

**BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
BOARD OF DIRECTORS MEETING**

November 16, 2023

Correspondence and media coverage of interest between October 9, 2023 and November 6, 2023

Correspondence

From: Dave Warner
To: SFPUC Commissioners, Dennis Herrera, Steve Ritchie
Date: November 1, 2023
Subject: 2045 SFPUC RWS demand could be down to 141 mgd, more than 20% below today's demand

From: Jimi Netniss, Modesto Irrigation District
David Guy, Northern California Water Association
Dennis Herrera, San Francisco Public Utilities Commission
Federico Barajas, San Luis Delta Mendota Water Authority
Jennifer Pierre, State Water Contractors
Michelle Reimers, Turlock Irrigation District
To: Members of the California Congressional Delegation
Date: October 31, 2023
Subject: Request to secure federal funding for priority habitat restoration projects

From: Nicole Sandkulla, BAWSCA CEO/General Manager
To: Asm. David Alvarez, Chair, Joint Legislative Audit Committee
Sen. Catherine Blakespear, Vice Chair, Joint Legislative Audit Committee
Cindy Silva, Chair, Alfred E. Alquist Seismic Safety Commission
Asm. Freddie Rodriguez, Vice-Chair, Alfred E. Alquist Seismic Safety Commission
Stefan Cajina, Chief, North Coastal Section, Division of Drinking Water
State Water Resources Control Board
Date: October 18, 2023
Subject: BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2022-23 Annual Report, Water System Improvement Program

From: Nicole Sandkulla, BAWSCA CEO/General Manager
To: The Hon. Tim Paulson, President, SFPUC Commission
Date: October 17, 2023
Subject: BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2022-23 Annual Report, Water System Improvement Program

From: Nicole Sandkulla, BAWSCA CEO/General Manager
To: Ms. Courtney Tyler, Clerk of the Board, State Water Resources Control Board
Date: October 17, 2023
Subject: Comment Letter - Proposed Making Conservation a California Way of Life Regulation

From: Chelsea Haines, Regulatory Relations Manager, ACWA, and undersigned organizations including BAWSCA
To: Ms. Courtney Tyler, Clerk of the Board, State Water Resources Control Board
Date: October 17, 2023
Subject: Comment Letter - Proposed Making Conservation a California Way of Life Regulation

Press Release

From: Office of the Governor
Date: November 6, 2023
Press Release: Governor Newsom Streamlines Sites Reservoir Project

From: Bureau of Reclamation
Date: November 2, 2023
Press Release: Reclamation and Sites Project Authority finalize plans to create new water storage in Northern California

Water Supply Conditions:

Date: November 6, 2023
Source: SF Chronicle
Article: California weather: Heavy rain, thunderstorms and mountain snow are in forecast

Date: November 6, 2023
Source: SF Chronicle
Article: Maps show California's remarkable drought recovery. Here's what comes next

Date: November 6, 2023
Source: SF Gate
Article: What NOAA's new snow maps say about California's upcoming winter

Date: October 23, 2023
Source: Maven News and Features
Article: Annual Supply Report shows water suppliers well positioned for 2023

Water Infrastructure:

Date: October 28, 2023
Source: San Francisco Chronicle
Article: Why Bay Area groundwater rebounded faster than elsewhere in California after winter Storms

Date: October 24, 2023
Source: DWR News
Article: Recent delta earthquakes a reminder of why modernizing our water infrastructure is vitally important

Bay Delta:

Date: October 26, 2023
Source: California Farm Water Coalition
Opinion: State Water Board's Delta Plan Is No Fix for Fish and Hurts Farms

Miscellaneous:

Date: October 3, 2023
Source: Pacifica Tribune
Article: City of Pacifica weighs options after hate

Date: October 3, 2023
Source: Almanac
Article: Public comment abuse leads to changes in Redwood City

November 1, 2023

Re: 2045 SFPUC RWS demand could be down to 141 mgd, more than 20% below today's demand

Dear Commissioners, General Manager Herrera and Assistant General Manager Ritchie,

Commissioner Ajami has spoken about the potential for a decentralized water supply, where not just places like the Salesforce tower or SFPUC headquarters recycle water, but where that style of recycling could extend to the home. Through your innovations program you are likely aware that at least one product is already on the market to meet this need. It's about the size of a household water heater, priced at \$4,000 and supposedly can recycle up to 45% of a household's water use.¹ And there's research underway to make water recycling even easier and cheaper. This is an example of how innovation can reduce our long-term water demand.

The above example supports the long-term trend analyses previously provided to you and BAWSCA.² The analyses used an industrial process methodology and water demand since 1990 to project gross per capita demand to 2045, which continues its downward trend.

The table below shows that using the trended 2045 GPCD projections and the California Department of Finance population projections, total Regional Water System (RWS) demand would be 141 mgd in 2045, well below today's demand and 40% below demand projections used in the 2045 Draft Alternative Water Supply Plan. The advent of home water recycling systems contributes to this trend.

Regional Water System (RWS) Systemwide Demand Derivation

	Reference	Projected GPCD	2045 Population Projections (000's)		2045 RWS Demand Based on Trended GPCD (mgd)		Reference
	2020 RWS demand (mgd)	2045 Based on trend	From 2020 UWMP	Based on CA Dept. of Finance	Using 2020 UWMP population Prtojections	Using Ca Dept of Finance Prtojections	2045 demand from AWS Plan (mgd)
San Francisco	67	46	1,251	847	57.5	39.0	73.5
BAWSCA	132	79	2,439	1,929	128.5	101.6	170.6
Combined	199		3,690	2,776	186.1	140.6	244.1

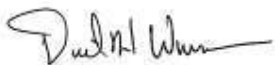
Note: BAWSCA 2045 RWS demand is calculated as two thirds of total BAWSCA 2045 demand

Such a low level of demand/water sales has immense implications on multiple critical areas, including water and sewer rates, capital budgeting, debt management, alternative water supply planning, environmental damage and the Bay Delta Plan, and individual BAWSCA members developing their own less expensive supplies.

As low and surprising 2045 RWS demand of 141 mgd seems, it's not far-fetched. Back in 2000 when demand was 261 mgd and our served population was 2.4 million, who would have imagined that in 2020 that our demand would drop to 199 mgd, more than 20% below 2000 demand while our population increased to approach 2.8 million?

Until now the SFPUC has only projected growing total demand/water sales. Please include declining demand scenarios in all of your analyses and materials where changes in demand affect outcomes and decisions.

Best regards,



Dave Warner

Cc: Nicole Sankulla, BAWSCA CEO
BAWSCA Board of Directors
SFPUC Citizen's Advisory Committee
Lisa Bilir and Karla Dailey, Palo Alto Utilities

¹ See promotional materials for Hydraloop H600.

² See attached letter dated July 12, 2021 to the commissioners and the attached slide deck dated May 26, 2021 provided to BAWSCA.

July 12, 2021

President Sophie Maxwell and Commissioners
San Francisco Public Utilities Commission
525 Golden Gate Ave.
San Francisco, CA 94102
Via Email

Dear President Maxwell and Commissioners,

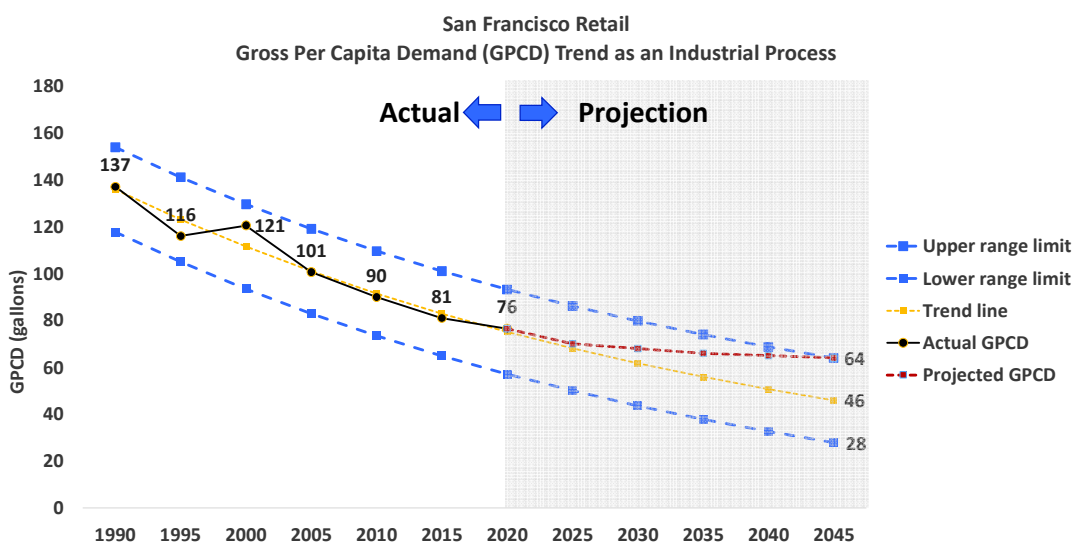
In anticipation of your July 16 demand workshop, you may find it interesting to view San Francisco's retail water demand in the context of an industrial process. The idea is that changes in demand are driven by process variables and assuming there are no substantial changes to the process, the changes in demand should continue, within a range of "control limits".

A statement in the draft urban water management plan alludes to such an industrial process:

"Both total consumption and per capita water use (i.e., gallons of water consumed per person per day [GPCD]) have been on a general decline since the mid-1970s. Many factors have contributed to this reduction in water use, including significant changes to the mix of industrial and commercial businesses and their associated water demand, and the general characteristics of water use by San Franciscans. In particular, the severe droughts of 1976-77 and 1987-92, changes in plumbing codes, and conservation programs (either voluntarily embraced by residents and businesses or mandated by the City) have affected water demands. During the most recent drought in 2012 – 2016 per capita water use further declined."¹

The actions mentioned in the excerpt will continue.

Applying industrial process methodology² results in the following table:



¹ From first paragraph in section 4.1.1 of the *2020 Urban Water Management Plan Public Review Draft, April 2021*

² Source used for industrial process methodology: Joiner, Bryan L. (1994). *Fourth Generation Management*. R.R. Donnelley & Sons Company, pages 148-149. Note that an exponential trend line was used in place of the author's average trend line.

The black line reflects actual gross per capita demand in five-year increments from 1990 to 2020.³ The yellow dashed line is the associated trend line. The blue dashed lines are the “control limits” as determined by the industrial process methodology. The control limits are determined such that it is highly unlikely (99.7% confidence interval) that the process will yield results outside the control limits.

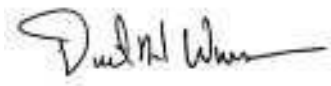
Extrapolating the process to 2045, it projects GPCD to then be 46 gallons down from 76 gallons today (with a possible range of 28 to 64 gallons).

The thought of San Francisco’s gross per capita water demand dropping from 76 gallons today to 46 gallons in 2045 might take one’s breath away. Imagine 25 years ago in 1995. GPCD then was 116 gallons and had dropped from 137 gallons 5 years earlier. Who then could have imagined that demand 25 years later, in 2020, would be 76 gallons? As the draft UWMP alluded, there will be more conservation measures, changes in building codes, and more droughts in the next 25 years. Industrial process methodology indicates that the trend will continue.

The red dashed line in the above chart is the draft UWMP’s projected GPCD to 2045, when it hits the upper control limit of the process chart. It’s possible that GPCD could be 64 gallons in 2045, but a lower GPCD is more likely. Looking at 1990-2020, actual GPCD never reached the control limit. The closest point was in the year 2000 when GPCD was 121 gallons and the upper control limit was 130 gallons.

Please consider having the SFPUC use an industrial process methodology as a means for evaluating demand projections.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Warner", with a stylized, flowing script.

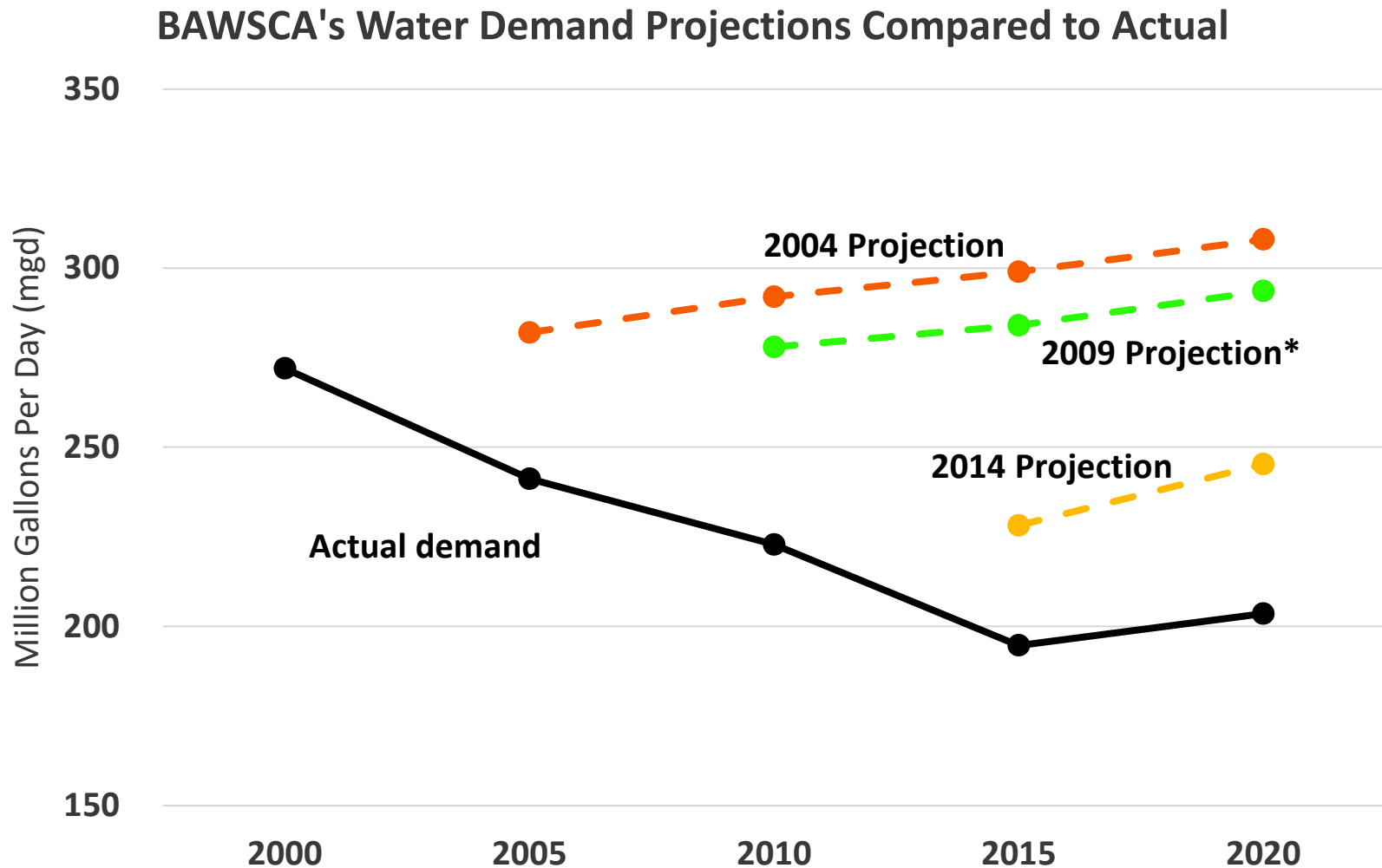
Dave Warner

³ 1990 and 1995 GPCD figures were estimated from Figure 6 in the SFPUC’s final 2005 Urban Water Management Plan. 2000 GPCD was calculated using total retail demand of 93.6 mgd (from table 5A of the same 2005 UWMP) and San Francisco’s population from the 2000 census.

