BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
BOARD OF DIRECTORS MEETING

October 3, 2025

Correspondence and media coverage of interest between September 19, 2025 and October 1, 2025

Press Release:

Date: September 30, 2025
Source: Department of Water Resources
Subject: California Prepares for Extreme Weather Swings as New Water Year Begins

Date: September 20, 2025
Source: California Water Resources Control Board
Subject: State Water Board releases draft scientific report on proposed Tuolumne River Voluntary Agreement

Date: September 19, 2025
Source: Sites
Subject: California Water Commission Awards Sites Reservoir $10.9 million in Early Prop 1 Funding

Water Supply Conditions:

Date: September 28, 2025
Source: California WaterBlog
Article: Happy New Water Year 2026! – following 2025's Normal and Extreme Hydrology

Water Policy:

Date: September 24, 2025
Source: CBS News
Article: California bill would require builders to release how much water data facilities use

Water Infrastructure:

Date: September 2025
Source: Pacific Institute
Article: California Water Action Collaborative Celebrates 10 years of Impact

Date: September 24, 2025
Source: The Independent
Article: Fish Passage Project in the Sunol Valley Moves Toward Finish Line by End of Year

Climate Change:

Date: October 1, 2025
Source: San Francisco Chronicle
Article: A surprising new fact just emerged about California's glaciers

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CALIFORNIA DEPARTMENT OF
WATER RESOURCES

News Releases
Sep 30, 2025

California Prepares for Extreme Weather Swings as New Water Year Begins

An aerial view shows high water conditions at Oroville Dam located at Lake Oroville in Butte County, California. Photo taken May 20, 2025.

SACRAMENTO, Calif. – While California's climate has always swung between dry and wet conditions, the past five years have proven what climate science has predicted: California must be prepared for extreme weather events of all kinds, even simultaneous drought and flood conditions.

As the new Water Year gets underway, Lake Oroville, the State Water Project's largest reservoir, is currently 109 percent of average for this date, however there is uncertainty about conditions this winter. The latest outlook from the National Oceanic and Atmospheric Administration's (NOAA) Climate Predication Center shows a 71 percent chance of La Niña conditions this fall, decreasing to a 54 percent chance in December through February. La Niña events have historically resulted in more dry than wet years, but research also suggests that even as the climate grows hotter and drier overall, the precipitation that California does receive will arrive in stronger storms, increasing the risk from flooding.

"There is no such thing as a normal water year in California," said DWR Director Karla Nemeth. "Just in the past two winters, deceptively average rain and snowfall totals statewide masked the extremely dry conditions in Southern California that contributed to devastating fires as well as flood events across the state from powerful atmospheric river events. California must be ready to respond to emergencies from droughts to floods to fires."

Last winter, extremely dry fall conditions in Southern California fueled the destructive Eaton and Palisades fires just weeks before the typical peak of atmospheric river storm activity in California. DWR, alongside the Governor's Office of Emergency Services, CAL FIRE, Caltrans, the California Geological Survey and the California Conservation Corps worked around the clock to protect downstream communities and watersheds as part of

the state's largest watershed protection mission to keep hazardous material from contaminating local water supplies and waterways.

Extreme flooding will remain a critical concern moving into this water year as a warmer atmosphere drives more moisture through more powerful storms. DWR's flood operations staff will be holding meetings with emergency response personnel across the state in the coming weeks to make sure the state and communities are prepared to respond. DWR has over 4.3 million sandbags and 191 flood fight materials containers pre-positioned for quick deployment across the state if needed.

"The past decade has clearly demonstrated the need to prepare for extremes," said State Climatologist Dr. Michael Anderson. "A dramatic flood year in 2023 was followed by two years with large spatial disparities. While our water supplies are in a good position heading into the new water year, we will be watching closely for dry and wet extreme conditions that can pose hazards statewide."

California is also starting this water year with more groundwater data than ever before, helping groundwater sustainability agencies and communities monitor conditions in their region to promote long-term sustainability and protect drinking water supplies against the impacts of climate change. Over the course of 2024, the state received average precipitation, helping sustain natural and managed recharge efforts after the exceptionally wet 2023. These last three years (2023, 2024, and 2025) have seen continued increases in groundwater storage.

California's water year runs from October 1 to September 30 and is the official 12-month timeframe used by water managers to compile and compare hydrologic records.

# # #

For more information on California's current hydrological conditions, visit https://cww.water.ca.gov.

Contact:
Jason Ince, Information Officer, Public Affairs, Department of Water Resources
(916) 820-8138 | media@water.ca.gov

PRESS RELEASE
from the State Water Resources Control Board:
September 20, 2025

State Water Board releases draft scientific report on proposed Tuolumne River Voluntary Agreement

[Friday], the State Water Resources Control Board released a Draft Scientific Basis Report Supplement that analyzes the science underpinning a proposed voluntary agreement for the Tuolumne River, a tributary of the Lower San Joaquin River.

The board will hold a public workshop on Wednesday, Nov. 5, 2025, to receive oral comments on the draft report, and written comments are due by Friday, Nov. 7, 2025. A quorum of board members may be present at the workshop, but no action will be taken.

The draft report is an initial step in the process to consider amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta Plan) to possibly incorporate the proposed agreement. The draft was developed jointly by staff from the board, California Department of Water Resources and California Department of Fish and Wildlife.

The draft report documents the science related to the proposal, which was submitted to the board in 2022 by the San Francisco Public Utilities Commission, Modesto Irrigation District and Turlock Irrigation District. The agreement proposes flow and non-flow habitat commitments to improve conditions for native fish in lieu of flow requirements that were included in the Bay-Delta Plan in 2018.

The draft analyzes the potential changes in hydrology, water temperatures and habitat availability in the Tuolumne River and Lower San Joaquin River under the proposal. The board will use this information to assist in its evaluation of whether to update the Bay-Delta Plan to allow for the agreement.

