

California Water Institute NEWSLETTER



Director's Message

California's water future depends on our ability to see challenges not as isolated problems, but as interconnected systems requiring integrated solutions. This quarter, the California Water Institute is advancing that vision through

research, partnership, and a commitment to turning knowledge into action.

Our Sustainability Report, released last quarter, synthesizes years of applied research and stakeholder collaboration into a roadmap for long-term water resilience. Through projects like the Fresno Regional Consolidation Feasibility Study and the San Joaquin Valley Water Infrastructure Financing Strategy, we've demonstrated that when engineering, hydrology, economics, and community collaboration converge, research becomes a tool for real change. For policymakers and practitioners, these findings offer a clearer picture of what works and where investment matters most.

But knowledge alone is not enough. This quarter, we welcomed a new [cohort of faculty fellows](#). Working across disciplines to address water challenges that transcend traditional boundaries. Their collaboration reflects an essential truth: the San Joaquin Valley's water future is shaped by policy, infrastructure, agriculture, economics, and community resilience all at once. Solutions require us to think and work differently.

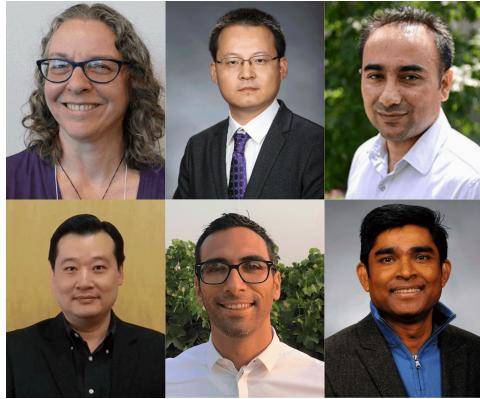
We are also deepening our connection to the communities and landowners who are part of the solution. At the World Ag Expo this month, we're bringing groundwater recharge conversations directly to the people managing the land.

Finally, in partnership with The Maddy Institute, we're making California's complex water legislation more accessible through our new Legislative Bill Summary Series. Informed participation in water policy requires clarity, and we are committed to providing it.

None of this work happens in isolation. It thrives because of partnerships across academia, agencies, industry, and the communities we serve. In this issue, we also highlight and recognize Cordie Qualle, one of our Assistant Directors, whose deep expertise in water resources and unwavering commitment to CWI's mission are instrumental to our success.

CWI Faculty Fellowship Program Welcomes New Interdisciplinary Cohort

In the San Joaquin Valley, water challenges are increasingly shaped by climate extremes, groundwater overdraft, aging infrastructure, and rising pressure on rural and disadvantaged communities. In response, the California Water Institute has started its 2026 cohort, bringing together faculty from six Fresno State colleges to work as interdisciplinary teams to develop applied research projects grounded

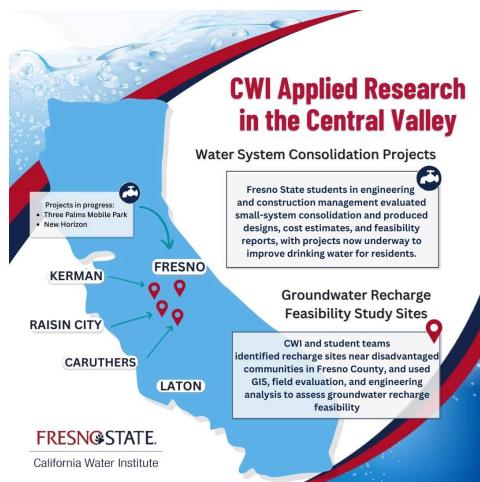


in regional needs. This year's Fellows are Alison Mandaville from English, Fayzul Pasha from Civil and Geomatics Engineering, Harry Xia from Finance and Business Law, Luca Brillante from Viticulture and Enology, Ranjit Riar from Plant Science, and Yuanyuan Xie from Mechanical Engineering.