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BAWSCA Demand Projection Analysis

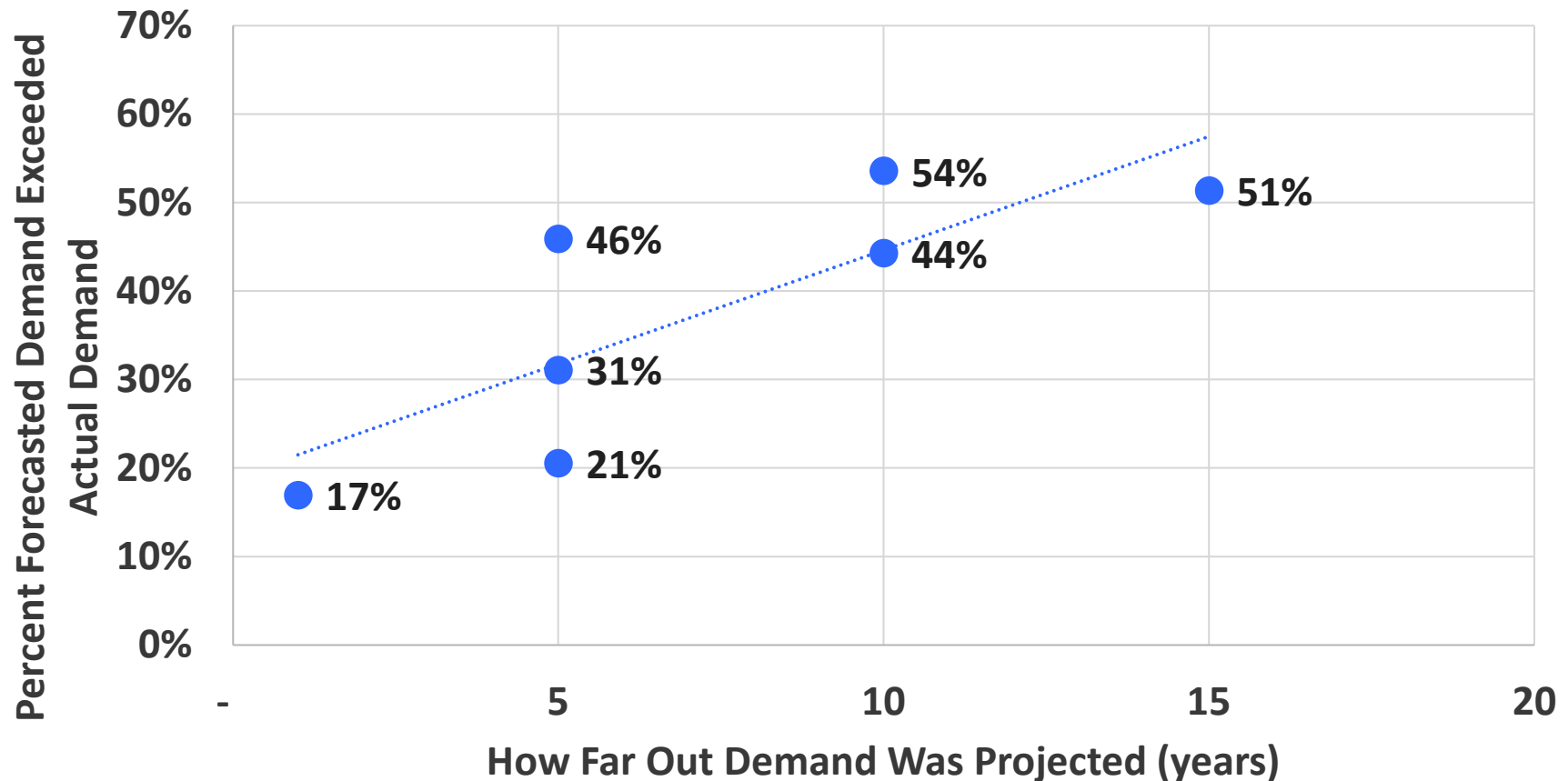
May 26, 2021



Projections consistently overestimated demand

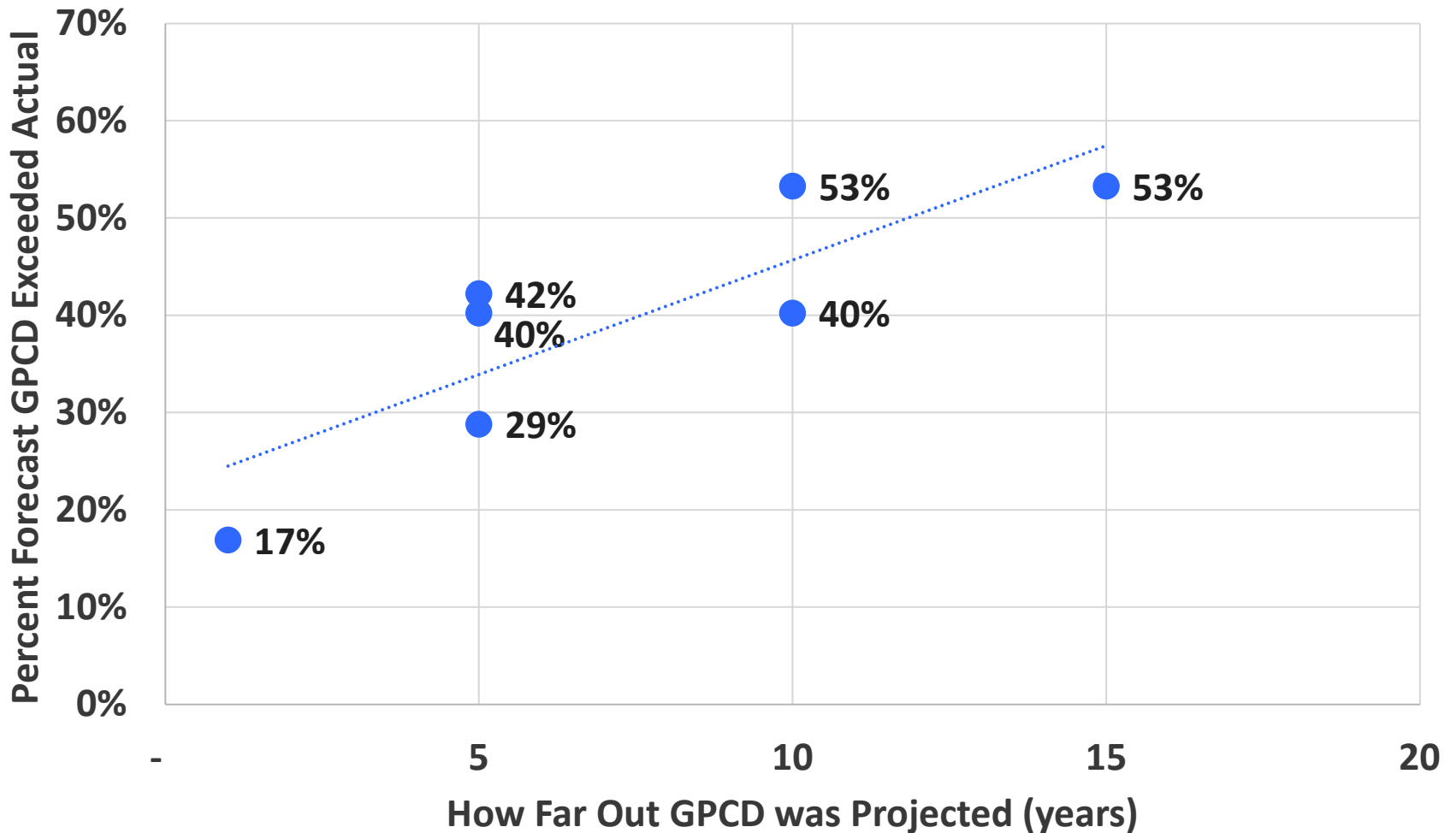
* The 2009 projection reflects a reduction of 5 to 12.5 mgd for active conservation savings as discussed in Sept 2009 Water Conservation Implementation Plan

Percent Demand Overestimated Plotted Against Years in the Future



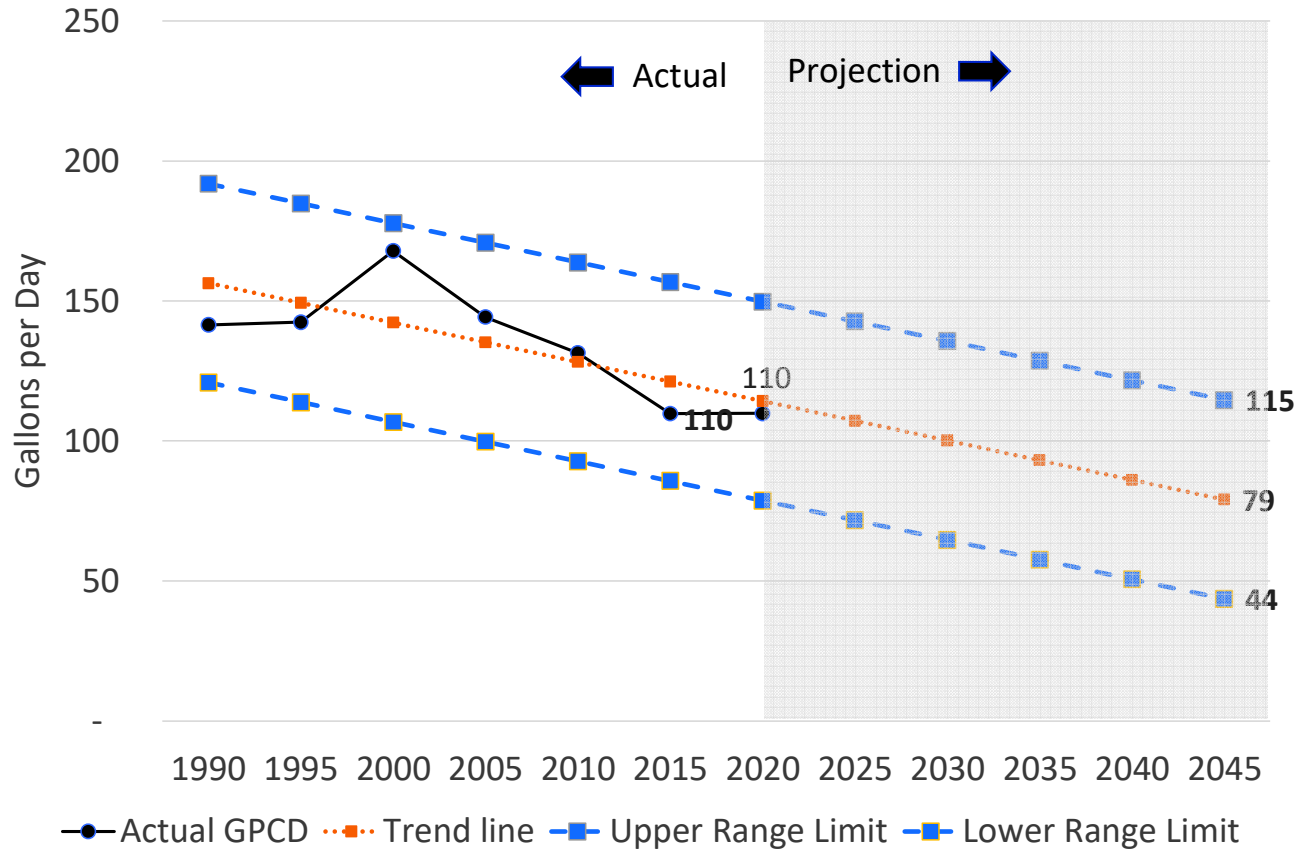
The size of the demand overestimate increased the further out demand was projected

Gross Per Capita Demand (GPCD) percent overestimated plotted against years in the future



- Projected GPCD was overestimated similarly to total demand (removing the effect of population growth)

GPCD Trend as an Industrial Process



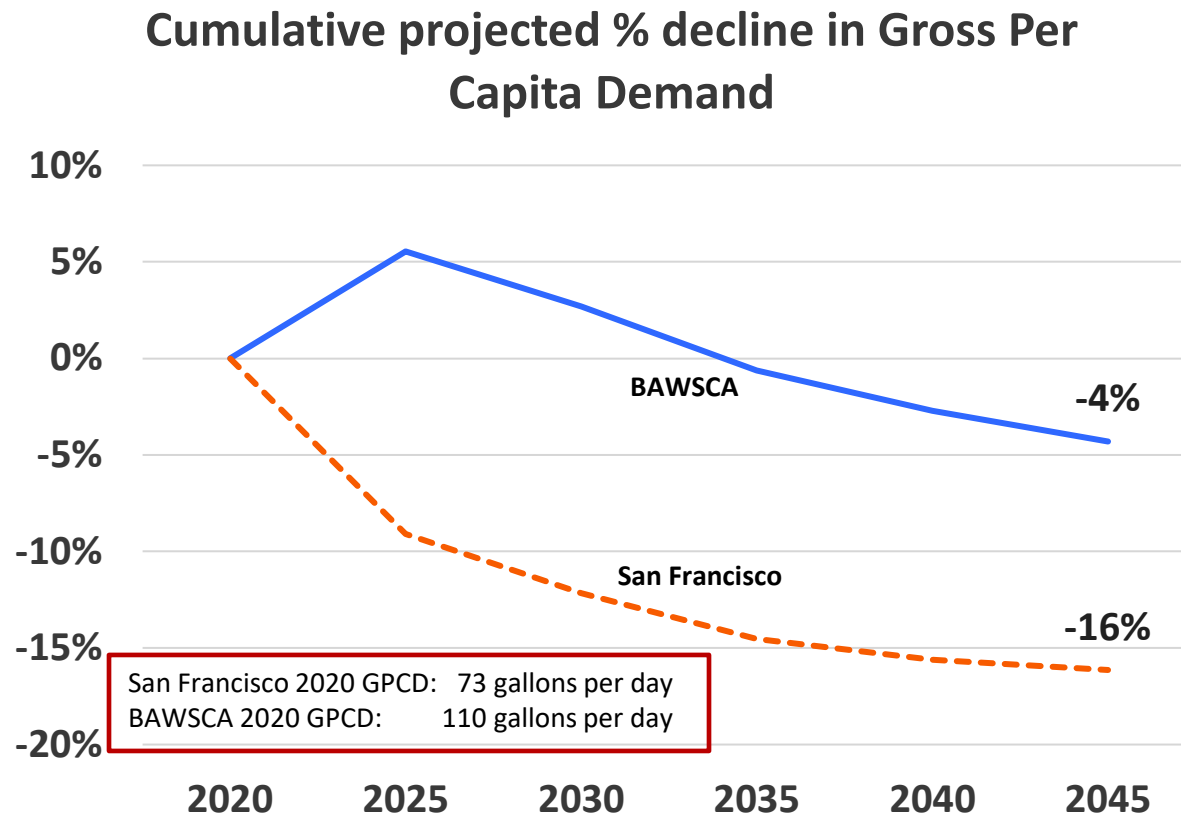
Using industrial process methodology, a trend can be plotted bounded by a 99% confidence interval, which assumes no significant process changes. For example people continue to implement conservation and droughts continue to occur, which people respond well to.