Following receipt of public comments, the draft will be revised as appropriate and submitted for scientific peer review pursuant to the requirements of California Public Health and Safety Code.

BACKGROUND

The State Water Board is actively engaged in urgent efforts in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta) watershed to address prolonged and precipitous declines of native aquatic species and their ecosystem. The Bay-Delta Plan identifies beneficial uses of water, water quality objectives and an implementation program to

protect the Bay-Delta watershed and its many beneficial uses. In December 2018, the board updated the Lower San Joaquin River flow and southern Delta salinity components and is currently developing a regulation to implement these updates.

# # #

For Immediate Release:
September 19, 2025

Contact: Quin La Capra
(858) 926-7006

California Water Commission Awards Sites Reservoir $10.9 Million in Early Prop 1 Funding

Maxwell, CA – This week, the California Water Commission (Commission) awarded the Sites Reservoir Project (Project) $10.9 million in early funding from the Water Storage Investment Program (WSIP). This additional funding will support the Sites Project Authority's work on permitting and environmental documents, which helps the Project meet the public benefit requirements of Proposition 1.

"This additional funding will help the Authority secure key federal and state permits that will advance Sites Reservoir closer to construction," said **Fritz Durst, Chair of the Sites Project Authority Board of Directors.** "We've made significant permitting and environmental progress in the last few years and are grateful to the California Water Commission for their continued support as we work to secure a water right for Sites Reservoir."

The Commission's Water Storage Investment Program (WSIP), funded by Proposition 1, provides funding for five major water storage projects throughout the state, including Sites Reservoir. Last month, the Commission provided inflationary adjustments to the Project's Maximum Conditional Eligibility Determination (MCED), making Sites Reservoir eligible for additional early funding.

Sites Reservoir will increase water supply throughout California and provide, for the first time, environmental benefits by storing water specifically to support native wildlife and their habitat during drought periods. The Project will provide an additional 1.5 million acre-feet of storage capacity, substantially improving the state's water flexibility, reliability, and resiliency in drier years.

Sites Reservoir is a 1.5 million acre-foot, off-stream reservoir proposed north of the Sacramento-San Joaquin Delta that would improve California's water reliability and resiliency in drier years for farms, families, fish, and fowl. The Project is backed by a broad coalition of cities, counties, water agencies, and irrigation districts across California, as well as the State of California through the Water Storage Investment Program and the federal government under the 2016 Water Infrastructure and Investment for the Nation Act. Additional information can be found at www.sitesproject.org or on Facebook, Instagram, and X at @SitesProject.

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Happy New Water Year 2026! – following 2025's Normal and Extreme Hydrology
California WaterBlog | September 28, 2025 | Jay Lund

October 1 marks the beginning of California's new Water Year (WY). Water years here run from October 1 until September 30 of the next calendar year and are named for the calendar year of the bulk of the water year (January-October).

October 1 is also the nominal beginning of California's wet season. California's hydrology has two basic seasons, wet and dry, with the wet season nominally from October 1 – April 1 (Figure 1). The first sizable storm sometimes arrives in late September and sometimes not until November (recently in 2021). Sizable storms rarely arrive after April.

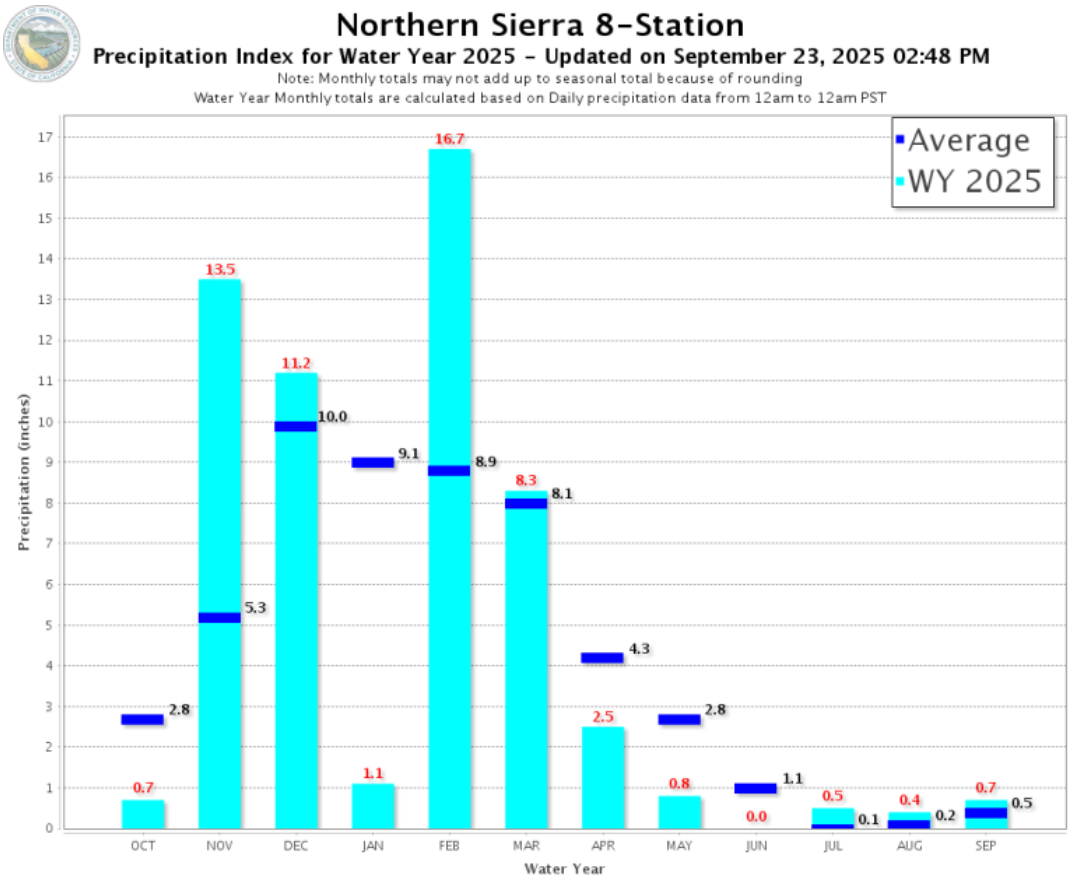

Figure 1. Northern California average and WY 2025 precipitation – a bouncy year.
https://cdec.water.ca.gov/images/WYPrecip/BAR_ESI.PNG

As we leave California's long dry season, and prepare hopefully for the wet season, it is a good time to reflect on the last water year and prepare for what is also California's flood season. At this time, it also is customary for people to make largely futile predictions and speculations of precipitation for the coming 12 months.

