwater Sustainability Plans (GSPs) for their basins. The State Water Resources Control Board (SWRCB) is the enforcement body. If a GSP is deemed inadequate by

CA DWR, the SWRCB can place the basin on probation and impose its own management plan. Of California's 515 groundwater basins, 94 are designated as medium- or high-priority and are subject to SGMA. These basins account for the vast majority of the state's groundwater use.

The central objective of SGMA is to prevent undesirable results, or "the six sins" of groundwater management: (1) chronic lowering of groundwater levels; (2) significant and unreasonable reduction of groundwater storage; (3) seawater intrusion; (4) degraded water quality; (5) land subsidence; and (6) depletion of interconnected surface water. Some solutions to these problems include groundwater recharge, reduced pumping, and improved data. The state is aggressively promoting "Flood-Managed Aquifer Recharge (Flood-MAR)" to capture winter floodwaters and direct them to agricultural lands and recharge ponds. This builds on California's long history of recharge projects. In severely overdrafted areas like the San Joaquin Valley, where long-term overdraft has averaged 1.5 to 2 million acre-feet per year, the only realistic solution is a significant reduction in groundwater use, which could lead to a reduction of 500,000 to 1 million acres of agricultural land. The state is using advanced technologies like InSAR (Interferometric Synthetic Aperture Radar) to monitor land subsidence and has invested a billion dollars over the last decade to fund new monitoring wells, models, and data programs to aid local agencies.

Current Status and Enforcement

- **GSA Formation:** All required GSAs were formed by the 2017 deadline.
- **GSP Submissions:** Critically overdrafted basins submitted their GSPs by 2020, and all other high- and medium-priority basins submitted theirs by 2022.
- **Review and Enforcement:** CA DWR has reviewed all plans, approving about three-quarters of them. The others are in a "fix-it" loop, and a few have been referred to the SWRCB for probation. The SWRCB has already placed two basins on probation and scheduled more hearings. This process marks a significant shift from a hands-off approach to one with real regulatory teeth.

The discussion with Jeanine Jones (CA DWR) and Joaquin Esquivel (Chair of the SWRCB) provided additional details on SGMA implementation.

Cost of SGMA Implementation

- **State Investment:** Jeanine previously mentioned a billion dollars in state investment. She clarified that the total investment, including local agencies, has not been fully tabulated, but some agencies have spent tens of millions on implementation.
- **Cost Drivers:** A significant portion of the cost is attributed to repairing damage caused by decades of overdraft, particularly land subsidence that has damaged critical conveyance infrastructure like canals. This creates an extra financial burden on agencies now responsible for fixing problems caused by past practices.

SWRCB's Enforcement and Probation

- **Legal Challenge:** When asked if there was a legal avenue to challenge the SWRCB, Jeanine explained that the enforcement process for SGMA is still in its early stages.

- **Probationary Period:** Joaquin Esquivel noted that for the two basins placed on probation, there is a one-year period for data collection and reporting before an interim plan can be adopted. No cuts to pumping have been made yet.
- **Proactive Engagement:** SWRCB's preference is for local agencies to take ownership of their challenges and show progress to avoid state intervention. Several basins referred to the SWRCB have successfully improved their GSPs and are now on a path to exit the process before a probationary hearing. In some San Joaquin Valley basins, local agencies are taking responsibility for problems, such as responding to dry domestic wells caused by their pumpers, rather than relying on the state to step in.

Reducing Groundwater Use

- **Voluntary vs. Mandatory Cuts:** During droughts, water reductions often become a business decision for growers. Land fallowing is already occurring, and some farmers are realizing they need to operate within a reduced water budget.
- **Mechanisms for Reduction:**
    - **Budgets:** Many GSAs are setting budgets for water use based on evapotranspiration (ET) without necessarily requiring meters.
    - **Fallowing:** While not strictly mandatory, the state has provided some grant funding for temporary fallowing and a "land flex" program to incentivize transitions to less water-intensive land uses.
    - **Market Forces:** The decline in agricultural land value, especially for land without a reliable water source, is a powerful market signal driving a new reality for growers.
- **Timeline:** The ultimate deadline for achieving sustainability under SGMA is 2040. Agencies are taking different approaches to reach this goal, with some implementing immediate cuts and others following a more gradual path.

Oregon Groundwater Quality Protection

Jennifer Wigal, Water Quality Program Manager at the Oregon Department of Environmental Quality (ODEQ), discussed groundwater quality issues in Oregon, highlighting the challenges of managing interconnected groundwater resources.

Oregon's legal framework for groundwater management is complex and involves multiple agencies with distinct responsibilities. ODEQ is the lead agency for groundwater quality. OWRD manages water rights for both surface and groundwater. The Oregon Health Authority (OHA) regulates drinking water but has no state-level requirements for private domestic wells. The Department of Agriculture manages water quality related to agricultural practices. Other agencies and entities with roles include the Department of Geology and Mineral Industries (DOGAMI) (mining permits and well siting and drilling), Department of Land Conservation and Development (land use, sewer and drinking water distribution systems), and Oregon State University (technical expertise and extension services, hydrogeology, agricultural links to contamination).

The state has a process for setting groundwater values, which has only been partially implemented. The process involves identifying "areas of concern" before officially designating "groundwater quality management areas" when contamination exceeds trigger levels. The current framework emphasizes sampling, education, and grants, but funding and clear agency roles are often lacking. Active legislation is in progress to address these issues and improve interagency collaboration.

Case Study 1: Lower Umatilla Basin

- **Problem:** This 550-square-mile area in Eastern Oregon was designated a groundwater management area due to widespread nitrate contamination exceeding the 10 mg/L Safe Drinking Water Act standard.
- **Sources:**
    - **Irrigated agriculture:** The region has extensive irrigated agriculture, which contributes to nitrate leaching.
    - **Concentrated Animal Feeding Operations (CAFOs):** Large-scale animal operations contribute manure to the system.
    - **Food production industries:** Wastewater from these facilities, which is rich in nitrates, is reused on agricultural lands, further adding to the contamination.
- **Challenges:** The area faces significant challenges due to limited state regulatory authority over private domestic wells, making it difficult to implement solutions for rural residents with contaminated water. The area is also low-income with a large non-native English-speaking population, adding a socioeconomic layer to the management problems.

Case Study 2: Crook County

- **Problem:** In Central Oregon's Crook County, high levels of manganese have been found in private domestic wells. Basin-wide issues include naturally-occurring minerals and decreasing water levels.
- **Sources:** The source of the contamination is currently unknown, but a nearby sand and gravel mine is a potential point source. DOGAMI has a year-long investigation, and ODEQ and OHA are analyzing water quality at domestic wells (2 rounds of testing)
- **Significance:** This case highlights the challenges of addressing groundwater quality issues in private wells where there is limited regulatory oversight and no clear source of contamination.

The Pacific Northwest's prolonged dry summers, combined with increasing demand for water, will likely intensify the need for irrigated agriculture, potentially worsening groundwater quality issues. There are significant economic considerations for businesses to change their operations, and a lack of clear agency authority makes it difficult to provide quick, effective fixes for rural residents. Rural communities are so spread out that municipal systems are often not feasible. The state currently has limited capacity and expertise to address these increasingly complex groundwater problems, underscoring the need for the legislative changes currently under consideration.

The discussion that followed focused on the challenges and collaborative efforts related to protecting groundwater quality, particularly from nitrate contamination.

Regulation of Nitrate Sources

- **Industrial and Agricultural Sources:** Tom Riley asked about the Port of Morrow's role in the Lower Umatilla Basin. Jennifer Wigal confirmed that the port is required to factor nitrate levels into its land application plans. The port is investing in treatment facilities to stabilize nitrogen concentrations, and the Department of Agriculture is developing regulations to track other applied fertilizers.
- **Nebraska's NRDs:** Tom shared Nebraska's approach, where Natural Resources Districts (NRDs) have the authority to regulate producers in "hot" areas with high nitrate levels. This can involve multi-phased regulations that limit fertilizer application timing and amounts, and require consideration of existing water nitrate levels. Jennifer thanked him for the insight, noting a potential statutory model for Oregon.

Addressing Contaminated Domestic Wells

- **Funding:** Regarding funding for the water replacement program, Jennifer explained that a one-time appropriation from the governor's office funded emergency water distribution. She noted a broader philosophical challenge in providing aid to residents who chose to live in areas without paying for municipal water services, and the lack of readily available state mechanisms for such situations.
- **Community Participation:** Participation in the water delivery program was impressive, estimated at around 75%. Jennifer praised the collaborative efforts of state and county health departments and local non-profits, who used various media in both English and Spanish to encourage water testing and delivery program enrollment.
- **Septic Systems:** Jennifer Carr from Nevada shared that her state faces similar challenges with nitrate contamination from septic systems and does not regulate domestic wells. She noted that Nevada is working on converting septic systems to sewers and has a law that requires connection to a nearby sewer system if a septic system fails. Jennifer Wigal acknowledged that septic-to-sewer conversion in Oregon has been a “contentious conversation,” and that proposed legislation to inspect septics faced pushback over concerns about privacy and property rights.
- **Land Use Laws and Infrastructure:** Jennifer Wigal discussed a significant barrier in Oregon's land use laws, which generally prohibit extending municipal sewer and drinking water services outside of urban growth boundaries. This makes it difficult to connect rural homes with contaminated wells. She mentioned that legislative action is being considered to ease these restrictions.
- **Long-Term Outlook:** Both Jennifer Wigal and Jennifer Carr emphasized the long-term nature of these problems, noting that even with a reversal in trends, it will take decades to see safe water in affected aquifers. They also stressed the importance of educating the public about the acute health risks of high nitrate levels in drinking water, particularly for infants.

Montana Aquifer Mitigation

Jake Morhmann, Bureau Chief at the Montana Department of Natural Resources and Conservation (MT DNRC), presented on the state's efforts to develop mitigation banking as a solution to facilitate continued water use and growth in a state where most water is already allocated.

Montana is a headwaters state, with mountains in the west and plains to the east. The valley fill aquifers in the west are typically narrow, long, and have a major river flowing through them, range from a few to thousands of feet thick, and are highly complex. Well depths are typically less than 100 feet. The plains aquifers feature relatively flat sedimentary stratigraphy, with sandstone and limestone aquifers, and well depths of hundreds to thousands of feet deep (e.g., a recent groundwater permit application for 5,000 feet deep seeks to access an aquifer less connected to the surface water.) Most groundwater is primarily for domestic supply, with some limited irrigation.

Montana conjunctively manages groundwater and surface water, treating them as a single, connected resource. The state's water law is based on the prior appropriation doctrine ("first in time, first in right"). Most surface water has been fully or over-appropriated for decades, meaning new consumptive uses are largely prohibited because they would impact senior surface water rights. An exception exists for "exempt wells," which are limited to 35 gallons per minute and up to 10 acre-feet per year. While individually small, the cumulative effect of a growing number of exempt wells is starting to have a noticeable impact on surface waters. For example, in the rapidly growing Gallatin Valley, approximately 10,000 exempt wells are depleting the Gallatin River by 15 cubic feet per second (CFS) at a constant rate, which is a significant portion of its low-flow.

Montana has been exploring the challenges and opportunities of mitigation. Any new water use must be mitigated by retiring or changing an existing water right. The mitigation has to match the depletions allowing water to be returned to the system at the same rate, in the same location, and at the same timing throughout the year. Timing is the most challenging aspect. New municipal uses are year-round, while available mitigation water rights are typically seasonal irrigation water rights.

Morhmann defined mitigation banking in the context of Montana's needs:

- **Mitigation:** The process of offsetting a new depletion by retiring or changing an existing water right. It requires a perfect match in the rate, location, and timing of the depletion.
- **Mitigation Banks:** "Banks" that acquire existing, "wet" water rights, change the timing from seasonal (e.g., for irrigation) to year-round, and then sell "credits" to new users, such as for domestic or municipal use.
- **Water Trust:** A "parking place" for water rights to prevent forfeiture, as used in Washington State.
- **Water Markets:** Transactional platforms (e.g., an "eBay of water rights") for buying and selling water rights.

Morhmann outlined three potential technical solutions for mitigation banking:

1. **Shallow Managed Aquifer Recharge (MAR):** Diverting surface water into infiltration basins to recharge an aquifer. The water slowly returns to a stream at a constant, year-round rate. This is relatively inexpensive and passive to manage.
2. **Deep Managed Aquifer Recharge (MAR) / Aquifer Storage and Recovery (ASR):** Injecting water deep into a valley-fill aquifer. The water returns to the surface at a constant rate, changing the timing from seasonal to year-round. This is more expensive but can be a solution for complex hydrogeology.
3. **Surface Reservoir Storage:** Utilizing existing reservoirs to store seasonal water and make it available year-round for new uses. This is a potential solution for areas with existing reservoir infrastructure, though it may require difficult negotiations with existing water user associations.

A mitigation bank could acquire 10,000 acre-feet of water, and then sell credits for different uses (e.g., domestic, stock, irrigation) at tiered prices. This could generate significant revenue for infrastructure and long-term maintenance. A 10,000 acre-foot bank could last for 50-150 years based on current growth rates in areas like the Bitterroot Basin, providing a long-term solution for growth. MT DNRC is aiming to have a policy package ready for the 2027 legislative session. This package will address legal changes, incentives, and pilot projects. The state is collaborating with grassroots organizations in basins like the Gallatin and Bitterroot to develop pilot MAR and reservoir-style mitigation banks.

The discussion that followed delved into the specifics of Montana's proposed mitigation banking program, clarifying its purpose, management structure, and operational details.

Purpose and Management of the Bank

- **Primary Goal:** The mitigation bank is being developed as a future tool to facilitate growth in areas where new water uses, including exempt wells, will no longer be permitted. Legislation is in progress to close off large basins to exempt wells, and the bank would then become the only way to support new development in these areas.
- **Who Will Run the Bank?** This question remains unanswered. The state is exploring different models:
    - A state-run initiative.
    - Independent banks run by other organizations with state incentives.
    - Fully independent private entities, with the state's role limited to policy and regulation.

Water Rights and Pricing

- **Water Source:** The water rights for the bank would need to be secured upfront. This could be done by purchasing existing water rights or using rights already held by an organization (e.g., a local water trust). In the case of state-owned reservoirs, the state may be able to renegotiate existing contracts or buy back credits.
- **Compensation:** The original water right holder would be compensated for their right, which would then be permanently owned by the bank. The right would be removed from public ownership records to ensure the water is available indefinitely for mitigation purposes.

- **Cost of Credits:** Jake provided an example of a credit costing approximately $1,000, which he considers a reasonable price for Montana. He noted that prices for similar programs in other states like Washington range from $2,000 to $10,000, but he doesn't believe Montana has the demand to support that price level. The price would likely be determined by each individual bank, not the state.

Metering and Enforcement

- **Metering Requirements:** Metering and reporting would be a definite requirement for new water users who purchase a mitigation credit.
- **Current Status:** Despite past attempts to require metering, it is not currently a statewide requirement. While some water rights have metering requirements, the collected data is often not utilized or made publicly accessible.
- **Legislative Action:** There is an irony in the current legislative session: funding was approved for a measurement database, but a mandate for metering was denied. The state recognizes the need for accessible data and is moving to make existing data usable, anticipating public demand for it.

Nebraska Groundwater Quality

Steve Goans and Hillary Stoll from the Nebraska Department of Environmental Quality (NDEQ) provides a comprehensive look at groundwater quality issues and management strategies in Nebraska.

Nebraska’s key groundwater contaminants include nitrates, iron and manganese, arsenic and uranium, and per- and polyfluoroalkyl substances (PFAS). Nitrates are a long-standing issue in Nebraska, with about 15% of private domestic wells exceeding the 10 mg/L drinking water standard. A recent study, which included free testing for 29,000 domestic well owners, aimed to optimize resources and outreach to address this problem. Iron and Manganese are common, particularly in eastern Nebraska. Manganese has a secondary maximum contaminant level (MCL) for aesthetic reasons (50 ppb), but the EPA's health advisory is 300 ppb. An incident in West Point with levels of 1000 ppb prompted a voluntary sampling program and public advisories for infants. Arsenic and Uranium are naturally occurring contaminants that are a concern for both public and private water systems. The City of Lincoln is expanding a treatment plant to address rising arsenic levels. Nebraska's Superfund program has identified over 990 facilities that may have used or produced PFAS. Recent sampling revealed that three public water systems exceeded the MCLs for certain PFAS compounds.

Nebraska’s groundwater quality management falls under a mixed regulatory framework. The state collaborates with NRDs and the university system to manage the Nebraska Groundwater Clearinghouse, a database that compiles water quality data from various sources. Approximately 18% of Nebraskans use private domestic wells, which are not regulated by the Safe Drinking Water Act. The state conducts outreach and offers resources, such as a reverse osmosis rebate program, to help well owners. Nebraska recently updated its regulations for groundwater under direct influence (GUDI) to align with federal standards. The presence of

Giardia or Cryptosporidium is still conclusive evidence of GUDI, but the presence of other single indicators now triggers an engineering review rather than an immediate conclusive determination.

Steve Goans discussed several innovative approaches and case studies:

- **"Reverse Maui" Cases:** These are situations where surface discharges impact a drinking water source. In one case, a meat processor's discharge into a small stream with a 20-year time of travel to a community's well required the facility to meet drinking water limits. They ultimately moved their discharge to a larger river for dilution.
- **Interbasin Transfers:** Moving water from one basin to another may require an NPDES permit if the water quality differs. In a case in southwest Nebraska, extensive hydrological and water quality analysis determined a permit was not needed for a specific transfer.
- **Large Septic Systems and Treated Wastewater:** To address high nitrate levels from rest areas and other facilities, the state has experimented with adding a sawdust layer as a carbon source for denitrification. This method was also successfully used at a fish cleaning station to manage high nutrient loads. In a collaboration with California, Steve helped design a system where treated wastewater was introduced into a pond with a sawdust layer to encourage denitrification before seeping back into a river for eventual use as drinking water. This provides an innovative way to recycle water while addressing public perception issues.
- **Managing Water Loss:** They have made complex calculations to quantify the amount of water lost from streams due to water quality control measures, such as a complete retention lagoon for a small town's wastewater treatment.

The discussion that followed covered a range of topics related to groundwater quality, including nitrate and PFAS contamination, and the role of agricultural practices.

Nitrate Contamination and Agricultural Management

- **Nitrate Sampling and Awareness:** Nebraska's free nitrate sampling program distributed free test kits, significantly increasing awareness of high nitrate levels in private wells, leading to greater participation in a state rebate program for reverse osmosis systems.
- **Disposal of Nitrate:** Nebraska has concerns about the disposal of nitrate-rich wastewater from reverse osmosis units, which is a potential issue for downstream water bodies.
- **Collaboration and Incentive Programs:** Nebraska works with the EPA on issues like animal waste application. Jesse and Hillary highlighted the Nebraska Nitrogen Reduction Act, a five-year pilot program that incentivizes farmers to reduce fertilizer use. The payment rates vary based on the level of nitrate contamination in the area, and there has been significant statewide interest.
- **Farmer Education:** Regarding nitrogen contamination in groundwater transfers, Steve addressed the complexities of interbasin transfers and noted that the state provides training to farmers on best practices for nitrate application, timing, and water management to reduce inputs and increase profits.

PFAS Contamination

- **Treatment and Funding:** Regarding how public water systems are responding to PFAS contamination, Steve noted that PFAS treatment is still an emerging field, and there are challenges with residual disposal. High PFAS levels are not common in Nebraska, but in affected areas, solutions often involve connecting to municipal water, using bottled water, or drilling new wells. The state has funding from the Infrastructure Investment and Jobs Act to help with this.
- **Biosolid Sampling:** Regarding biosolid sampling from wastewater treatment plants, Steve confirmed that while the agency hasn't done extensive sampling, a project with the university is underway to evaluate PFAS in influent, effluent, and biosolids from 17 plants. The results of this study are not yet available

Roundtable: Conjunctive Management

This roundtable discussion, prompted by a question from Teresa Wilhelmsen (Utah), explored the degree of active implementation of conjunctive management—the coordinated use of groundwater and surface water—across various Western states. Michelle Bushman moderated the discussion, and noted that conjunctive management may take place along a spectrum. At one end may be states that recognize the interconnectedness of groundwater and surface waters, but are constrained by separate laws. In the middle of the spectrum may be states that have begun to merge the management of both resources, through laws or policies or local plans. At the other end of the spectrum may be states that manage groundwater and surface water as a single, fully connected resource.