This process chart projects that in 2045 likely BAWSCA GPCD will be 79 gallons per day and will fall between 44 and 115 gallons per day.

Source used for industrial process methodology/formula:

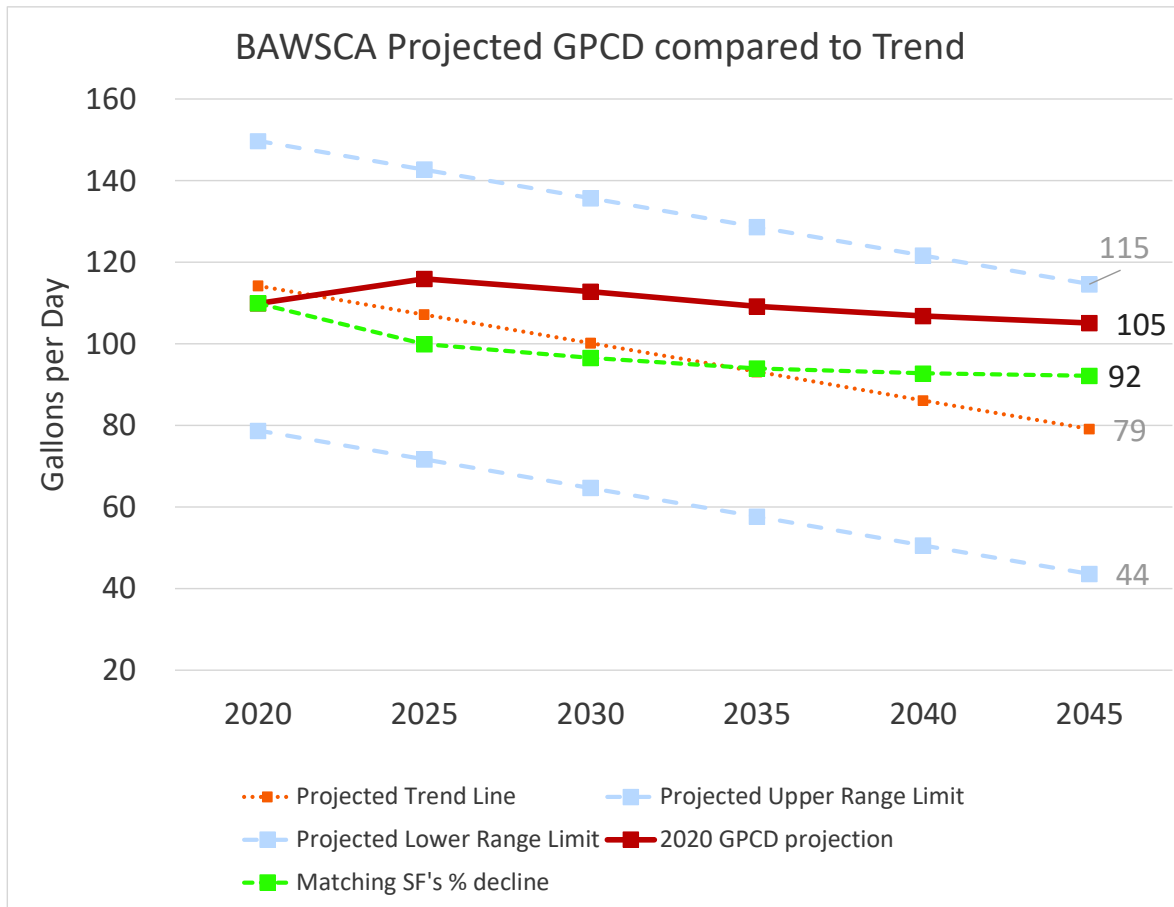
Joiner, Bryan L. (1994) . *Fourth Generation Management*. R. R. Donnelley & Sons Company

Projected GPCD Decline Compared to San Francisco



Given San Francisco's low GPCD, one might have imagined that BAWSCA's GPCD would decline more than San Francisco's

Comparing BAWSCA's Projected GPCD and SF's rate of Decline



- At 2045 GPCD of 105 gallons per day, BAWSCA's projection is 33% above the likely trended GPCD
- If BAWSCA used San Francisco's rate of decline in GPCD, BAWSCA's 2045 GPCD would be 92 gallons per day
- A GPCD of 92 gallons per day would still be 16% higher than target
- At a GPCD of 92 gallons per day, BAWSCA's total 2045 demand would be 224.3 mgd, down 30 mgd from the current projection

A Big Downside to Overestimating Demand

- Higher demand reduces supply reliability
- Overestimating demand gives the appearance of reduced supply reliability
- Overestimating demand creates unneeded costs in developing unneeded supplies
- Overestimating demand increases harm to the environment

At a minimum, a similar comparative analysis to this one should be completed prior to finalizing the next demand study, if such an analysis is not already done.



October 31, 2023

Senator Padilla
Senator Butler
Congressman Calvert
Congressman Costa
Congressman Duarte
Congressman Garamendi
Congressman LaMalfa
Congressman McCarthy
Congresswoman Napolitano
Congressman Thompson
Congressman Valadao

Dear Members of the California Congressional Delegation:

We are writing to request your assistance in securing federal funding for priority habitat restoration projects as part of a balanced plan to restore California's threatened and endangered fish species while preserving a reliable and drought-resistant water supply for our farms and cities. These habitat restoration projects are described in the [*Agreements to Support Healthy Rivers and Landscapes*](#), often referred to as "Healthy River Agreements" or "Voluntary Agreements." Critically, these are "no regrets" projects that are independently helpful to meet California's water challenges as we work together to benefit our cities, our farms, and our environment.

We specifically request you designate a staff person who can work with us and our Memorandum of Understanding (MOU) partners as part of a workgroup to explore federal funding opportunities for this important effort.

As background:

- On March 29, 2022, a Memorandum of Understanding (MOU) was signed by numerous local water agencies, state agencies, and federal agencies, in support of these Agreements. The water agencies that have signed the MOU collectively provide water to ninety percent of California's

population, the vast majority of California's irrigated land, and serve water for fish and wildlife throughout California.

- On September 28, 2023, the State Water Board issued a [series of documents](#) to update the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta), which includes an evaluation of the *Agreements to Support Healthy Rivers and Landscapes*. The participating water agencies offered a [statement](#) supporting the Voluntary Agreements, which will enhance healthy rivers and landscapes while helping California adapt to our climate reality by strengthening the environment, communities, and farms. The State Water Board in 2024 will consider adopting the Agreements as a component of the updated Bay-Delta Water Quality Control Plan.
- The Sacramento and San Joaquin Rivers and Sacramento-San Joaquin Bay-Delta support the fifth largest economy in the world, provides drinking water supply to over 35 million Californians, and provides irrigation to one of the most productive agricultural regions in the world, a key component to national food security and global nutrition security. Additionally, improved reliability of water supplies in the Bay-Delta helps to relieve pressure from the Colorado River system. Investing in the vitality of the Sacramento and San Joaquin River water systems is essential to the health and well-being of western communities and our state and national economies.
- The Agreements provide the resources and flexibility needed to protect fish and wildlife and the California economy in an era of increasingly uncertain conditions. The Agreements will help restore over 20,000 acres of habitat, integrated with deliberately timed environmental flows, to contribute to the recovery of salmon and other native fish species. By improving environmental management, this initiative will help build water supply reliability for tens of millions of Californians.
- To help implement the Agreements, the **state** has committed to provide nearly \$1.5 billion over the 8-year term of the Agreements. **Water suppliers** have agreed to provide approximately \$670 million in funding to advance the program, in addition to making uncompensated flows available.
- The Agreements anticipate \$740 million over 8 years in **federal** funding, primarily for priority habitat projects to match the state and water user investments. We understand that this level of federal assistance would benefit from participation by multiple agencies, including the U.S. Department of the Interior, The Department of Commerce, the U.S. Army Corps of Engineers, the U.S. Department of Agriculture, and the U.S. Department of Homeland Security, specifically the Federal Emergency Management Agency.

We appreciate your support for funding projects described in the *Agreements to Support Healthy Rivers and Landscapes* as part of a balanced strategy for meeting California's water challenges, and we look forward to working with you to streamline and maximize the opportunities for these federal investments. Please call on any of us if you have any questions or would like to discuss further.

Sincerely yours,

Jimi Netniss, Modesto Irrigation District

jimi.netniss@mid.org

David Guy, Northern California Water Association

dguy@norcalwater.org

Dennis Herrera, San Francisco Public Utilities Commission

djherrera@sfgwater.org

Federico Barajas, San Luis Delta Mendota Water Authority

federico.barajas@sldmwa.org

Jennifer Pierre, State Water Contractors

jpierre@swc.org

Michelle Reimers, Turlock Irrigation District

mareimers@tid.org

cc: Wade Crowfoot and Sara Aminzadeh, Natural Resources Agency

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October 18, 2023

Assembly Member David Alvarez - Chair
Senator Catherine Blakespear - Vice Chair
Joint Legislative Audit Committee
1020 N Street, Room 107
Sacramento, CA 95814

Cindy Silva, Chair
Assembly Member Freddie Rodriguez, Vice-Chair
Alfred E. Alquist Seismic Safety Commission
2945 Ramco Street, Suite 195
West Sacramento, CA 95691

Stefan Cajina, Chief
North Coastal Section, Division of Drinking Water
State Water Resources Control Board
850 Marina Bay Parkway, Bldg P, Second Floor
Richmond, CA 94804

RE: BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2022-23 Annual Report, Water System Improvement Program

Dear Assembly Member Alvarez, Senator Blakespear, Chair Silva, Assembly Member Rodriguez, and Chief Cajina,

BAWSCA has reviewed the San Francisco Public Utilities Commission's (SFPUC) Water System Improvement Program (WSIP) Annual Report for Fiscal Year 2022-23, dated September 1, 2023 (Annual Report). Attached is BAWSCA's comment letter to the SFPUC, which includes a request that the Commission direct staff to implement the recommendations provided with BAWSCA's comments.

As documented in Section 6 of the Annual Report, the overall WSIP program has had significant achievements associated with project completion since its inception. However, there remain two key projects that have yet to be implemented. Those two projects are the Alameda Creek Recapture Project (ACRP), located in the SFPUC's Sunol Valley Region, and the Regional Groundwater Storage and Recovery Project (RGSRP), located in the SFPUC's San Francisco (Regional) Region.

As detailed in the Annual Report, the ACRP's construction was halted in April 2023 due to the need to revisit its design. The RGSRP, which was broken into three phases, has proven to be a difficult project to construct. While the SFPUC has not included challenges in its discussion of the Sunol Valley Region work, BAWSCA believes that the ACRP will be significantly delayed due to complications associated with work necessary along the bank of a yet-to-be closed quarry pond that factors into the project's design and construction. In the challenges discussion provided for the San Francisco (Regional) Region, the SFPUC has indicated that a WSIP Notice of Change (NOC) will need to be issued in the coming year(s) to factor delays associated with the RGSRP.

Both the ACRP and RGSRP are key components of WSIP, in that they each are needed to achieve the WSIP Level of Service (LOS) Goals for Water Supply.

The delays associated with the construction of both the ACRP and the RGSRP will push the overall completion date of the WSIP beyond the currently adopted completion date of February 1, 2027. While it is hard for BAWSCA to gauge the exact time needed to complete either project and the SFPUC has not provided that information as part of this annual report or other documents, it is clear that the WSIP completion date will extend several years beyond its currently approved completion date in 2027. Given the known delayed status of these projects, the SFPUC should prepare and adopt an NOC that establishes a new WSIP completion date, as well as provide project and program budget updates and address any additional funding authority required to complete the work.

BAWSCA offers the following key findings and recommendations regarding the status and progress of the WSIP for the State's consideration.

Finding 1: There is a need for a Notice of Change given identified project and program schedule delays presented in the report: The Commission last approved an NOC to the WSIP at a hearing held on April 26, 2022. State agencies were notified of the NOC via correspondence from the SFPUC dated August 19, 2022. The NOC extended the proposed WSIP completion date to February 1, 2027 and extended project completion schedules for the work that remained. The project that most impacted the delay in the WSIP completion was the Regional Groundwater Storage and Recovery Project (RGSRP) and, since last year, delays continue to impact the likely final completion of the RGSRP. Additionally, since this last NOC, construction was halted on the Alameda Creek Recapture Project (ACRP). These schedule delays will result in the need for a new NOC that documents and adopts a revised project schedule for the RGSRP and ACRP as well as the overall WSIP completion schedule. The progress on these projects was discussed in Section 3.2 of the Annual Report, and Section 6.0 of the Annual Report detailed the challenges ahead.

Recommendation 1: SFPUC should be asked to identify its plan to adopt a Notice of Change given the project status of the RGSRP and ACRP.

Finding 2: Anticipated project cost increases will result in overall increased program budget and require increased WSIP funding approval. There were no WSIP budget revisions proposed in the 2022 NOC yet there were concerns detailed in the FY 2022-23 Annual Report regarding the potential need for a future budget increase to complete the WSIP, and in particular, to complete the ACRP and the RGSRP. The SFPUC does not provide an estimate in this Annual Report of the additional funding necessary. This information has also not been provided to BAWSCA at this time.

Recommendation 2: The SFPUC should be asked to provide updated budgets for the RGSRP and ACRP and the associated plan to secure approval of necessary funding.