The 2025 water year was near-average when averaged across the state (Figure 2). Not too wet. No major floods. Not a drought. Both WY 2024 and 2025 were unusually normal (averaged statewide) for the last highly variable decade.

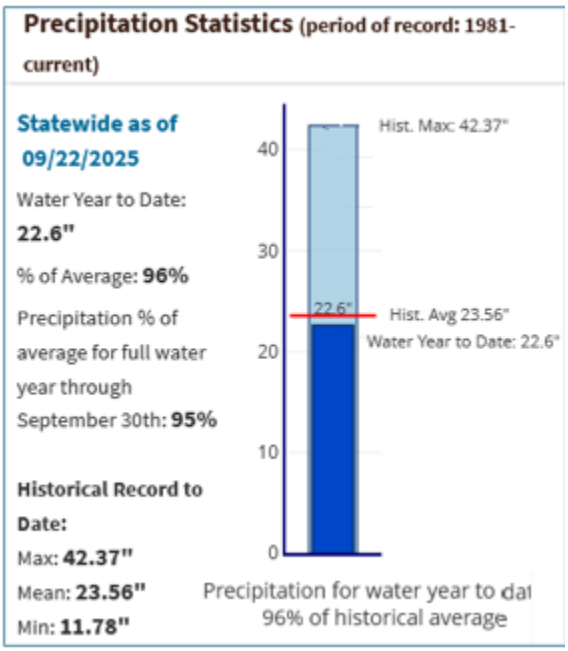

Figure 2. 2025 Water Year and Average Statewide Precipitation in inches – near average.
https://cww.water.ca.gov/

Figure 3 shows that northern California in WY 2025 had near-average total precipitation (about 108% of average). But, as is typical, some months were unusually wet (November and February) and others were unusually dry (January). (Drought years tend to have more dry months and fewer wet months, as the mathematics of statistics and averages require.)

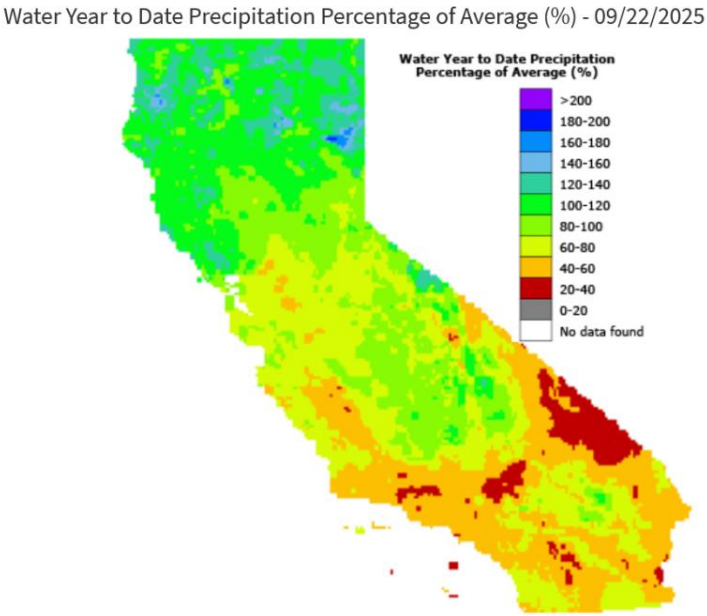

Figure 3. WY 2025 California precipitation map – bigger-than-usual north-south differences
https://cww.water.ca.gov/

2025 was highly unusual in southern California, with an extraordinarily late start to the wet season; remember the unusually late and devastating January 2025 wildfires in southern California. Overall, southern California had a very dry WY 2025 (Figure 3).

The San Joaquin Valley tended to be on the drier side of average overall.

Figure 3 also shows several other common features of California's hydrology. First, northern California tends to be wetter and southern California to be drier. Second, California is large with much local variability – weather and climate is often spotty within regional tendencies.

What is the California water system's current condition in terms of water storage? What is the likelihood of floods or drought in WY 2026? What should we do now?

Storage going into 2026 Water Year

For the Central Valley, Water Year 2025's precipitation was scattered, a bit above average in the north, drier but not drought in the San Joaquin Valley, and distinctly dry in southern California. https://cdec.water.ca.gov/snow_rain.html

Most major California reservoirs today have a little above average water storage pretty much statewide, https://cdec.water.ca.gov/reportapp/javareports?name=RESSW. If the coming water year is moderately dry, this storage will be helpful for cities and agriculture.

Groundwater is by far the largest supply of stored water in California, particularly for droughts. Despite passage of the Sustainable Groundwater Management Act (SGMA) and a few wettish years, some San Joaquin and Tulare basins continue to deepen their groundwater overdraft and land subsidence, worsening prospects of compliance with SGMA by 2040. DWR's groundwater data site (Groundwater Live) provides some useful data on groundwater levels and subsidence: https://sgma.water.ca.gov/CalGWLive/ Hopefully this site will continue to mature to give more consolidated indications of groundwater trends, comparable to data available for surface water storage.

What will happen in 2026?

Nobody really knows, but expect extensive speculation from now until March. Only by March (and sometimes mid-April) is it late enough in California's mercurial wet season to have already seen and reasonably predict the water year's precipitation.

