



California Water Institute

NEWSLETTER



Director's Message

Dear Friends and Colleagues,

This spring marked a season of growth and forward momentum for the California Water Institute. We were proud to launch Fresno State's new water minor and CWI

101 course—the first in the CSU system—giving students from across disciplines the opportunity to explore the vital role of water in California and the diverse careers it supports.

We recently welcomed our 2025 Faculty Fellows, representing four colleges at Fresno State. Their research will advance innovative solutions to water challenges in the San Joaquin Valley, from climate resilience to equity and technology.

CWI was honored to co-host the Eleventh Annual Rural West Conference with Stanford University and the Maddy Institute. The conference brought together leaders and community voices to discuss the Central Valley's role in shaping California's climate future.

We have also been busy documenting CWI-supported collaborations that provide students with meaningful, real-world experiences. Our most recent case study highlights Fresno State data analytics students who developed an Environmental Management System for Woolf Farming. This project is a strong example of how applied research can benefit both students and industry partners.

On a personal note, I was honored to be officially appointed Director of CWI and grateful to receive the 2025 *Women Leading the Way* Award. I'm especially proud to work alongside such a dedicated team, including students like Ysabella Ramirez, featured in our employee spotlight.

As always, thank you for supporting our mission. We look forward to the work ahead.

Laura Ramos Director, California Water Institute

CWI 101 Speaker Series Debuts for Water Minor at Fresno State

This spring semester, the California Water Institute introduced a new class to the water minor at Fresno State – the only minor of its kind in the CSU system. Offered as a rotating elective, CWI 101 is a guest speaker series that introduces students to dynamic careers in a water-related fields such as agriculture, environmental preservation, or public policy.



Guests included experts from the Department of Water Resources, State Water Contractors, as well as attorneys, scientists, engineers and more. Fresno State student Marco Muniz-Luna appreciated the diverse perspectives the water professionals shared with his class.

“I have gained valuable insight into present and future challenges associated with maintaining and upgrading necessary infrastructure that makes it possible for communities, businesses, and agriculture to have access to water and flourish in California,” Muniz-Luna said.

The water minor is available through the Department of Earth and Environmental Sciences and is open to all disciplines at Fresno State. The minor first became available in the 2023-2024 academic year. It focuses on pressing water management challenges and the crucial role water plays in the economy and daily life of the American West, and California in particular. Students learn about conflicts in current water resource systems, and the effects of public policies aimed at expanding water access.

“I learned so much about SGMA, and issues that affect our groundwater sustainability,” said Fresno State student Zach Lopez. “Students will have a greater understanding on how to form solutions to complex issues affecting our water.”

The water minor is a series of six courses integrating a number of science, business and media disciplines at Fresno State. Students complete the water minor with three required and three elective courses, including topics, such as Water and Strategic Media, Civil Engineering Hydraulics, Environmental Sociology and more.

CWI Selects New Members for 2025 Faculty Fellowship Program



The California Water Institute has selected a [new cohort](#) for its 2025 Faculty Fellowship program. The six fellows hail from four different colleges at Fresno State, including two from the College of Science and Mathematics, two from the College of Arts and Humanities, one from the Craig School of Business and one from the Lyles College of Engineering.

2025 CWI Faculty Fellows

Aric Mine - College of Science and Mathematics

Jai Choi - College of Science and Mathematics

Paula Durette - College of Arts and Humanities

George Rozsa - College of Arts and Humanities

Jorge Pesantez Sarmiento - Lyles College of Engineering

Harry Xia - Craig School of Business

CWI's Faculty Fellowship program fosters collaboration across disciplines, encouraging fellows to come up with innovative solutions for some of the most pressing water issues in the San Joaquin Valley. The program targets interest in water-related research including climate change and sustainability, agriculture and precision technology, policy and economic impacts, social equity and inclusion.

Fellows are tasked with pursuing a research topic that will result in either a research proposal to be used by CWI for grant proposal, or to write and submit a grant proposal for funding.

Rural West Conference Focuses on Central Valley's Role in California's Climate Future

The Eleventh Annual Eccles Family Rural West Conference was held Feb. 26-27 at Fresno State, featuring a diverse range of presentations and panel discussions focused on the Central Valley's vital role in addressing climate change and its impact on rural communities. The



theme, **“People and Places: Resourcing California’s Climate Future in the Central Valley,”** examined our region, considered to be at the intersection between environmental sustainability, economic resilience and community engagement in the state’s climate future.

The California Water Institute and the Maddy Institute partnered with Stanford University's Bill Lane Center for the American West to bring the event to campus. Fresno State president Saúl Jiménez-Sandoval was among the speakers, many of whom were local experts in the areas of climate science, water law, health policy and community development.