State-by-State Overview

- **Idaho:** Mat Weaver shared that Idaho is on the single resource end of the spectrum, with a common priority date for surface and groundwater rights across much of the Eastern Snake Plain. A 2007-2008 methodology, which has survived numerous legal challenges, governs this. Recent orders curtailed junior groundwater rights, affecting over 500,000 acres, due to a shortfall of 64,000 acre-feet. This led to a settlement agreement and a renewed mitigation plan.
- **Montana:** Jake Morhmann explained that Montana's permitting process recognizes a statewide connection between groundwater and surface water, a result of legal challenges post-2007. However, the state does not actively regulate this connection after permits are issued, making it difficult for senior surface water users to curtail nearby groundwater users.
- **Oklahoma:** Sara noted that Oklahoma is on the opposite end of the spectrum, with separate laws. Groundwater is considered private property, while surface stream water is public, with no priority relationship between them. While the connection is acknowledged, no action can be taken to manage them conjunctively.
- **Oregon:** Justin Iverson stated that Oregon practices conjunctive management from an allocation standpoint, but rarely regulates groundwater users in response to surface water calls. While they would have previously considered themselves a fully conjunctive management state, he now feels they do very little in terms of active, conjunctive regulation.
- **Utah:** Mark Stratford noted that Utah recognizes all water as public property, which suggests strong conjunctive management, but a lack of data makes this difficult to implement. The state primarily uses groundwater management plans to prevent future overdrafts rather than for true conjunctive management.
- **California:** Joaquin Esquivel highlighted that California is relatively new to this due to the passage of SGMA in 2014. The law requires GSAs to manage for “undesirable results,” including impacts on interconnected surface water. However, data issues and the vastness of the state's basins present ongoing challenges.
- **Kansas:** Earl Lewis mentioned that Kansas is on the single resource end of the spectrum with a system that has recognized both surface and groundwater under the same permitting act since 1945. They manage minimum desirable stream flows, and a recent order shut off over 400 water rights (half of which were groundwater) due to low stream flow.

- **Nebraska:** Jesse Bradley described Nebraska's “integrated management” system, where groundwater rights have no priority. In designated “fully appropriated” basins, junior groundwater users become responsible for all mitigation, which provides a strong incentive for NRDs to proactively manage their basins to avoid this designation.
- **Nevada:** Cathy Erskine stated that Nevada is in the very early stages of conjunctive management, with a recent Supreme Court decision affirming the State Engineer's authority to manage basins conjunctively. However, this is still tied up in court, and stakeholder discussions are ongoing in specific basins like the Humboldt River.
- **Washington:** Matt Rakow explained that Washington's 1971 Water Resources Act mandated conjunctive management, but implementation has varied. While the state considers surface water impacts for new permits, it lacks the authority to regulate between water users unless a basin is adjudicated by a Superior Court.
- **North and South Dakota:** Jennifer Verleger described North Dakota as a fully managed state with public water, pervasive metering, and complex models. In contrast, South Dakota lacks metering and data, and its two water quality monitoring networks are managed by different groups.

Common Challenges and Opportunities

- **Data Deficiencies:** Several states, including California, Utah, and South Dakota, identified a lack of data on groundwater-surface water interaction as a major barrier to effective management.
- **Litigation and Collaboration:** In Idaho, extensive litigation ultimately led to collaborative settlement agreements. Jerry noted that despite the conflicts, stakeholders generally work cordially to find solutions.
- **Political Will:** Mat Weaver from Idaho mentioned that having strong political support from the governor's office was crucial for the initial implementation of large-scale curtailment.
- **Federal Legislation:** Paula Cutillo raised a question about the proposed Water Rights Protection Act, which would prevent federal agencies from recognizing a groundwater-surface water connection unless state law does. She noted that this seems to run counter to the direction many states are heading.
- **Domestic Exemptions:** Jerry highlighted a growing issue in Idaho where the cumulative impacts of many small domestic wells are becoming significant, suggesting that homeowners will eventually need to contribute to mitigation efforts. Montana, Washington, and Oregon are facing similar challenges.
- **Metering:** North Dakota and Nebraska noted the importance of metering, which is a key part of their successful management, but is often a contentious and difficult topic in other states.
- **Groundwater report:** Tony mentioned a New York Times article that criticized states for not adequately managing groundwater, suggesting that updating a report on state efforts could provide a better understanding of the challenges and solutions being pursued.

Roundtable: Aquifer Science

This roundtable discussion focused on the current state of aquifer science across various Western states. The conversation highlighted the critical role of data, modeling, and communication in managing water resources.

Current Scientific Methods and Tools

- **Integrated Hydrologic Modeling:** Montana is heavily investing in integrated hydrologic modeling, a shift from having hydrologists focused on individual permits to a unified team working on a single, comprehensive model. Similarly, Idaho, after using multiple models in the past, now collaborates on a single model to ensure all stakeholders are invested in the process.
- **Aerial Electromagnetic (AEM) Mapping:** Kansas and North Dakota are using AEM mapping to get a more accurate understanding of their subsurface geology. Kansas plans to expand this statewide, and North Dakota has conducted multiple flights over the last five to seven years.
- **Geomagnetic Resistance Mapping:** California is using this technology to characterize groundwater basins and identify areas with high recharge potential.
- **Data Consolidation and Access:** Nebraska, with its 23 NRDs, is committed to investing in data, including a recent $25 million investment in resistivity surveys. Oklahoma is focused on making its statewide water monitoring network data publicly accessible through its "Oklahoma Hydro Net" project.
- **Satellite and Remote Sensing Tools:** Nevada is working to scale a new tool called Climate Engine, which provides access to satellite and remote sensing data to streamline reporting and analysis for users.
- **Downhole Geophysical Tools:** Oregon has invested in advanced downhole tools like electromagnetic flow meters to precisely measure flow in wells. This has led to a tighter definition of "commingling wells" and, in some cases, more complex regulatory challenges.

Confidence, Gaps, and Challenges

While all states acknowledge that models and science are imperfect, many expressed a growing confidence in their ability to understand their aquifers. Kansas noted that 30 years of consistent metering and monitoring data have been transformative in building public trust and making informed decisions.

- **Data Gaps:**
    - **Data Interoperability:** California and Nebraska highlighted the challenge of making better use of existing data, which is often siloed and in different formats.
    - **Monitoring Networks:** Washington and South Dakota lack comprehensive, telemetered monitoring networks, relying on seasonal or less frequent measurements. This creates significant data gaps, especially in areas with high irrigation use.
    - **Groundwater Quality Data:** Arizona and Oregon both noted a lack of consolidated, statewide groundwater quality data, making it difficult to identify and address contaminant issues on a global scale.
- **Gaps to Prioritize:**

    - **Decision Support Tools:** California and Kansas want to prioritize developing user-friendly decision support tools and "digital twins" to help managers test hypotheses and make data-driven decisions.
    - **Data Consolidation:** Trevor from Arizona wants to prioritize creating a consolidated, statewide view of contaminant issues.
    - **Groundwater-Surface Water Interactions:** The complexity of characterizing perennial stream connections remains a challenge for Nebraska's conjunctive management efforts.

Public Communication and Trust

- **Building Public Trust:** Earl from Kansas emphasized that it took 10 years of consistent data presentation to build public trust in metering data.
- **Effective Communication:** Montana and Oregon recognized a need to improve their public communication efforts. Montana is hiring marketing and communication staff to translate technical data into easily understandable information, and Oregon found that concepts like groundwater age-dating are highly effective for public engagement.
- **Transparency:** Oklahoma's focus on making data publicly accessible through its Oklahoma Hydro Net aims to help communities plan and make informed decisions.

Funding and Collaboration

- **Funding is Key:** Oklahoma noted that funding is a critical factor for conducting aquifer studies and determining maximum annual yield.
- **Collaborative Models:** The Snake River Aquifer, the Republican River Basin, and the Upper Colorado River Basin were all cited as examples where collaboration on a single model was crucial for moving past litigation and making progress.
- **Partnerships:** Idaho and Washington rely on partnerships with organizations like the USGS and Bureau of Reclamation for model development and monitoring, often on a cost-share basis.
- **Innovation:** Nevada's Climate Engine tool, developed by the Desert Research Institute, shows how collaboration with universities can lead to innovative tools that improve data access and understanding.

Peer Review of State-Produced Scientific Reports

- **The Challenge:** Oregon raised a concern about a growing trend in legal disputes where consultants publish their conceptual models in peer-reviewed journals to lend them more credibility, while state reports, which are internally reviewed, are not held to the same standard.
- **Potential Solutions:** The discussion acknowledged this challenge in other states, and Michelle raised the question of whether states could potentially peer-review each other's reports. However, she noted that this might not be a perfect solution due to differences in state hydrogeology and models.

Water Quality and Aquifer Recharge in California

Jennifer Carr (Nevada) posed a question to Joaquin (California) about the tension between California's urgent need for aquifer recharge (driven by drought and flood cycles) and the

challenge of maintaining water quality, where contaminants could persist in aquifers for long periods. Joaquin explained that California is actively balancing these competing needs through a combination of policy and regulation:

- **Streamlined Permitting:** In 2017, California created temporary groundwater recharge permits, which simplify the process and allow for a less extensive environmental review during high-flow events. This program authorized 1.2 million acre-feet of recharge in 2023.
- **Flood Flow Diversion:** An executive order, now codified in legislation, allows water to be diverted from rivers during flood stage for recharge without a water rights permit.
- **Water Quality Protections:** To mitigate water quality risks, these flood permits come with protections, such as restrictions on recharging on lands with recent pesticide or fertilizer applications. Consultation with Regional Water Quality Control Boards is also integrated into the process.
- **Data and Monitoring:** Joaquin acknowledged a significant data gap regarding ambient groundwater monitoring and post-recharge water quality impacts. Preliminary data, however, suggests that in some cases, recharge can "freshen" groundwater.
- **Balancing Act:** The goal is to develop better tools and incentives to guide recharge to suitable locations. Joaquin emphasized that, for now, balancing water quantity and quality is largely a project-specific effort due to data limitations.

Next Steps

This final discussion centered on future plans for the WSWC groundwater workshops and webinars. The feedback highlighted a strong desire for continued collaboration, opportunities for deeper dives into specific topics, and the creation of resources that facilitate peer learning and inform policy-making.

Forum Format and Frequency

- **Value of In-Person Meetings:** While the full-day format was long, participants consistently expressed appreciation for the opportunity to meet people from other states and hear about their unique challenges and successes.
- **Future Options:** The WSWC has an open slot for a potential in-person groundwater workshop at its Fall meetings in San Pedro, California. Online webinars, both presentation-style and discussion-based, were also suggested as a viable option.
- **Integrating into Council Meetings:** There was a suggestion to integrate more dedicated roundtable time into regular council meetings to avoid the need for separate, full-day workshops, as the current discussions often feel rushed.

Proposed Future Topics

- **Exempt Wells:** Justin (Oregon) and Trevor (Montana) specifically mentioned that a deeper dive into the various types of exempt uses and how different states are managing them would be highly beneficial. This topic is particularly relevant in areas experiencing rapid population growth.
- **Groundwater Management Districts:** Julie (Oklahoma) expressed a strong interest in learning about the structure and function of groundwater management districts in other states, as Oklahoma is facing challenges in defining boundaries and is looking for models to inform its legislature and agricultural groups.
- **"Gnarly and Hard" Issues:** Jennifer (Oregon) and Earl (Kansas) suggested focusing on specific, challenging problems that other states may have already solved. This could involve deep dives into topics like metering, policy strategies, or scientific approaches that have worked.
- **General Open Updates:** Justin also appreciated the general updates and suggested that a forum for these, perhaps at a different time, would still be valuable.

Opportunities and Resources for the Future

- **WSWC as a Resource:** The discussion highlighted the WSWC's potential to serve as a central repository for state-specific information.
- **Compendium of State Efforts:** Joaquin (California) proposed creating a compendium or report for Western states, similar to an ECOS report on PFAS, that details where each state stands on its groundwater journey. This would provide a standardized, consolidated resource for legislatures and governors, showing them what other states are doing and providing a basis for advocating for change. Jennifer (South Dakota) mentioned a report she is working on with Michelle that details the structure of water appropriation divisions in each state, which will be a valuable resource for newer members. We should continue to create these reports, documenting similarities and differences in state water practices.

- **Catalyst for Change:** Tony and Joaquin noted that having this information readily available can be a catalyst for change. It can empower legislatures to question why they lack certain authorities and push for more active groundwater management, as seen in a recent Texas Senate Committee hearing.
- **Peer Learning:** Jerry (Idaho) and Jennifer (South Dakota) emphasized the high value of peer learning and roundtable discussions, especially with the turnover of state employees. They stressed that these opportunities should not be allowed to die, as they are crucial for providing new members with historical context and for all members to learn from each other's successes and failures.

Appendix A: Workshop Agenda

WSWC Groundwater Workshop

Lincoln, Nebraska
April 22, 2025

8:00 am	Welcome and Introductions
8:15 am	**Roundtable Discussion: Big Picture Challenges and Opportunities**
9:00 am	**Groundwater Allocation** Oregon Groundwater Allocation Rules – Justin Iverson, Groundwater Section Manager, Oregon Water Resources Department
9:45 am	**Aquifer Monitoring** Nebraska Groundwater Models – Jesse Bradley, Interim Director of Nebraska Departments of Natural Resources and Environment & Energy
10:30 am	**Groundwater Sustainability** California Sustainable Groundwater Management Act (SGMA) – Jeanine Jones, Interstate Resources Manager, California Department of Water Resources
11:15 am	**Protecting Groundwater Quality** Oregon – Jennifer Wigal
12:00 pm	Lunch Buffet
1:00 pm	**Aquifer Mitigation** Mitigation Banking in Montana – Transitioning seasonal senior water rights to year-round mitigation credits through managed aquifer recharge – Jake Morhmann, Bureau Chief, Montana Department of Natural Resources and Conservation
1:45 pm	**Groundwater Quality** Nebraska – Steve Goans, Deputy Director, Water Programs, and Hillary Stoll, Engineering Section, Nebraska Department of Environment and Energy
2:30 pm	**Roundtable Discussion on Conjunctive Management: Recent Developments, Challenges, and Opportunities**
3:15 pm	**Roundtable Discussion on Aquifer Science: Recent Developments, Challenges, and Opportunities**
4:00 pm	**Discussion: Thoughts, Next Steps**
4:30 pm	Adjourn

Appendix B: Workshop Questions

- How are states managing groundwater across jurisdictional boundaries?
- How are states managing overallocated groundwater basins?
- How are states addressing variability in aquifers across the state?
- Who is investing in aquifer science?
- Who is using their own models, academic models, USGS models? How robust/reliable are the models for meaningful decisionmaking purposes?
- Who is metering and reporting groundwater use, and how well is that working?
- What other tools are states using to monitor, manage, or report on groundwater quality and water supply? How well does the state/public trust these tools to be accurate?
- Which states are actively managing groundwater and surface water conjunctively (e.g., as a single source of hydrologically connected water)? What does that look like?
- Do other states have exempt groundwater uses that were presumed *de minimis* at the time of authorization as exempt, but are having a cumulative impact on senior water rights?
- What administrative tools are states using to manage groundwater?
- How are states handling local cooperative shortage sharing agreements?
- How involved are states in creating an environment where groundwater users can work together to solve challenges in their basin?
- Which states are collaborating with neighboring states to manage shared groundwater resources?
- For states curtailing groundwater pumping for senior water rights, how are they managing the timing given the delay for the cone of depression to recover? Or managing the timing considering seasonal vs. year-round uses?
- How are states engaging with the public on groundwater policies, education, groundwater protection and conservation, etc.?
- How are states dealing with nitrates and other contaminants (geologic or anthropogenic)?
- How has the *Maui* decision impacted water quality management?

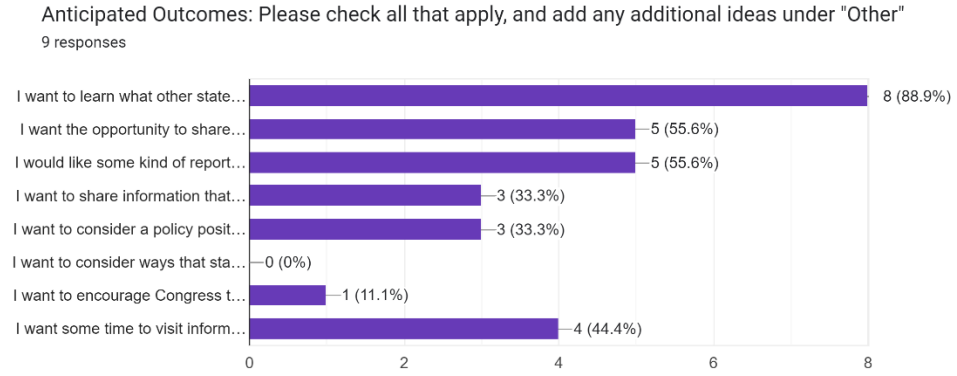
Appendix C: Workshop Participants

Trevor Baggiore, Director, Arizona Water Quality Division
Joaquin Esquivel, Chair, California State Water Resources Control Board
Jeanine Jones, Interstate Resources Manager, California Department of Water Resources
Jerry Rigby, Idaho Council Member, Rigby, Andrus & Rigby Law, PLLC
Mathew Weaver, Director, Idaho Department of Water Resources
Earl Lewis, Chief Engineer, Kansas Department of Agriculture, Department of Water Resources
Trevor Watson, Water Resources Deputy Division Administrator, Montana Dept. of Nat. Resources & Conservation
Jesse Bradley, Interim Director, Nebraska Department of Natural Resources
Steven Goans, Deputy Director, Nebraska Department of Environment and Energy
Justin Lavene, Assistant Attorney General, Nebraska Attorney General's Office
Tom Riley, Owner, Riley Consulting LLC
Cathy Erskine, Senior Policy Advisor, Nevada Department of Conservation and Natural Resources
Jennifer Carr, Administrator, Nevada Division of Environmental Protection
Hannah Singlton, Southern Nevada Water Authority
Patrick Fridgen, Director Planning and Education, North Dakota Department of Water Resources
Julie Cunningham, Executive Director, Oklahoma Water Resources Board
Sara Gibson, General Counsel, Oklahoma Water Resources Board
Jennifer Wigal, Water Quality Program Manager, Oregon Department of Environmental Quality
Justin Iverson, Groundwater Section Manager, Oregon Water Resources Department
Nakaila Steen, Natural Resources Engineer II, South Dakota DANR
Mark Stratford, Legal Counsel, Utah Division of Water Rights
Leslie Connelly, Manager, Water Quality Program Strategic Planning, Washing Department of Ecology
Matt Rakow, Washington Department of Ecology
Tony Willardson, WSWC Staff
Michelle Bushman, WSWC Staff
Christopher Carlson, USFS
Lauren Dempsey, USAF
Paula Cutillo, BLM

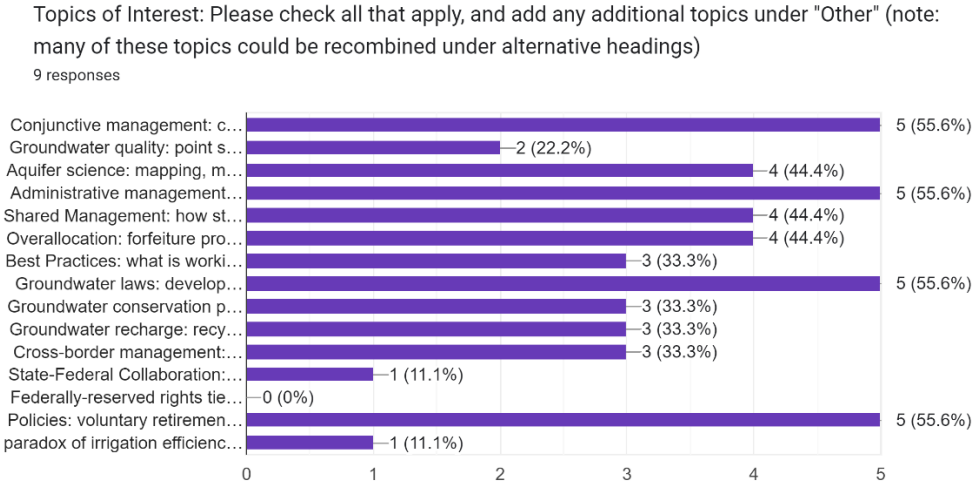
Appendix D: Groundwater Workshop Subcommittee Survey Results (Summer 2024)

Topics and Outcomes

The Subcommittee's primary interest in the workshop is overwhelmingly for states to share information with each other and to have some time to visit informally with each other. There is some interest in generating a report from the workshop, in considering a policy position, in using information from the workshop to help educate the public/federal government about what states are doing, and in encouraging Congress to fully fund existing programs that are useful in addressing challenges.



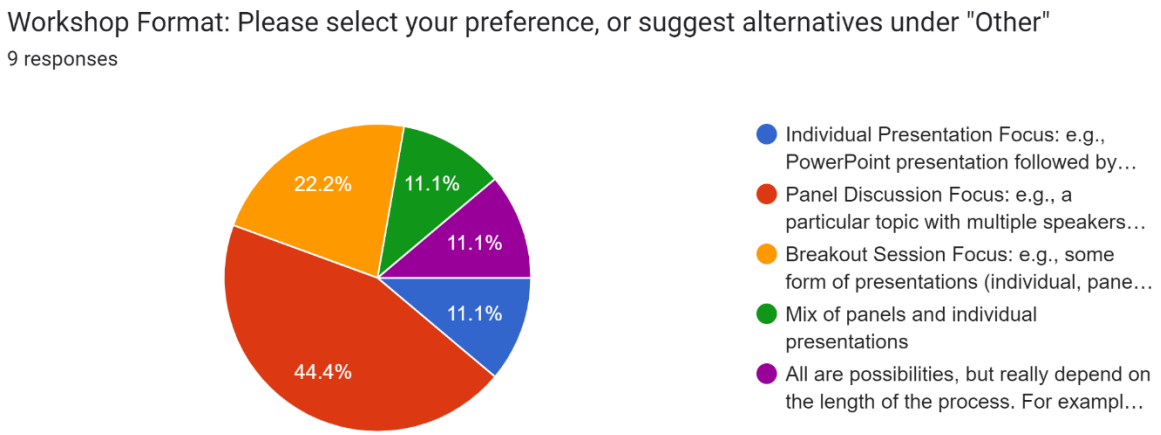
The most popular topics from the Subcommittee are: (1) **Conjunctive management**: challenges, developments, successes, curtailments, agreements; (2) **Administrative management areas**: reporting, assessments and decisionmaking, permit moratoria, closed basins, intentional mining, subsidence, recovery; (3) **Groundwater laws**: developments in state legislation, court decisions, new implementation of old laws; (4) **Policies**: voluntary retirement of rights, conservation programs, nonpoint source reduction programs, management through drought; (5) **Aquifer science**: mapping, monitoring, modeling, funding; (6) **Shared Management**: how state and local entities share groundwater management responsibilities; and (7) **Overallocation**: forfeiture procedures, unused paper rights, domestic wells, seasonal ag converted to annual housing developments.[1]



Duration and Format

[1] This is a large number of topics for one workshop. We may wish to hold a second in-person workshop, or move some of these topics to a virtual webinar series.