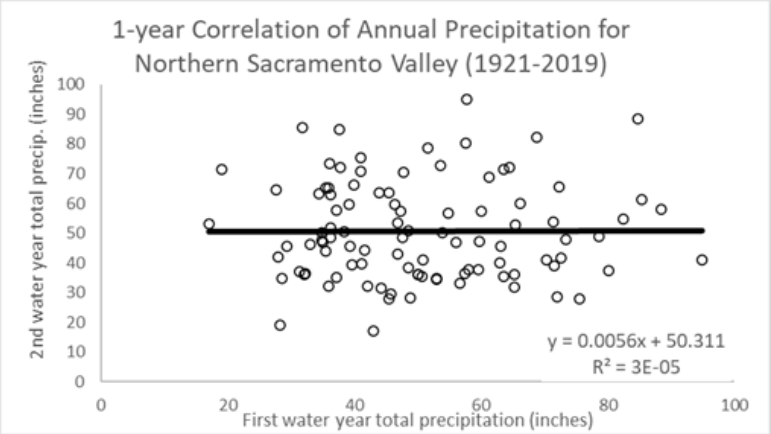

Figure 4. Last year's Sacramento Valley precipitation has no correlation with the next year's precipitation (DWR data, CDEC)

Statistically, there is almost no correlation of unimpaired runoff in northern California from one year to the next, as seen in Figure 4. Similarly, there is almost no simple correlation between El Niño conditions and runoff from northern California (Figure 5). However, El Niño correlations are a bit stronger in southern California. (There is a little more correlation in streamflow from one year to the next, mostly driven by overyear groundwater storage.)

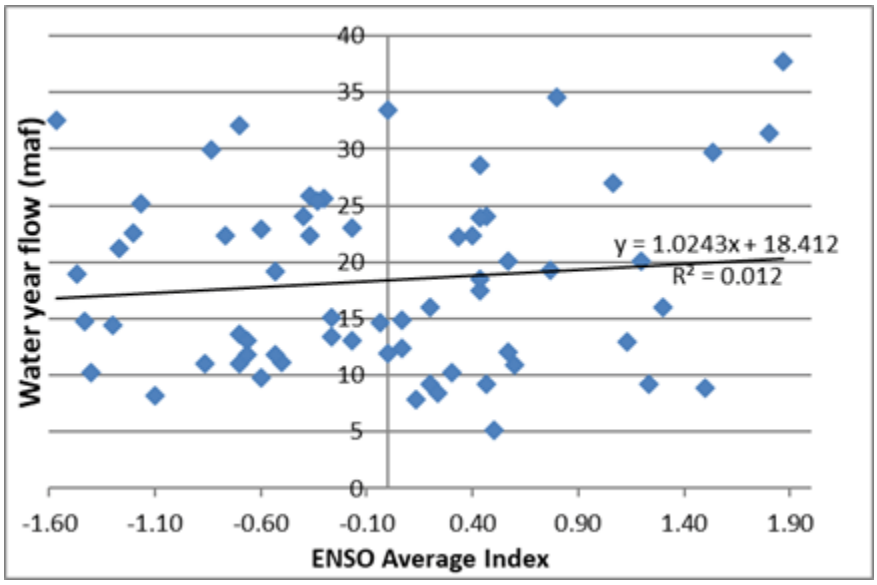

Figure 5. Classical El Niño estimates don't help much in predicting northern California's annual runoff. (CDEC data)

Forecasting storms more than a few days becomes increasingly uncertain. Sometimes in life, and always with California water, all we can do is to prudently prepare for contingencies and surprises. Preparing for a range of future conditions is central to California water management.

The Future

The future seems likely to have less water availability for California than it has become used to historically. This will come mostly from the unavoidable elimination of overdrafting of California's groundwater and Colorado River reservoirs, as well as climate change and needs for additional environmental water dedications (Lund et al. 2024). This will be a growing challenge.

What to do?

Every year, water managers and users must be prepared for both flood and drought, in addition to their other duties.

Californians should pay serious attention to water and likely climate changes, without complacency or panic over our remarkably effective but substantially flawed water management system and institutions. Changes are needed in the development of coordinated (perhaps consolidated) technical work by the DWR and SWRCB in groundwater modeling, regional water balances, and other areas for SGMA implementation and other challenges (particularly regarding ecosystems). Complacency and panic are convenient rhetorically and for fund-raising, but they also are expensive and potentially life-threatening reactions to situations that deserve serious and more constructive thought, analysis, and deliberations.

Today, most of our water deliberations and analyses remain relics of the history of water infrastructure and allocation for agricultural and urban growth. They are not without value but need improvements to help us adapt to a changing climate, ecosystems, economy, and social concerns.

Take advantage of less urgent average years to think hard and discuss such challenges soberly with others, especially those outside your current advocacy identity. These are long-term conversations we should not seek to control for short-term advantage.

So, have a drink (of water) to celebrate the new water year. Even average years are never entirely average here and are becoming less frequent. We must prepare for floods, droughts, and middling water years that give opportunities to make reasoned preparations and investments.

# # #

About the Author

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California bill would require builders to release how much water data facilities use
CBS News | September 24, 2025 | John Ramos

As California's population grows, the pressure increases on its finite natural resources. And one of those, water, is the subject of some concern, with the increase in data generation in the state.

The data facilities use a lot of water, but at this point, officials don't know how much. New legislation aims to find out.

Santa Clara isn't just the home of the 49ers; it's also where the internet lives. The city has 55 huge data centers already in operation, with three more on the way. While that takes an awful lot of energy, it also uses water.

Mike Kiparsky, director of the Wheeler Water Institute at the UC Berkeley School of Law, said the need is about to explode with the advent of artificial Intelligence.

"The data centers that we see now will just multiply," he said. "And their need to cool their servers will multiply along with them."

Water runs through the machines to keep them cool, and how much they use isn't public information.