Finding 3: There is a potential need for additional WSIP project(s) to ensure that the SFPUC's adopted Level of Service (LOS) Goals are met. Both the RGSRP and the ACRP serve to address the LOS goals associated with water supply reliability. Due to the potential changes to both the RGSRP and the ACRP, the water supply yields of those projects may be lower than originally planned. The WSIP's purpose was to upgrade aging or insufficient

infrastructure to address seismic concerns, and to implement specific delivery and drought reliability elements that, when implemented, would enable the SFPUC to meet its adopted LOS goals. If the respective water supply yield of those two WSIP projects is reduced, the SFPUC will need to implement alternative projects to make up the difference.

Recommendation 3: The SFPUC should be asked to address the result of changes to the RGSRP and ACRP on Regional Water System yield, water supply reliability, and the SFPUC's ability to meet the water supply LOS.

Please call me if BAWSCA can provide further assistance in the State's review of the SFPUC's FY 2022-23 Annual Report, or if you would like to discuss BAWSCA's comment letter to the SFPUC. I can be reached by phone at (650) 743-6688 or via email at nsandkulla@bawasca.org. BAWSCA sincerely appreciates the time and attention given by the State in helping to make sure the WSIP's progress continues.

Sincerely,



Nicole Sandkulla
Chief Executive Officer/General Manager

NS/tf/le

Enclosure

cc: SFPUC Commissioners
Dennis Herrera, General Manager, SFPUC
Stephen Robinson, Assistant General Manager of Infrastructure, SFPUC
Steven Ritchie, Assistant General Manager of the Water Enterprise, SFPUC
Katie Miller, Director, Water Capital Programs, SFPUC
Alison Kastama, BAWSCA Liaison, SFPUC
Vlad Rakhmimov, Staff Engineer, North Coastal Section, Division of Drinking Water, State Water Resources Control Board
Marco Pacheco, San Francisco District Engineer, Division of Drinking Water, State Water Resources Control Board
Darrin Polhemus, Deputy Director, Division of Drinking Water, State Water Resources Control Board
Daniel Newton, Assistant Deputy Director, Northern California Drinking Water Field Operations Branch, State Water Resources Control Board
Annde Ewertsen, Executive Director, Alfred E. Alquist Seismic Safety Commission
Jia Wang-Connelly, Senior Structural Engineer, Alfred E. Alquist Seismic Safety Commission
BAWSCA Board of Directors
BAWSCA Water Management Representatives
Allison Schutte, Legal Counsel, Hanson Bridgett, LLP

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October 18, 2023

Via email

The Hon. Tim Paulson, President
and Members of the Commission
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

**RE: BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2022-23 Annual Report,
Water System Improvement Program**

Dear President Paulson and Members of the Commission,

BAWSCA has reviewed the San Francisco Public Utilities Commission's (SFPUC) Water System Improvement Program (WSIP) Annual Report for Fiscal Year 2022-23, dated September 1, 2023 (Annual Report) and offers the following findings and recommended actions for the SFPUC:

Finding 1: There is a need for a Notice of Change given identified project and program schedule delays presented in the report: The Commission last approved an NOC to the WSIP at a hearing held on April 26, 2022. State agencies were notified of the NOC via correspondence from the SFPUC dated August 19, 2022. The NOC extended the proposed WSIP completion date to February 1, 2027 and extended project completion schedules for the work that remained. The project that most impacted the delay in the WSIP completion was the Regional Groundwater Storage and Recovery Project (RGSRP) and, since last year, delays continue to impact the likely final completion of the RGSRP. Additionally, since this last NOC, construction was halted on the Alameda Creek Recapture Project (ACRP). These schedule delays will result in the need for a new NOC that documents and adopts a revised project schedule for the RGSRP and ACRP as well as the overall WSIP completion schedule. The progress on these projects was discussed in Section 3.2 of the Annual Report, and Section 6.0 of the Annual Report detailed the challenges ahead.

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Recommendation 2: The Commission should direct staff to provide updated budgets for the RGSRP and ACRP and the associated plan to secure approval of necessary funding.

Finding 3: There is a potential need for additional WSIP project(s) to ensure that the SFPUC's adopted Level of Service (LOS) Goals are met. As documented in Section 3.0 of the Annual Report, both the RGSRP and the ACRP serve to address the LOS goals associated with water supply reliability. Due to the potential changes to both the RGSRP and the ACRP, the water supply yields of those projects may be lower than originally planned. The WSIP's purpose was to upgrade aging or insufficient infrastructure to address seismic concerns, and to implement specific delivery and drought reliability elements that, when implemented, would enable the SFPUC to meet its adopted LOS goals. If the respective water supply yield of those two WSIP projects is reduced, the SFPUC will need to implement alternative projects to make up the difference.

Recommendation 3: The Commission should direct staff to identify the result of changes to the RGSRP and ACRP on Regional Water System yield, water supply reliability, and the SFPUC's ability to meet the water supply LOS.

Finding 4: A final assessment of the actual performance of the WSIP and its individual projects against planned performance and the LOS goals is integral and critical information to the definition of completeness. The WSIP Program Environmental Impact Report identified the WSIP LOS as guiding the identification, design, and implementation of the WSIP projects and facilities. As the WSIP nears completion, nearly all of the WSIP facilities are in operation and an critical piece of information for the Commission and the wholesale customers will be how are the WSIP projects operating compared to the identified LOS goals.

Recommendation 4: The Commission should direct staff to prepare a WSIP Program Completion report when all projects have achieved final construction completion that documents actual project performance against planned project performance with respect to the LOS goals.

Finding 5: The "June 2023 Forecasted Cost" provided in Table 5.2 for completed projects is valuable information for accurately documenting the availability of unspent funds to support remaining WSIP budget needs. Table 5.2 and its "unspent funds" column differs from the reporting approach used in prior WSIP Annual Reports. More specifically, it documents up-to-date cost variances, which aligns with how project cost variances are presented in each WSIP quarterly report. Understanding cost variances in a timely and accurate manner is necessary to fully understand the remaining monies available in the "Director's Reserve". BAWSCA supports this approach as it more accurately documents the availability of unspent funds to support remaining budget needs.

Recommendation 5: The SFPUC should continue this financial reporting approach in future annual reports.

As part of its review of the WSIP Annual Report, BAWSCA has also provided comments to the State agencies that have oversight responsibilities related to WSIP under California State Law, AB 1823 (2002, Papan). A copy of this letter is attached.

Thank you for the opportunity to review and comment on this report. If you have questions or wish to discuss these issues further, please contact me at 650-743-6688, or email me at nsandkulla@bawsca.org.

Sincerely,



Nicole Sandkulla
Chief Executive Officer/General Manager

NS/tf/le

cc: The Honorable Anthony Rivera Vice President, SFPUC Commission
The Honorable Newsha Ajami, Commissioner, SFPUC Commission
The Honorable Sophie Maxwell, Commissioner, SFPUC Commission
The Honorable Kate H. Stacy, Commissioner, SFPUC Commission
Assembly Member David Alvarez, Chair, Joint Legislative Audit Committee
Senator Catherine Blakespear, Vice Chair, Joint Legislative Audit Committee
Cindy Silva, Chair, Alfred E. Alquist Seismic Safety Commission
Assembly Member Freddie Rodriguez, Vice-Chair, Alfred E. Alquist Seismic Safety Commission
Mr. Stefan Cajina, Chief, North Coastal Section, Division of Drinking Water, State Water Resources Control Board
Vlad Rakhimov, Staff Engineer, North Coastal Section, Division of Drinking Water, State Water Resources Control Board
Marco Pacheco, San Francisco District Engineer, Division of Drinking Water, State Water Resources Control Board
Darrin Polhemus, Deputy Director, Division of Drinking Water, State Water Resources Control Board
Daniel Newton, Assistant Deputy Director, Northern California Drinking Water Field Operations Branch, State Water Resources Control Board
Annde Ewertsen, Executive Director, Alfred E. Alquist Seismic Safety Commission
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BAWSCA Board of Directors
Dennis Herrera, SFPUC, Acting General Manager
Steven Ritchie, SFPUC, Assistant General Manager, Water Enterprise
Stephen Robinson, SFPUC, Assistance General Manager of Infrastructure
Katie Miller, SFPUC, Director, Water Capital Programs
Alison Kastama, SFPUC, BAWSCA Liaison
BAWSCA Water Management Representatives
Allison Schutte, Hanson Bridgett, LLP, Legal Counsel

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October 17, 2023

Via email @ commentletters@waterboards.ca.gov

Ms. Courtney Tyler, Clerk of the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

RE: Comment Letter — Proposed Making Conservation a California Way of Life Regulation

Dear Ms. Tyler,

The Bay Area Water Supply and Conservation Agency (BAWSCA) appreciates the opportunity to submit written comments to the State Water Resources Control Board (State Board) on the proposed regulations for Making Conservation a California Way of Life. BAWSCA is a special district that represents the 26 water agencies that rely on the San Francisco Hetch Hetchy Regional Water System. These agencies in turn deliver water to 1.8 million residents and over 40,000 businesses in the Bay Area, including Silicon Valley, which is a vital engine of California's economy with significant commercial and industrial water demands.

BAWSCA is committed to the success of Making Conservation a California Way of Life and has demonstrated its commitment to water use efficiency since its creation as a special district in 2003. Since then, BAWSCA and its agencies have invested more than \$16M in successful water conservation programs, lowering water use by 36 percent in the area. This investment does not include programs implemented by BAWSCA agencies independent of BAWSCA programs. Today, the average resident in the BAWSCA region uses 60 gallons per day, which is roughly 35% less than the average California resident.

BAWSCA participated in the Department of Water Resources (DWR) working group meetings to implement SB 606 and AB 1668 and is committed to the success of Making Conservation a California Way of Life. With that ongoing commitment, BAWSCA offers the following recommendations for the State Board's consideration. Further, BAWSCA requests that the State Board provide a collaborative and transparent process for amending the proposed regulations in a manner that achieves the overall objectives and is financially and operationally achievable by water suppliers.

Implement a Reasonable, Water Savings-Based Approach for Requiring Best Management Practices (BMPs)

BAWSCA develops and administers water conservation programs for its 26 agencies and has a long-standing commitment to water conservation. BAWSCA anticipates that it will develop new conservation programs targeted to Commercial, Industrial, and Institutional (CII) accounts to assist its agencies with the CII BMP Performance Measure (PM) requirements. Additionally, BAWSCA looks forward to the inter-agency learning that will transpire when suppliers across the state implement CII BMPs and share program successes, lessons learned, and program effectiveness.

However, the approach in the proposed regulations is overly burdensome and it is unclear whether water savings will be achieved. Specifically, BAWSCA does not see the measurable impact of requiring suppliers to implement at least five BMPs for the top 20% of CII customers in each of the recommended 22 CII categories, and at least two BMPs for the top 2.5% of CII customers. This requirement would necessitate a significant increase in staff and financial resources for the BAWSCA agencies to implement programs for CII customers that may already be efficient, and which make up a small fraction of total water use.

For example, BAWSCA does not see the water saving potential from implementing five BMPs, such as rebate and education and outreach programs, for parking lots and warehouses.

BAWSCA recommends that the draft regulations be amended to require BMPs for the top 20% of all CII customers, regardless of category. This targeted approach will focus water supplier efforts, and financial resources, on the largest water users with the greatest potential to reduce water use.

Adopt Reasonable and Achievable Implementation Timelines

BAWSCA has more than 20 years of experience developing and implementing water conservation programs on an agency and regional level. Designing, budgeting for, and implementing a conservation program can take as little as two years for a straightforward program and four years or more for a complex and innovative program. BAWSCA anticipates that its agencies will rely on regional and collaborative programs to comply with the standards. However, the concurrent implementation schedule for the CII PMs in the proposed regulations is not achievable. BAWSCA offers the following comments in support of a staggered implementation schedule so that water suppliers and the goals of the regulations are set up for success.

The proposed regulations require that suppliers classify at least 20% of CII customers by 2026, 60% by 2028, and 100% by 2030. Concurrently, suppliers are expected to design and implement BMPs for CII customers based on those classification categories. CII customer classification will take time. BMP development for CII customer categories will take time. Water suppliers will struggle to successfully both categorize CII customers and implement BMPs for those same CII customers given the minimum two-year schedule for program development outlined above.

BAWSCA recommends that the State Board adjust the CII BMP development schedule. More specifically, that CII BMPs be developed between 2030 and 2035. This change would provide suppliers the necessary time to evaluate the CII customers that have been categorized, then design and implement appropriate BMPs that will achieve water savings.

Reinstate the CII Classification Categories Recommended by DWR

BAWSCA agrees that a state-wide standardized CII classification system will facilitate data gathering by water suppliers for further understanding of service area-wide water use by CII water use category and corresponding effectiveness of various water conservation practices.

Water Code Section 10609.10 directs DWR, in coordination with the State Board, to develop “recommendations for a CII water use classification system for California that address significant uses of water.” DWR’s multi-year effort resulted in a recommended CII classification

system that is water-centric and that combines CII customers based on significant water uses. By contrast, the Energy Star Portfolio Manager (ESPM) classification system proposed in the draft regulation is energy-centric and used for energy management purposes. For example, two categories in the ESPM system are parking lots and warehouses, neither of which are sources of significant water use. Given that the CII BMP PM is tied to the Classification System PM, and that the final classification system will be the first opportunity for state-wide benchmarking, it is important that the categories reflect significant uses of water.

BAWSCA recommends that the Water Board adopt the CII classification system recommended by DWR.

Reinstate DWR's Recommended One-Acre Landscape Area Threshold for Converting CII Mixed Use Meters (MUMs) to Dedicated Irrigation Meters (DIMs)

BAWSCA agrees that DIMs (or equivalent technologies) and in-lieu technologies that separate CII indoor water use and irrigation water use offer opportunities to improve efficiency for large, irrigated landscapes served by mixed-use meters.

The State Board's March 22, 2023, presentation indicated that the 500,000 gallon per year volumetric threshold would capture fewer CII accounts state-wide compared to the one-acre landscape area threshold and would be more cost effective. However, using the equation provided in the proposed regulations and the average Net Evapotranspiration (ET_o) for the BAWSCA region, CII landscaped areas smaller than two-thirds of an acre would exceed the threshold for conversion. Additionally, water use for irrigation can fluctuate significantly from year to year based on weather and local climate. Considering the significant investment required to convert MUMs to DIMs, or implement in-lieu technologies, it will create an undue burden if the qualifying properties changes from year to year based on Net ET_o.

Finally, the regulations categorically exclude CII process water. However, water suppliers often do not know how much of a CII customer's water use is process water. Additionally, that information may not be provided upon request because it may be considered proprietary. Therefore, suppliers may not have the information necessary to subtract it out and accurately estimate CII landscape irrigation water use.

BAWSCA recommends that the State Board adopt the one-acre landscape area threshold for converting MUMs to DIMs, or implementing in-lieu technologies.