To revisit the conference, you can watch full event recordings here:

<https://west.stanford.edu/events/eleventh-annual-eccles-family-rural-west-conference-0>

CWI Grant Helps Fresno State Students Propel Local Family Farm to Global Certification



In 2019, Fresno State students were instrumental in helping a local farm achieve a globally recognized certification, thanks to a grant from the Agriculture Research Institute (ARI) and CWI matching funds. CWI and data analytics students from Fresno State's Craig School of Business partnered with Woolf Farming, a third-generation Central Valley family-owned farm.

The farm was in pursuit of B-Corp Certification, a designation that requires a business to meet rigorous and exceptionally high standards in social, environmental and operational performance. Woolf Farming, which grows conventional and organic crops including almonds, pistachios, tomatoes, grapes, wheat and more, needed to demonstrate its commitment to sustainability. To do that, Woolf Farming needed to develop an Environmental Management System (EMS) that could track its use of water, pesticides and fertilizer.

Dr. Aimee Jacobs, an associate professor of Data Analytics at Fresno State, took the project out of the classroom setting and into the flexibility of a student club – the Data Analytics Student Association. The club setting allowed a number of students to work with an extended timeline for the project. They collected and digitized data from the farm, then analyzed how much water was needed and being used for specific crops, the basis of an EMS for water tracking.

Students like Arthur Carlos enjoyed the hands-on work and the challenge of unpredictable real-world data. He credited the experience to helping him find a full-time job as an analytics engineer, soon after graduating.

“The real world was much more difficult than the classroom. You often get improper, imprecise and imperfect data, and that’s much more of a reality in the real world that you don’t see in class,” he said.

The Environmental Management System Carlos and other students helped to create landed Woolf Farming the B-Corp Certification it sought. Dr. Aimee Jacobs called it a win-win for her students, the client and CWI.

CWI's Laura Ramos Celebrates Promotion and Award Recognition



Two professional milestones to announce for Laura Ramos, who was appointed director this January after serving in an interim role since January 2023. Ramos began her career in Fresno State's water initiatives in 2001 at the Center for Irrigation Technology, transitioning to the California Water Institute in 2018, where she worked as a program manager and the associate director before becoming interim director in 2023.

In announcing her appointment, Fresno State Provost, Dr. Xuanning Fu highlighted Laura's wealth of leadership experience in water

resource management and ability to lead CWI through significant advancements. “She is a recognized leader through her active membership in various statewide advisory boards such as the Drought Resilience Interagency

and Partners and the Collaborative and Updating Water Rights Data for California Advisory Group,” Fu said.

Laura was also recently honored as a recipient of the 2025 Women Leading the Way Award. The 11th annual award ceremony recognized Ramos among a group of distinguished women from across the 27th Assembly District. Assemblywoman Esmeralda Soria celebrated the select group in her district for their outstanding leadership, service and community contributions. The ceremony was held in Madera in recognition of Women’s History Month in March.



Employee Spotlight / Ysabella Ramirez

Ysabella Ramirez has always dreamed of working in digital media, and says she feels lucky to get a jump start in her career as the social media strategist at CWI. For the past two years, Ramirez has

maintained a constant presence on CWI’s social media networks with weekly crafted posts, graphics, photos and engagement. Ramirez first became interested in the field with a love for movies, which evolved when she enrolled in a digital media class in middle school. That’s where she first learned that being creative could be a career.

“It feels more tangible in a way because I’m doing it – it’s not just like a dream,” she said. “I’m actually going towards it. I’m actually doing something and being productive in it.”

Ramirez credits her co-workers and director Laura Ramos at CWI for helping to build her digital media skills in a supportive working environment. Ramirez is in her second year of undergraduate studies as a business major at Fresno State and plans on pursuing an emphasis in marketing next semester. In her free time, she returns to her love of movies. Her favorites are Drew Barrymore rom-coms like “Never Been Kissed.”

“They’re feel-good movies I can get lost in,” she said.

Upcoming Events

May Water Bootcamp

It’s Water Awareness Month! In an effort to help raise awareness about the importance of water conservation, CWI is having our annual Water Bootcamp, a virtual series held to educate people about the complex water system in California. Attendees will also learn sustainable water practices and be able to address various water-related issues facing their community. Each online session is about 20-30 minutes long and will include Q&A.

Dates: May 2nd, 9th, 16th and 30th (Spanish) 12-1pm

Three of the Water Bootcamp days will be held in English and one of the days will be held in Spanish. You can register here for the remaining sessions:
<https://cvent.me/E1Rxoo>

Sincerely,

Laura Ramos

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