Most of the Subcommittee members felt that the workshop deserved a full day or multiple workshops/webinars to maximize the benefits to the states. There were mixed results on the preferred format, and it might depend on the topic and speaker(s); for example, some presentations may be better on an individual basis, while discussions/comparisons between states (e.g., a discussion of "best practices" or perspectives on a shared issue) might work better with a panel.



There was some interest in holding breakout group discussions. We might hold a breakout session to do a deeper dive into a particular topic/issue, to consider language or principles for updating WSWC policies/new policies, or to discuss topics to highlight in a report.

There was also interest having some time for informal discussions. We might incorporate some breaks between sessions, or plan a shared lunch to facilitate time for conversations.

Potential Webinar Series

It may be appropriate to host some individual presentations via Zoom recordings[2] either before or after the meeting for some of the topics of interest with slightly less support from the Subcommittee, but likely still of interest to the broader group: (1) **Groundwater conservation programs**: funding, policies, personnel, challenges, *and the paradox of irrigation efficiencies that lead to greater consumptive use*; (2) **Groundwater recharge**: recycled water, land application, injection wells, storage, recovery, water rights accounting, water quality oversight; (3) **Cross-border management**: how states, local entities, tribes, etc. manage groundwater across jurisdictional boundaries; (4) **Best Practices**: what is working well, what is not; and (5) **Groundwater quality**: point source and nonpoint source pollutants, state protections, programs, domestic wells.[3] These recordings could be posted to our website for later sharing and viewing, similar to our WestFAST series of webinars.

[2] These can be posted to our website for future sharing and viewing.

[3] Notably, this Subcommittee was assembled in the Legal Committee and did not initially include Water Quality Committee members; we may want to intentionally do more outreach to the Water Quality Committee and elevate this as part of the in-person workshop to incorporate both quality and quantity folks in the discussion.

Appendix E: Summary of Subcommittee Workshop Recommendations

WSWC Groundwater Workshop Planning Calls
September 6th and 11th, 2024

Subcommittee Participants
Jeanine Jones (CA)
Mathew Weaver (ID)
Anne Pakenham Stevenson (MT)
Jesse Bradley (NE)
Justin Lavene (NE)
Melissa Flatley (NV)
Raquel Rancier (OR)
Annette Liebe (OR)
Jennifer Wigal (OR)
Jennifer Zygmunt (WY)

Summary of Workshop Recommendations

Information sharing prior to the workshop - Would like a draft report ahead of the workshop to identify some things WSWC already knows, and a survey to fill in some of the gaps. We can't cover everything at the workshop, but it would be great to be able to reference information beyond what is on the agenda as states communicate with each other. A summary of this survey/report could be the starting panel at the workshop.

Conjunctive Management – Which states are actively managing surface water and groundwater conjunctively? What does that look like? Curtailments to protect senior water rights? Treating groundwater and surface water as a single source, including for hydrologic basin water budgets and managed aquifer recharge? What is working and what isn't? What administrative tools are states using? What reliable technical information is available, with analysis to support using it?

Aquifer Science – Would prefer a targeted discussion rather than just a grab bag of tools. Who is investing in the science?

Modeling Aquifers – What modeling efforts are states undertaking? What decisions can those models support? How are states gathering enough data to determine what the aquifer's safe yield is? Are they mostly just estimates? Which states are using their own models, academic models, or USGS models?

Water quantity allocations – What are states already doing in terms of new permit/water right constraints? Who is metering/reporting groundwater use, and how has that worked (or not)? How are states handling the timing of groundwater curtailments given the delay for the cone of depression to recover and the impacts that response time has on other water users?

Policy – What statutes, regulations, or other information guides the state engineer or water resource manager when adopting groundwater management plans? What motivates water users in a hydrologic basin to work together cooperatively to address water shortage realities?

Water quality – How are states are dealing with nitrates, nitrogen in groundwater? Particularly with increased development in rural areas facing wastewater challenges, or in areas coping with non-point source fertilizer. GWPC is focused on best practices for UIC programs, but it would be good to hear what they are doing. *Maui* groundwater panel/webinar would be helpful to hear how other states are managing.

Federal water quality resources – would like to educate federal agencies more on what states are doing, highlight in a report the state authorities and activities, and show where federal resources could best support and elevate these state efforts.

Potential speakers –

- Oregon could find speakers to talk about groundwater management, curtailment, and water quality issues
- California could find a speaker to talk about SGMA implementation; the California DWR also released a recorded webinar to help Groundwater Sustainability Agencies address the depletion of interconnected surface water in their Groundwater Sustainability Plans
- Dan Yates, National Ground Water Protection Council
- Rich Niswonger USGS HQ Science Center ("best practices" on modeling aquifers from USGS perspective)
- Jesse Bradely noted that Nebraska has good lessons to share on their extensive network of groundwater models, policies and strategies on long-term sustainability, management pool, examples where water users work together (and some that don't)

Tab M – WSWC-NARF Indian Water Rights Symposium

WATER RIGHTS **August 15, 2025**
Symposium on the Settlement of Reserved Indian Water Rights Claims **Special Report #2674**

On August 6, the Native American Rights Fund (NARF) and WSWC virtually hosted the 19th Biennial Symposium on the Settlement of Reserved Indian Water Rights Claims. The Symposium provided an overview of the complex and multifaceted processes leading to Indian water rights settlements. The speakers covered historical context, federal policy, tribal experiences, negotiation strategies, legislative hurdles, and implementation challenges, highlighting the enduring collaborative efforts and difficulties in achieving these agreements that are critical to water security across the West.

Introductory Remarks

The symposium commenced with introductory remarks from John Echohawk, Executive Director of NARF, and Tony Willardson, Executive Director of WSWC, setting a tone of collaborative commitment. Both speakers underscored the shared purpose and enduring partnership between tribal organizations, state entities, and federal agencies in addressing critical water resource issues. Echohawk emphasized the long-standing importance of water rights for tribes, particularly in the arid American West. He recounted the establishment of NARF in 1970 to provide legal assistance to tribes, noting that at the time, many tribes lacked legal representation despite possessing significant rights under treaties, federal Indian law, and U.S. Supreme Court decisions. Past federal policies towards tribes were to ignore them, to force assimilation, and to terminate tribes.

Echohawk highlighted a pivotal shift in federal Indian policy under President Nixon, which began to recognize Indian self-determination, treaties, and sovereignty. This change allowed NARF, in conjunction with the federal government, to assert tribal water rights in litigation. He stressed the unique nature of tribal water rights, often senior and "reserved" for present and future uses with priority dates extending to the establishment of the reservations or even time immemorial. Echohawk described the large-scale litigation necessitated by these claims, which required joining all water users in a basin, capturing the attention of western governors and businesses. This led to the Western Governors Association hosting a meeting in 1981, where a consensus emerged among Tribes and States to pursue settlements as an alternative to protracted and costly litigation. Together they went to Washington, D.C., and the Department of the Interior (DOI) was amendable to establishing the Indian Water Rights Office. Since then, 35 Indian water rights settlements have been passed by Congress, with NARF involved in nine of them. Echohawk noted ongoing negotiations for approximately 20 settlements and about a dozen pending bills in Congress, underscoring the continued relevance and activity in this field. He concluded by affirming NARF's commitment to these issues, noting the Symposium's role since 1991 in reviewing progress and educating various federal, state, and tribal stakeholders.

Willardson noted the WSWC's 60th anniversary. The WSWC, now representing 18 States, was created by Western Governors to advise them on water policy. He underscored the WSWC's mission to ensure adequate and suitable water supplies for the West's present and future economic and environmental needs. Willardson paid tribute to his predecessor, Craig Bell, who, along with John Echohawk, laid the groundwork for the partnership between NARF and WSWC. This symposium marked Willardson's last as Executive Director, as he was set to retire at the end of the month. Willardson shared a personal anecdote about his great-great-grandfather, William Lee, who mediated between native peoples and pioneers in Utah, emphasizing the historical significance of communication, trust-building, and shared resource management in the West. He drew parallels to contemporary challenges of drought and water scarcity. "Today we face many challenges as sovereign Nations and States, as stewards of the land and of the waters and leaders of our people. Drought and lack of rain and snow exacerbates these challenges and threatens our ways of life. We're gathered from all over the West, though remotely, to talk, to communicate our wants and needs, to build trust, and to work together towards a better future for our people."

The Federal Settlement Process

Next, Sarah LeFlore, Acting Director of the Secretary's Indian Water Rights Office, and Karen Budd-Falen, Advisor in the Office of the U.S. Secretary of the Interior, provided an overview of the federal approach to Indian water rights settlements. LeFlore detailed the "settlement era" that began in the 1970s, driven by the inefficiencies of litigation. She noted that 39 settlements have been completed by DOI, with 35 enacted by Congress and four approved by the Administration. Settlements often evolve from general state stream adjudications and typically involve multiple parties, though the level of state participation varies. California's state government is generally not a party, while Montana compacts involve only the State, Tribe, and federal government. Other States, like Arizona and New Mexico, see extensive party involvement, including irrigation districts, municipalities, and other governmental entities.

Incentives for settlement include the senior priority of tribal water rights, which can cloud title for non-Indian users, who may participate to gain greater certainty for the future of their existing water uses and avoid priority calls in times of water scarcity. Settlements provide the opportunity for Tribes to secure water and necessary infrastructure. The federal government's participation stems from its trust responsibility and government-to-government relationship with Tribes, as well as a general desire for dispute resolution.

LeFlore stressed that Tribes take the lead role in negotiations, with the federal government following their direction. The Interior Department provides technical and financial assistance through the Bureau of Indian Affairs (BIA) and Bureau of Reclamation (Reclamation). Changes in tribal, state, and federal administrations can cause delays. Tribal communication with their membership is also crucial, especially where ratification by vote is required. Settlements with broad commitment from all stakeholders are more likely to be approved by the Secretary's office. An "agreement in principle" is usually reached before federal legislative approval is sought, which often requires multiple introductions of bills in Congress before enactment.

The federal settlement process is coordinated by the Working Group on Indian Water Rights Settlements, established in 1989, and the Secretary's Indian Water Rights Office (SIWRO). SIWRO was formally established within the Secretary's office in 2009 when the DOI manual was updated, but it has existed since the early 1990s. SIWRO coordinates policy issues across departmental bureaus, works closely with the Solicitor's Office, and signals the importance of settlements to the department as a whole. They receive policy direction from the Chair of the Working Group. LeFlore provided an update on SIWRO staff, noting the recent retirement of the former SIWRO Director Pam Williams and highlighting their small but dedicated team.

Federal settlement teams are established upon tribal request, considering ten factors like existing adjudications, urgency, and party commitment. These teams, comprising representatives from BIA, Reclamation, the Solicitor's Office, and the Department of Justice (DOJ), are the primary mechanism for day-to-day negotiations. Currently, there are 45 teams with 19 implementing enacted settlements, 4 negotiating, and 4 assessing potential settlements. The federal legislative approval process involves the Working Group establishing negotiation positions and SIWRO assisting in drafting legislation. Departmental testimony, cleared by the Office of Management and Budget, marks the first official federal position. Factors influencing legislative success include congressional delegation leadership, stakeholder involvement, water supply availability, and politics.

LeFlore distinguished between project-based settlements, which involve specific infrastructure construction (e.g., Navajo-Gallup Project), and fund-based settlements, which establish trust funds for Tribes to develop water infrastructure (e.g., Navajo Utah). While project-based settlements face challenges like cost overruns and lack flexibility to adapt over time, fund-based settlements are generally preferred by DOI where appropriate due to the greater federal certainty, though the department will not force this model on Tribes. Some Tribes prefer the flexibility of fund-based settlements, allowing them to control their destiny in terms of water development and potentially participate in water markets. Some pending settlements use a hybrid approach. Settlement costs vary widely, with federal funding predominating. Funding mechanisms include discretionary appropriations (BIA for trust funds, Reclamation for infrastructure), mandatory funding (in some settlements and all pending ones), the 2009 Reclamation Water Settlement Fund, and the 2021 Indian Water Rights Completion Fund (which provided $2.5 billion but is now expended). LeFlore also highlighted emerging trends, including a slowdown in Arizona settlements due to Central Arizona Project water limitations, and increased settlement activity in New Mexico, along with amendments to enacted settlements for increased funding in the face of inflation or modified uses.

Budd-Falen, who chairs the Working Group on Indian Water Rights Settlements, emphasized the Secretary's commitment to supporting settlements and encouraged parties to be creative and inclusive and develop broad stakeholder buy-in. She encouraged realistic feasibility studies for project-based settlements to ensure cost accuracy and reduce future overruns, and encouraged fund-based settlements where appropriate. She noted the unique nature of each Tribe and settlement.

The Federal Settlement Process: A Tribal Perspective

Bidtah Becker, Chief Legal Counsel for the Navajo Nation, and Wes Williams, Jr., General Counsel for the Walker River Paiute Tribe, offered tribal perspectives on water rights settlements, highlighting historical context, generational shifts, and the complexities of negotiation. Becker shared her experiences with the Navajo Nation's protracted water rights claims, emphasizing the generational nature of these efforts. She noted the shift from litigation to settlement, a path encouraged by figures like John Echohawk and supported by the federal government's trust responsibility. Becker highlighted the long history of Navajo's water claims, spanning nearly 50 years for some adjudications. She underscored the importance of tribal leadership in negotiations and the need for continuous communication with tribal members, especially when settlements require ratification. Becker discussed the Navajo Nation's move towards a hybrid settlement model that includes both project-based components, like the Navajo-Gallup Water Supply Project, which delivered clean drinking water during COVID-19, and fund-based components for future water acquisition in the lower basin. She stressed that while

project-based settlements deliver tangible infrastructure, fund-based settlements offer flexibility and allow Tribes to participate in water markets, securing resources from willing sellers. Becker also noted the increasing costs of settlements over time, arguing that upfront investment is more cost-effective than prolonged litigation. She emphasized the importance of the federal commitment to these agreements, drawing a contrast with the historical underfunding of services like the Indian Health Service.

Williams recounted the Walker River Paiute Tribe's nearly 30-year journey to settle parts of the Walker River Decree, a case initiated in 1924. He detailed the Tribe's senior water rights (1859 priority date) and their crucial claim for a recognized right to store water in Weber Reservoir. Williams explained the extensive challenges of serving defendants and the numerous, often unsuccessful, settlement attempts over the years, often derailed by broader, contentious issues like the declining Walker Lake. He highlighted a turning point when the federal court, after initially dismissing the Tribe's claims, reversed course and ruled in the Tribe's favor on numerous affirmative defenses, eliminating obstacles that had long plagued negotiations. This legal clarity ultimately opened the door for successful settlement discussions in 2024. Both Becker and Williams underscored the unique circumstances of each Tribe, the resilience required in negotiations, and the profound impact of water settlements on tribal self-determination and community well-being.

Negotiation and Settlement of Indian Water Rights Claims

This session, moderated by Alice E. Walker, featured perspectives from Grace Rebling, an attorney with Osborn Maledon; Fred Lomayesva, General Counsel for the Hopi Tribe; Jay Weiner, an Administrative Law Judge with the Montana Department of Natural Resources and Conservation; Guss Guarino and Marisa J. Hazell, Trial Attorneys from the DOJ Tribal Resources Section/Environment and Natural Resources Division. Rebling and Lomayesva provided insights into the Hopi Tribe's long-standing efforts toward the settlement of their reserved water rights claims. Lomayesva emphasized the cultural and existential importance of water for the Hopi people, whose traditions are deeply tied to water scarcity in their arid lands. He detailed the Tribe's engagement in the Northeastern Arizona Indian Water Rights Settlement Act (NAWSA), highlighting the arduous, multi-generational negotiation process that involved not only federal and state entities but also other tribal nations like the Navajo and San Juan Southern Paiute. Rebling spoke to the intricate legal and technical challenges, including the quantification of rights and the development of infrastructure plans, emphasizing the need for flexibility and adaptability in negotiations given changing environmental conditions and evolving federal policies.

Weiner offered a state perspective, specifically on Montana's successful compacting process. He explained how Montana's Water Use Act of 1973 set up a framework for negotiating and codifying Indian water rights through compacts, which are then ratified by the State Legislature and Congress. Weiner highlighted the importance of a dedicated state commission (e.g., Montana's Reserved Water Rights Compact Commission) that maintains institutional knowledge and fosters consistent engagement with Tribes, developing trust and streamlining negotiations. He cited the Confederated Salish and Kootenai Tribes (CSKT) settlement as a prime example of a successful, comprehensive compact that addressed not only water rights but also land transfers and funding for infrastructure.

Guarino emphasized the DOJ's responsibility in protecting tribal trust resources through litigation where necessary, but also actively supporting and participating in settlement negotiations as a preferred alternative. Hazell elaborated on the intricate legal review process within the DOJ, ensuring that proposed settlements align with federal law, policy, and the government's trust responsibility. Both underscored the need for comprehensive agreements that address legal certainty, provide for infrastructure development, and secure appropriate federal contributions, acknowledging the significant financial and legal complexities involved in bringing these settlements to fruition. The discussion collectively highlighted the long-term commitment, intergovernmental collaboration, and adaptability required to navigate the challenging landscape of Indian water rights settlements.

Settlement Legislation: Getting Bills Through Congress

Tanya Trujillo, Deputy State Engineer for the New Mexico Office of the State Engineer, moderated a discussion on the intricate process of shepherding Indian water rights settlement bills through Congress, featuring insights from congressional staff Darren Modzelewski, Counsel for the Senate Committee on Indian Affairs (minority), and Qay-Liwh Ammon, Professional Staff for the House Committee on Natural Resources (minority). Ammon started with a House perspective. She explained that the House Committee on Natural Resources is the main committee of jurisdiction, with its Subcommittee on Water, Wildlife, and Fisheries often taking the lead. Ammon reiterated the importance of clear, concise communication about the bill's benefits, both for the tribes and for regional stability. She noted that the House, with its larger membership, presents different challenges and opportunities for building coalitions. Ammon emphasized the need for persistence, as bills often take multiple congressional sessions to pass. She also spoke about the importance of demonstrating local support for the settlement, including endorsements from state and local governments, and non-tribal water users, which signals to members that the bill addresses a broad constituency.

Modzelewski offered a detailed look at the Senate side. He emphasized that the Senate Committee on Indian Affairs serves as the primary committee for these bills, though other committees like Energy and Natural Resources, and even

Appropriations, might have jurisdiction depending on the bill's specifics. Modzelewski highlighted the importance of bipartisan support, especially in a divided Congress, noting that a single Senator's objection can significantly impede progress. He stressed the need for strong advocacy from tribal leadership and state partners to educate and persuade members of Congress and their staff. He also pointed out the critical role of the Congressional Budget Office (CBO) in scoring bills, as their cost estimates heavily influence legislative viability. Modzelewski underscored that "no surprises" is a key principle for congressional staff and members — they prefer to be fully informed about a bill's implications, particularly its financial and legal aspects, to avoid unexpected issues that could derail its passage.

Both Modzelewski and Ammon agreed that successful legislative efforts hinge on proactive engagement with congressional offices, thorough preparation of supporting materials, and a unified front from all stakeholders. They highlighted the competitive nature of the legislative calendar and the need for a compelling narrative that resonates with a wide range of congressional priorities. The discussion underscored that while the path through Congress is fraught with political and procedural hurdles, consistent effort and broad-based support significantly increase the likelihood of success for Indian water rights settlement bills.

Settlement Legislation: Tribal Perspectives

Daniel Cordalis, Staff Attorney at NARF, moderated a session on tribal perspectives regarding the legislative process for water rights settlements, featuring insights from the legal counsel for various Tribes, including Ryan Smith, Shareholder at Brownstein Hyatt Farber Schreck; Ryan Rusche, attorney with Sonosky Chambers Perry & Sachse; and John Bezdek, Shareholder at Water and Power Law Group PC.

Smith, who serves as counsel for the Navajo Nation, discussed the unique challenges faced by large, multi-state Tribes like the Navajo Nation in advancing settlement legislation. He emphasized the sheer scale of the Navajo Nation's claims, which span multiple States and river basins, requiring a comprehensive legislative approach that can accommodate diverse regional interests. Smith highlighted the necessity of consistent and coordinated engagement with a wide array of congressional delegations and committees, often across different House and Senate chambers. He also touched upon the complexities of internal tribal processes, including extensive consultation with chapters and leadership, which are crucial for building consensus and securing tribal ratification — a prerequisite for congressional action.