Remove All Requirements for Disclosable Buildings

BAWSCA does not believe there is water saving potential from identifying disclosable buildings. "Disclosable buildings" are defined by the California Energy Commission (CEC) for the purpose of energy saving initiatives. Metrics that are indicators for energy usage, such as gross floor area square footage are not applicable to water use.

Water suppliers do not have access to gross floor area measurements and therefore do not have the necessary data to identify disclosable buildings as defined by ESPM. Obtaining the data will be particularly difficult for special water districts and private water companies that are a separate entity than local building departments, which may or may not have the required data.

While the CEC appears to publish a benchmarking list,¹ it is not exhaustive of all disclosable buildings. Additionally, BAWSCA does not know how often this list is updated or made public.

In addition to requiring that water suppliers identify disclosable buildings, the proposed regulations require suppliers to provide monthly water use data in a format that is not publicly available. Water suppliers provide customers with water use in various formats depending on billing and meter reading systems as well as supplementary programs to encourage efficient water use. For example, many BAWSCA agencies provide customers with water use reports through a BAWSCA subscription program. Requiring a new and additional format for suppliers to provide CII customers with water use does not achieve water savings. Instead, it creates duplicative work for financially and staff limited resources.

BAWSCA recommends that the State Board remove all requirements related to disclosable buildings as there is no correlation with water use efficiency.

Remove all Requirements for Non-Functional Turf or Align Definitions and Timelines with AB 1572

BAWSCA supports prohibiting irrigation of non-functional turf with potable water. However, BAWSCA is concerned that the definition of non-functional turf and the timeline outlined in the proposed regulations does not align with AB 1572, passed by the California State Legislature on September 14, 2023. This misalignment will cause confusion and does not set suppliers up for success.

BAWSCA recommends that the State Board either eliminate any reference to requirements for non-function turf or align them with AB 1572.

Reinstate DWR's Recommended 0.63 Evapotranspiration Adjustment Factor / Landscape Efficiency Factor (ETAF/LEF) for Existing Residential and CII DIM landscapes as a minimum value for 2035 compliance and beyond and extend 0.8 ETAF/LEF until 2034.

The 0.55 and 0.45 ETAF/LEF (residential and nonresidential respectively) are Model Water Efficient Landscape Ordinance (MWELO) design standards and are not achievable in the real-world on a service area scale, especially for established (pre MWELO) landscapes. It is concerning that the State Board's outdoor standard recommendation deviates so far from DWR's final recommendations. The fact that both state agencies' analyses yielded very different results for what is considered "efficient use" appears to demonstrate the data quality issues, methodology shortcomings, and misinterpretations of supplier data that have been expressed to the state for several years. These issues include over or underestimating residential landscape area, improper connection of budgets to supplier demand data to pre-assess compliance, the complete omission of analysis for CII DIM irrigation budgets and a scientifically unsound horticultural irrigation efficiency factor to name a few. These issues have already been well documented in ACWA and numerous other comment letters during the initial DWR process. Furthermore, real life landscapes that are designed according to MWELO rarely perform at MWELO standards as shown by Santa Margarita Water District in a presentation at the October 4th State Water Board workshop.

¹ <https://www.energy.ca.gov/media/7213>

BAWSCA recommends that the State Board reinstate DWR's recommended 0.63 ETAF/LEF for existing residential and CII DIM landscapes as a minimum value for 2035 compliance and beyond and extend 0.8 ETAF/LEF until 2034.

Reinstate DWR's Recommendation to Include 20% of Irrigable, Not Irrigated (INI) Landscape Area Measurements (LAM) in the Outdoor Residential Standard.

DWR conducted a statistical analysis of outdoor water use, LAM and INI data. The data concluded that the INI area is being irrigated at one fifth, or 20%, of the irrigable area. As a result, DWR correctly concluded that the calculation of annual outdoor water use must include 20 percent INI. Additionally, the inclusion of INI is consistent with the 2018 conservation legislation. Water Code §10609.6(a)(2)(B) directed "the standards shall apply to irrigable lands. The removal of DWR's recommended to include 20% for INI is statistically inaccurate.

DWR's findings were based on the recognition that its analysis was only a snapshot in time. Its follow-up analysis indicated that the snapshot missed 20% of the irrigated landscape that was irrigated either before or after the image was taken for the analysis. DWR recognized that this under counting of irrigated area would continue to be the case unless multiple images are conducted over the analysis year. This 20% should not be looked as additional, but as area that is actually being irrigated.

BAWSCA recommends that the State Board revert to DWR's recommendation with the inclusion of 20 percent INI and that that suppliers would recalculate INI when DWR provides new LAM data.

BAWSCA appreciates the opportunity to provide written comments on behalf of its 26 water agencies. I can be reached by phone at (650) 743-6688 or via email at nsandkulla@bawasca.org should you have any questions.

Sincerely,



Nicole Sandkulla
CEO/General Manager

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ACWA

American Water Works Association
California-Nevada Section

BAWSCA
Bay Area Water Supply & Conservation Agency



CMUA
CALIFORNIA MUNICIPAL UTILITIES
ASSOCIATION



CSDA

CWA
CALIFORNIA WATER ASSOCIATION

ROWA

ACWD
ALAMEDA COUNTY WATER DISTRICT



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DISTRICT

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HEIGHTS
WATER
DISTRICT**

INCORPORATED 1913
**CITY OF
BANNING**
ENDLESS OPPORTUNITY

PUBLIC WORKS



CORONA
"THE CIRCLE CITY"
Established
May 4, 1886
To Cherish Our Past - To Plan Our Future

CITY OF FOUNTAIN VALLEY
Fountain Valley
A NICE PLACE TO LIVE
INCORPORATED
JUNE 13, 1957
ORANGE COUNTY, CALIFORNIA

A CARING COMMUNITY
EST. 1925
CITY OF LA HABRA

**CITY OF
LAVERNE**
SINCE 1906

**CITY OF
REDDING**
CALIFORNIA

**CITY OF
OCEANSIDE**
WATER UTILITIES

SD

Public
Utilities

**CITY OF
ROSEVILLE**
CALIFORNIA

City of
SACRAMENTO

CITY OF NEWPORT BEACH
CALIFORNIA

CITY OF SEAL BEACH
CALIFORNIA
INCORPORATED 1915

**CITY OF
SHASTA LAKE**
Established 1993

THE CITY OF SUSANVILLE
INCORPORATED 1900

**CITY OF
TUSTIN**

**WATER
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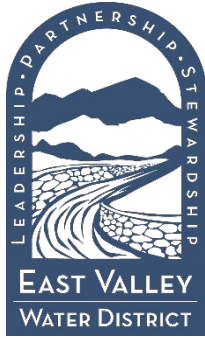
DESERT WATER

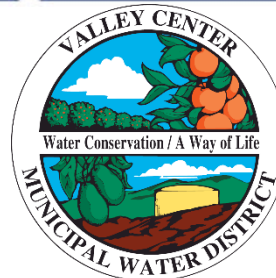
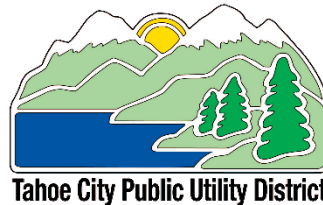
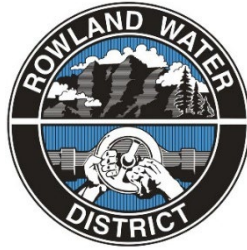


EOCWD
EAST ORANGE COUNTY
WATER DISTRICT

emwd
EASTERN
MUNICIPAL
WATER DISTRICT







October 17, 2023

Submitted via: commentletters@waterboards.ca.gov

Courtney Tyler
Clerk to the State Water Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Re: Comment Letter — Proposed Making Conservation a California Way of Life Regulation

Dear Ms. Tyler,

The Association of California Water Agencies and the undersigned organizations appreciate the opportunity to provide comments to the State Water Resources Control Board (State Water Board) on the Draft Making Conservation a California Way of Life Regulation (Regulation). This comment letter (Comment Letter) is intended to provide constructive and comprehensive recommendations to the State Water Board to meaningfully advance water use efficiency, address urban retail water suppliers' constraints and concerns, and build on local and regional successes. We respectfully request the State Water Board's thoughtful consideration of our comments and recommendations, as supported by agency specific oral and written comments. We ask for the opportunity to work collaboratively with the State Water Board over the duration of the rulemaking to revise the draft Regulation to incorporate input from interested parties to support successful local and regional implementation.

This comment letter includes an Appendix with detailed suggested redline changes to the draft Regulation. We recognize the suggested redlines are one of many ways in which the draft Regulation could be modified to address suppliers' concerns. ACWA and the undersigned parties are committed to working with the State Water Board on revisions that support both the State's goals and water suppliers' successful implementation of a final Regulation. This Comment Letter is organized as outlined below:

SECTION 1. STATE & LOCAL PARTNERSHIP

SECTION 2. OVERARCHING POLICY CONCERNS & RECOMMENDATIONS

- I. Set Reasonable Timelines
- II. Recognize Data Errors & Limitations
- III. Provide Alternative Compliance
- IV. Align CII Performance Measures with Local Success
- V. Adhere to Legislative Requirements

SECTION 3. TECHNICAL CONCERNS & RECOMMENDATIONS

- I. Outdoor Standards
- II. CII Performance Measures
- III. Methodologies & Variances
- IV. Reporting

SECTION 4. APPENDIX: SUGGESTED REDLINE RECOMMENDATIONS

SECTION 5. CLOSING REMARKS

SECTION 1: STATE & LOCAL PARTNERSHIP

Water suppliers are on the front lines of managing the impacts of climate change to ensure a reliable water supply for California's diverse beneficial uses. The actions that suppliers take will vary across California depending on local and regional supplies and conditions. As water suppliers implement diverse projects to advance existing and new supplies, they have also long recognized water use efficiency as an important tool for climate resilience.

Over the past several decades, water suppliers have been pioneering local and regional programs to advance efficiency and improve drought planning and response. These programs have been complemented by statewide efforts to standardize drought planning and response and set statewide water conservation targets. The Water Conservation Act of 2009 directed the State to achieve a 20% reduction in per capita water use by 2020. The Department of Water Resources (DWR) Report to the Legislature on the Status of the 2020 Urban Water Management Plans (UWMPs) found that "California surpassed the 20% reduction and reduced per capita urban water use by 32%. Of the 386 Urban Retail Water Suppliers that submitted retail UWMPs, 374 of these (97%) achieved their targeted 2020 water use reduction."¹ While significant achievements have been made to use water wisely, the water community recognizes a continued effort toward greater efficiency is needed to prepare for more frequent and prolonged droughts and a hotter and drier climate.

As the State finalizes this new regulatory program to advance long-term water use efficiency, we ask that it recognizes water suppliers as a key partner to the State's success. Compliance with the regulation will fall solely on water suppliers and their ratepayers. The ability of water suppliers to implement the Regulation successfully and cost-effectively will determine California's success in advancing long-term water use efficiency. **We ask that the State Water Board work with ACWA and the water supplier community to address the policy and technical concerns outlined in this Comment Letter.**

Additionally, we ask for the State's leadership to secure resources to support cost-effective compliance with a final Regulation. Given the timelines of the CII Performance Measures (PMs) and broader water use objectives, we encourage the State to provide technical resources, data, and funding as soon as possible. We believe that increasing flexibility and reducing reporting burdens in the draft Regulation can help reduce costs. However, the State should allocate dedicated resources to support water suppliers and Californians' compliance. Additionally, the State should recognize and promote regional and statewide partnerships as a mechanism for suppliers to comply with the Regulation, particularly regarding the CII PMs. This will help leverage suppliers' limited resources and advance local capacity.

SECTION 2: OVERARCHING POLICY CONCERNS & RECOMMENDATIONS

I. SET REASONABLE TIMELINES

We have significant concerns that the timelines proposed in the draft Regulation are not reasonable, do not support cost-effective compliance, and would not achieve the multi-benefits desired. The timelines proposed for both the outdoor water use standards and the CII PMs are problematic. In order to successfully implement programs that require long-term customer behavior change and significant

¹ [Status of 2020 Urban Water Management Plans \(ca.gov\)](#). A Report to the Legislature pursuant to Section 10644 of the California Water Code. January 2023.

investments, water suppliers require adequate time to: analyze existing water use efficiency programs; plan for cost-effective compliance with the standards, objectives and performance measures; budget for and staff programs; partner with customers and build partnerships, including targeted programs for disadvantaged communities (DACs); and allow for technology advancements. Furthermore, we are concerned that these timelines could have unintended consequences, such as impacts to urban tree health and disproportionate impacts to DACs and water affordability.

We anticipate the State Water Board will consider adoption of the draft Regulation August 2024 and the final Regulation would go into effect October 2024.² Starting 2025, within three months of the Regulation's expected effective date, 42% of suppliers would need to achieve a water reduction. By 2030, 74% of suppliers would need to achieve reductions (with a third by greater than 20%); and by 2035, 82% of suppliers would need to achieve reductions (with over 40% of suppliers by greater than 20%).³ Suppliers' water use objectives, and the associated required reductions, could change if suppliers obtain variances. However, we are concerned the timeline also unreasonably limits suppliers' ability to collect and submit the required data to obtain the variances.

Table 1: Urban Retail Water Suppliers by Percent Reduction

Reductions needed to meet proposed objective	2025	2030	2035
	% of urban retail water suppliers		
No Reduction	58%	26%	18%
Less Than 5% Reduction	10%	9%	9%
5-10% Reduction	9%	10%	11%
10-20% Reduction	13%	23%	21%
20-30% Reduction	7%	16%	20%
Greater Than 30% Reduction	3%	16%	21%

Additionally, all suppliers would be required to begin compliance with comprehensive CII PMs beginning January 1, 2025: suppliers would be required to identify all disclosable buildings by January 1, 2025 and notify building owners; ban the irrigation of non-functional turf on all CII Landscapes by July 1, 2025; classify all CII customers (20% by 2026); identify CII large landscapes with mixed-use meters (MUMs) and either install dedicated irrigation meters or employ in-lieu water technologies (20% by 2026); and design and implement best management practices (BMPs) by January 1, 2025 (20% of the top 20% of CII classification by 2026)(see Table 1). The currently proposed completion of all CII PMs within a five-year period, beginning 2025, would require significant resources and create implementation challenges. For example, it is unclear how suppliers would accurately implement BMPs for the top 20% of each classification while classifying CII customers. The compressed timeline is unnecessary and further increases costs to suppliers.

² Enacted legislation directed the State Water Board to adopt the Regulation by June 30, 2022. We recognize that there are factors beyond the State Water Board's control as to the current status of the draft Regulation. However, currently proposed compliance timelines do not reflect the delayed status of the Regulation.

³ Provisional Data State Water Resources Control Board. (Version 2.0, 2023-09-13). We note that this table does not include the CIIDIM Outdoor Standard, variances, or data errors so the % reduction by % supplier could change.