But now a bill has passed the Legislature that would shed a little light on that. Assembly Bill 93 would require builders to project how much water their data facility will use before opening and how much they use annually while in operation.

"Without reporting, there's no way to know how much the 300-plus data centers in California, how much water they use...where and what the impacts are," said Kiparsky. "Without this information, it's very difficult for local decision makers, such as the mayor of a small town, to understand the ramifications for their water systems of green-lighting a project that might have other benefits for their communities, even if the impacts could be hidden from them."

It should be noted that the data centers in Santa Clara use recycled water for their cooling applications.

But Kiparsky said even recycled water is a resource that could be used for other purposes if not for the data centers.

For various reasons, the facilities are usually clustered together and they tend to be in places where water is often scarce, like California, Texas and Arizona.

A business sustainability company called Ceres released a study examining the effects of data centers on the area around Phoenix.

"The statistics were pretty staggering," said Kirsten James, Senior Program Director for Water. "We found that in some of the water basins in that region, we saw an increase in water stress by as much as 32%."

The study found that the projected growth of data center water use in the Phoenix area will increase by 870% from the current 385 million gallons to more than 3.7 billion gallons per year. That's the kind of information that AB93 hopes to provide.

"You know, similar to this piece of legislation, we need more information," said James. "Companies and their investors need this information as well to really disclose, so we can understand what are the impacts."

Kiparsky said local communities need to weigh the immediate economic benefits of welcoming in a data center with the impacts on the area's water resources. Requiring companies to disclose their consumption is just the first step in helping local governments as they scramble to keep up with the breakneck speed of technology.

"We try our best to anticipate and understand what's already happening and anticipate what's coming next," Kiparsky said. "So that we can be a step ahead or at least not too many steps behind."

# # #

California Water Action Collaborative Celebrates 10 Years of Impact
Pacific Institute | September 2025 | Chris Hancock and Cora Snyder, Pacific Institute

Key Takeaways:

- 10-Year Anniversary: The California Water Action Collaborative (CWAC) has united over 30 companies and nonprofits to implement 50+ water stewardship projects since its founding in 2015 in response to historic drought conditions.
- Convening Diverse Perspectives: CWAC's unique platform brings together diverse, even competing, organizations to co-create solutions—from forest restoration and leak detection to regenerative agriculture—proving collaboration can drive meaningful water outcomes.
- A Model for Collective Action: As water stress intensifies, CWAC's action-oriented, place-based approach is vital —and its model holds lessons for other water-stressed regions.

Water Crisis Sparks Collective Action
In 2014, California was two years into a historic drought. News coverage sounded the alarm of shrinking reservoirs, thirsty farms, wildfires, salmon die-offs, and communities losing access to safe drinking water. California's Governor declared a statewide emergency, imploring all Californians to conserve however they could.

At the height of this drought, in May 2014, the Pacific Institute hosted a CEO Water Mandate meeting in Los Angeles, convening corporations and NGOs to discuss ways to collaborate to address water challenges. In the context of the drought, seeing brown lawns and "Call to report

water waste” signs outside of their hotel, there was a palpable sense of urgency among attendees across sectors. The state was moving forward with passing its first ever groundwater management law, which would reshape water management especially in agricultural areas.

There was a shared interest in seeking solutions, a receptiveness to new ideas and partnerships, and an appetite for action. The crisis at hand unified diverse stakeholders around the possibilities for achieving meaningful action on California’s uniquely complex water challenges by working together in a new way.

CWAC members together for their annual learning journey in 2024. Photo provided by Ag Innovations.

Conversations among nonprofit and corporate leaders sprang from breakout sessions during the meeting and spilled over into discussions at the hotel watering hole. Meeting attendees wanted to understand California’s water challenges better, identify geographies and issues of shared interest, and work together on projects that would make positive impacts on water security in the state. Those conversations culminated in the creation of the California Water Action Collaborative (CWAC), which held its first meeting in March 2015.

“California was in the midst of a multi-year drought,” said Jon Radtke, a founding member formerly with The Coca-Cola Company who helped bring the company into the group. “Water security was top of mind. We recognized the need for collaboration to scale results and were inspired to join forces with like-minded companies and NGOs.”

Diverse Perspective Come Together

CWAC is a platform for diverse stakeholders – including leading environmental nonprofits, food & beverage companies, agricultural producers, and others – to come together, learn from each other, and pursue collective action projects to improve California’s water security for people, business, agriculture, and nature. Members collaborate and partner with the understanding that while no one company or organization can solve California’s water challenges alone, together they can help create a sustainable water future.

“CWAC fosters important discussions and learning around the greatest needs for water in California,” said Margot Conover, Regenerative Agriculture Manager at General Mills and CWAC Steering Committee Member. “The diverse membership ensures members never get stuck in an echo chamber. We’re always learning from others’ different perspectives and therefore expanding insights into what is needed and possible.”

Pre-Competitive Friendship: A CWAC member dinner is where you can find these two beverages served side by side! Pictured left to right: Jon Radtke, previously with The Coca-Cola Company, and Nyima Dansira with PepsiCo. Photo from 2019. Originally published on the CWAC Blog: cawateraction.org/news/2019/12/5/cwac-learning-together-in-the-field.

Fellow CWAC Steering Committee member Jasmeet Kaur at The Coca-Cola Company, agrees. “One of CWAC’s most important contributions is its ability to convene and align diverse stakeholders—corporations, NGOs, public agencies, agricultural producers and environmental foundations—toward collaborative action on water stewardship.” This collaborative model has led to on-the-ground impact through over 50 projects restoring watersheds, river flows, forest resilience, improving groundwater recharge, and enhancing ecosystem health.”

The diversity of its membership extends beyond nonprofits and for-profits. CWAC members span the food and beverage, technology, consumer packaged goods, hospitality, agriculture, and environment sectors. Members even include competitors such as The Coca-Cola Company and PepsiCo.