Rusche, representing the Confederated Salish and Kootenai Tribes (CSKT), offered insights from a Tribe that has successfully navigated the legislative process. He underscored the importance of strong, unified tribal leadership and a clear, well-articulated vision for the settlement. Rusche detailed how CSKT's long-standing relationship with its congressional delegation and effective public outreach helped build broad support. He also emphasized the significance of a comprehensive compact that addressed not only water rights but also other key tribal priorities, like land transfers and funding for resource management, which allowed for a more compelling legislative package. Rusche noted that even after successful passage, continued engagement with Congress is essential for securing implementation funding and addressing any unforeseen issues.

Bezdek, counsel for the Colorado River Indian Tribes (CRIT), provided a perspective rooted in the highly complex and often contentious Colorado River Basin. Bezdek highlighted the challenges of negotiating and legislating in an environment where water scarcity is paramount and competing interests are intense. He stressed the importance of carefully quantifying tribal water rights and demonstrating how a settlement can contribute to overall basin stability rather than exacerbating existing tensions. Bezdek emphasized the need for Tribes to be proactive in shaping the legislative narrative and to build alliances with other basin stakeholders, including States and water users, to present a unified front to Congress. He also discussed the strategic considerations involved in timing legislative pushes, recognizing that the broader political climate and ongoing river negotiations can significantly impact a bill's chances of success.

Collectively, the panelists underscored that tribal success in Congress for water rights settlements relies on sustained advocacy, adaptability to the political landscape, robust internal tribal consensus, and the ability to forge strategic alliances with diverse stakeholders.

Implementation of Indian Water Rights Settlements

The final session of the symposium, moderated by Phillip Perez, Chairman of the Northern Pueblos Tributary Water Rights Association, discussed the critical implementation phase of Indian water rights settlements after congressional authorization. The panel featured Pueblo representatives Ryan Swazo-Hinds, Environmental Biologist, Pueblo of Tesuque; Jeff Montoya, Development Department Specialist, Pueblo of Pojoaque; Mike Lujan, Mayordomo, Pueblo of Nambé; Governor Christopher Moquino, Pueblo de San Ildefonso; and Lt. Governor Raymond Martinez, Director, Department of Environmental and Cultural Preservation, Pueblo de San Ildefonso; alongside federal and state perspectives from Jennifer Faler, Albuquerque Area Manager, Bureau of Reclamation; and Tomás Stockton, Technical Liaison, New Mexico Office of the State Engineer.

The Pueblo representatives collectively highlighted the profound impact of the settlements on their communities, emphasizing that implementation goes far beyond mere water delivery. Swazo-Hinds discussed the Pueblo of Tesuque's focus on environmental and cultural preservation, ensuring that the water secured through the settlement supports traditional practices and ecological health. Montoya shared insights from the Pueblo of Pojoaque on economic development opportunities unlocked by a secure water supply, including agricultural revitalization and sustainable community growth. Lujan spoke to the on-the-ground challenges and successes of managing water for traditional irrigation and domestic use in the Pueblo of Nambé, underscoring the importance of community engagement and capacity building in water management. Governor Moquino and Lt. Governor Martinez of the Pueblo de San Ildefonso elaborated on the comprehensive nature of their settlement, which included not only water infrastructure but also provisions for land management and cultural resource protection. They stressed that effective implementation requires ongoing intergovernmental coordination and a deep understanding of tribal sovereignty and traditional ecological knowledge.

From the federal side, Faler provided an overview of Reclamation's role in constructing and maintaining infrastructure components of settlements. She acknowledged the complexities of project management, including navigating permitting, contracting, and unforeseen construction challenges, particularly in remote areas. Faler emphasized Reclamation's commitment to working collaboratively with Tribes and other stakeholders to ensure that projects are completed efficiently and meet the intended objectives.

Stockton offered a state perspective on implementation. He discussed the mechanisms for integrating settled tribal water rights into state water administration systems, including the challenges of modifying existing decrees and managing diverse water user demands. Stockton highlighted the importance of clear communication and technical assistance from the State to ensure a seamless transition to the new water management regime.

The panel acknowledged that implementation is a continuous process requiring sustained funding, adaptive management, and strong partnerships among all parties. It involves translating legal agreements into tangible benefits, addressing unforeseen challenges, and ensuring that the long-term goals of tribal self-determination and water security are met.

Michelle Bushman, Deputy Director and General Counsel of the Western States Water Council, delivered the wrap-up remarks for the Symposium. She highlighted the complexities of settlement negotiations as an alternative to litigation, noting that while paper rights don't always lead to water access, negotiated settlements facilitate tangible infrastructure and "wet water" for Tribes. Settlements provide certainty for both tribal and non-tribal communities, especially during water shortages. They are always "local" in terms of unique needs and resources, yet they have a regional impact. Bushman emphasized that these settlements are not earmarks for local projects, but are vital for regional water security across the West. They also frequently have the benefit of fostering trust and rebuilding communities. She acknowledged the critical, sometimes intergenerational, long-term commitment of tribal, federal, and state representatives who continue to show up at the table for years and even decades of negotiations. She thanked Pam Williams for her knowledge and resilience and her many years of dedicated service at SIWRO, referring to the many times her efforts on various settlements were mentioned during the Symposium. Finally, Bushman issued an invitation for interested parties to join the NARF-WSWC Ad Hoc Group to help broadly advocate for settlements, emphasizing the need to educate Congress on the cost-effectiveness, trust responsibilities, regional water security, and profound impact of these completed agreements.

Tab F – Future WSWC Meetings

WESTERN STATES WATER COUNCIL

FUTURE MEETINGS

2026 WSWC Meetings Projections

Spring – Washington, D.C.
April 20-24, 2026 **(tentative)**

Will Summer Meeting be held virtually?

Summer/Fall Options
- Oregon last held 8/3/2018 in Newport
- New Mexico last held 10/20/2017 in Albuquerque

2027 WSWC Meetings Projections

Spring	Idaho last held 10/26/2018 in Coeur d'Alene
Summer	Washington last held 7/18/2019 in Leavenworth
Fall	Arizona last held 3/22/2019 in Chandler

MEETING SCHEDULE

	Alaska	Arizona	California	Colorado	Idaho	Kansas	Montana	Nebraska	Nevada	New Mexico	North Dakota	Oklahoma	Oregon	South Dakota	Texas	Utah	Washington	Wyoming	Other
168																			Wash. DC 3/15/12
169																	Seattle 6/8/12		
170															San Antonio 10/12/12				
171				Denver 4/5/13															
172																		Casper 6/26/13	
173														Deadwood 10/4/13					
174																			Wash. DC 4/3/14
175							Helena 7/18/14												
176		Scottsdale 10/10/14																	
177												Tulsa 4/17/15							
178									50th Anniversary Stateline 7/10/15										
179						Manhattan 10/9/15													
180																			Wash. DC 3/22/16
181											Bismarck 7/15/16								
182																St. George 9/30/16			
183								Nebraska City 4/14/17											
184			Rohnert Park 6/29/17																
185										Albuquerque 10/20/17									

	Alaska	Arizona	California	Colorado	Idaho	Kansas	Montana	Nebraska	Nevada	New Mexico	North Dakota	Oklahoma	Oregon	South Dakota	Texas	Utah	Washington	Wyoming	Other
186																			Wash. DC 3/14/18
187													Newport 8/3/18						
188					Coeur d'Alene 10/26/18														
189		Chandler 3/22/19																	
190																	Leavenworth 7/18/19		
191				Breckenridge 10/18/19															
192																			*Cancelled - ~~Wash. DC 4/1/20~~ COVID-19*
193																			No Host 7/22/20
194																			No Host 10/15/20
195															Virtual Texas 3/25/21				
196																		Cody 6/25/21	
197														Deadwood 9/16/21					
198																			Arlington, VA 4/6/22
199							Polson 8/5/22												
200												Sulphur 10/21/22							
201									Reno 5/24/23										
202	Anchorage 9/14/23																		
203																			Wash. DC 3/14/24
204											West Fargo 7/25/24								
205					Lawrence 10/23/24														
206								Lincoln 4/25/25											
207																Snowbird 6/12/25			

Tab B – Membership List

WESTERN STATES WATER COUNCIL
MEMBERSHIP LIST
September 18, 2025

OFFICERS

Chair - **Julie Cunningham**
Vice-Chair - **Earl Lewis**
Secretary-Treasurer - **Candice Hasenyager**

STAFF

Executive Director - **J.D. Strong**
(Former Executive Director) **Tony Willardson**
Deputy Director/General Counsel - **Michelle Bushman**
Policy Analyst - **Elysse Campbell**
Data Analyst/Hydroinformatics Specialist - **Ryan James**
Office Manager - **Julie Groat**
WestFAST Federal Liaison - **Jason Olive**

Staff E-mail: jdstrong@wswc.utah.gov
twillardson@wswc.utah.gov
mbushman@wswc.utah.gov
elyssecampbell@wswc.utah.gov
rjames@wswc.utah.gov
jgroat@wswc.utah.gov
jasonolive@wswc.utah.gov

Address: 682 East Vine Street, Suite 7
Murray, UT 84107
(801) 685-2555

ALASKA

***Honorable Mike Dunleavy**
Governor of Alaska
P.O. Box 110001
Juneau, AK 99811-0001
(907) 465-3500

†Randy Bates
Commissioner-Designee
Office of the Commissioner
Alaska Dept. of Environmental Conservation
555 Cordova Street
Anchorage, AK 99501
(907) 269-7645
randy.bates@alaska.gov

Tom Barrett, Chief
Water Resources Section
Division of Mining Land and Water
Alaska Department of Natural Resources
550 West 7th Avenue, Suite 1020
Anchorage, AK 99501-3579
(907) 269-8645
tom.barrett@alaska.gov

Thomas Mooney-Myers
Assistant Attorney General
Alaska Department of Law
1031 W 4th Avenue, Suite 200
Anchorage, AK 99501
(907) 269-3035
thomas.mooney-myers@alaska.gov

ARIZONA

***Honorable Katie Hobbs**
Governor of Arizona
Statehouse
Phoenix, AZ 85007
(602) 542-4331

****Thomas Buschatzke**, Director
Arizona Department of Water Resources
1110 West Washington Street, Suite 310
Phoenix, AZ 85007
(602) 771-8426
tbuschatzke@azwater.gov

Trevor Baggiore, Director
Arizona Water Quality Division
1110 West Washington Street
Phoenix, AZ 85007
(602) 771-2321
baggiore.trevor@azdeq.gov

Ayesha Vohra, Deputy Counsel
Arizona Department of Water Resources
1110 West Washington Street, Suite 310
Phoenix, AZ 85007
(602) 771-8472
avohra@azwater.gov

Kelly Brown, Deputy Counsel (Alt.)
Arizona Department of Water Resources
1110 West Washington Street, Suite 310
Phoenix, AZ 85007
(602) 771-8646
kbrown@azwater.gov

*Ex-Officio Member
**Executive Committee Member
†Council members denoted by this symbol are listed by virtue of their office, pending receipt of a letter of appointment by their Governor.

†Trent Blomberg (Alt.)
Assistant Legislative Liaison
Arizona Department of Water Resources
1110 W. Washington Street, Suite 310
Phoenix, AZ 85007
(602) 771-8489
tblomberg@azwater.gov

CALIFORNIA

***Honorable Gavin Newsom**
Governor of California
State Capitol
Sacramento, CA 95814
(916) 445-2841

****Jeanine Jones**, P.E. (Alt.)
Interstate Resources Manager
California Department of Water Resources
715 P Street
Sacramento, CA 95814
(916) 902-7173
jeanine.jones@water.ca.gov

Karla Nemeth, Director
California Department of Water Resources
715 P Street
Sacramento, CA 95814
(916) 653-5791
knemeth@water.ca.gov

Betty H. Olson, Professor
Civil & Environmental Engineering
University of California, Irvine
1361 SE II, Code: 7070
Irvine, CA 92697-7070
(949) 824-7171
bholson@uci.edu

E. Joaquin Esquivel, Chair
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100
(916) 341-5161
joaquin.esquivel@waterboards.ca.gov

COLORADO

***Honorable Jared Polis**
Governor of Colorado
State Capitol
Denver, CO 80203
(303) 866-2471

****Lauren Ris**, Director
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203
(303) 866-3441
lauren.ris@state.co.us

Jason Ullmann, State Engineer
Colorado Division of Water Resources
1313 Sherman Street, Room 318
Denver, CO 80203
(303) 866-3441
jason.ullmann@state.co.us

†Patrick Cummins, Senior Manager
Environmental Health and Protection
Colorado Dept. of Public Health & Environment
4300 Cherry Creek Drive South, A-5
Denver, CO 80246-1530
(303) 692-3468
patrick.cummins@state.co.us

Rebecca Mitchell (Alt.)
State of Colorado Commissioner
Upper Colorado River Commission
1313 Sherman Street, Room 718
Denver, CO 80203
(303) 866-3441
rebecca.mitchell@state.co.us

Nate Pearson (Alt.)
Assistant Director of Water Policy
Colorado Department of Natural Resources
1313 Sherman Street
Denver, CO 80203
(303) 866-3311
nate.pearson@state.co.us

Scott Steinbrecher (Alt.)
Deputy Attorney General
Natural Resources and Environment Section
Colorado Department of Law
1300 Broadway, 9th Floor
Denver, CO 80203
(720) 508-6287
scott.steinbrecher@coag.gov

IDAHO

***Honorable Brad Little**
Governor of Idaho
State Capitol
Boise, ID 83720
(208) 334-2100

****Mathew Weaver**, Director
Idaho Department of Water Resources
The Idaho Water Center
322 East Front Street
P.O. Box 83720
Boise, ID 83720-0098
(208) 287-4800
mathew.weaver@idwr.idaho.gov

†Jess Byrne, Director
Idaho Department of Environmental Quality
Statehouse Mail
1410 North Hilton Street
Boise, ID 83706-1255
(208) 373-0240
jess.byrne@deq.idaho.gov

Jerry R. Rigby
Rigby, Andrus & Rigby Law, PLLC
553 East 4th South
Rexburg, ID 83440
(208) 356-3633
jrigby@rex-law.com

John Simpson, Partner
Marten Law, LLP
101 S. Capitol Blvd
US Bank Plaza, Suite 305
Boise, Idaho 83702
(208) 424-2031
jsimpson@martenlaw.com

KANSAS

***Honorable Laura Kelly**
Governor of Kansas
State Capitol, 2nd Floor
Topeka, KS 66612-1590
(785) 296-3232

****Earl Lewis**, Chief Engineer
Division of Water Resources
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, KS 66502
(785) 564-6658
earl.lewis@ks.gov

Connie Owen, Director
Kansas Water Office
900 SW Jackson Street, Suite 404
Topeka, KS 66612
(785) 296-3185
connie.owen@kwo.ks.gov

†Stephanie Kramer, Chief Counsel
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, KS 66502
(785) 564-6700
stephanie.kramer@ks.gov

Chris W. Beightel (Alt.)
Water Management Services Program Manager
Division of Water Resources
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, KS 66502
(785) 564-6659
chris.beightel@kda.ks.gov

Matt Unruh, Assistant Director (Alt.)
Kansas Water Office
900 SW Jackson Street, Suite 404
Topeka, KS 66612
(785) 296-3185
matt.unruh@kwo.ks.gov

MONTANA

***Honorable Greg Gianforte**
Governor of Montana
State Capitol
Helena, MT 59620
(406) 444-3111

****Anna Pakenham Stevenson**
Administrator, Water Resources Division
MT Dept. of Natural Resources & Conservation
P.O. Box 201601
Helena, MT 59620-1601
(406) 444-0559
anna.pakenhamstevenson@mt.gov

†Lindsey Krywaruchka, Administrator
Water Quality Division
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-1601
(406) 444-4632
lkrywaruchka@mt.gov

Jay Weiner (Alt.)
Administrative Law Judge
MT Dept. of Natural Resources & Conservation
1539 11th Avenue
Helena, MT 59601
(406) 444-1510
jay.weiner@mt.gov

NEBRASKA

***Honorable Jim Pillen**
Governor of Nebraska
State Capitol
Lincoln, NE 68509
(402) 471-2244

****Jesse Bradley**, Director
Nebraska Department of Natural Resources
245 Fallbrook, Suite 201
Lincoln, NE 68521-6729
(402) 219-1357
jesse.bradley@nebraska.gov

Justin Lavene, Bureau Chief
Agriculture, Environment and Natural Resources
Nebraska Attorney General's Office
1445 K Street, Room 2115
P.O. Box 98920
(402) 471-2682
justin.lavene@nebraska.gov

†Kara Valentine, Interim Director
Nebraska Dept. of Environment and Energy
1200 N Street, Suite 400
P.O. Box 98922
Lincoln, NE 68509-8922
(402) 471-2186
kara.valentine@nebraska.gov

NEVADA

***Honorable Joe Lombardo**
Governor of Nevada
State Capitol
Carson City, NV 89701
(775) 687-5670

****Adam Sullivan**, State Engineer
Nevada Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, NV 89701-9965
(775) 684-2800
asullivan@water.nv.gov

Jennifer Carr, Administrator
Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, NV 89701-5249
(775) 687-9302
jcarr@ndep.nv.gov

James Bolotin (Alt.)
Deputy Administrator
Nevada Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, NV 89701-9965
(775) 684-2894
j.bolotin@water.nv.gov

Cathy Erskine, Sr. Policy Advisor (Alt.)
NV Dept. of Conservation & Natural Resources
901 South Stewart Street, Suite 1003
Carson City, NV 89701
(775) 684-2700
c.erskine@dcnr.nv.gov

James Settelmeyer, Director (Alt.)
NV Dept. of Conservation & Natural Resources
901 South Stewart Street, Suite 1003
Carson City, NV 89701
(775) 684-2700
jsettelmeyer@dcnr.nv.gov

Chad Stephens, Deputy Director (Alt.)
NV Dept. of Conservation & Natural Resources
901 South Stewart Street, Suite 1003
Carson City, NV 89701
(775) 684-2700
cstephens@dcnr.nv.gov

Chris Thorson, Deputy Administrator (Alt.)
Nevada Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, NV 89701-9965
(775) 684-2800
cthorson@water.nv.gov

NEW MEXICO

***Honorable Michelle Lujan Grisham**
Governor of New Mexico
State Capitol
Santa Fe, NM 87501
(505) 476-2200

****Tayna Trujillo**, Deputy State Engineer
New Mexico Office of the State Engineer
Concha Ortiz y Pino Building
130 South Capitol Street
P.O. Box 25102
Santa Fe, NM 87504-5102
(505) 487-6083
tanya.trujillo@ose.nm.gov

Nathaniel Chakeres, General Counsel
New Mexico Office of the State Engineer
130 South Capitol Street
Santa Fe, NM 87506-5108
(505) 827-6150
nathaniel.chakeres@state.nm.us

John Rhoderick
Deputy Cabinet Secretary - Administration
New Mexico Environment Department
Springer Building
121 Tijeras Avenue, NE
Albuquerque, NM 87102
(505) 819-8284
john.rhoderick@env.nm.gov

NORTH DAKOTA

***Honorable Kelly Armstrong**
Governor of North Dakota
State Capitol
Bismarck, ND 58505
(701) 224-2200

****Reice Haase**, Director
North Dakota Department of Water Resources
1200 Memorial Highway
Bismarck, ND 58504
(701) 328-4920
rehaase@nd.gov

L. David Glatt, Director
North Dakota Dept. of Environmental Quality
4201 Normandy Street
Bismarck, ND 58503-1324
(701) 328-5152
dglatt@nd.gov

Jennifer Verleger, General Counsel
North Dakota Department of Water Resources
1200 Memorial Highway
Bismarck, ND 58504
(701) 328-3442
jlverleger@nd.gov

Patrick Fridgen, Deputy Director (Alt.)
North Dakota Department of Water Resources
1200 Memorial Highway
Bismarck, ND 58504
(701) 328-4964
pfridgen@nd.gov

OKLAHOMA

***Honorable Kevin Stitt**
Governor of Oklahoma
State Capitol
Oklahoma City, OK 73105
(405) 521-2342

****Julie Cunningham**, Executive Director
Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118
(405) 530-8800
julie.cunningham@owrb.ok.gov

Robert Singletary, Executive Director
Oklahoma Dept. of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677
(405) 702-7172
robert.singletary@deq.ok.gov

Sara Gibson, General Counsel (Alt.)
Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118
(405) 530-8800
sara.gibson@owrb.ok.gov

OREGON

***Honorable Tina Kotek**
Governor of Oregon
State Capitol
Salem, OR 97310
(503) 378-3100

****Doug Woodcock**
Deputy Director, Water Management
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301-1271
(503) 383-5573
douglas.e.woodcock@water.oregon.gov

Racquel Rancier, Deputy Director
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301-1271
(503) 302-9235
racquel.r.rancier@water.oregon.gov

Jennifer Wigal
Water Quality Program Manager
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204
(503) 229-5323
wigal.jennifer@deq.state.or.us

SOUTH DAKOTA

***Honorable Larry Rhoden**
Governor of South Dakota
State Capitol
Pierre, SD 57501
(605) 773-3212

****Hunter Roberts**, Secretary
SD Dept. of Agriculture & Natural Resources
523 East Capitol Avenue
Pierre, SD 57501-3181
(605) 773-5559
hunter.roberts@state.sd.us