Table 2: Proposed Regulation's Compliance Schedule

	2024	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35
Reg Effective	Fall											
Indoor Standard.		47					42					
Res. Outdoor Standard		0.8					0.63					0.55
CIIDIM Outdoor Standard					0.8		0.63					0.45
Water Loss												
Variances												
Non-Functional Turf		July										
Disclosable Buildings			20%		60%		100%					
CII Classification (22 proposed)			20%		60%		100%					
CII BMPs			20%		60%		100%					
CII MUMs: In-Lieu or DIM			20%		60%		100%					
Reporting	Jan. 1											

We understand that the enacting legislation does not allow the State Water Board to issue a civil liability penalty until 2027. Additionally, we appreciate that the State Water Board has a positive track record of utilizing its enforcement discretion. However, we believe the intent of the State Water Board should be compliance, not enforcement discretion. Significant consideration of reasonable timelines is necessary.

RECOMMENDATION # 1. Modify the proposed timelines for the outdoor standards to provide an additional 5 years for all suppliers to achieve compliance.⁴

RECOMMENDATION # 2. Provide 10 years for suppliers to complete all CII PMs, with CII Classification completed between 2025 – 2030, and CII Mixed-Use Meter and CII BMP completed 2030 – 2035. Unstacking the CII BMPs from the CII Classification will allow suppliers to spread limited resources over a 10-year period, while still meeting the goals of the Regulation.

II. RECOGNIZE DATA ERRORS & LIMITATIONS

We appreciate that the intent of this Regulation is to shift away from a one-size fits all approach to one that incorporates local characteristics. A challenge with the approach is that the accuracy of the statewide efficiency standards and water suppliers' water use objectives requires more, verified data, including both statewide and local data. Inaccurate data can create water use efficiency objectives that do not provide the local flexibility the enacting legislation intended. Currently, observed data gaps and inaccuracies include landscape area measurements (LAM) and population, and the application of Model Water Efficient Landscape Ordinance (MWELO) principles, including effective precipitation and irrigation efficiency.

The draft Regulation's methodology should recognize that there are and will continue to be inherent data quality limitations and variability that impact suppliers' compliance with their water objectives. The

⁴ The State Water Board has the authority to make this change as the only statewide water use efficiency standard with a legislatively mandated timeline for implementation are the residential indoor water use standards, as required in SB 1157 (Freidman, 2022).

State Water Board has accounted for data quality and variability issues in other regulations, such as the Water Loss Regulation, which provided that “a supplier shall maintain, for each compliance assessment, real loss that is no greater than 5 gallons per connection per day above the supplier’s real water loss standard.”⁵

As discussed further in Section 3.I. of this Comment Letter, we continue to have concerns with the three methodologies DWR utilized and data DWR excluded to develop its recommendation of the residential outdoor standards. We also recommend that the State evaluate if the observed inequities among inland and coastal communities’ water use objectives are attributable to DWR’s methodologies for developing the outdoor standards, such as the trimmed data and application of MWELo, compounded with local data limitations.

RECOMMENDATION # 3. Include a “Data Error Adjustment” (DEA) in the formula for calculating suppliers’ water use objectives. The DEA would be a percentage, either five or ten percent as determined below, added to a supplier’s budget for efficient indoor residential water use, efficient outdoor residential water use and efficient water use on a CII landscape with a dedicated irrigation meter (DIM) or equivalent technology, as follows:

$$WUO = (R_{indoor} + R_{outdoor} + CIIDIM) \text{DEA} + L + V + Pr + BPR$$

The DEA would recognize suppliers’ historic progress and achieved savings (SB X7-7 based) and acknowledge that data used to develop and evaluate standards has intrinsic errors. The magnitude of the DEA would reduce over time as suppliers achieve progress towards their water use objective. We are proposing a five percent DEA for suppliers achieving less than 20 percent reduction from SB X7-7, and a 10 percent DEA for suppliers achieving a reduction of 20 percent or greater from SB X7-7.

Additionally, we note concern that a supplier may not comply with its water use objective because it is unable to obtain the information required for variances due to resource or other limitations. The draft Regulation identifies the calculations and data requirements to submit to the State Water Board to seek a variance. Collecting this data, however, could require significant resources for suppliers. Prior to taking any enforcement action, the State should offer technical assistance to a supplier, which should include through regional and/ or statewide partners, to determine if the unique water uses in the supplier’s service area, for which variances are available, would bring the supplier into compliance. We again reiterate that the goal of this Regulation should be successful compliance, rather than enforcement actions or enforcement discretion.

RECOMMENDATIONS # 4. Clarify that if a supplier does not meet its water use objective because it is unable to obtain the information required for the variances, prior to the issuance of any enforcement action, technical assistance must be offered to the supplier.

III. PROVIDE ALTERNATIVE COMPLIANCE

Our understanding is that State Water Board staff included section 966(i) to serve as an alternative compliance pathway in response to concerns water suppliers continue to raise regarding unreasonable

⁵ [Water Loss Control Regulations](#). Adopted Oct. 14, 2022.

or unattainable water use objectives. We appreciate the intent of this provision and believe that an alternative compliance pathway will be essential for some suppliers. Meaningful advancement of water use efficiency is an important goal of the State's Water Supply Strategy and the draft Regulation. However, some suppliers are confronting significantly larger water reduction requirements. Many of these suppliers are in the central valley and inland communities and may also serve disadvantaged communities or low-income households. Additionally, many of these communities have demonstrated a commitment to advancing water use efficiency, as mentioned in Section 1 of this Comment Letter, including achieving their targeted 2020 water use reduction.

In addition to the five-year extension that we recommend be provided to all suppliers to comply with the requirements of the draft Regulation, we recommend an alternative compliance pathway be provided to suppliers that would incur unreasonable cost and affordability impacts to meet their proposed water use objective. As currently proposed, the alternative compliance pathway is problematic for the following reasons:

- It does not address 2025 and 2030 compliance for suppliers. As shown in Table 1 of this Comment Letter, some suppliers will have significant reductions in 2025 and 2030. The current proposal does not resolve compliance concerns for these suppliers.
- The provision of five additional years does not resolve compliance concerns for some suppliers with an unreasonable or unattainable objective.
- The eligibility requirements for the currently proposed alternative compliance pathway would impose a significant cost burden on suppliers for actions that may not help achieve compliance. For example, the SITES rating system costs \$9,600 per site to implement.
- Special districts, which include a significant number of urban retail water suppliers, would be ineligible for the alternative compliance pathway because they do not qualify for the Standards for Tree City USA Recognition. 90% of ACWA's 470 members are special districts.
- The requirement for suppliers to dedicate 40% of funding to DACs conflicts with Proposition 218, which would cause feasibility issues for water suppliers to utilize the pathway.

We have also heard variances characterized as an alternative compliance pathway that provide additional flexibility. The enacting legislation established variances to account for actual water used in a service area in order to provide suppliers with a more accurate water use objective. Accurately accounting for water use in a service area is very different than alternative compliance.

RECOMMENDATION # 5. The State Water Board should work collaboratively with ACWA, water suppliers and other interested parties to develop an "Alternative Compliance Pathway" that allows suppliers that have an unreasonable or unattainable water use objective to be eligible for an alternative objective and/or extension of time to comply. This pathway should balance the goals of achieving meaningful water savings and multi-benefits, while considering cost, affordability and suppliers' good faith effort to offer proactive water use efficiency programs to address indoor and outdoor water use.

IV. ALIGN CII PERFORMANCE MEASURES WITH LOCAL SUCCESS

The draft Regulations' CII PMs should be aligned with existing local and regional CII conservation programs and lessons learned. Most urban retail water suppliers and their regional and statewide partners have extensive experience implementing water use efficiency programs for CII customers. Additionally, CII customer water use will vary significantly among suppliers, and consequently, so will the associated water savings from the overall CII sector and among CII customer types. Currently, the CII PMs impose one size fits all approaches to CII water use efficiency, as described below. We request that the CII PMs provide more flexibility to water suppliers to (1) build on existing local and regional programs, (2) remove prescriptive timelines, and (3) allow suppliers to focus on customers with the greatest water savings potential.

- A. Existing CII Programs: The draft Regulation does not recognize suppliers' and their regional and statewide partners existing water use efficiency programs that have resulted in already efficient mixed-use meters (MUM). Many suppliers offer existing mixed-use meter programs, practices and rebates, which may offer different in-lieu technologies and water management practices to those listed in 973(a)(1) and (2). Rather than impose MUM requirements that will duplicate existing efforts and expend resources without achieving significant additional savings, suppliers should be able to provide a list of existing programs, practices and rebates currently offered as an alternative.

RECOMMENDATIONS # 6. Allow existing CII conservation programs, made available either directly by the supplier or through regional, statewide, or other partnerships, to serve as an alternative to meeting the CII MUM PM requirements currently proposed. Allow suppliers to provide a list and crosswalk of current programs, practices, and rebates to the listed in-lieu technologies and water management programs.

- B. Prescriptive Implementation Schedules: The draft Regulation establishes a deadline to complete each CII PM, which is appropriate. However, the draft Regulation also prescribes a timeline to complete each PM by 20% and 60%. For example, section 972(c) would require that "each supplier shall classify at least twenty percent of its CII customers by 2026, at least sixty percent by 2028, and one hundred percent by 2030." Section 973(c) would require "for commercial, industrial, and institutional large landscapes that have mixed-use meters, suppliers shall make annual progress in either installing dedicated irrigation meters or employing in-lieu water technologies for these large landscapes, with at least twenty percent compliance by 2026, at least sixty percent compliance by 2028 and one hundred percent compliance by 2030." This level of prescription removes suppliers' flexibility to achieve the broader goals cost-effectively and based on their unique CII customers and local conditions, as well as within the context of completing all the various requirements of the draft Regulation.

RECOMMENDATION # 7. Provide flexibility to suppliers to complete implementation of one hundred percent of CII PMs by removing prescriptive timelines. This includes CII classifications, CII MUMs and CII BMPs.

- C. Focused Water Savings: The draft Regulation directs suppliers to implement BMPs for the top 20% of each CII classification. We understand the intent is to target large CII water users to maximize water savings potential. However, this approach may have the unintended impact of steering efforts to CII customers with negligible water use. For example, the Energy Star Portfolio

Manager classification “warehouse/ storage” may account for a very small percent of a suppliers’ CII water use in a service area. However, suppliers would still be required to target customers at or above the 80th percent for water use in that classification category. The draft Regulation should provide flexibility for suppliers, either directly or through regional, statewide, or other partnerships, to develop programs and engage with their CII customers that have water savings potential, which will be driven by characteristics unique to each service area. This prescriptive requirement could impose an unnecessary burden on suppliers for minimal water savings.

We also recommend an exemption for suppliers from the CII BMP PMs whose CII potable water use is less than 10%. This will allow those suppliers to focus efforts and resources on residential actions to maximize water savings.

RECOMMENDATION # 8. Direct suppliers to implement programs, either directly or through regional, statewide, or other partnerships, for CII customers at or above the 80th percentile among all CII customers, rather than by individual CII classification. Additionally, exempt suppliers with less than 10% CII potable water usage, based on a five-year average that is re-evaluated every five years, from BMP requirements.

V. ADHERE TO LEGISLATIVE REQUIREMENTS

Authorizing legislation AB 1668 and SB 606 (2018) (collectively referred to as Conservation Legislation) underwent a year and half of negotiations among diverse interested parties. We have significant concerns that provisions of the draft Regulation either contradict the requirements of the Conservation Legislation or exceed the authority delegated to the State Water Board. Specific concerns and recommendations include:

- A. Existing Landscapes: The Conservation Legislation states that the landscape efficiency factor (LEF) values should reflect a factor that allows for “the amount of water necessary to efficiently irrigate both new and existing landscapes” (Water Code Section 10609.9). The draft Regulation sets efficiency factors for residential use at 0.55 and for non-residential use at 0.45, which are the standards in the MWELO design standards. As detailed in Section 3.I. of this Comment Letter, we have provided data to both DWR and the State Water Board that indicates the proposed LEFs would not support existing landscapes. Because the draft Regulation would set the LEF too low to ensure enough available water for use on existing landscapes, it is inconsistent with the Conservation Legislation.

RECOMMENDATION # 9: Establish a LEF that will support existing and new landscapes.

- B. Irrigable Land: The Conservation Legislation requires outdoor efficiency standards to apply to “irrigable lands” (Wat. Code, § 10609.6 (2)(B)). The draft Regulation does not apply to “irrigable lands” as the statute requires. Instead, the draft Regulation only includes irrigable land that is currently being irrigated in its proposed outdoor standards. Section 968(b)(2)(B) inappropriately limits 20% of the irrigable, but not currently irrigated (INI), landscape area as eligible for inclusion in the objective until 2027, and even then, it is only allowed to be included if the supplier will surpass its objective target without it. Because the draft Regulation does not apply to all irrigable lands, it is inconsistent with the Conservation Legislation.

RECOMMENDATION # 10: Better reflect the statutory language with regards to land area used to calculate the urban water use objectives.

- C. Non-Functional Turf: Section 974(e)(1) of the draft Regulation would ban the irrigation of non-functional turf with potable water by July 1, 2025. This language does not align with AB 1572 (Freidman, 2023), which the Governor signed on October 13, 2023. signature and would not ban the irrigation of non-functional turf for most CII Customers until January 1, 2028. This bill was a collaborative effort that was ultimately supported by a broad array of stakeholders, including ACWA. The language in the draft Regulation is not only unnecessary but would create confusion among water suppliers and CII customers. The draft Regulation is inconsistent with the State Water Board’s authorities within the law.

RECOMMENDATION # 11: Remove non-functional turf provisions from the draft Regulation.

- D. Reporting Year: The Conservation Legislation allows for water suppliers’ calculations to be based on “conditions for the previous calendar or fiscal year.” (Wat. Code § 10609.20, subd. (b).) Section 975 of the draft Regulation would require urban water supply reports to be based on conditions of the previous state fiscal year. A regulation cannot limit flexibility that a statute specifically allows. We additionally note that this is inconsistent with the State Water Board’s adopted Water Loss Regulation, which allows water loss audit reporting on either a fiscal or calendar year. Because the proposed Regulation would require water suppliers to report based on the state fiscal year, it is inconsistent with the Conservation Legislation.

RECOMMENDATION # 12: Allow suppliers to report either calendar year or fiscal year.

- E. Dedicated Funding for DAC: The draft Regulation section 966(i)(2)(e)(iv) would require that suppliers who want to pursue a five-year compliance extension must provide “dedicated funding for the creation and maintenance of climate-ready landscapes, with a minimum of 40 percent of program funds dedicated to low-income households and disadvantaged communities within the supplier’s service area.” This requirement would conflict with the requirements of Proposition 218 funding guidelines. Additionally, the Legislature in the 2022/2023 legislative session discussed this issue when considering Assembly Bill 1072 (Wicks 2023). Because of the issues associated with Proposition 218, the bill was ultimately held on suspense while still in the Assembly.