One early memorable moment for Radtke was “when Coca-Cola and PepsiCo teamed up, along with others, on a restoration project. Seeing two long-time business rivals collaborate like that really highlighted how CWAC provides a unique pre-competitive space for companies to work together on shared water challenges.”

CWAC’s Impact and Longevity

Through a collective action approach, CWAC members have invested over $11 million in direct and in-kind support, launched more than 50 projects, and cultivated impactful relationships that have strengthened California’s water resilience. CWAC’s impact ripples beyond these numbers, with many members reporting new projects, ideas, and relationships originating in CWAC.

Camp and Carr Fire Restoration 2022. Photo provided by American Forest Foundation.
Through a diverse array of members, the CWAC portfolio comprises a diverse array of solutions. Steering Committee member Ben Wilinsky, Arbor Day Foundation, views this diversity of thought as a unique asset.

“[CWAC’s] agnostic opinion about solutions is also meaningful,” said Wilinsky. “I think about their ability to highlight projects like ours in response to the Camp and Carr Fires in Northern California in comparison to the Pacific Institute’s toilet leak detection as being on the far ends of the water solution spectrum, but both worthy of the spotlight.”

Over the past decade, CWAC has evolved from a casual working group to an action-oriented network of more than 30 companies and nonprofits, facilitated and managed by Ag Innovations, a nonprofit based in California.

Enabling a strong network has required strong support from Ag Innovations to foster communication and mutual understanding, enhance project development abilities, and facilitate problem-solving and alignment to sustain the network's work. "By curating high-impact learning and relationship building using learning journeys, speakers, and supporting member-led interests, Ag Innovations has helped members see new ways to make innovative change, together, in California's water landscape," said Robert Gould, Managing Facilitator at Ag Innovations.

"The 10-year anniversary stands out," said CWAC Steering Committee member, Aaron Brown, Cox Enterprises. "It is impressive that a collaborative such as CWAC has lasted a decade and still has strong momentum."

"Think about [CWAC's] longevity," said Wilinsky. "10 years of creating meaningful dialogue and exposing so many practitioners (including me) to the space. The impact of this recruitment will have a ripple and wave effect for many years."

The impressive longevity of CWAC is no happy accident. It's a product of CWAC's intentional approach to project co-design. "CWAC nurtures innovative approaches to water resilience by supporting co-creation and shared goal setting in projects," said Conover. "This approach can be slow but ensures that projects have needed stakeholder buy-in and multiple sources of funding, both of which help ensure longevity."

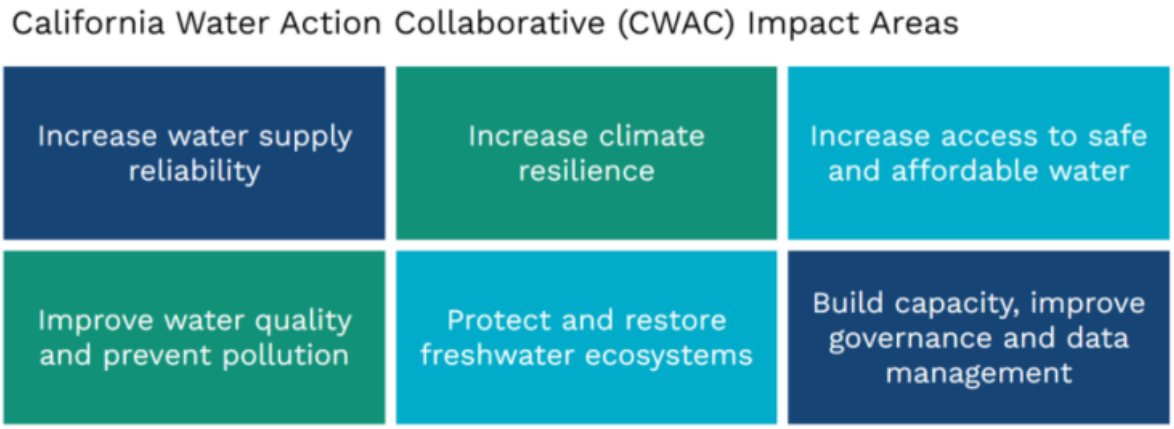
A fundamental value of CWAC is action – it's in the name. The group's founding members, which included brands like Coca-Cola and General Mills, along with nonprofits such as The Nature Conservancy, Sustainable Conservation, and the Pacific Institute, demanded more than just discussion. They insisted on impact.

"From the beginning, the collaborative was focused on driving action," said Radtke. "Instead of sitting around and talking about what should be done, the focus was on implementing impactful projects."

CWAC members visiting a meadow restoration site in the Sierra National Forest in 2018, on a CWAC Learning Journey. Photo taken by Cora Snyder.

That action orientation was built into project management from the outset through a simple rule: CWAC projects must include at least three members who make meaningful contributions through funding or expertise.

What made CWAC different from other efforts in 2015? “First, the focus on action and that everyone contributes in some way,” said Dan Sonke, a founding member of CWAC, formerly with Campbell Soup Company. “Second, the intentional collaboration between corporations with goals and interests, and NGOs with projects to address them. Most other water groups in California at the time seemed to focus on activism or education.”



By 2017, CWAC adopted a framework to define common goals and intended project outcomes for its collective action initiatives. The framework, developed by the Pacific Institute with contributions from other CWAC members, married the policy objectives of the California Water Action Plan and the United Nations Sustainable Development Goals 6, 11, and 13 into six overarching impact areas. CWAC aimed to develop projects that address water resilience in ways that yield multiple benefits in the following six outcome types, shown below:

CWAC in Action
Over the past 10 years, CWAC members have collaborated to implement more than 50 projects. Projects have ranged from reforestation in the Carr and Camp fire footprints to technology-enabled leak detection in affordable housing to improved manure management in the Central Valley.