Nakaila Steen, Natural Resources Engineer
SD Dept. of Agriculture & Natural Resources
523 East Capitol
Pierre, SD 57501
(605) 773-3352
nakaila.steen@state.sd.us

Eric Gronlund, Chief Engineer (Alt.)
Water Rights Program
SD Dept. of Agriculture & Natural Resources
523 East Capitol Avenue
Pierre, SD 57501-3181
(605) 773-3352
eric.gronlund@state.sd.us

TEXAS

***Honorable Gregory W. Abbott**
Governor of Texas
State Capitol
Austin, TX 78711
(512) 463-2000

****Brooke Paup**, Chairwoman
Texas Commission on Environmental Quality
P.O. Box 13087, MC 100
Austin, TX 78711-3087
(512) 239-5505
brooke.paup@tceq.texas.gov

L'Oreal Stepney, Chairwoman
Texas Water Development Board
1700 North Congress Avenue
P.O. Box 13231
Austin, TX 78711-3231
(512) 463-7847
loreal.stepney@twdb.texas.gov

UTAH

***Honorable Spencer Cox**
Governor of Utah
State Capitol
Salt Lake City, UT 84114
(801) 538-1000

****Candice Hasenyager**, Director
Division of Water Resources
Utah Department of Natural Resources
1594 W North Temple, Suite 310
Salt Lake City UT, 84116
(801) 538-7230
candicehasenyager@utah.gov

John Mackey, Director
Division of Water Quality
Utah Department of Environmental Quality
195 North 1950 West
P. O. Box 144870
Salt Lake City, Utah 84114-4870
(801) 536-4300
jkmackey@utah.gov

Teresa Wilhelmsen, P.E.
State Engineer/Division Director
Division of Water Rights
Utah Department of Natural Resources
1594 West North Temple, Suite 220
P.O. Box 146300
Salt Lake City, UT 84114-6300
(801) 538-7240
teresawilhelmsen@utah.gov

Tim Davis (Alt.)
Executive Director
Utah Department of Environmental Quality
195 North 1950 West
P. O. Box 144870
Salt Lake City, Utah 84114-4870
(801) 247-3940
tim.davis@utah.gov

Todd Stonely (Alt.)
Assistant Director of Planning
Division of Water Resources
Utah Department of Natural Resources
1594 West North Temple, Suite 310
Salt Lake City UT, 84116
(801) 538-7277
toddstonely@utah.gov

Mark Stratford (Alt)
Legal Counsel
Division of Water Rights
Utah Department of Natural Resources
1594 West North Temple, Suite 220
P.O. Box 146300
Salt Lake City, UT 84114-6300
(801) 538-7240
mstratford@utah.gov

WASHINGTON

***Honorable Bob Ferguson**
Governor of Washington
State Capitol
Olympia, WA 98504
(360) 753-6780

****Ria Berns**
Program Manager, Water Resources
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
(425) 495-3917
ria.berns@ecy.wa.gov

Mike Gallagher
Water Resources Section Manager
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
(360) 407-6058
mike.gallagher@ecy.wa.gov

Stephen North
Assistant Attorney General, Ecology Division
Washington State Attorney General's Office
1125 Washington Street, SE
P.O. Box 40100
Olympia, WA 98504- 0100
(360) 586-3509
stephen.north@atg.wa.gov

Leslie Connelly, Manager (Alt.)
Water Quality Program Strategic Planning
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
(360) 628-4381
leslie.connelly@ecy.wa.gov

WYOMING

***Honorable Mark Gordon**
Governor of Wyoming
State Capitol
Cheyenne, WY 82001
(307) 777-7434

****Brandon Gebhart**
Wyoming State Engineer
Wyoming State Engineer's Office
Herschler Building, 2nd Floor West
122 West 25th Street
Cheyenne, WY 82002
(307) 777-6150
brandon.gebhart1@wyo.gov

Christopher Brown
Senior Assistant Attorney General
Water and Natural Resources Division
Wyoming Attorney General's Office
123 Capitol Avenue
Cheyenne, WY 82002
(307) 777-3406
chris.brown@wyo.gov

Todd Parfitt, Director
Wyoming Department of Environmental Quality
200 West 17th Street, 4th Floor
Cheyenne, WY 82002
(307) 777-7555
todd.parfitt@wyo.gov

Jeff Cowley (Alt.)
Administrator, Interstate Streams
Wyoming State Engineer's Office
Herschler Building, 2nd Floor West
122 West 25th Street
Cheyenne, WY 82002
(307) 777-1942
jeff.cowley@wyo.gov

Jennifer Zygmunt, Administrator (Alt.)
Water Quality Division
Wyoming Department of Environmental Quality
200 West 17th Street, 4th Floor
Cheyenne, WY 82002
(307) 777-7072
jennifer.zygmunt@wyo.gov

WESTERN STATES WATER COUNCIL
COMMITTEE ASSIGNMENTS

EXECUTIVE COMMITTEE

Vacant - Alaska
Thomas Buschatzke - Arizona
Jeanine Jones - California
Lauren Ris - Colorado
Mat Weaver - Idaho
Jerry Rigby - Idaho
(Alternate)
Earl Lewis - Kansas
(**Vice-Chair**)
Anna Pakenham Stevenson - Montana
Jesse Bradley - Nebraska
Adam Sullivan - Nevada
Tanya Trujillo - New Mexico
Reice Haase - North Dakota
Julie Cunningham - Oklahoma
(**Chair**)
Sara Gibson - Oklahoma
(Alternate)*
Doug Woodcock - Oregon
Hunter Roberts - South Dakota
Nakaila Steen- South Dakota
(Alternate)*
Brooke Paup - Texas
Candice Hasenyager - Utah
Todd Stonely - Utah
(Alternate)*
Ria Berns - Washington
Brandon Gebhart - Wyoming
Jeff Cowley - Wyoming
(Alternate)*

Ex-Officio Representatives
*For purposes of Committee rosters, the designation as an “alternate” only reflect the person’s function on the Committee.

Management Subcommittee

Julie Cunningham
(**Chair**)
Earl Lewis
(**Vice-Chair**)
Candice Hasenyager
(**Secretary/Treasurer**)
J.D. Strong
(**Executive Director**)
Tony Willardson
(**Former Executive Director**)
Jeanine Jones
(**Former Chair**)

LEGAL COMMITTEE

Thomas Mooney-Myers - Alaska
Ayesha Vohra - Arizona
Kelly Brown - Arizona
(Alternate)*
Jeanine Jones - California
Jason Ullmann - Colorado
Jerry Rigby - Idaho
John Simpson - Idaho
(Alternate)*
Vacant - Kansas
Jay Weiner - Montana
Justin Lavene - Nebraska
Vacant - Nevada
Nathaniel Chakeres - New Mexico
Vacant - North Dakota
Sara Gibson - Oklahoma
(**Vice-Chair**)
Vacant - Oregon
Nakaila Steen - South Dakota
Hunter Roberts - South Dakota
(Alternate)*
Vacant - Texas
Teresa Wilhelmsen - Utah
Mark Stratford - Utah
(Alternate)*
Stephen North - Washington
Chris Brown - Wyoming
(**Chair**)

Clean Water Act Jurisdiction

Non-Tribal Federal Water Needs Subcommittee

Tom Barrett - Alaska
Jay Weiner - Montana
Adam Sullivan - Nevada
Kathy Alexander - Texas
Chris Brown - Wyoming

Micheline Fairbanks (ex-officio member)

Ex-Officio Representatives

BLM - Ronald McCormick
David Hu
Paula Cutillo
BOR - Arthur Coykendall
DOD - Lauren Dempsey
DOJ - Stephen Bartell
USFS - Michael Eberle
Chris Carlson
USFWS - Michael Higgins
USGS - Timothy McHale
NPS - Peter Fahmy
Ed Harvey

Tribal Reserved Water Rights Subcommittee

Jay Weiner - Montana
Teresa Wilhelmsen - Utah

WRDA/Corps Policies

Kathy Alexander - Texas

WATER QUALITY COMMITTEE

Vacant - Alaska
Trevor Baggiore - Arizona
E. Joaquin Esquivel - California
Betty Olson - California (Alternate)*
Vacant - Colorado
Jess Byrne - Idaho
Vacant - Kansas
Lindsey Krywaruchka - Montana
Vacant - Nebraska
Jennifer Carr - Nevada
John Rhoderick - New Mexico
David Glatt - North Dakota
Robert Singletary - Oklahoma
Jennifer Wigal - Oregon
Nakaila Steen - South Dakota
Brooke Paup - Texas
John Mackey - Utah
Tim Davis - Utah (Alternate)*
Leslie Connelly - Washington
Todd Parfitt - Wyoming
Jennifer Zygmunt - Wyoming (**Chair**) (Alternate)*

Abandoned Mines Subcommittee

Trevor Baggiore - Arizona
Jennifer Carr - Nevada

Clean Water Act Subcommittee

Jennifer Carr - Nevada
Allison Woodall - Texas
Lauren Driscoll - Washington

Maui Subcommittee

John Mackey - Utah
Jennifer Zygmunt - Wyoming

Nutrients Subcommittee

John Mackey - Utah
Jennifer Zygmunt - Wyoming

PFAS Subcommittee

Brittany Duarte - Washington
Jennifer Zygmunt - Wyoming

Water Quality/Quantity Nexus Workgroup

WATER RESOURCES COMMITTEE

Tom Barrett - Alaska
Thomas Buschatzke - Arizona
Jeanine Jones - California
Rebecca Mitchell - Colorado
John Simpson - Idaho
Jerry Rigby - Idaho
(Alternate)*
Chris Beightel - Kansas
Anna Pakenham Stevenson - Montana
(**Vice-Chair**)
Vacant - Nebraska
Adam Sullivan - Nevada
Tayna Trujillo - New Mexico
Reice Haase - North Dakota
Julie Cunningham - Oklahoma
Doug Woodcock - Oregon
Racquel Rancier - Oregon
(Alternate)*
Nakaila Steen - South Dakota
Eric Gronlund - South Dakota
(Alternate)*
L'Oreal Stepney - Texas
Candice Hasenyager - Utah
Todd Stonely - Utah
(Alternate)*
Ria Berns - Washington
Brandon Gebhart - Wyoming
Jeff Cowley - Wyoming
(Alternate)*

Climate Adaptation and Drought Subcommittee

Jeanine Jones - California (**Chair**)

Ex-Officio Representatives

Corps - Rolf Olsen
NRCS - Mike Strobel

Pumped Storage Subcommittee

Sara Gibson - Oklahoma
Jennifer Zygmunt - Wyoming

Water Information and Data Subcommittee (WIDS)

Lisa Williams - Arizona
Mathew Weaver - Idaho
Lane Letourneau - Kansas
Ginger Pugh - Kansas
Julie Cunningham - Oklahoma
Kent Wilkins - Oklahoma
Ken Stahr - Oregon
Kathy Alexander - Texas
Candice Hasenyager - Utah

Ex-Officio Representatives

USACE - Steve Ashby
USBOR - Allison Danner
USEPA - Dwane Young
USGS - Nancy Barber
NASA - Brad Doorn
NOAA - DeWayne Cecil
NRCS - Mike Strobel

Committee Assignments

EXECUTIVE COMMITTEE

Vacant - Alaska
Thomas Buschatzke- Arizona
Jeanine Jones - California
Lauren Ris - Colorado
Mat Weaver - Idaho
Jerry Rigby - Idaho (Alternate)*
Earl Lewis - Kansas (**Vice Chair**)
Anna Pakenham Stevenson - Montana
Jesse Bradley - Nebraska
Adam Sullivan - Nevada
Tayna Trujillo - New Mexico
Reice Haase - North Dakota
Julie Cunningham - Oklahoma (**Chair**)
Sara Gibson - Oklahoma
(Alternate)*
Doug Woodcock - Oregon
Hunter Roberts - South Dakota
Nakaila Steen - South Dakota (Alternate)*
Brooke Paup - Texas
Candice Hasenyager - Utah
Todd Stonely - Utah (Alternate)*
Ria Berns - Washington
Brandon Gebhart - Wyoming
Jeff Cowley - Wyoming
(Alternate)*

LEGAL COMMITTEE

Thomas Mooney-Myers - Alaska
Ayesha Vohra - Arizona
Kelly Brown - Arizona (Alternate)*
Jeanine Jones - California
Jason Ullman - Colorado
Jerry Rigby - Idaho
John Simpson - Idaho (Alternate)*
Vacant - Kansas
Jay Weiner - Montana
Justin Lavene - Nebraska
Vacant - Nevada
Nathaniel Chakeres - New Mexico
Reice Haase - North Dakota
Sara Gibson - Oklahoma (**Vice-Chair**)
Vacant - Oregon
Nakaila Steen - South Dakota
Hunter Roberts - South Dakota (Alternate)*
Vacant - Texas
Teresa Wilhelmsen - Utah
Mark Stratfod - Utah (Alternate)*
Stephen North - Washington
Chris Brown - Wyoming (**Chair**)

WATER QUALITY COMMITTEE

Vacant - Alaska
Trevor Baggiore - Arizona
E. Joaquin Esquivel - California
Betty Olson - California (Alternate)*
Vacant - Colorado
Jess Byrne - Idaho
Vacant - Kansas
Lindsey Krywaruchka - Montana
Vacant - Nebraska
Jennifer Carr - Nevada
John Rhoderick - New Mexico
David Glatt - North Dakota
Robert Singletary - Oklahoma
Jennifer Wigal - Oregon
Nakaila Steen - South Dakota
Brooke Paup - Texas
John Mackey - Utah
Tim Davis - Utah (Alternate)*
Leslie Connelly - Washington
Todd Parfitt - Wyoming
Jennifer Zygmunt - Wyoming (**Chair**) (Alternate)*

WATER RESOURCES COMMITTEE

Tom Barrett - Alaska
Thomas Buschatzke - Arizona
Karla Nemeth - California
Jeanine Jones - California (Alternate)*
Rebecca Mitchell - Colorado
John Simpson - Idaho
Jerry Rigby - Idaho (Alternate)*
Chris Beightel - Kansas
Anna Pakenham Stevenson - Montana
(**Vice-Chair)**
Vacant - Nebraska
Adam Sullivan - Nevada
Tayna Trujillo - New Mexico
Reice Haase - North Dakota
Julie Cunningham - Oklahoma
Doug Woodcock - Oregon
Racquel Rancier - Oregon (Alternate)*
Nakaila Steen - South Dakota
Eric Gronlund - South Dakota (Alternate)*
L'Oreal Stepney - Texas
Candice Hasenyager - Utah
Todd Stonely - Utah (Alternate)*
Ria Berns - Washington
Brandon Gebhart - Wyoming
Jeff Cowley - Wyoming
(Alternate)*

WESTERN STATES WATER COUNCIL
Non-Appointed Members
September 2025

ALASKA

†Randy Bates
Commissioner-Designee
Office of the Commissioner
Alaska Dept. of Environmental Conservation

ARIZONA

†Trent Blomberg
Assistant Legislative Liaison
Arizona Department of Water Resources

COLORADO

†Patrick Cummins
Senior Manager
Environmental Health and Protection
Colorado Dept. of Public Health & Environment

IDAHO

†Jess Byrne, Director
Idaho Department of Environmental Quality

KANSAS

†Stephanie Kramer
Interim Chief Legal Counsel
Kansas Department of Agriculture

MONTANA

†Lindsey Krywaruchka
Administrator, Water Quality Division
Montana Department of Environmental Quality

NEBRASKA

†Kara Valentine, Interin Director
Nebraska Dept. of Environment and Energy

WESTERN STATES

FEDERAL AGENCY SUPPORT TEAM

(Updated 8/20/2025)

DEPARTMENT OF AGRICULTURE

Carlson, Christopher PhD (FS, WestFAST Chair)
National Program Lead for Watershed and Aquatic Ecology Research
U.S. Forest Service
1400 Independence Avenue, SW
Washington, DC 20250
(202) 205-1481
christopher.carlson@usda.gov

Eberle, Michael (FS, WestFAST Vice-Chair)
National Water Uses and Rights Program Leader
Washington Office,
Field Services and Innovation Center,
National Water Resources and Post-Fire Recovery
U.S. Forest Service
201 14th Street, W
Washington, DC 20250
(202) 689-5890
michael.eberle2@usda.gov

Hofman, Heather (NRCS, WestFAST Vice-Chair)
Director
National Water and Climate Center
Natural Resources Conservation Service
1201 NE Lloyd Boulevard, Suite 802
Portland, OR 97232
(503) 414-3030
(971) 325-5171 (mobile)
heather.hofman@usda.gov

DEPARTMENT OF COMMERCE

Sheffield, Amanda, Ph.D. (NOAA)
National Integrated Drought Information System (NIDIS)
325 Broadway
Boulder, Colorado 80305
(303) 497-6621 (office)
amanda.sheffield@noaa.gov

DEPARTMENT OF DEFENSE

Dempsey, Lauren M. (DOD)
Water and Natural Resources
Regulatory Media Expert
Legislative & Regulatory Engagement Division - Western Branch
Air Force Civil Engineer Center
510 Hickam Avenue
Travis AFB, CA 94535
(707) 424-8628
lauren.dempsey@us.af.mil

USACE
Vacant

DEPARTMENT OF ENERGY

Rinker, Mike
Senior Technical Adviser
Energy Efficiency & Renewable Energy
Industrial Efficiency and Decarbonization Office / Water Power Technologies Office
U.S. Department of Energy
(509) 551-2152
michael.rinker@ee.doe.gov

DEPARTMENT OF HOMELAND SECURITY

Powderly, John (FEMA)
Grants and Planning Outreach Specialist
FEMA Region 9
1111 Broadway #1200
Oakland, CA 94607
(202) 705-0127
john.powderly@fema.dhs.gov

WESTERN STATES

FEDERAL AGENCY SUPPORT TEAM

(Updated 8/20/2025)

DEPARTMENT OF THE INTERIOR

Abel, Chad (FWS, WestFAST Vice-Chair)
National Water Resources Coordinator
National Wildlife Refuge System, NRPC
Weaverville, CA 96093
(970) 792-6883
chad_abel@fws.gov

Clark, Brian (USGS)
Deputy Program Coordinator
Water Resources Availability
U.S. Geological Survey
700 W. Research Blvd
Fayetteville, AR 72701
(501) 352-1864
brclark@usgs.gov

Cutillo, Paula PhD (BLM, WestFAST Vice-Chair)
Senior Water Resources Specialist
Office of Resources and Planning
Bureau of Land Management
Lakewood, CO 80225
(720) 899-2844
pcutillo@blm.gov

Fisk, Terry (NPS)
Water Rights Branch Chief
Water Resources Division
National Park Service
1201 Oakridge Dr., Suite 250
Fort Collins, CO 80525
(970) 803-0692
terry_fisk@nps.gov

Hatathlie, Brenda (BIA)
Branch of Water Resources
Division of Water & Power
Bureau of Indian Affairs
13922 Denver West Parkway
Building 54, Suite 300
Lakewood, CO 80401
(202) 374-5532
brenda.hatathlie@bia.gov

Ming, Jaron E. (FWS)
Branch Chief, Air and Water Resources
National Wildlife Refuge System
7333 W. Jefferson Ave., Suite 375
Lakewood, CO 80235
(720) 926-3528 (work mobile)
(303) 914-3801 (work office)
jaron_ming@fws.gov

Olive, Jason (FWS, Federal Liaison Officer to WSWC and WestFAST)
National Fish Habitat Partnership Coordinator
Fish and Aquatic Conservation Program
3701 NW 82nd Avenue
Doral, FL 33166
(703) 489-5700
jasonolive@wswc.utah.gov
jason_olive@fws.gov

Yonts, Travis (Reclamation)
Management Analyst
Office of the Deputy Commissioner – Operations
Bureau of Reclamation
1849 C Street, NW
Washington, DC 20240
(202) 513-0509
tyonts@usbr.gov

ENVIRONMENTAL PROTECTION AGENCY

Gorke, Roger (EPA, WestFAST Past Chair)
Senior Policy Advisor, Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460
(202) 591-5680
gorke.roger@epa.gov

WESTERN STATES

FEDERAL AGENCY SUPPORT TEAM

(Updated 8/20/2025)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Fleming, Sean W. (NASA)
Program Scientist
NASA Western Water Action Office (WWAO)
Jet Propulsion Laboratory
NASA Ames Research Center
sean.w.fleming@nasa.gov

Urquhart, Erin (NASA)
Program Manager, Water Resources
National Aeronautics and Space Administration
300 E Street, SW
Washington, DC 20546
(202) 909-9823
erin.urquhart@nasa.gov

DEPARTMENT OF JUSTICE

Bartell, Stephen G. (DOJ)
Assistant Chief, Natural Resources Section
Environment & Natural Resources Division
U.S. Department of Justice
150 M Street NE, Suite 3.1611
Washington, DC 20001
(202) 305-0234
(202) 532-3079 (mobile)
stephen.bartell@usdoj.gov

Tab G – Draft FY25-26 Committee Work Plan
Executive / Water Resources / Water Quality / Legal

EXECUTIVE COMMITTEE
WORK PLAN
July 1, 2025 to June 30, 2026

1. WGA/WSWC COORDINATION and COLLABORATION

Work to date: The Western Governors' Association (WGA) has adopted two comprehensive policy statements, one Water Resource Management in the West (2024-07) and the other Water Quality in the West (2024-09), as well as other policy statements with water-related implications.