RECOMMENDATION # 13: Remove funding threshold requirements for low-income and DAC funding from the draft Regulation.

SECTION 3: TECHNICAL CONCERNS & RECOMMENDATIONS

I. OUTDOOR STANDARDS

In ACWA’s March 30, 2023, comment letter to the State Water Board on the draft Regulatory Framework, we provided input on DWR’s three methodologies utilized to develop its recommendation of an ETF of

0.63 by 2030. Additionally, we raised concerns with technical assumptions and policy decisions that underestimated current outdoor residential water use and overestimated feasibility from what is evident through real-world performance.⁶ We support a methodology that is based on real-world performance, horticultural and irrigation science, supports healthy landscapes, and minimizes unintended impacts. We note that detailed recommendations with redlines are provided in the Section 4 Appendix of this Comment Letter. High level recommendations are in bold below, consistent with detailed redlines in the Section 4 Appendix.

As mentioned in Section 2.II. of this Comment Letter, we recommend the State Water Board assess if the observed inequities among inland and coastal communities water use objectives could be attributable to DWR's methodologies for developing the outdoor standards, compounded with local data limitations. Additionally, as noted in Section 2.V. of this Comment Letter, we note the deviation of the draft Regulation from the requirements of the Conservation Legislation. These inconsistencies must be corrected to align the draft Regulation with the requirements of the law.

- A. Methodology Error 1: Horticultural Approach (Assumed 0.8 Irrigation Efficiency) – DWR's horticultural and irrigation science approach assumed 0.8 Irrigation Efficiency (IE). **The draft Regulation should reflect an outdoor residential water use efficiency standard based on an IE that ranges from 0.55 to 0.65**, based on accumulated data from water purveyors on actual irrigation system and performance through the various landscape programs implemented over ten or more years, recently completed field studies by UC Davis (Evapotranspiration Adjustment Factor Study (Agreement #4600008156)), and data by the Irrigation Association.
- B. Methodology Error 2: Statewide ETF Approach (Trimmed Data > 1.0) – DWR “trimmed” all existing landscape data outside of the range of 0.1 to 1.0 ETF because “it is not consistent with MWELo principles.” 80 percent of homes in California pre-date MWELo. MWELo design standards did not start being incorporated into landscape designs until after 2015. Trimming data based on MWELo design standards excluded existing landscapes prevalent throughout California and is inconsistent with the application of MWELo. **The draft Regulation outdoor standards should consider all real-world California landscape data to provide an accurate baseline.**
- C. Methodology Error 3: Theoretical Average Approach (Consistency with MWELo) – DWR analyzed a statewide ETAF by using the age distributions of housing stock and corresponding ETAF from MWLEO Guidelines: 0.8 assumed for pre-1992, 1993 – 2009 assumed 0.8 ETAF, 2010 – 2015 assumed 0.7 ETAF, 2015 to 2020 assumed 0.55 ETAF, and 2021- 2030 assumed 0.55 ETAF. As described above, MWELo only applies to 20 percent of California's housing stock and developer-installed landscapes. This methodology assumes all homes are compliant with MWELo, which is fundamentally flawed. **This methodology should not inform the outdoor standards.**
- D. Effective Precipitation – Effective Precipitation is not required by MWELo (Title 23, Division 2.7, Section 494): “A local agency may consider Effective Precipitation (25% of annual precipitation) in

⁶ [ACWA and Coalition Comment Letter on the Draft Regulatory Framework](#) . March 30, 2023.

tracking water use.” The inclusion of Effective Precipitation in the outdoor standard is inconsistent with real-world irrigation practices. Landscapes are generally not designed to consider effective precipitation since it can be highly variable. Precipitation often falls during winter months when irrigation is not utilized (May through September) and can percolate below the root zone of the plant negating its beneficial effect to that plant’s watering needs. Additionally, precipitation is often not distributed evenly throughout a supplier's service area. Some areas may receive precipitation and other areas none, making it difficult to apply one effective precipitation rate at the water supplier level. **Effective Precipitation should be removed from the draft Regulation and outdoor standard.**

- E. Landscape Area Measurements – A key concern based on waters suppliers’ verification of LAM data is that residential LAMs are being overestimated and underestimated, which could have a significant impact on suppliers’ outdoor water use standard and overall objective. Improved data quality should be an important goal of the draft Regulation, as inaccurate data will further exacerbate feasibility challenges and sound decision making. **The draft Regulation should include a Data Error Adjustment to recognize data limitations and variability (see Recommendation # 3).**
- F. Irrigable vs. Irrigated – As discussed in Section 2.V of this Comment Letter, the Conservation Legislation requires outdoor efficiency standards to “apply to irrigable lands” (Water Code, § 10609.6 (2)(B)). In accordance with Water Code section 10609.6, DWR conducted a statistical analysis of outdoor water use, LAM and INI data. The data concluded that the INI area is being irrigated at one fifth or 20% of the irrigable area. This 20% should not be viewed as additional, but as area that is actually being irrigated. As a result, DWR correctly recommended that the calculation of annual outdoor water use must include 20% INI. DWR's findings were also based on the recognition that its analysis was only a snapshot in time and undercounting of irrigated area would continue unless multiple images are conducted over the analysis year. The removal of DWR's recommendation to include 20% for INI is statistically inaccurate and further exacerbates feasibility challenges with the outdoor standard. **The draft Regulation should reflect DWR’s recommendation with the inclusion of 20 percent INI. Suppliers would recalculate INI when DWR provides new LAM data.**
- G. Temporary Provisions: Recycled Water – Sites irrigated with recycled water generally do not change and are on dedicated irrigation meters (DIM), which suppliers already are required to measure by 2028. The requirement to annually apply for variances and temporary provisions places a significant burden on both State Water Board staff and suppliers. **Recycled water should not be a temporary provision.**
- H. Temporary Provisions: Pools – The residential factor for residential pools should be same as public pools, which is 1.0. Water evaporates at about 1.0. Not allocating enough water to residential pools effectively further reduces the residential outdoor budget. Most pools are not subject to MWEL, as they are generally in backyards and existing prior to MWLEO. In addition to evaporation, water loss from pools includes splash out and water carried out on swimwear and people. Pool covers are generally not effective. During summer months when pools are

used daily, customers won't use covers. Metropolitan Water District's pool cover rebate program inspections found that many times the covers were in garages and had never been installed.

Residential pools should not be a temporary provision.

- I. MWELO: Newly Constructed Landscapes and Special Landscapes Areas (SLA) – The standards for newly constructed landscapes, including residential and CII landscapes with DIMs, point to factors identified in MWELO. Additionally, the standard for CII landscapes with DIMs that are special landscape areas point to the factor identified in MWELO. MWELO can be modified, which could impact suppliers' compliance with the Regulation and associated costs. Suppliers need certainty as they strive to implement this Regulation in the most cost-effective manner. **The draft Regulation should set these standards as LEFs, rather than refer to MWELO.** Additionally, the draft Regulation would require that suppliers demonstrate the existence of newly constructed landscapes through annual MWELO reporting. Many new residential landscapes are not subject to MWELO or MWELO reporting. MWELO reporting would be incomplete and would not accurately reflect newly constructed residential landscape area. **We request that the draft Regulation include DWR's recommended approaches to account for newly constructed residential and CII DIM landscape areas, which include on-the-ground measurement, remote sensing methods, and using service area level averages.**

II. CII PERFORMANCE MEASURES

A. CII Classification

- i. Energy Star: Suppliers worked closely with DWR to inform its CII Classification PM recommendations. DWR proposed 19 categories, in which they found "these categories are sufficient to address major CII water uses and provide adequate differentiation among different CII sectors to facilitate data collection and future references. However, the system will not be overly detailed to create undue burdens on urban retail suppliers for implementation." The draft Regulation is proposing 22 classifications, 18 Energy Star Portfolio Manager board categories and 4 additional proposed categories. Classifying CII customers will require significant supplier staff time and resources, including making changes to internal billing systems. The CII Classification PMs should be simplified to reduce the burden on suppliers, where possible. **The four additional proposed classifications that deviate from the Energy Star Portfolio Manager broad categories should be removed from the draft Regulation.**
- ii. Schedule for Completion: As discussed in Section 2.IV. of this Comment Letter, we recommend more flexibility be provided to suppliers to complete classifications by 2030. **The draft Regulation should remove schedules for classifying 20% of customers by 2026 and 60% by 2028.**
- iii. Classification of Existing Customers: It is unclear how existing versus new customers are considered within the five-year timeframe to complete all CII classifications. CII classification will be a significant lift for suppliers. Suppliers should focus on completing classifications for a static list of CII customers based on the time of the State Water Board's adoption of the final Regulation. The additional burden of

addressing influxes and changes of CII customers within the first five years of completing classifications could impair suppliers' ability to comply. **The draft Regulation should clarify that the initial classification of CII customers is based on existing customers at the time of the State Water Board's adoption of the Regulation. Suppliers must include any new CII customers after completing the initial classification of all CII customers.**

- iv. State Guidance: As a statewide PM, the State should develop guidance for all suppliers that will support consistent interpretation of SIC and NAICS codes as it applies to each Energy Star Portfolio Manager category. A standardized interpretation will lend itself to better data and overall implementation. **DWR should provide a guide to associate NAICS codes to the respective classification category prior to suppliers' implementing CII classifications.**

B. Large Landscapes with Mixed-Use Meter

- i. Timeline: DWR CII-LAM data will not be delivered until 2026. Suppliers need adequate time to review the data before coming into compliance. To implement this specific PM, suppliers would need to identify actual large landscape water use (e.g., remove the process water to see ACTUAL landscape water usage for CII). The compliance schedule for MUM conversion should account for every customer being a unique and specific project, requiring budget and time to implement, if a physical conversion is taking place. **As discussed in Section 2.I. of this Comment Letter, we request the timeline to complete MUM PM be from 2030 – 2035. Additionally, the draft Regulation should remove schedules for completing 20% of large landscapes by 2026 and 60% by 2028.**
- ii. Recognize Existing Programs: As discussed in Section 2.IV. of this Comment Letter, many suppliers have existing MUM programs, which may offer different in-lieu technologies and water management practices to those listed in 973(a)(1) and (2). **The draft Regulation should allow suppliers' existing CII conservation programs to serve as an alternative to meeting the CII MUM PM requirements currently proposed.**
- iii. "Offer" vs. "Employ:" The draft Regulation requires suppliers to "employ" actions and technologies for large landscapes. The term "employ" implies that suppliers will take up an action on a customer's behalf. Suppliers may offer programs, rebates, incentives and in-lieu technologies, but suppliers cannot require the customer to act or implement in-lieu water use technologies. **The draft Regulation should replace "employ" with "offer" to recognize suppliers' appropriate authorities.**
- iv. Efficient Water Use Technologies & Water Management Practices: We recommend technical changes to the specified water technologies that reflect on-the-ground best practices and actions that are within suppliers' authorities. For example, water suppliers generally do not provide maintenance services for customer irrigation systems or irrigation schedules. That is the responsibility of the customer and could be a liability for suppliers. Additionally, DWR recommended suppliers implement one in-lieu technology. However, the draft Regulation would require suppliers to

implement two in-lieu technologies. Requiring two is duplicative and does not necessarily generate more savings. **The draft Regulation section 973 should be updated to reflect the suggested redlines in the attached Appendix of this Comment letter.**

- v. Quantification of Volume of Water Use on CII MUMs: The draft Regulation would direct suppliers to estimate the volume of water use on CII large landscapes with MUMs. As a PM, suppliers should not be required to quantify MUM water usage, particularly because any quantification is inclusive of process water and the draft Regulation does not provide the appropriate time for suppliers to investigate customer water usage for a compliance determination. **This provision should be removed from the draft Regulation.**

C. Best Management Practices

- i. Disclosable Buildings: The draft Regulation would require suppliers to identify all disclosable buildings in their service area by January 1, 2025 and deliver specified information to each building owner. These requirements would place significant burden on suppliers' limited resources, without providing clear benefits or guaranteeing water savings. Our concerns include: (1) suppliers do not have or maintain square footage information to identify disclosable buildings; (2) square footage is well correlated with energy use, but not necessarily with water use, so this may not be an effective use of limited resources; (3) many suppliers currently provide monthly or bi-monthly water usage to customers in their bill with water use reports, or through an AMI portal. Sending duplicative data to customers, particularly those that will not utilize it, is not good use of suppliers' limited resources, (4) suppliers cannot determine what meter serves which buildings on an owner's parcel. Suppliers can associate meters with an account but they may not know the customer's use. Suppliers can't identify how much water use goes to each building if there are multiple buildings on one meter; and 5) the proposed timelines are not reasonable. **Proposed section 974(a) and (b) should be removed from the draft Regulation.**
- ii. Thresholds and De Minimis CII Water Use: As already discussed in Section 2.IV. of this comment letter, suppliers need flexibility to develop programs and engage with their CII customers that have water savings potential, which will be driven by characteristics unique to each service area. **The draft Regulation should direct suppliers to implement programs for CII customers at or above the 80th percentile among all CII customers, rather than by individual CII classification. Additionally, suppliers with less than 10% CII potable water usage, based on a five-year average, should be exempt from BMP requirements.**
- iii. Non-Functional Turf: As discussed in Section 2.V. of this Comment Letter, Section 974(e)(1) of the draft Regulation would ban the irrigation of non-functional turf with potable water by July 1, 2025, which is inconsistent with State Water Board's pending authority. **This provision should be removed from the draft Regulation.**

- iv. Timelines: As discussed in Section 2.I. of this Comment Letter, we have concerns with the requirement to complete BMPs while suppliers are completing CII Classification. Additionally, consistent with Section 2.IV. of this Comment Letter, suppliers should be able to best determine how to meet the broader BMP PMs requirements based on the unique local characteristics and existing programs. **The draft Regulation timeline should be modified to allow for suppliers to achieve 100 percent compliance with BMP PMs by 2035 and remove percentage completion requirements.**
- v. BMPs: We recommend technical changes to the specified water technologies that reflect on-the-ground best practices and actions that are within the authorities of water suppliers. For example, water suppliers generally do not provide maintenance services for customer irrigation systems or irrigation schedules. Additionally, we recommend AMI be specifically included. **The draft Regulation section 974 should be updated to reflect the suggested redlines in the attached Appendix of this Comment Letter.**