- Reforestation in the Carr and Camp Fire Footprints
  Led by the Arbor Day Foundation and supported by PepsiCo, Procter & Gamble, and Target, this reforestation project is focused on areas impacted by two of the state’s most destructive wildfires. “Our relationship to the water crisis in California centers on the effective use of forests as a solution,” said Ben Willinsky, Arbor Day Foundation. “We envision that by 2035, we will have demonstrated how forest restoration has successfully contributed to the health of California watersheds by restoring thousands of acres of devastated forest lands.”

- Toilet Leak Detection in Affordable Housing
  This project is led by the Pacific Institute and BEF and supported by CWAC members, including Google, Coca-Cola, Ecolab, and Procter & Gamble. It uses Internet-of-Things (IoT) technology to detect leaks in multi-family affordable housing buildings. To date, the project has installed 1,600 toilet leak sensors in apartment buildings across Los Angeles, saving millions of gallons of water. The project received a Los Angeles Better Buildings Challenge Innovation Award in 2023 and a One Water Award from the Metropolitan Water District of Southern California in 2025.

  “There is incredible untapped potential to save valuable water across California’s cities by stopping invisible water waste,” said Cora Snyder, Pacific Institute. “This project solves a common problem with a new technology, saving precious shared water resources and saving money for affordable housing providers.”

- Dairy Manure Drip Irrigation Pilot
  One of CWAC’s inaugural investments supported Sustainable Conservation, Netafim, and California Central Valley dairy producers in pioneering a manure subsurface drip irrigation system (MSDI) that applies nutrients and water directly to crop root zones. As a result, dairies can now use their water and manure nutrients efficiently to grow food for their cow herds while protecting local groundwater that communities rely on for drinking.

  With an NRCS Conservation Innovation Grant (CIG) and support from CWAC members General Mills, Bonneville Environmental Foundation, and Nestlé USA, the project generated proof of concept to commercialize and scale MSDI with federal and state incentives across California, and the nation. Now, with a new CIG and support from Google and others, the team is testing MSDI on almond orchards to assess food safety and the potential for MSDI to generate additional drinking water and GHG benefits by reducing synthetic fertilizer use.

- Regenerative Agriculture and Water (RAW) Lab
  A blooming almond orchard, next to Cache Creek in Woodland, California. Photo taken March 3, 2025. Sara Nevis / California Department of Water Resources.
  RAW Lab is an initiative aiming to increase the capacity of growers, suppliers, and food/beverage companies to accelerate regenerative agriculture and water practices in the San Joaquin Valley. The project seeks to test in real farm contexts how soil health can support water outcomes. Corporate participants are encouraged to support farmers to implement these practices either by funding the project or supporting them via technical assistance.

  “Our aspiration is that insights from RAW Lab can unlock novel ways to advance water resilience in agriculture, a critical part of California’s economy and water system,” said Margot Conover of General Mills. “RAW Lab seeks to build credible insights around practices that advance water resilience and uplift the innovative farmers and NGOs implementing them. Ideally, these practices will help reduce the need for irrigation and

support farms in weathering rain events, potentially returning or keeping water in the aquifer or surface water bodies."

Looking Ahead

California's water system, a mind-boggling array of natural and engineered infrastructure, is among the most complex in the world. California's water resources support the 5th-largest economy in the world, sustain over 38 million residents, and irrigate most of the country's nuts and fresh produce. Water scarcity is rapidly increasing due to unsustainable uses and decreasing supply reliability. At the same time, climate change is amplifying droughts, wildfires, and extreme weather, putting even greater stress on already overdrawn systems.

In this landscape, CWAC's model of collaborative, place-based investment is not just relevant, it is essential. By connecting work across watersheds and sectors, CWAC is helping businesses, NGOs, farmers, and funders take a holistic view. "CWAC helped me understand the significant complexities of water in California and that we need to be acting from summit to sea and not just where we think our impact is," said CWAC Co-Founder Jeff Hanratty, formerly of General Mills, now with Ducks Unlimited.

The need for this kind of partnership has only grown since CWAC's founding, and the stakes for people, ecosystems, and economies are only getting higher. The scale and complexity of the challenges also mean the lessons emerging from California can have broader implications. "CWAC operates well and has a good business model that could be exported," said Aaron Brown, CWAC Steering Committee Member from Cox Enterprises. Whether in other U.S. states, transboundary basins, or global water-stressed regions, CWAC's approach of co-creation, shared learning, and collective investment offers a path forward.

Looking ahead, CWAC's future impact will depend on expanding the circle of participation and ambition. "Ultimately, the challenges are mounting –like wildfire and forest loss–, and our solutions are not keeping up with the scale of the challenge. We need more corporates, more funders, and more big-idea thinking to continue to chip away at the challenges," said Wilinsky.

That future requires both immediate action and bold imagination. "CWAC's role to play is to continue pushing companies to act on what is possible today, while simultaneously envisioning a much different future for water in California," added Conover.

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Fish Passage Project in the Sunol Valley Moves Toward Finish Line by End of Year
Effort Strives To Restore Trout and Salmon Access to More Than 20 Miles of Creek
The Independent | September 24, 2025 | Vivien Wenneker

SUNOL — Major construction on the Sunol Valley Fish Passage Project, an effort intended to restore fish passage and ecological function in the upper Alameda Creek, is expected to be completed this year.

The project involves the removal of an existing Sunol Valley concrete erosion-control mat, which is protecting a 36-inch pipeline, L303, owned and operated by Pacific Gas and Electric Company (PG&E).

The plan is to replace L303 with a new pipeline buried about 18 feet below the existing Alameda Creek grade to eliminate any need for an erosion-control structure in the creek bed that limits fish migration and ecological function.

The new pipeline will be located approximately 114 feet north of the existing one to allow for an open trench with shallow side slopes to account for soil stability during the construction excavation.

Through this effort, the Sunol Valley Fish Passage Project is expected to restore fish access to more than 20 miles of habitat, giving fish access to quality spawning grounds in the upper watershed.