The Council has worked closely with WGA on various regulatory and other issues, especially the Corp's Water Supply Rule, EPA's proposed and final rules related to Clean Water Act (CWA) jurisdiction and the definition of Waters of the United States, as well as the CWA 401 State Water Quality Certification.

WGA has taken the lead on some issues and deferred to the Council on other issues, such as tribal water rights settlements.

2025-2026: The Council and the Committee will continue to coordinate and consult with the WGA on matters that come before the Council and assist as requested in the development and implementation of WGA water-related policies. WGA staff are invited to attend and participate in our meetings, workshops and symposia. WGA and WSWC staff collaborate on a continuing basis.

As in the past, the Council may propose policy resolutions for WGA consideration. Further, the WSWC Chair and/or Executive Director will participate in WGA meetings as appropriate. Working with the WGA, the Council will also coordinate Western Federal Agency Support Team (WestFAST) activities and needs. WGA and WSWC will also work together as part of the Western Policy Network.

Subcommittee: Management Subcommittee

Time Frame: ongoing

2. WESTFAST

Work to date: The creation in 2008 of our Western States Federal Agency Support Team (WestFAST) has had many benefits. It is a unique forum for addressing western (and national) water issues that has brought together fifteen separate federal agencies to collaborate with each other and state agencies with water-related responsibilities. WestFAST addresses issues raised with the Council and WGA (which in turn support development and implementation of related federal policies and programs). WestFAST and the Council have also discussed collaborative federalism principles to guide federal/state working relationships.

2025-2026: The Executive Committee will continue to oversee the Council's work with WestFAST. Further, the Committee will work to ensure participating agencies realize the real and

potential benefits of WestFAST, helping to build a sound foundation for continuing collaboration. The WSWC will meet regularly with WestFAST representatives and will continue building and maintaining closer ties with WestFAST principals. The Council will also advocate for continued WestFAST funding.

Time Frame: Ongoing

3. FEDERAL ADMINISTRATION and CONGRESSIONAL VISITS/CONTACTS

Work to date: In an ongoing effort to promote WSWC and WGA positions and priorities, Council officers, members and staff often travel to Washington, D.C. to visit with Administration officials and Congressional members and staff. WSWC members and staff have also previously hosted or presented at briefings for congressional staff on the importance of federal data gathering activities, including Landsat thermal data, U.S. Geological Survey streamgaging programs, USDA's National Weather and Climate Center and its snow survey activities, National Oceanic and Atmospheric Administration programs (including the National Integrated Drought Information System and improving subseasonal to seasonal (S2S) precipitation forecasting), as well as Indian water rights settlements. Some of the feedback from these meetings has suggested a need for greater contact and communication between the Council and federal and congressional policymakers.

Of note, the Council is often invited to testify on proposed legislation. Further, the Council also distributes policy positions adopted at its meetings to House and Senate members of western state delegations, key Congressional leadership and staff, and senior Administration officials.

2025-2026: The Council will continue to communicate our positions with the Administration and the Congress. Future meetings when appropriate will be scheduled with Administration and Congressional contacts and advise them on major national water issues from the perspective of western states. The WestFAST Liaison Officer and WestFAST members will assist with and participate in visits with Executive Branch agencies. The WSWC will meet with WestFAST principals. Other trips and visits may be made as needed. The Council staff and members will also communicate our external positions as the need arises and continue to respond to requests for testimony, briefings and information from the Congress and the Administration.

Subcommittee: Management Subcommittee

Time frame: Ongoing

4. REGULAR COUNCIL MEETINGS

Work to date: The first meeting of the Council was held in Stateline, Nevada in 1965, and regular meetings have been held since. Currently, the Council meets three times per year, rotating among the member states, which host the meetings at a location of their choice. During the pandemic, meetings were held virtually. One benefit of virtual and now hybrid meetings has been expanded participation and reduced meeting and travel costs. Guest speakers and topics for discussion are scheduled according to members' interests and needs. External policy positions for consideration

are noticed 30-days before the Council meets and are distributed not only to members, but also to WGA staff and the Governors' staff. Any position statement not noticed may be brought before the Council for consideration at a meeting by unanimous consent, but if approved, must be sent to WGA for review prior to distribution consistent with mutually agreed upon WGA and WSWC procedures for policy coordination.

2025-2026: The WSWC met for its Summer meetings in Snowbird, UT on June 10-12, and will meet in San Pedro, CA on September 23-26. The Spring 2026 meetings will be held in Washington, DC.

5. NEWSLETTER

Work to date: *Western States Water* provides members and others with accurate and timely information on various water resources topics, activities and events at state, regional and national levels. It has been provided as a free service to members, governors and their staff, member state water resource agencies, state water users associations, selected multi-state organizations, key congressmen and their staffs, and top federal administration officials. A subscription fee for others has been discontinued. It is primarily distributed via email, and is posted on our website.

2025-2026: Along with the Council's regular meetings, the newsletter requires our most significant commitment of staff resources, though that is usually ancillary to other efforts. The response from members and others receiving the newsletter has been consistently positive. The Council will continue to provide this service weekly via email.

Time Frame: Ongoing

6. WATER MANAGEMENT SYMPOSIA

Work to date: An annual WSWC Water Management Symposium has traditionally been held under the auspices of the Executive Committee. However, the Committee has usually asked one of the other committees to take the lead. This includes a biennial Indian Water Rights Settlement Symposia cosponsored with the Native American Rights Fund. The last WSWC/NARF Symposium was held virtually in August 2023. The Executive Committee considers hosting symposia on any topic and issues as their importance merits.

In 2022-23, the Council held a number of meetings and webinars in collaboration with relevant federal agencies, multiple stakeholders, and public and private experts. This included exploring a potential regional approach to defining "Waters of the United States" (WOTUS), and a technical white paper summarizing the discussions was drafted. Further, a National Water Use Data Workshop was held. One goal is identifying common interests and promoting partnerships.

2025-2026 The Legal Committee, under the direction of the Executive Committee, will coordinate~~d~~ with NARF in sponsoring the 2025 Indian Water Rights Settlement Symposium.

Time Frame – Ongoing

7. ANNUAL REPORT

Work to date: Since its organization in 1965, the Council has prepared and published an annual report, with a brief discussion of the Council's formation and a detailed summary of its current membership and activities. It is a report of the Council's meetings and provides an explanation of resolutions and positions and other actions taken by the Council. Further, it includes a description of workshops, seminars and symposia sponsored by the Council, as well as other important activities and events. It also describes the Council's involvement in major current water policy issues. Lastly, biennially, it includes an audit of the Council's finances, and current rules of organization. Recently, electronic copies have been distributed.

2025-2026: The staff will work on the current backlog of annual reports (2020-2024).

Time frame: Ongoing

8. HISTORICAL REVIEW: ISSUES & OUTCOMES

Background: The Council has positions addressing numerous issues and has taken various actions and invested significant resources in attempting to influence outcomes. While the annual report, newsletter, meeting minutes and other sources document such work, there has never been a comprehensive review of some of the major topics addressed and outcomes achieved. Such a summary evaluating the influence the Council has had on outcomes would be useful. The Council has been active in both administrative and congressional affairs, including federal regulatory matters and federal budgeting and appropriations processes. The Council has also provided a forum for states to learn from each other, as well as serving as a resource and catalyst for innovation, such as the WSWC Water Data Exchange. Selecting appropriate metrics for measuring results could be challenging.

In 2024, the Committee approved the funds to contract with a facilitator to conduct a forward-looking strategic directions exercise. A survey of states on relevant issues and valued activities was followed by two facilitated discussions during the meetings in Nebraska and Utah.

2025-2026: The Committee will consider the best means of undertaking such a review and metrics for evaluating the Council's influence on matters that have been brought before the Council. The Committee, given its oversight functions, will use the results of any summary to guide the investment of Council staff and budgetary resources.

Subcommittee:

Time frame:

9. STATE WATER AGENCY STAFFING AND RETENTION CONCERNS

Background: During the Deadwood, South Dakota meeting in September 2021, various WSWC members raised concerns about hiring, training, and retaining technical and professional staff to carry out essential agency functions. Some turnover or lack of new applicants may be attributable to: (1) high specialization of western water challenges; (2) shuffling among state/federal agencies; (3) smaller salaries compared to the private sector; (4) limited advancement opportunities for mid-level staff; and (5) retirements, pandemic-related adjustments, and younger generation career-culture shifts. On October 22, 2021 and January 24, 2022, various WSWC members discussed challenges and potential solutions that the WSWC might work together to be able to accomplish.

2025-2026: The Committee will consider: (1) a brief survey of states to identify obstacles, with the intent to create a report that may be utilized to demonstrate the staffing needs of state water agencies across the West; (2) a mechanism for sharing job postings at state water agencies across the West that is cost-effective; and (3) developing a pipeline of incoming staff by introducing a younger generation of potential employees to day-to-day work of technical and professional staff, complex western water challenges, and benefits beyond salaries (e.g., through webinar series, cooperation with universities or other organizations).

Subcommittee: Henry Brooks, Jerry Rigby, Mary Anne Nelson, Connie Owen, Earl Lewis, Matt Unruh, Jesse Bradley, Sara Gibson, Jeanne Goodman, Kathy Alexander, Kim Nygren, Jeff Cowley

Time frame:

Tab XYZ – Sunsetting Positions for Spring 2026 Meetings (#490 - #503)

Position No. 490

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
Regarding

WATER QUALITY STANDARDS, PROTECTING TRIBAL RESERVED RIGHTS, and FEDERAL BASELINE WATER QUALITY STANDARDS FOR INDIAN RESERVATIONS

Reno, Nevada
May 24, 2023

WHEREAS, the mission of the Western States Water Council is to ensure that the West has an adequate, sustainable supply of water of suitable quality to meet its diverse economic and environmental needs now and in the future; and

WHEREAS, states are co-regulators under the Clean Water Act, which does expressly "recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources…." CWA § 101(b); and

WHEREAS, water quality standards are central to achieving the goals of the Clean Water Act on both state lands and tribal reservation lands; and

WHEREAS, the state water quality agencies have long-established water quality standards to protect and maintain existing designated uses, with water quality criteria designed to protect aquatic life and human health regardless of geographic location, and under the Clean Water Act these water quality standards are subject to triennial review with the opportunity for public comment; and

WHEREAS, the arid Western States include numerous federally-recognized tribes with diverse historical and cultural uses of water; and

WHEREAS, the Environmental Protection Agency (EPA) is proposing to establish Federal water quality standards for Indian reservation waters that currently do not have water quality standards in effect under the Clean Water Act; and

WHEREAS, many states and tribes put considerable time, effort, and resources into developing constructive relationships and coordinating cross-jurisdictional efforts while seeking to respect one another's sovereignty; and

WHEREAS, the cultural needs of tribes, their health, and their economic prosperity are an important priority for tribal, federal, and state governments; and

WHEREAS, the identification and interpretation of federal instruments (treaties, statutes, executive orders, and other sources of federal law), with the potential to create express or implied federal reserved rights, is a complex exercise – often involving consultation, research, analysis, and extensive court proceedings – that requires expertise unrelated to water quality assessment; and

WHEREAS, in November 2021, the Department of the Interior, the EPA, and 15 other federal agencies signed a *Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the*

Protection of Tribal Treaty Rights and Reserved Rights, committing to protect such rights and implement federal treaty obligations: (1) through early consultation and consideration of those rights in decision-making and rulemaking; (2) by creating a searchable and indexed database of all treaties; (3) by developing tools and resources to identify, understand, and analyze tribal treaty and reserved rights; and (4) by providing a means of dispute resolution regarding tribal complaints of the sufficiency and timing of federal consultation; and

WHEREAS, western water laws provide a complex system of allocating and administering water, including the determination of the quantity and priority of water rights, with their sources of water, points of diversion, and places of beneficial use, and this system includes the necessary quantification and priority dates of tribal reserved water rights as implied under the *Winters* doctrine, as well as any additional state-based water rights for tribes or tribal members; and

WHEREAS, states have the exclusive authority to allocate and administer quantities of water within their respective jurisdictions; and

WHEREAS, water quality agencies generally lack the means and authority to determine the full nature and geographic extent of tribal reserved rights to natural resources that may require specific quantities or quality of water to satisfy the purposes of the reservations; and

WHEREAS, historical waterbodies have been extensively modified in the arid West with federal, state, tribal, and local infrastructure to capture, store, divert, and convey water for diverse and often competing uses of water; and

WHEREAS, any efforts to fulfill the federal trust responsibility to protect tribal reserved rights related to water resources, using a regulatory framework to be implemented by states, have clear federalism implications as contemplated by Executive Order 13132; and

WHEREAS, promulgation of nationwide baseline water quality standards for tribes has the potential to create a more complicated regulatory environment for state water quality and water resources managers and users, and at this time may raise more questions and conflicts than they will resolve, particularly in western states where a complex mix of state and tribal lands may be present.

NOW, THEREFORE, BE IT RESOLVED that the Westerns States Water Council supports the establishment of a searchable database of all tribal treaties and tools for analysis as described in the 17-agency MOU.

BE IT FURTHER RESOLVED that the Western States Water Council opposes shifting federal trustee responsibilities to the states by imposing the burden of determining the nature and extent of tribal reserved rights over to states.

BE IT FURTHER RESOLVED that the Western States Water Council supports timing any tribal-federal consultation process to determine water quality needs for tribal reserved rights to take place prior to the subsequent triennial review of state water quality standards, in order to better inform the state process in a timely and efficient manner.

BE IT FURTHER RESOLVED that federal regulations intended to protect tribal reserved rights should not harm state-tribal relations or place states in the middle of tribal treaty disputes that may not be appropriate for States to attempt to resolve.

BE IT FURTHER RESOLVED that steps must be taken to ensure that any tribal reserved rights that require specific quantities of water in Western States have a corresponding water right.

BE IT FURTHER RESOLVED that the Western States Water Council urges EPA to fully consider legal and administrative issues associated with promulgating nationwide tribal baseline water quality standards, including addressing (1) how EPA would implement such a rule and under what authorities, particularly with regard to non-jurisdictional waters and unquantified reserved water rights; (2) how the baseline WQS would impact existing state jurisdictions and water quality programs, particularly where the outer reservation boundaries do not reflect current regulatory jurisdictions and/or non-tribal lands within reservation boundaries; and (3) how EPA would resolve any differences between states and tribal standards, as well as states' standards and EPA's baseline standards for tribes without treatment as states (TAS) authority.

BE IT FURTHER RESOLVED that the Western States Water Council supports meaningful and substantive consultation with States as co-regulators, seeking input from states beyond mere information-sharing, prior to publication of any proposed or final rules with federalism implications.

Position No. 491

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
Urging Congress and the Administration to Support

SUBSEASONAL to SEASONAL
WEATHER RESEARCH, FORECASTING, and INNOVATION

Reno, Nevada
May 24, 2023

WHEREAS, Western States experience great subseasonal, seasonal, and annual variability in precipitation, with serious impacts and consequences for water supply planning and management, drought and flood preparedness and response, water rights administration, operation of water projects, and aging water infrastructure; and

WHEREAS, sound decision-making to protect life and property by reducing flood risks and to inform decisions involving billions of dollars of economic activity for urban centers, agriculture, hydropower generation, and fisheries depends on our ability to observe, understand, model, predict, and adapt to precipitation variability on operational time scales ranging from a few weeks to a season or more; and

WHEREAS, investments in observations, modeling, high-performance computing capabilities, research, and operational forecasting of precipitation provide an opportunity to significantly improve planning and water project operations to reduce flood damages, mitigate economic and environmental damages, and maximize water storage and water use efficiency; and

WHEREAS, operating aging water infrastructure in the face of growing and often competing water supply and water management demands requires that state, federal, tribal, and local agencies optimize operations for maximum efficiency and seek innovations, such as improved subseasonal to seasonal forecasting (S2S), to support their decision-making; and

WHEREAS, the responsibility for operational weather forecasting rests with the National Weather Service (NWS), and currently NWS has minimal skill in making S2S outlooks; and

WHEREAS, there is a need to prioritize National Oceanic and Atmospheric Administration (NOAA) research and weather modeling to improve operational sub-seasonal and seasonal precipitation forecasts, with attention to Western needs; and

WHEREAS, NOAA submitted a report[1] to Congress pursuant to Section 201 of the Weather Research and Forecasting Innovation Act of 2017 (P.L. 115-25) recommending pilot projects to improve S2S forecasts for water management in the western U.S.; and

WHEREAS, the Flood Level Observation, Operations, and Decision Support (FLOODS) Act of 2022 (P.L. 117-316) directs NOAA to improve S2S forecasting to support flood management.

[1] https://repository.library.noaa.gov/view/noaa/27408

NOW, THEREFORE, BE IT RESOLVED that the Western States Water Council supports the reauthorization of the Weather Act and its implementation, together with the FLOODS Act, authorizing federal action to improve precipitation forecasting at S2S scales in the West, and urges NOAA to move forward with pilot projects for improving S2S winter precipitation forecasting in the mountain west and summer precipitation forecasting in the Great Plains.

BE IT FURTHER RESOLVED that the Western States Water Council supports adequate Congressional appropriations directed toward the improvement of S2S forecasting.

(See also Position #441, 3/6/20; and #399, 4/14/17)

Position No. 492

RESOLUTION
of the
WESTER N STATES WATER COUNCIL
regarding the
BUREAU OF RECLAMATION'S
MAINTENANCE, REPAIR, AND REHABILITATION NEEDS

Reno, Nevada
May 24, 2023

WHEREAS, the Bureau of Reclamation's mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public; and

WHEREAS, Reclamation operates hundreds of dams, reservoirs, and related infrastructure in the West, supplying water and power to millions of people, irrigating millions of acres for food and fiber, providing flood control and recreation, and supporting wildlife and habitat; and

WHEREAS, the importance of maintaining these projects cannot be overstated; and

WHEREAS, many of Reclamation's facilities are nearing, or have already exceeded, their original design lives and are in need of maintenance, repair, and/or rehabilitation (MR&R), in order to minimize risk; and

WHEREAS, MR&R needs refer to both maintenance that has been deferred and future projections or anticipated maintenance, repair and rehabilitation work; and

WHEREAS, Reclamation's funding and the funding from non-federal partners which operate two-thirds of Reclamation's infrastructure under contract is not sufficient to address all MR&R needs; and

WHEREAS, in 2021, Reclamation submitted an Asset Management Report[1] to Congress pursuant to §§ 8601-8603 of the John D. Dingell, Jr. Conservation, Management and Recreation Act of 2019 (P.L. 116-9) providing a detailed assessment of major MR&R needs over the next 30 years, which identified over 2,800 activities at an estimated cost of $11.9B; and

WHEREAS, Congress and the Administration must have access to consistent and accurate information on Reclamation's MR&R needs to address these needs through investments that are based on long-term capital planning and budgeting strategies; and

WHEREAS, state water managers require this information to carry out their water planning and other water administration activities; and

[1] https://www.usbr.gov/infrastructure/mrr/docs/asset-management-report-to-congress.pdf

WHEREAS, in recent years, Reclamation has made progress in developing and improving estimates of MR&R needs for infrastructure under its jurisdiction as well as standard asset management criteria that evaluate risks to: (1) human health and safety; (2) economic growth; and (3) the environment; and

WHEREAS, Reclamation also continues to work with non-federal operating entities to clarify the processes for providing non-federal input into compiling and reporting MR&R needs; and

WHEREAS, notwithstanding these improvements, much of the currently available information regarding Reclamation's MR&R needs for Reclamation's infrastructure under contract is inconsistent and difficult to obtain; and

WHEREAS, a process is needed to evaluate Reclamation's MR&R needs for facilities under contract pursuant to standard asset management criteria that evaluate risks.

NOW, THEREFORE, BE IT RESOLVED that the Western States Water Council urges Congress and the Administration to work together to develop a standardized process to evaluate Reclamation's MR&R needs for facilities under contract and a process to ensure Reclamation can receive from partners/operating entities, and provide, the most up-to-date, consistent, and accurate information, including the estimated costs of those needs and the relative priority or importance of addressing those needs; and

BE IT FURTHER RESOLVED that Reclamation should ensure that appropriate information on its MR&R needs is readily accessible and easy to understand by Congress, state policy makers, and the public.

(See also Position #442, 03/06/20; #400, 4/14/17; and #360, 4/03/14)

Position No. 493

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
regarding the
RECLAMATION SAFETY OF DAMS ACT OF 1978

Reno, Nevada
May 24, 2023

WHEREAS, the Bureau of Reclamation's dams and reservoirs are the primary source of water for numerous regions and communities throughout the West; and

WHEREAS, Reclamation's dams and reservoirs provide essential benefits such as drinking water, irrigation, hydropower, flood control, and recreation, while also supporting wildlife and habitat; and

WHEREAS, the safe operation and maintenance of Reclamation's dams is critical to sustaining these benefits and preventing dam failure, which threatens lives as well as private and public property; and

WHEREAS, many state[1] and federal agencies, including Reclamation, follow the 2004 FEMA hazard potential classification system for failures or mis-operation of dams (FEMA Pub. No. 333), defining "high hazard" as probably causing a loss of human life, and "significant hazard" as no probable loss of human life but resulting in substantial economic loss, environmental damage, disruption of lifeline facilities, or other considerable impacts; and

WHEREAS, in the FY2024 budget request,[2] Reclamation noted that half of their 489 dams were built between 1900 and 1950, with 90% of their dams built before the adoption of modern design and construction practices, and the agency has identified 361 high and significant hazard dams and recommended modifications to prevent safety or performance issues; and

WHEREAS, maintaining and rehabilitating dams and related infrastructure is one of the most serious problems that Reclamation currently faces; and

WHEREAS, the Reclamation Safety of Dams Act of 1978 provides Reclamation with authority to preserve and maintain the structural safety of dams under its stewardship; and

WHEREAS, in FY2016, the Congress provided an additional $1.1 billion in budget authority for dam safety (P.L. 114-113, Section 204; 43 U.S.C. 509), giving Reclamation several more years before reaching its spending ceiling; and

[1] Summary of State Laws and Regulations on Dam Safety (May 2020), Association of State Dam Safety Officials
[2] https://www.usbr.gov/budget/2024/FY-2024-Bureau-of-Reclamation-Budget-Justifications.pdf

WHEREAS, failure to appropriate such sums as are necessary for Reclamation's dam safety activities will increase the chances of dam failures by hindering the agency's ability to carry out critical dam safety rehabilitation and modernization efforts, risking loss of life and public and private property.

