

WATER IN THE WEST

Water in the West addresses the growing water crisis in California and the West by creating new solutions that move the region toward a more sustainable water future. It marshals the resources of one of the world's preeminent research institutions to address one of the most urgent questions about the West's future— how can the region continue to thrive despite growing water scarcity?

WE ARE

- A partnership of the Stanford Woods Institute for the Environment and the Bill Lane Center for the American West
- An interdisciplinary collaboration between engineering, natural sciences, earth sciences, social sciences, economics and law
- Generating cutting-edge solutions to freshwater challenges affecting Western North America

WE REACH

- Water managers
- Policymakers
- Government agencies
- Researchers
- Businesses
- Nongovernmental organizations

Mission

Water in the West bridges the gap between research and practice to create and promote the adoption of effective solutions for more sustainable water management in the American West.

Goals

- Create innovations that solve water scarcity problems through research in policy, management and technology.
- Engage Stanford students in creating water management solutions, addressing water scarcity today and educating the next generation of leaders.
- Use communications to advance new ideas and create tools for sharing research in ways that respond to water shortages and are useful for water managers, policymakers and partner organizations.
- Build strong partnerships to inform policymakers, water managers and NGOs, providing a direct path for disseminating new solutions and technologies.



Water in the West’s interdisciplinary work is organized around four main issues:

Sustainable Groundwater

Throughout the West we are pumping groundwater at unsustainable levels, jeopardizing the primary water supply for many communities and making groundwater unavailable during times of drought, when it plays a critical role as a buffer against surface water shortages. Water in the West integrates law, policy, geophysics, engineering and economics to develop comprehensive solutions to the challenges facing groundwater management.

Water and Energy

Water and energy are strongly linked, since withdrawing, transporting and treating water all require large amounts of energy. Energy production and extraction can also use large amounts of water. Despite these interdependencies, water and energy are managed separately.

We are finding ways to increase efficiency on both fronts, including partnering with ReNUWIt to evaluate and encourage adoption of innovative technologies and strategies.

Watershed Health

People have heavily manipulated the rivers of the West, first to sustain settlement and agriculture, and then to meet explosive economic and population growth. Dams, water withdrawals, changes in stream flows, degraded habitat, and other factors have altered western watersheds and profoundly harmed their ecological health. We focus on new policies and technologies that can preserve rivers and streams while supplying adequate water to cities, farms and ranches.

Water Management and Allocation

Efforts to rationally manage water in the West – allocating it to the most valuable uses, both human

and ecological – are hampered by a lack of data, fragmented governance and the West’s rigid prior appropriation system. This lack of flexibility is exacerbating increased water shortages. To make water management more effective and efficient, Water in the West conducts research on governance, policy and new models for water pricing and marketing.

EDUCATION AND ENGAGEMENT

Water in the West facilitates research, student internships and other forms of engagement in “real world” projects that enable Stanford researchers to answer important questions through field research, term projects, theses and independent studies.

For more information:

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“Anyone who can solve the problems of water will be worthy of two Nobel prizes – one for peace and one for science.”

—President John F. Kennedy