Their collaboration matters because Valley water issues do not fit within a single discipline. Policy, infrastructure, agriculture, economics, and community resilience are connected, and solutions require researchers who can work across those boundaries. The fellowship supports this work through a year of collaboration, proposal development, and applied research. Fellows gain access to networks with regional, state, and federal agencies, industry partners, and professional development opportunities. This structure helps teams move from concept to actionable research while positioning their work for competitive funding and broader impact.

Over the coming year, the cohort will turn early ideas into fully formed proposals and begin applied studies that strengthen the connection between scholarship and implementation. As their work develops, it will help shape future research priorities and partnerships across the region and contribute to a shared knowledge base for agencies and communities. To learn more about the cohort and the program connect with CWI [visit our page](#).

Building a Sustainable Water Future: Research, Partnerships, and Innovation at the California Water Institute



California's water management system faces increasing pressure from climate variability, groundwater overdraft, aging infrastructure, and growing demands across urban and agricultural uses. Rising temperatures, more frequent droughts and floods, and long-term groundwater depletion further strain systems designed for more predictable conditions. These challenges are the focus of the California Water Institute's

Sustainability Report, which examines how research, partnerships, and innovation can strengthen long-term water resilience across the state.

The report was developed to synthesize applied research, stakeholder input, and on-the-ground experience into a clearer picture of what is working and where gaps remain. It documents how agencies and communities are responding to groundwater sustainability, drinking water reliability, and infrastructure needs under SGMA and a changing climate. For policymakers, practitioners, and partners, the findings highlight practical ways to better align technical analysis, governance, and funding to support more durable water management decisions.

Key sections of the report draw on efforts led by the California Water Institute, including the Fresno Regional Consolidation Feasibility Study, the Groundwater Recharge Feasibility Study, and the San Joaquin Valley Water Infrastructure Financing Strategy. Together, these examples show how integrated approaches combining engineering, hydrology, economics, and collaboration can translate research into actionable outcomes.

Looking ahead, the Sustainability Report will serve as a foundation for future work. Priorities include advancing the Unified Water Plan, Climate Resiliency Through Regional Water Recharge, and research on cover crops as well as on-farm groundwater recharge. These directions reflect a continued focus on data-driven planning and long-term resilience.

CWI is expanding partnerships across academia, agencies, and industry. If you are interested in collaborating or supporting this research, contact us to learn more about the [Sustainability Report](#) and explore opportunities to advance applied solutions together.

Understanding California Water Policy: CWI and The Maddy Institute Introduce Legislative Bill Summaries

California's water challenges, ranging from long-term supply reliability to ecosystem management, are increasingly shaped by state legislation that is often technical and difficult to interpret. As lawmakers respond to climate change, drought, and competing water demands, timely understanding of enacted water



policy is essential for agencies, practitioners, researchers, and communities working to implement solutions on the ground.

To support informed participation, the California Water Institute (CWI) at Fresno State, in partnership with The Maddy Institute, has launched the Legislative Bill Summary Series, a new resource designed to make recently enacted water and natural resource legislation more accessible. The series provides concise summaries that explain a bill's purpose, key provisions, and implementation considerations using clear, nonpartisan language. Each summary draws from publicly available legislative materials and includes the bill author, enactment date, and links to official state resources for additional context.

The series launches with summaries of California's SB 72, AB 1319, and SB 695, with additional bills planned. By distilling complex legislation into practical insights, the series helps water professionals and stakeholders better understand how state policy may influence local decision making.

Readers are invited to explore the [Legislative Bill Summary Series](#), learn more about CWI's policy and research efforts, and stay engaged as new summaries are released.

Groundwater Recharge Takes Center Stage at the World Ag Expo

As California faces more frequent swings between flooding and drought, landowners are increasingly part of the solution. Managing excess water during wet years can help support more reliable water supplies over the long term, both on the farm and across the region.

The California Water Institute (CWI) will be at the World Ag Expo with two educational sessions designed specifically for landowners interested in groundwater recharge. These sessions provide a practical overview of what recharge is, why it matters, and how it may fit into different agricultural operations.