NOW, THEREFORE, BE IT RESOLVED that the Western States Water Council urges the Administration and Congress to work together and determine such sums as may be necessary for Reclamation to effectively carry out its dam safety program in a timely manner.

(See also Position #443, 3/03/20, #401, 4/14/17; and #361, 4/03/14)

Position No. 494

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
regarding
THE TRANSFER OF FEDERAL WATER AND POWER PROJECTS
and
RELATED FACILITIES

Reno, Nevada
May 24, 2023

WHEREAS, the John D. Dingell, Jr. Conservation, Management and Recreation Act (P.L. 116-9) was signed into law on March 12, 2019, and Title VIII provides the Bureau of Reclamation with authority to transfer title to certain eligible facilities to qualifying entities without separate and individual acts of Congress; and

WHEREAS, on May 22, 2019, U.S. Secretary of the Interior David Bernhardt announced actions to expedite the transfer of eligible Reclamation facilities into local ownership and management with a new Categorical Exclusion and an update of Reclamation's operating manual procedures to streamline the title transfer process; and

WHEREAS, such transfers may offer important benefits, but many are necessarily very complex and involve many different interests, including important public and third-party interests protected under various state and federal laws; and

WHEREAS, many of these projects serve multiple purposes and were built (and their capital costs are being repaid) under longstanding agreements with water, power, and other users; and

WHEREAS, some single-purpose projects might be appropriately transferred under an expedited review process to their non-federal sponsors/operators by mutual agreement; and

WHEREAS, the many potential public benefits and costs related to transfers involve state and local governments and other interests, in addition to the federal government; and

WHEREAS, present and potential benefits may be lost unless there is a careful analysis of the transfer of individual projects; and

WHEREAS, federal project transfers require a careful project-by-project analysis of expected costs and benefits; and

WHEREAS, states have the primary responsibility for the comprehensive development, administration, and protection of their water resources for all purposes.

NOW THEREFORE, BE IT RESOLVED that the Western States Water Council supports the careful evaluation of the transfer of federal water and power assets and urges the Administration and Congress to work together, with strong state involvement and protections for state water laws and water rights.

(See also Position #444, 3/06/20; #402, 4/14/17, and #362, 4/03/14)

For reference, see also Position #209 readopted November 20, 1998, which was allowed to sunset at the meetings held in Oklahoma City, OK on November 16, 2001. (*Originally adopted Nov. 17, 1995*)

Position No. 495

POSITION
of the
WESTERN STATES WATER COUNCIL
regarding
THE NATIONAL LEVEE SAFETY PROGRAM

Reno, Nevada
May 24, 2023

WHEREAS, floods are among the Nation's most frequent and costliest hazards – every year the costs to taxpayers are in the billions and continue to increase; and

WHEREAS, all 50 states confront levee safety issues; and

WHEREAS, Congress enacted the National Levee Safety Act of 2007 (the Act) in the aftermath of Hurricane Katrina and the failure of the levees and flood water conveyance canals in New Orleans, Louisiana;[1] and

WHEREAS, the Act created the "National Committee on Levee Safety" (NCLS) to develop recommendations for a national levee safety program, including a strategic plan for implementation of the program; and

WHEREAS, in January 2009, the NCLS released, "Recommendations for a National Levee Safety Program – A Report to Congress;" and

WHEREAS, the report's core recommendation calls for the creation of an independent National Levee Safety Commission to: (1) develop national safety standards for levees for common, uniform use by all federal, state, and local agencies; (2) inventory and inspect all levees on a periodic basis; and (3) develop national tolerable risk guidelines for levees; and

WHEREAS, the Water Resources Reform and Development Act (WRRDA) of 2014 subsequently redefined the term "levee" as an embankment or flood wall (i) "the primary purpose of which is to provide hurricane, storm, and flood protection…;" and (ii) " that normally is subject to water loading for only a few days or weeks during a year;" and further defined "canal structures" to mean an embankment, wall or structure along a canal or manmade watercourse that (i) constrains water flows; (ii) is subject to frequent water loading; and (iii) "is an integral part of a flood risk reduction system that protects the leveed area from flood waters" associated with weather-related events; and

WHEREAS, water supply canals that are part of an irrigation or municipal or industrial water supply system are appropriately excluded from the National Levee Safety Program; and

WHEREAS, one objective of the National Levee Safety Act of 2007 was to promote sound technical practices in levee design, construction, operation, maintenance, inspection, assessment, and security; and

[1] 121 Stat. 1288, P.L. 110-114.

WHEREAS, the U.S. Government Accountability Office (GAO) released a June 2016 report that found that WRRDA 2014 directed the U.S. Army Corps of Engineers (USACE) and Federal Emergency Management Agency (FEMA) to: (1) reconvene the National Committee on Levee Safety; (2) develop a national levee inventory; (3) implement a multifaceted levee safety initiative; (4) report to Congress by June 10, 2015; (4) report on the feasibility of a joint dam and levee-safety program by June 10, 2017; and (5) submit a report with recommendations identifying and addressing legal liabilities of engineering levee projects; and

WHEREAS, GAO found that with the exception of continuing to develop a national levee inventory that the FEMA and USACE had made little progress in implementing key WRRDA requirements, given resource constraints; and recommended that they develop a plan with milestones for implementing the required activities using existing resources or request additional resources as needed.

WHEREAS, the National Levee Database (NLD), developed by USACE, is the focal point for comprehensive information about our nation's levees and the NLD continues to be a dynamic database with ongoing efforts to add levee data from federal agencies, states, and tribes; and

WHEREAS, USACE and the U.S. Bureau of Reclamation published "Best Practices in Dam and Levee Safety Risk Analysis," in July 2019; and

WHEREAS, USACE published Engineer Circular No. 116-2-218,[2] establishing policies for implementing the Levee Safety Program and guidance consolidating and formalizing the principles, policies, and key processes used by USACE in the program; and

WHEREAS, the Circular expired in March 2023, with USACE expected to issue more permanent agency guidance based on input and lessons learned.

NOW, THEREFORE, BE IT RESOLVED, that the Western States Water Council supports the implementation and improvement of our national program of safety standards for levees, flood walls and flood water conveyance canals; and

BE IT FURTHER RESOLVED, that such a program should not apply to federal or non-federal water supply canals that are part of an irrigation or municipal or industrial water supply system; and

BE IT FURTHER RESOLVED, that the Western States Water Council encourages the Administration and Congress to work together and with States to strengthen the National Levee Safety Program and provide adequate resources for implementing the requirements of the National Levee Safety Act of 2007, WRRDA 2014, and the Aging Water Infrastructure and Maintenance Act (Subtitle G of the Omnibus Public Lands Management Act of 2009).

(See also Position #445, 3/06/20; #403, 4/14/17; and #363, 4/03/14)

[2] https://www.mvn.usace.army.mil/Portals/56/EC%201165-2-218.pdf

Position No. 496

POSITION
of the
WESTERN STATES WATER COUNCIL
regarding the
CLEAN and DRINKING WATER STATE REVOLVING FUNDS
and
WATER INFRASTRUCTURE FINANCE and INNOVATION ACT
LOANS and STATE and TRIBAL ASSISTANCE GRANTS

Reno, Nevada
May 24, 2023

WHEREAS, the economies of every state and the Nation as a whole depend upon sufficient water supplies of suitable quality, which require adequate water and sewer infrastructure; and

WHEREAS, it is Congress's intent that states assume responsibility for permitting programs under the Clean Water Act and Safe Drinking Water Act;

WHEREAS, the Environmental Protection Agency's (EPA) Clean Water State Revolving Fund and Drinking Water State Revolving Fund (SRF programs) provide states with capitalization grants that are leveraged with state contributions to offer financial assistance to cities, towns, communities, and others for the planning, design, construction and rehabilitation of built and green water and wastewater-related infrastructure to improve source and drinking water quality; and

WHEREAS, each state administers the SRF programs in coordination with EPA, and these programs are one of the principal tools that states use to pursue the goals of the Clean Water Act and Safe Drinking Water Act; and

WHEREAS, the nation's wastewater and drinking water infrastructure is aging and in need of repair and replacement; and

WHEREAS, the EPA by law estimates infrastructure needs every four years and the most recent estimates show a total capital investment need of at least $271 billion for wastewater and stormwater infrastructure and $625 billion for drinking water infrastructure nationwide over the next 20 years, and a significant funding gap under current spending and operation practices; and

WHEREAS, the 2021 American Society of Civil Engineers' Infrastructure Report Card and updated Failure to Act Report estimates that by 2029 there will be a $434 billion gap in needed new capital investments for water and wastewater projects, as well as the loss of an estimated 10.6% of the water sector workforce each year due to transfers or retirement, with some utilities expecting as much as half of their staff to retire in the next ten years; and

WHEREAS, ASCE recommends tripling the amount of annual appropriations to the Drinking Water SRF program, fully funding the WIFIA program and the USDA Agriculture Rural Development programs; and

WHEREAS, these estimates do not include anticipated operation and maintenance costs, typically funded by ratepayers, nor an estimated $30 billion unfunded gap related to calls for replacing some 6.1 million homes with lead water service lines; and

WHEREAS, proposed federal appropriations and budget requests that reduce SRF funding ignore the multitude of needs identified by EPA, particularly given that many states and communities are struggling to meet their water and wastewater challenges in the face of growing populations and aging infrastructure; and

WHEREAS, to the extent federal law has established certain nationwide levels of treatment for drinking water and wastewater, the federal government has an obligation to provide states with the necessary financial and technical assistance needed to comply with such requirements, including the appropriation of adequate funding for SRF capitalization grants; and

WHEREAS, EPA's Clean Water and Drinking Water Infrastructure Sustainability Policy mandates that state SRF programs promote sustainable water infrastructure and overall system sustainability; and

WHEREAS, the SRF Programs have measures in place to help ensure system sustainability and account for individual state needs and priorities; and

WHEREAS, the SRF programs are one of the most successful delivery mechanisms for federal assistance; and

WHEREAS, new competing water and wastewater infrastructure funding programs should not come at the expense of the SRFs, which are a proven model for addressing water and wastewater infrastructure needs; and

WHEREAS, it is the sense of Congress through the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA), the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN), the America's Water Infrastructure Act of 2018 (AWIA), the American Rescue Plan Act of 2021 (ARPA), the Infrastructure Investment and Jobs Act of 2021 (IIJA), and the Inflation Reduction Act of 2022 (IRA) to provide robust funding of capitalization grants for States' drinking water revolving loan fund and the clean water revolving loan fund; and

WHEREAS, Congress has imposed a number of additional requirements on the states' management and use of SRF funds, including but not limited to: (1) mandating the use of between 20% and 30% of appropriated funds for principal forgiveness, negative interest loans, grants, or a combination thereof; (2) setting aside 10% of funds for green infrastructure, water or energy efficiency, or other environmentally innovative activities; (3) "American Iron and Steel," "Build America, Buy America," and other domestic sourcing provisions that limit the use of SRF funds to purchase certain types of materials and services; (4) Davis-Bacon Prevailing Wage that requires payment of locally prevailing wages and fringe benefits to contractors and subcontractors at the site of work, (5) mandating at least 10% (CW SRF) and 12% (DW SRF) for loans to disadvantaged communities in the form of grants or principal forgiveness; and (6) mandating funds that can only be used for specific project purposes, such as replacing lead lines and addressing emerging contaminants; and

WHEREAS, although often well-intended, these requirements are generally aimed at advancing policy objectives that are unrelated or contrary to the SRFs' primary purpose of providing a permanent, recurring source of funding for basic water infrastructure, and reduce the flexibility of the States to manage SRFs in a cost effective manner; and

WHEREAS, paying for Congressional earmarks through SRF capitalization grants cuts funding for state priority projects; and

WHEREAS, cutting federal funding for the SRFs also cuts funding for critical water quality programs, including technical assistance for small, rural and tribal communities, source water protection and capacity development under the Public Water System Supervision program, and other state and local water protection activities, and may put primacy at risk for some states; and

WHEREAS, additional restrictions on state SRF management represent unfunded federal mandates that impose significant regulatory burdens and make state SRF programs less attractive to local entities, and reduce the capacity of a State to leverage their SRF programs and address infrastructure needs; and

WHEREAS, the State and Tribal Assistance Grants (STAG), including Performance Partnership Grants (PPG) and other grants are critical to the support of state programs that assure that the nation's drinking water and water quality remain safe for the public health of the citizens.

NOW, THEREFORE, BE IT RESOLVED, that the Administration and Congress should work together to ensure that stable and continuing federal appropriations are made to the SRF capitalization grants, WIFIA loans, and State and Tribal Assistance Grants at funding levels that are adequate reflect the states' priorities identified in their intended use plans (IUP), and further that these states' allocations are not reduced or harmed by directed congressional earmarks. These combined actions are intended to help states address their water infrastructure needs and protect public health and the environment for the benefit of the people.

BE IT FURTHER RESOLVED, that the SRF programs should allow for greater flexibility and require fewer restrictions on state SRF management.

BE IT FURTHER RESOLVED, that the Western States Water Council urges the Administration to allow and encourage drinking water and wastewater system improvements to satisfy compensatory mitigation requirements triggered in various permitting programs.

(See also Position #446, 3/06/20; #364, 4/03/14; and #404, 4/14/17)

Position No. 497

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
regarding the
RURAL WATER and WASTEWATER PROJECT/INFRASTRUCTURE NEEDS
and
U.S. DEPARTMENT of AGRICULTURE PROGRAMS

Reno, Nevada
May 24, 2023

WHEREAS, in the West, water is indeed our "life blood," a vital and scarce resource the availability of which has and continues to circumscribe growth, development, our economic and environmental well-being and quality of life; and

WHEREAS, across the West, many small, rural and tribal communities are experiencing water supply shortages due to drought, declining streamflows and groundwater supplies, and inadequate infrastructure, with some communities hauling water over substantial distances to satisfy their potable water needs; and

WHEREAS, often water supplies that are available to these communities are of poor quality and may be impaired by naturally occurring and man-made contaminants, including arsenic, copper, lead, and carcinogens, which impact communities' health and their ability to comply with increasingly stringent federal water quality and drinking water mandates; and

WHEREAS, many small, rural and tribal communities (including colonias) also face challenges related to meeting federal mandates for wastewater treatment; and

WHEREAS, at the same time, many small, rural and tribal communities in the West suffer from significant levels of unemployment and simply lack the financial capacity and expertise to plan, finance and construct needed drinking water and wastewater system improvements; and

WHEREAS, there is a Federal responsibility to assist these communities in meeting related federal mandates to achieve water and wastewater public health goals; and

WHEREAS, USDA's water and wastewater grant and loan programs help provide financing for clean and reliable drinking water systems, sanitary sewage disposal, solid waste disposal and stormwater drainage for individual households, businesses, cooperatives, private non-profits, and state and local governmental entities and tribal communities – many without access to private, commercial credit on reasonable terms or other federal financial assistance (including the SRFs); and

WHEREAS, these programs help very small, financially distressed communities by providing long-term low interest loans (up to 40 years at fixed rates determined by need), loan guarantees, and grants (if funds are available), and related programs provide technical assistance and training grants; and

WHEREAS, these wise investments of federal dollars can help businesses and manufacturers to locate or expand operations in these communities, providing an economic boost, as well as environmental improvements and other long-term returns.

NOW THEREFORE BE IT RESOLVED, that the Western States Water Council urges the Administration and Congress to carefully consider the needs of small, rural and tribal communities and businesses and provide or otherwise ensure they have access to financial and technical assistance sufficient to ensure they can meet federal water quality and drinking water mandates, as well as achieve public health goals.

(See also Position #447, 3/06/20; and #405, 4/14/17)

Position No. 498

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
in support of
NATIONAL DAM SAFETY PROGRAMS

Reno, Nevada
May 24, 2023

WHEREAS, access to, and availability of, water profoundly influences growth and development, economic and environmental well-being, and the quality of life for the population; and

WHEREAS, across the Nation, dams and reservoirs store water for crucial uses, including agriculture, industry, municipalities, recreation, fisheries, and other purposes; and

WHEREAS, to ensure public health and safety and the continued provision of essential benefits, responsible operation, regular maintenance, and repair and rehabilitation of dams and related infrastructure is required; and

WHEREAS, many state[1] and federal agencies, including the Bureau of Reclamation and the Army Corps of Engineers, follow the 2004 FEMA hazard potential classification system for failures or mis-operation of dams (FEMA Pub. No. 333),[2] defining "high hazard" as probably causing loss of human life, and "significant hazard" as no probable loss of human life but resulting in substantial economic loss, environmental damage, disruption of lifeline facilities, or other considerable impacts; and

WHEREAS, aging infrastructure and lack of investment are contributing to an increase in the number of non-federal high hazard potential (HHP) dams in poor repair across the Nation, with around 16,000 dams identified as HHP in the 2023 National Inventory of Dams (NID) and requiring an estimated $34.1 billion to repair and rehabilitate, according to the Association of State Dam Safety Officials;[3] and

WHEREAS, hundreds of Bureau of Reclamation dams and reservoirs throughout the West provide water and power for millions of people, irrigation for food and fiber, flood control, recreation opportunities, and habitat for wildlife; and

WHEREAS, the average age of Bureau of Reclamation dams is 70 years, and Reclamation's 2023 Asset Management Report[4] to Congress indicates that over the next 30 years, major maintenance, repair, and rehabilitation (MR&R) needs (including extraordinary maintenance, safety of dams, and deferred maintenance) will be $20.3 billion; and

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[1] Summary of State Laws and Regulations on Dam Safety (May 2020), Association of State Dam Safety Officials
[2] https://www.ferc.gov/sites/default/files/2020-04/fema-333.pdf
[3] The Cost of Rehabilitating Dams in the U.S.: A Methodology and Estimate, ASDSO April 2023
[4] https://www.usbr.gov/infrastructure/mrr/docs/asset-management-report-to-congress2023.pdf

WHEREAS, the Reclamation Safety of Dams Act of 1978 provides Reclamation with authority to preserve and maintain the structural safety of dams under its stewardship; and

WHEREAS, in FY2016, the Congress provided an additional $1.1 billion in budget authority (P.L. 114-113, Section 204), giving Reclamation several more years before reaching its spending ceiling; and

WHEREAS, the Natural Resources Conservation Service (NRCS) has 2,243 high hazard project dams with an average age of 50 years, with most requiring MR&R estimated at $11.1 billion, and by 2025 nearly 6,800 NRCS watershed dams will have reached the end of their design life; and

WHEREAS, the NRCS offers a Watershed Rehabilitation Program under the Watershed Protection and Flood Prevention Act to help local sponsors to rehabilitate their dams; and

WHEREAS, the U.S. Army Corps of Engineers (USACE) operates and maintains approximately 740 dams nationwide that provide significant, multiple benefits including flood risk management, navigation, water supply, hydropower, environmental stewardship, fish and wildlife conservation and recreation that are essential to the nation, integral to many communities, and critical in many watersheds; and

WHEREAS, USACE's dam safety program is designed to make sure these projects deliver their intended benefits, while reducing risks to people, property and the environment through continuous assessment, communication and management; and

WHEREAS, approximately 97 percent of USACE dams are more than 30 years old, 70 percent have exceeded their designed 50-year service lives, and the estimated cost of repair is nearly $20 billion;[5] and

WHEREAS, USACE dam safety projects are cost shared with local sponsors and requirements vary based on the original Congressional project authorization, and dams with highest life safety risk receive 100% of what can be efficiently expended in the program year, taking into account both budgeted funds and carryover balances.