“PG&E is pleased to be part of this historic effort to restore steelhead trout and Chinook salmon to Sunol Valley,” said Tamar Sarkissian, spokesperson for the utility company. “Being good stewards of the environment is one of our priorities as a company, making this a natural fit for PG&E.”

Since 2023, PG&E and California Trout (CalTrout), a San Francisco-based conservation nonprofit, have been working together to design, permit and construct the project. PG&E’s construction began earlier this year and was completed in early September, while CalTrout is still working on its scope and expects to be finished later this year.

The project was conceived by PG&E more than 10 years ago, according to Claire Buchanan, CalTrout’s project manager for the Sunol Valley Fish Passage Project.

“In 2023, CalTrout was asked to join the project team and take on a lead role in the barrier-removal project in Sunol Valley to open more than 20 miles of stream in the upper watershed to Chinook salmon and steelhead, remediating the last unnatural barrier on mainstem Alameda Creek,” Buchanan said.

Removal of this final major barrier in the mainstem Alameda Creek was driven by decades of work by the Alameda Creek Alliance and the Alameda Creek Fisheries Restoration Workgroup to complete 16 other fish-passage projects. The group of agencies, nonprofits, and community groups formed in 1999.

As the project lead, CalTrout has worked to reduce the project cost for PG&E by applying for grants and taking on a major coordination role among the project’s many partners. It has also applied for and holds all permits for the project.

CalTrout has partnered closely with NOAA Fisheries, a key federal funder of the project, Buchanan said. CalTrout has also partnered with the San Francisco Public Utilities Commission (SFPUC), the landowner of the project site. The California Department of Fish and Wildlife and the Regional Water Quality Control Board, meanwhile, have supported the project through permitting.

Alameda Creek is the largest Alameda County tributary to San Francisco Bay and has historically produced large numbers of Chinook salmon, lamprey and steelhead in the South Bay. Central California Coast steelhead trout in the Alameda Creek watershed are listed as a threatened species under the federal Endangered Species Act.

Over the past century, the watershed experienced intense urbanization, including the construction of three major dams and reservoirs, according to Buchanan. Until recently, the

entire Alameda Creek watershed was inaccessible to anadromous fish (besides Pacific lamprey, which were able to sucker their way over some barriers).

As California's cycle of drought and deluge continues, resolving this last barrier to fish passage will help ensure fish passage upstream regardless of species, life stage or size, and whether it is a wet or dry year.

Alameda Creek currently serves as one of the largest vehicles for drinking water in the Bay Area, transporting water to millions of residents, according to the SFPUC. With so many demands on its resources, consistent dedication and collaboration between water agencies, and state and local conservation organizations over the past few decades have been crucial in working to restore native fish populations and ecological function.

"The upcoming fish-passage project on Alameda Creek can build an even greater appreciation for Bay Area fish," Buchanan said. "These fish have traveled all the way from the ocean and ended up in your backyard! It's remarkable to think about it, let alone to watch it happen."

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A surprising new fact just emerged about California's glaciers
San Francisco Chronicle | October 1, 2025 | Kurtis Alexander

Clouds move over snow-covered mountains in the Eastern Sierra in March 2024. Some glaciers on the range date back to the Ice Age, a new study has found. DAVID SWANSON/AFP via Getty Images

The glaciers of the Sierra Nevada, clinging to the slopes of such eminent spots as Yosemite and Kings Canyon, are much older than people thought — with many dating back to at least the Ice Age, according to research published Wednesday.

The finding, which appears in the journal Science Advances, makes the current trend of warming temperatures even more ominous: Humans have never been in California when the glaciers have not been present, and yet they are projected to disappear by the end of the century.

"We'll be the first to see the ice-free peaks," said Andrew Jones, lead author of the new paper and a PhD student in the Department of Geoscience at the University of Wisconsin at Madison. "This has ecological implications for plants and animals. And it's a symbolic loss. Climate change is very abstract, but these glaciers are tangible. They're iconic features of the American West."

Prior studies have suggested that glaciers, which emerged in force during the last Ice Age more than 11,000 years ago, melted during warm periods and reconstituted in colder times. Most of the glaciers in the Sierra today are thought to have arisen within the past 700 years.

Jones and his colleagues, however, found that rocks beneath glaciers in parts of the Sierra have been continuously covered by ice for thousands of years, indicating that many of the glaciers have persisted since the Ice Age — when humans were mere hunter-gatherers and few had arrived in California.

The researchers determined how long glaciers covered the rocks by examining cosmogenic in situ isotopes, essentially atoms that indicate how long the rock has been exposed to cosmic rays and not buried by ice. They also honed the glacial timeframe by dating newly exposed bedrock around the glaciers and comparing that to boulders deposited by the glaciers in their distant past.

“We can really say now the glaciers have been around in the Sierra Nevada for at least 30,000 years,” Jones said.

Some glaciers may have emerged more recently, he acknowledged, but the thinking that all of them are relatively young is incorrect.

The team, which included scientists from universities, the Department of Energy and the National Park Service, looked specifically at four glaciers: Lyell, Maclure and Conness glaciers in and around Yosemite National Park and Palisade Glacier in the Palisades range in the southern Sierra.

Each of these glaciers is now in considerable retreat as a consequence of rising temperatures during the modern industrial age.

While California doesn’t directly rely on glaciers for drinking water, the ice sheets supplement the flow of rivers that people depend on, including the Tuolumne River, which provides water to San Francisco and much of the Bay Area. During droughts, the glacial melt-off can be especially important as a last-ditch water source.

“I think of glaciers as high-mountain water towers,” Jones said. “When the glaciers are gone, you will lose that bit of remaining water.”

Bob Anderson, a glacier expert and professor of earth science at the University of Colorado at Boulder, who was not part of the research, said the new paper brings to light the upshot of human-caused climate change in dramatic fashion. The fact that these glaciers have been around for thousands of years and now they’re disappearing, he said, is quite an indictment.

“It really points to how anomalous the ice coverage in the Sierra is and reflects what impact humans have had on the environment,” Anderson said.

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