On Tuesday, February 10 at 11:00 a.m., Fresno State civil engineering lecturer Henry Liang will present *Groundwater Recharge—Planning, Design, and Implementation for Landowners*, introducing key considerations for landowners exploring recharge opportunities. On Wednesday, February 11 at 2:00 p.m., CWI Director Laura Ramos will lead *Groundwater Recharge Methods—Exploring Your Options*, highlighting different recharge approaches and how they may align with land and water conditions.

The sessions also connect to CWI's broader work through its ICARP- Regional Resilience project, which focuses on capturing extreme runoff events to recharge groundwater. Through this effort, CWI is helping identify potential recharge locations and support coordination among groundwater sustainability

agencies, irrigation and water districts, and flood control agencies during high-flow events.

By bringing this conversation to the World Ag Expo, CWI is connecting landowners with research and regional planning efforts that support long-term water resilience. Landowners attending the Expo are encouraged to join the sessions and learn how groundwater recharge could play a role in their water future.



Employee Spotlight / Cordie Qualle

For Cordie Qualle, water has always been about understanding how complex systems work together. After a 40-year career in water resources engineering, that perspective now guides his role as Assistant Director at the California Water Institute.

Cordie is one of two assistant

directors at CWI, where he provides technical insight on water quality, quantity, and management to support Director Laura Ramos as she engages with water stakeholders across California. “Working with the staff and Director Ramos to accomplish water-related research and education for California is the most rewarding part of the job,” Cordie said.

Before joining CWI, Cordie spent years as a consulting Civil engineer specializing in floodwater modeling and management, wastewater, and water modeling. He later earned a master’s degree in Civil engineering with a focus on water resources management and went on to teach full time in Fresno State’s Civil and Geomatics Engineering Department. His connection to CWI began in 2021, when he served as interim director. After stepping away, Cordie returned a year later when Ramos was appointed director. “It was very easy to say yes,” he said.

At CWI, Cordie values the collaborative environment and the opportunity to engage with diverse perspectives on water management. Work exploring the intersection of surface water use for groundwater recharge and water rights has been particularly eye-opening. “What seems straightforward becomes very complex as more perspectives are included,” he noted.

Now retired from the teaching, Cordie appreciates the chance to continue contributing his experience at a pace that fits his life today. Outside of work, he enjoys bicycling, hiking, and reconnecting with longtime colleagues on the Fresno State campus, while staying engaged in research and education around California’s most precious resource: water.

Upcoming Events

Mark Your Calendars for a Series of Water Events Coming This Spring!

The California Water Institute is hosting a series of events this spring to connect Californians with water challenges and solutions.

CWI will begin the season at the **World Ag Expo on February 10–11** with two educational sessions for landowners interested in groundwater recharge. On February 10 at 11:00 AM, and on February 11 at 2:00 PM. The sessions will be highlighting recharge approaches and how they align with varying land and water conditions.

On March 20, CWI will celebrate **World Water Day** (observed March 21) with interactive displays tracing water's journey from source to tap. Visitors will learn about groundwater reliance, local water delivery, and how each drop reaches their faucet, both on campus and in the city. The Fresno State Water Tower will serve as a focal point for celebrating water and inspiring action.

During **Water Awareness Month in May**, the Annual Water Bootcamp offers virtual sessions with Fresno State experts exploring pressing water issues, innovations, and solutions.

The **San Joaquin Valley Water Summit: From Reports to Results** on May 20–21 at Fresno State will feature panels and presentations on critical reports recently released, while Day 2 will focus on translating insights into action through roundtable discussions that identify near-term priorities, pilot projects, and collaborative pathways for state, local, and federal partners. *Planning is still in its infancy; stay tuned for more information soon.*

Mark your calendars and stay tuned for registration details—these events provide a chance to learn, engage, and participate in informed, solution-driven action for California's water future.

If you would like to no longer receive CWI email updates, please [click here](#).