WHEREAS, according to the Congressional Research Service, in 2019 the 90,000 dams listed in the NID included 3% owned by federal agencies and the remainder owned by private entities, nonfederal governments, and public utilities; and

WHEREAS, states have regulatory authority for over 69% of NID-listed dams, but the federal government plays a key role in dam safety policies for both federal and nonfederal dams; and

WHEREAS, changing climate conditions are contributing to the frequency and severity of weather events and natural disasters which increase the likelihood of dam failures, including failures of deficient HHP dams; and

[5] https://www.usace.army.mil/Media/Fact-Sheets/Fact-Sheets-View/Article/2523036/dam-safety-facts-and-figures/

WHEREAS, dam failures can result in loss of life, mass evacuations, extensive property damage, destruction of public infrastructure, and widespread dispersal of contaminants; and

WHEREAS, failing rural water infrastructure increase pressures on rural and tribal communities throughout the West, and dam failures can exacerbate water scarcity and supply issues; and

WHEREAS, the significant legal and economic costs of dam failures place additional strain on scant state, tribal, and local revenues that must respond to other crises, including the COVID-19 pandemic; and

WHEREAS, the primary purpose of the Federal Emergency Management Agency (FEMA) National Dam Safety Program is to provide financial assistance to the States for strengthening dam safety programs through such actions as: (1) dam safety training for state personnel; (2) increased inspections of non-federal dams; (3) increased submittal and testing of emergency action plans; (4) more timely review and issuance of permits; (5) improved coordination with state emergency preparedness officials; (6) identification of non-federal dams for repair or removal; and (7) dam safety awareness workshops and creation of dam safety outreach materials; and

WHEREAS, Congress recently appropriated $10 million for FEMA's new Rehabilitation of High Hazard Potential Dams (HHPD) Grant Program for FY2020, to provide technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams; and

WHEREAS, the FEMA National Dam Safety Program's Grant Assistance to States provides critical funding for state dam safety programs, which continue to be underfunded and lack sufficient staff and other resources; and

WHEREAS, the FEMA HHP Dam Rehabilitation Grant program is essential to the continued improvement of dam infrastructure throughout the Nation; and

WHEREAS, mitigation planning, supported by FEMA grants, such as the Flood Mitigation Assistance Grant Program, the Pre-Disaster Mitigation Grant Program, and the Hazard Mitigation Assistance Grant Program, help to break the cycle of disaster damage, reconstruction, and repeated damage; and

WHEREAS, Congress recently authorized and appropriated $81M for the USACE Corps Water Infrastructure Financing Program (CWIFP) to provide long-term, low-cost loans for maintaining, upgrading, and repairing non-federal, NID-listed dams; and

WHEREAS, state dam safety programs are integral to the efficient and sustainable use of federal funds to improve the safety and longevity of non-federal dams and related infrastructure.

NOW, THEREFORE, BE IT RESOLVED, the Western States Water Council supports continued and increased funding for the FEMA National Dam Safety Program, the FEMA High Hazard Dam Rehabilitation Grant, the FEMA Hazard Mitigation Assistance Grants and the USACE CWIFP; and

BE IT FURTHER RESOLVED, the Western States Water Council supports federal legislative and administrative actions that provide stable and continuous funding streams for MR&R of local, state, and federal dams and related infrastructure, including HHP dams, Bureau of Reclamation dams, NRCS dams, and USACE dams; and

BE IT FURTHER RESOLVED, the Western States Water Council supports ongoing coordination of state and federal efforts to strengthen dam safety programs.

(See also Position #448, 7/22/20)

Position No. 499

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
REGARDING PREEMPTION OF STATE LAW IN FEDERAL LEGISLATION

Reno, Nevada
May 24, 2023

WHEREAS, the future growth, prosperity and economic and environmental health of the West and the Nation depend upon the availability of adequate quantities of water for myriad uses; and

WHEREAS, Western states have primary authority and responsibility for the appropriation, allocation, development, conservation and protection of water resources, both groundwater and surface water, including protection of water quality, instream flows and aquatic species; and

WHEREAS, the Congress has historically deferred to state water law as embodied in Section 8 of the Reclamation Act, Section 10 of the Federal Power Act, Section 101(g) and 101(b) of the Clean Water Act, and myriad other statutes; and

WHEREAS, any weakening of the deference to state water law would be inconsistent with over a century of cooperative federalism and a threat to water rights and water rights administration in all western states; and

WHEREAS, federal deference to state water law is based on sound principles for the protection of private property rights and the collective public interest in managing our water resources and the environment; and

WHEREAS, states are primarily responsible and accountable for their own water development, management and protection challenges, and are in the best position to identify, evaluate and prioritize their needs and plan and implement strategies to meet those needs; and

WHEREAS, any legislation related to any federal water policy, water plan or planning process must recognize, defer to and support state, tribal and local government water laws, agreements, and management processes; and

WHEREAS, the federal government should explicitly recognize and provide support for ongoing watershed and state water management efforts both in and between the states, tribes and local entities, closely consult with the states, and provide appropriate technical and financial assistance; and

WHEREAS, the federal government should avoid strategies that increase unilateral mandates on state, tribal and local governments; and

WHEREAS, from time to time federal legislation and regulatory actions have been proposed that are not consistent with sound principles of cooperative federalism and primary state water related laws, authorities and responsibilities; and

WHEREAS, legislation preempting or discharging requirements for compliance with state law is not consistent with a balanced federalism approach.

NOW, THEREFORE, BE IT RESOLVED, that nothing in any act of Congress should be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to: (a) water or watershed management; (b) the control, appropriation, use, or distribution of water used in irrigation, municipal, environmental, or any other purposes, or any vested right acquired therein; or (c) intending to affect or in any way to interfere with any interstate compact, decree or negotiated water rights agreement.

BE IT FURTHER RESOLVED, that the Administration and Congress should strive to ensure federal laws, policies, rules and regulations are consistent with the principles set forth herein.

(S*ee also Position #449, 7/22/20; #406, 6/29/17; #365, 7/18/14; and #331, 7/29/11*)

Position No. 500

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
supporting
NOAA DATA, FORECASTING, AND RESEARCH PROGRAMS

Reno, Nevada
May 24, 2023

WHEREAS, federal agency data and research programs provide an important foundation for supporting water management decision-making by western federal, state, and local agencies and tribes; and

WHEREAS, the National Oceanic and Atmospheric Administration (NOAA) collects weather and climate data through in-situ and remotely sensed observations, issues forecasts and outlooks of precipitation and temperature and weather hazard warnings, and conducts research to improve forecasting and

WHEREAS, line agencies within NOAA – including the National Weather Service (NWS), Office of Atmospheric Research (OAR), National Environmental Satellite Data and Information Service (NESDIS), and National Centers for Environmental Information (NCEI) – manage the programs that collect data, issue forecasts, and conduct research; and

WHEREAS, the information obtained through these programs supports water management and preparing for and responding to the extremes of drought and flooding; and

WHEREAS, water management in the West is both defined by and challenged by high annual variability in precipitation and by the extremes of drought and flooding; and

WHEREAS, recent billion-dollar weather disasters in the West have included: recent western flooding and mudslides, severe weather and wildfires (2023): extensive West and Midwest drought, heatwave, and wildfires, as well as severe Central weather and North Central and South Central hail (2022): Western drought, heatwave and wildfires, with California flooding, as well as Central and South Central severe storms and cold wave (2021); continued drought, heatwave, wildfires, as well as severe storms and hail (2020);Missouri River and northern Great Plains flooding (2019):;Colorado hail storms (multiple years), drought in the southern Great Plains (2018); California and Nevada flooding (2017),;severe multi-year drought in California and much of the West (2012-16); Texas and Oklahoma flooding (2015); and flooding in Texas resulting from Hurricane Harvey (2017); drought across the southern Great Plains (2011); Missouri River and northern Great Plains flooding (2011); and

WHEREAS, the Colorado River Basin is experiencing a 20+year drought, one of the more severe in the tree-ring record, and tree ring data shows that there have been numerous multi-decadal or mega-droughts in the basin and some suggest drought may be the new normal for the region; and

WHEREAS, the NWS Cooperative Observer Program has provided the only long-record spatially dense precipitation observing system in rural areas and especially in mountain regions where precipitation is highly variable, but is not being supported and modernized in proportion to the high value it provides for measuring extreme precipitation; and

WHEREAS, NWS River Forecast Centers (RFCs) play an important role in using weather and climate data to produce streamflow forecasts, and in delivering forecast products to end users; and

WHEREAS, weather forecasts are operationally issued out to about two weeks but most of the forecast skill is in the first seven days; and

WHEREAS, research observing systems developed through OAR's Hydrometeorology Testbed program have demonstrated the potential for improving weather forecasts through innovative instrumentation; and

WHEREAS, the skill of precipitation forecasts at the sub-seasonal to seasonal (S2S) time scale (two weeks to two years) is minimal and is insufficient to support water management decision-making at these lead times important for flood and drought preparedness and response; and

WHEREAS, the Weather Research and Forecasting Innovation Act of 2017 (WRFIA) directed NOAA to improve its S2S forecasting ability and to submit a report to Congress on research and resources needed to improve forecasting; and

WHEREAS, a coordinated effort by the NWS Climate Prediction Center (CPC), NWS Office of Weather and Air Quality Research, and OAR and its Laboratories is needed to improve S2S precipitation forecasting; and

WHEREAS, improving S2S precipitation forecasting will require targeted observations, dedication of high-performance computing resources, focused research, and improvements to dynamical and statistical modeling; and

WHEREAS, the production of NWS' existing S2S precipitation outlooks began in the mid-1990s and has shown no significant increase in skill since that time, pointing to the need for new approaches and focused pilot projects to improve forecasting skill; and

WHEREAS, OAR's testbed programs (Climate Testbed, Hydrometeorology Testbed) have an important role in transitioning research to operational forecasting: and

WHEREAS, OAR's information delivery programs (Regional Integrated Services and Assessments, National Integrated Drought Information System) help translate research to end user communities; and

WHEREAS, improving drought prediction entails research supported through OAR on climate dynamics and process studies, developing and applying paleoclimate data sets, and regionally focused pilot research projects; and

WHEREAS, NCEI's Regional Climate Centers (RCCs) provide special-purpose, customized data products such as daily plots of mountain freezing elevations or precipitation anomalies for regional water and agricultural stakeholders; and

WHEREAS, the satellite data collected by NESDIS' Geostationary Operational Environmental Satellites (GOES) program is foundational to modern weather forecasting, with GOES-17 just having transitioned to operations as GOES-West in 2020; and

WHEREAS, OAR supports the collection and acquisition of tropical ocean temperature profiles and other data from sources such as the TAO/Triton array of moored buoys, data that are used for monitoring El Nino-Southern Oscillation status; and

NOW, THEREFORE, BE IT RESOLVED, that NWS should preserve and modernize the NWS Cooperative Observer Program.

BE IT FURTHER RESOLVED, that OAR should sustain and expand its Hydrometeorology Testbed – West program to build upon progress made in that program for developing and installing new technologies for precipitation observations, and should continue and expand ocean observations that are critical for weather and S2S forecasting.

BE IT FURTHER RESOLVED, that NOAA should place a priority on implementing the provisions of WRFIA regarding improving S2S precipitation forecasting skill, and should submit the report to Congress on S2S forecasting required by WRFIA.

BE IT FURTHER RESOLVED, that the Western States Water Council urges the NWS-OAR development of regional pilot projects to improve S2S precipitation forecasting, including a pilot on cool season precipitation forecasting in the mountain West and a pilot on summer precipitation forecasting in the Plains.

BE IT FURTHER RESOLVED, that the Western States Water Council supports the NWS CPC's efforts to improve the utility and skill of its S2S outlooks.

BE IT FURTHER RESOLVED, that the Western States Water Council supports the climate data products provided by the NCEI's RCCs, and urges NCEI to fully fund the RCCs.

BE IT FURTHER RESOLVED, that the Western States Water Council supports OAR programs to transition research to operations, and NWS and OAR programs to deliver information to end users.

BE IT FURTHER RESOLVED, that the Western States Water Council will work with NOAA in supporting efforts on improving weather and S2S forecasting.

(See also Position #450, 7/22/20; #407, 6/29/17; #366, 7/18/14; #332, 7/29/11)

Position No. 501

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
regarding the
THE RECLAMATION FUND

Reno, Nevada
May 24, 2023

WHEREAS, in the West, water is indeed our "life blood," a vital and scarce resource the availability of which has and continues to circumscribe growth, development and our economic well-being and environmental quality of life – the wise conservation and management of which is critical to maintaining human life, health, welfare, property and environmental and natural resources; and

WHEREAS, recognizing the critical importance of water in the development of the West, the Congress passed the Reclamation Act on June 17, 1902 and provided monies "reserved, set aside, and appropriated as a special fund in the Treasury to be known as the 'reclamation fund,' to be used in the examination and survey for and the construction and maintenance of irrigation works for the storage, diversion, and development of water for the reclamation of arid and semiarid land..." in seventeen western states, to be continually invested and reinvested; and

WHEREAS, then President Theodore Roosevelt stated, "The work of the Reclamation Service in developing the larger opportunities of the western half of our country for irrigation is more important than almost any other movement. The constant purpose of the Government in connection with the Reclamation Service has been to use the water resources of the public lands for the ultimate greatest good of the greatest number; in other words, to put upon the land permanent homemakers, to use and develop it for themselves and for their children and children's children...;"[1] and

WHEREAS, the Secretary of the Interior was authorized and directed to "locate and construct" water resource projects to help people settle and prosper in this arid region, leading to the establishment of the Reclamation Service – today's U.S. Bureau of Reclamation; and

WHEREAS, western states and the Bureau of Reclamation have worked in collaboration to meet the water-related needs of the citizens of the West, and protect the interests of all Americans, recognizing changing public values and the need to put scarce water resources to beneficial use for the "ultimate greatest good of the greatest number;" and

WHEREAS, the Bureau of Reclamation has facilities that include 338 reservoirs with the capacity to store 140 million acre-feet of water, with irrigation water for 10 million acres of farmland that produce 60 percent of the nation's vegetables and 25 percent of its fruits and nuts, as well as providing water to about 31 million people for municipal and industrial uses, while generating more than 40 billion kilowatt hours of energy each year from 53 hydroelectric power plants, enough to serve 3.8 million households, while providing 245 recreation areas with over 90 million visits annually, and further providing flood control, and fish and wildlife benefits; and

WHEREAS, project sponsors have and continue to repay the cost of these facilities, which also produce power receipts that annually return over one billion in gross power revenues to the federal government, prevent millions in damages due to floods each year, and supports over 63.9 billion in economic returns and supporting over 456,219 jobs; and

WHEREAS, project sponsors have and continue to repay the cost of these facilities, which also produce power receipts that annually return around $1 billion in gross power revenues to the federal

[1]State of the Union Address, 1907

government, prevent millions in damages due to floods each year, and supports over $45 billion in economic returns and over 344,000 jobs; and

WHEREAS, the water and power resources developed under and flood control provided by the Reclamation Act over the last century supported the development and continue to be critical to the maintenance of numerous and diverse rural communities across the West and the major metropolitan areas of Albuquerque, Amarillo, Boise, Denver, El Paso, Las Vegas, Los Angeles, Lubbock, Phoenix, Portland, Reno, Sacramento, Salt Lake City, Seattle, Tucson and numerous smaller cities; and

WHEREAS, western States are committed to continuing to work cooperatively with the Department of Interior and Bureau of Reclamation to meet our present water needs in the West and those of future generations, within the framework of state water law, as envisioned by President Roosevelt and the Congress in 1902; and

WHEREAS, according to the Administration's FY 2024 budget request actual and estimated receipts and collections accruing to the Reclamation Fund are $3.619 billion for FY 2022, $3.216 billion for FY 2023, and $3.021 billion for FY 2024, compared to actual and estimated appropriations of $1.602 billion for FY 2022, $1.811 billion for FY 2023, and $1.344 billion for FY 2024 and as a result the unobligated balance at the end of each year respectively is calculated to be $20.131 billion, $21.536 and $23.213 billion; and

WHEREAS, this unobligated balance in the Reclamation Fund continues to grow at an increasing rate from an actual balance of $5.67 billion at the end of FY 2006, to the estimated $23.213 billion by the end of FY 2024, over a 4-fold increase; and

WHEREAS, under the Reclamation Act of 1902, the Reclamation Fund was envisioned as the principle means to finance federal western water and power projects with revenues from western resources, and its receipts are derived from water and power sales, project repayments, certain receipts from public land sales, leases and rentals in the 17 western states, as well as certain oil and mineral-related royalties – but these receipts are only available for expenditure pursuant to annual appropriation acts; and

WHEREAS, with higher receipts than expenditures for authorized Reclamation purposes, the unobligated figure gets larger and larger, while the money is actually spent elsewhere for other federal purposes contrary to the Congress' original intent.

NOW THEREFORE BE IT RESOLVED, that the Western States Water Council asks the Administration to request and the Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund subsequent to the Reclamation Act and other acts for their intended purpose in the continuing conservation, development and wise use of western resources to meet western water-related needs – recognizing and continuing to defer to the primacy of western water laws in allocating water among uses – and work with the States to meet the water-related challenges and needs of the future.

BE IT FURTHER RESOLVED, that such "needs" may include Reclamation project dam safety costs, financing extraordinary maintenance and rehabilitation of aging infrastructure (including transferred works), authorized rural water supply projects, and the construction of Reclamation facilities incorporated as part of a Congressionally approved Indian water right settlements**.**

BE IT FURTHER RESOLVED, that the Western States Water Council asks the Administration and the Congress to investigate the advantages of converting the Reclamation Fund from a special account to a true revolving trust fund with annual receipts to be expended with or without further appropriation for authorized purposes in the year following their deposit (similar to some other federal authorities and trust accounts).

(See also Position #451, 7/22/20; #408, 6/29/17; #367, 7/18/14; #333, 7/29/11; and #304, 7/11/08)

Position No. 502

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
in support of the
WATER RESOURCES RESEARCH INSTITUTES
and the
USGS WATER RESOURCES RESEARCH ACT PROGRAM

Reno, Nevada
May 24, 2023

WHEREAS, in the West, water is a vital and scarce resource the availability of which has and continues to circumscribe growth, development, our economic well being and environmental quality of life; and

WHEREAS, the wise use, conservation, development and management of our water resources is critical to maintaining human life, health, safety and property; and

WHEREAS, water resources research, the dissemination and application of research results or research to operations (R2O) and technology transfer are increasingly important to meeting our present and future water needs; and

WHEREAS, the Water Resources Research Act of 1964 authorized a program that included the establishment of state water resources research institutes (WRRIs) or centers in each state to address our water resources challenges; and

WHEREAS, today's institutes and centers provide a research infrastructure that uses the capabilities of universities to greatly assist and provide important support to western state water agencies in long-term planning, policy development and management of the increasingly complex challenges associated with water in the West; and

WHEREAS, these challenges are exacerbated by the uncertainty surrounding population growth, climate, and economic and environmental water demands; and

WHEREAS, the Council and its member states continue to work with the institutes/centers and the academic community to ensure research investments are relevant to our most pressing water problems and allow each state to solve its problems by methods most appropriate to its own situation; and

WHEREAS, the institutes/centers' outreach and information transfer services and activities are very valuable to the water communities in the various western states; and

WHEREAS, this is a very worthwhile federal-state partnership that promotes collaboration, cooperation and the conservation of limited physical, financial and personnel resources; and

WHEREAS, funding for Water Resources Research Act programs and WRRI assistance falls within the Department of the Interior's Water and Science budget, under the U.S. Geological Survey (USGS); and

WHEREAS, the USGS Water Resources Research Act program promotes, facilitates, and conducts research that helps resolve state and regional water problems; promotes technology transfer; facilitates dissemination and application of research; trains scientists through participation in research; and awards competitive grants.

NOW, THEREFORE, BE IT RESOLVED, that the Western States Water Council asks the Administration and the Congress to maintain the federal authorization and financial support for the state water resources research institutes and Water Resources Research Act program – requesting and appropriating funds as appropriate.

(See also Position #452, 7/22/20; #409, 6/29/17; #368, 7/18/14; #334, 7/29/11; and #305, 7/11/08)

Position No. 503

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
Regarding

WATER-RELATED FEDERAL RULES, REGULATIONS, DIRECTIVES, ORDERS and POLICIES

Reno, Nevada
May 24, 2023

WHEREAS, Presidential Executive Order 13132, issued on August 4, 1999, requires federal agencies to "have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications…;" and

WHEREAS, an increasing number of federal regulatory initiatives and directives are being proposed that threaten principles of federalism, an appropriate balance of responsibilities, and the authority of the states to govern the appropriation, allocation, protection, conservation, development and management of the waters within their borders; and

WHEREAS, taking such actions goes beyond the intent of the applicable laws; and

WHEREAS, a number of these recent proposals have been made with little substantive consultation with State Governments; and

WHEREAS, a Western Federal Agency Support Team (WestFAST) now comprised of twelve water-related federal agencies was created pursuant to a recommendation of the Western Governors' Association and Western States Water Council to foster cooperation and collaboration between the federal agencies and States and state agencies in addressing water resource needs; and

WHEREAS, State consultation should take place early in the policy development process, with the States as partners in the development of policies; and

WHEREAS, federal agencies have inappropriately dismissed the need to apply this requirement to their rulemaking processes and procedures; and

WHEREAS, water quantity regulation and management are the prerogatives of States, and water rights are private property, protected and regulated under State law.

NOW, THEREFORE, BE IT RESOLVED, that nothing in any federal rule, regulation, directive, order or policy should affect, erode, or interfere with the lawful government and role of the respective States relating to: (a) the appropriation and allocation of water from any and all sources within their borders; and/or (b) the withdrawal, control, use, or distribution of water; and/or (c) affect or interfere with any interstate compact, decree or negotiated water rights agreement; and/or (d) application, development and/or implementation of rules, laws, and regulations related to water.

BE IT FURTHER RESOLVED, that federal agencies with water related responsibilities fully recognize and follow the requirements of Executive Order 13132 by establishing and implementing appropriate procedures and processes for substantively consulting with States, their Governors, as elected by the people, and their appointed representatives, such as the Western States Water Council, on the implications of their proposals and fully recognize and defer to States' prerogatives.

(See also Position #453, 7/22/20;#411, 6/29/17; and #371, 8/11/14)