D. Methodologies & Variances

- i. Compliance & Alternative Compliance: As discussed extensively in Section 2.I., II., and III. of this Comment Letter, we are requesting changes to compliance provisions of the draft Regulation. We believe these changes preserve the intent of the draft Regulation to advance meaningful water use efficiency. **The draft Regulation should incorporate our recommendations that modify the timelines of the outdoor standards and CII PMs, include the DEA, and establish an Alternative Compliance Pathway.**
- ii. Variance Threshold: The draft Regulation currently proposes that an individual variance must represent 5% or more of the sum of a water supplier's budget. This threshold fails to recognize the cumulative impact unique water uses could have on suppliers' ability to comply with their water use objectives. Additionally, the five percent threshold could significantly restrict the ability of water suppliers that have unique water uses. The Conservation Legislation requires the State Water Board to establish appropriate variances for unique uses that can have a material effect on water use of an urban retail water supplier. Variances are not a "bonus" or "alternative compliance" mechanism. Variances are intended to provide suppliers with an accurate water use objective. **The draft Regulation should establish a cumulative threshold for variances of 5%.**
- iii. Variance Frequency: We are concerned the currently proposed variance pathway would be too onerous and expensive to an extent that would deter small to mid-sized agencies from seeking variances. The draft Regulation currently requires suppliers to submit requests for variances annually. Requiring annual submittal and approval of the variances would place a significant administrative burden on both suppliers and State Water Board staff and does not help advance actual water use efficiency. **The draft Regulation should allow for a suppliers' approved variance(s) be valid for five years.**

- iv. Reporting: The State Water Board should ensure that water suppliers' limited resources are not being shifted to complying with burdensome reporting requirements, rather than working with customers to achieve water savings. The State Water Board should consider the goals of AB 1755, the Open and Transparent Water Data Act, and AB 1668 requirements under Water Code Section 10609(c)(4), which direct the State to identify opportunities for streamlined reporting, eliminate redundant data submissions, and incentivize open access to data collected by urban and agricultural water suppliers, and the overall usefulness of data requested. We have concerns with the duplicative reporting to both DWR and the State Water Board. We think that state agencies should share datasets, rather than require duplicative reporting. Additionally, as noted in Section 2.V. of this Comment Letter, we have concerns with the removed flexibility for water suppliers to report on a fiscal year or calendar year. **We encourage the State to partner with the California Data Collaborative and California Water Data Consortium to identify strategies for streamlining data reporting and minimizing data quality concerns that would go into effect once the final Regulation is adopted.**

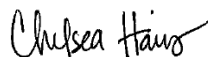
SECTION 4: APPENDIX: REDLINE RECOMMENDATIONS

The included Appendix of the Comment Letter provides detailed suggested redline changes to the draft Regulation. We recognize the suggested redlines are one of many ways in which the draft Regulation could be modified to address suppliers' concerns. ACWA is committed to working with State Water Board staff on revisions that support both the State goals and water suppliers' successful implementation of the Regulation.

SECTION 5: CLOSING REMARKS

We appreciate the opportunity to provide these written comments to the State Water Board on the draft Regulation. We ask for the opportunity to work collaboratively with the State Water Board over the duration of the rulemaking to revise the draft Regulation to incorporate input from interested parties to support successful local and regional implementation. Please do not hesitate to contact me at ChelseaH@acwa.com or (916) 206-4078 if you have any questions regarding our input.

Sincerely,



Chelsea Haines
Regulatory Relations Manager
Association of California Water Agencies

Alameda County Water District
American Water Works Association CA-NV
Association of California Water Agencies
Bay Area Water Supply & Conservation Agency

Bellflower-Somerset Mutual Water Company
California American Water
California Municipal Utilities Association
California Special Districts Association
California Water Association
Calleguas Municipal Water District
Camrosa Water District
Carmichael Water District
Casitas Municipal Water District
Citrus Heights Water District
City of Banning
City of Brea
City of Colton
City of Corona Utilities Department
City of Fountain Valley
City of Fullerton
City of Garden Grove
City of La Habra
City of La Verne
City of Oceanside
City of Newport Beach
City of Redding
City of Roseville
City of Sacramento
City of San Diego Public Utilities Department
City of Seal Beach
City of Shasta Lake
City of Susanville
City of Tustin
City of West Sacramento
City of Yuba City
Coachella Valley Water District
Contra Costa Water District
Cucamonga Valley Water District
Desert Water Agency
Diablo Water District
East Orange County Water District
East Valley Water District
Eastern Municipal Water District
El Dorado Irrigation District
El Toro Water District
Elk Grove District
Elsinore Valley

Georgetown Divide Public Utility District
Golden State Water Company
Gradient Water
Helix Water District
Indio Water Authority
Inland Empire Utilities Agency
Jurupa Community Services District
Laguna Beach County Water District
Lake Hemet Municipal Water District
Las Virgenes Municipal Water District
Liberty Utilities
Long Beach Utilities Department Logo
Marina Coast Water District
Mesa Water District
Metropolitan Water District of Southern CA
Mid-Peninsula Water District
Mission Springs Water District
Monte Vista Water District
Montecito Water District
Municipal Water District of Orange County
Orchard Dale Water District
Otay Water District
Padre Dam Municipal Water District
Palmdale Water District
Rancho CA Water District
Rosamond Community Services District
Regional Water Authority
Rowland Water District
Sacramento County Water Agency
Sacramento Suburban Water District
San Diego County Water Authority
San Gabriel Valley Water Company
Santa Clarita Valley Water Agency
Santa Fe Irrigation District
Santa Margarita Water District
Santa Rosa Water
South Coast Water District
South Tahoe Public Utility District
Sweetwater Authority
Tahoe City Public Utility District
Three Valleys Municipal Water District
Trabuco Canyon Water District
Triunfo Water & Sanitation District

Truckee Donner Public Utility District
Tuolumne Utilities District
Vallecitos Water District
Valley Center Municipal Water District
Walnut Valley Water District
West Basin Municipal Water District
West Kern Water District
West Valley Water District
Western Canal Water District
Western Municipal Water District
Yorba Linda Water District

CC: The Honorable E. Joaquin Esquivel, Chair, State Water Resources Control Board
The Honorable Dorene D'Adamo, Vice Chair, State Water Resources Control Board
The Honorable Laurel Firestone, State Water Resources Control Board
The Honorable Sean Maguire, State Water Resources Control Board
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Ms. Charlotte Ely, Supervisor, Conservation and Efficiency, State Water Resources Control Board
Mr. Dave Eggerton, Executive Director, Association of California Water Agencies
Ms. Cindy Tuck, Deputy Director, Association of California Water Agencies

APPENDIX: SUGGESTED REDLINE RECOMMENDATIONS
CII PERFORMANCE MEASURES

Reg Sec.	Sub. Sec.	Topic	Current Regulatory Text	Concern	Recommendation	Suggested Redline
965	(ee)	Definitions	(ee) “In-Lieu Technologies” are technologies that improve landscape water use efficiency by means other than the direct measure of water use. They include but are not limited to best management practices, audits, efficient irrigation devices, or irrigation budgets.	Some in-lieu technologies may not result in actual water savings, but can provide benefits (e.g., better data). The currently proposed definition for "in lieu technologies" is limited to technologies that improve water use efficiency.	Clarify that in-lieu technologies are technologies that aid in managing landscape water use.	(ee) “In-Lieu Technologies” are technologies that aid in managing improve landscape water use efficiency by means other than the direct measure of water use. They include but are not limited to best management practices, audits, efficient irrigation devices, or irrigation budgets.
965	NA	Definitions	NA	The proposed CII Performance Measures do not recognize suppliers existing water use efficiency programs and existing water use efficiency. Most suppliers have robust CII water efficiency programs that have resulted in meaningful savings within the CII sector. The Regulation should provide flexibility to local suppliers to build on existing programs and successes to avoid duplicative programs that may not be as effective at achieving water savings.	Add a definition for "Existing CII Conservation Program"	(iii) "Existing CII Conservation Program" is a program or set of programs currently offered or implemented by an urban retail water supplier or regional entity. Existing programs should be designed to achieve CII sector water use savings as a result of program element implementation, be adaptively managed by the supplier, and contain at least three of the major BMP categories identified in Section 974.
972	(b)	Classification -	(a) Urban retail suppliers shall annually classify commercial, industrial and institutional customers in accordance with Energy Star Portfolio Manager’s broad categories. (b) In addition to Energy Star Portfolio Manager’s broad categories, suppliers shall identify every CII customer associated with: (1) CII laundries (2) Large landscapes (3) Water recreation (4) Car wash. For every CII customer that operates a car wash in addition to its primary service and for which the car wash accounts for the majority of that customer’s water use, the supplier shall also identify the customer’s Energy Star Portfolio Manager property type.	Suppliers worked closely with the Department of Water Resource (DWR) to inform its CII Classification Performance Measure recommendations. DWR proposed 19 categories, in which they found "these categories are sufficient to address major CII water uses and provide adequate differentiation among different CII sectors to facilitate data collection and future references. However, the system will not be overly detailed to create undue burdens on urban retail suppliers for implementation." The draft Regulation is proposing 22 classifications, 18 Energy Star Portfolio Manager board categories and 4 additional proposed categories. Classifying CII customers will require significant supplier staff time and resources, including making changes to internal billing systems. The CII Classification Performance Measures should be simplified to reduce the burden on suppliers, where possible. Specifically, the four additional proposed classifications that deviate from Energy Star will place an additional burden on suppliers, without clear benefit or water savings.	Make classifications consistent with the Energy Star Portfolio Manager. Strike the additional four categories.	(a) Urban retail suppliers shall annually classify commercial, industrial and institutional customers in accordance with Energy Star Portfolio Manager’s broad categories. (b) In addition to Energy Star Portfolio Manager’s broad categories, suppliers shall identify every CII customer associated with: (1) CII laundries (2) Large landscapes (3) Water recreation (4) Car wash. For every CII customer that operates a car wash in addition to its primary service and for which the car wash accounts for the majority of that customer’s water use, the supplier shall also identify the customer’s Energy Star Portfolio Manager property type.
972	(c)	Classification	(c) Each supplier shall classify at least twenty percent of its CII customers by 2026, at least sixty percent by 2028, and one hundred percent by 2030. After 2030, the supplier shall maintain at least a 95% classification rate, as measured on an annual basis.	It is unclear how existing verse new customers are considered within the 5-year timeframe to complete all CII classifications. CII classification will be a significant lift for suppliers. Suppliers should focus on completing classifications for a static list of CII customers based on the time of the State Water Board's adoption of the Regulation. The additional burden to address influxes and changes of CII customers within the first five years of completing classifications could impair suppliers ability to comply.	Clarify that the initial classification of CII customers is based on existing customers at the time of the Board's adoption of the Regulation. Any new CII customers will be included once suppliers have completed their initial classification of all customers.	(c) Each supplier shall classify existing at least twenty percent of its CII customers by 2026, at least sixty percent by 2028, and one hundred percent of its CII customers by 2030. After 2030, the supplier shall maintain at least a 95% classification rate including any new CII customers , as measured on an annual basis.
972	(c)	Classification - Alternative Schedule	Same as above	CII customers among suppliers' service areas vary significantly. It may be more cost-effective or locally appropriate to complete all CII customer classification on a schedule different than the proposed Regulation.	Provide flexibility to suppliers to complete one hundred percent classification of CII customers by 2030. Remove prescriptive timeline requirements on how to complete one hundred percent classification.	(c) Each supplier shall classify existing at least twenty percent of its CII customers by 2026, at least sixty percent by 2028, and one hundred percent by 2030. After 2030, the supplier shall maintain at least a 95% classification rate, including any new CII classification customers , as measured on an annual basis.
972	NA	Classification - State Guidance	NA	As a statewide performance measure, the State should develop guidance to all suppliers that will support consistent interpretation of SIC and NAICS codes as it applies to each Energy Star Portfolio Manager category. A standardized interpretation will lend itself to better data and overall implementation.	DWR should provide a guide to associate NAICS codes to the respective classification category prior to suppliers' implementing CII classifications.	(d) The Department will provide a guidance document to suppliers for classifying all SIC and NAICS codes within each broad Energy Star Portfolio Manager category no later than 2025.

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973	(a)	Mixed Use Meters - Exemptions	NA	The draft Regulation does not recognize suppliers' existing water use efficiency programs and practices and already efficient mixed-use meters. DWR's recommendations included 'Qualified Conditions and Exemptions,' that suggested narrowly defined exemptions from the mixed-use meter conversion requirements and implementation of the conversion threshold Performance Measure. The Regulation should support suppliers' existing successful program, and reduce requirements that will not achieve significant water savings but will require suppliers' to invest significant resources.	Include DWR’s recommendations ‘Qualified Conditions and Exemptions" (Recommendations for Dedicated Irrigation Meter Conversion...4-3). Clarify that these exempt landscapes are not required to meet the in-lieu water management practices for communications, system maintenance, and irrigation scheduling as they would already be considered implementing the In-Lieu Technologies Performance Measures. Additionally, include language to allow suppliers to submit a list of current programs, practices and rebates as an alternative to (973)(a)(1) and (2).	(3)Commercial, industrial, and institutional mixed use meters that meet the following criteria shall be considered exempt from the requirements of Section 973(a)(1) & 973(a)(2): (A) Landscapes exempt under MVELO (B) Non-irrigation water usage of no more than 5% of total water use (C) CII landscapes irrigated with a mixed-use meter and the estimated landscape water use satisfy the requirements of the landscape efficiency factors listed in Section 969, as appropriate, on a per-parcel basis, are considered to be implementing the In-Lieu Technologies PM and therefore exempt. (D) Suppliers may provide a list and crosswalk of current programs, practices, and rebates to listed in-lieu technologies and water management practices to satisfy programmatic requirements of 973(a)(1) and (2).
973	(a) and (c)	Mixed Use Meters - Employ	(a) same as above (c) For commercial, industrial, and institutional large landscapes that have mixed-use meters, suppliers shall make annual progress in either installing dedicated irrigation meters or employing in-lieu water technologies for these large landscapes, with at least twenty percent compliance by 2026, at least sixty percent compliance by 2028, and one hundred percent compliance by 2030. After 2030, the supplier shall ensure at least 95% of large landscapes either have a dedicated irrigation meter installed or are employing in-lieu water technologies, as assessed on an annual basis.	The draft Regulation requires suppliers to “employ” actions and technologies for large landscapes. The term “employ” implies that suppliers will take up an action on a customer's behalf. Suppliers may offer programs, rebates, incentives and in-lieu technologies, but suppliers cannot require the customer to act or implement in-lieu water use technologies. The final Regulation must recognize suppliers’ appropriate authorities	Replace "employ" with "offer."	(a)(1) Suppliers shall employ offer for large landscapes that do not have DIMs at least two of the following efficient water use technologies: (2) Suppliers shall employ offer the following water management practices for large landscapes that do not have DIMs: (c)For commercial, industrial, and institutional large landscapes that have mixed-use meters, suppliers shall make annual progress in either installing dedicated irrigation meters or employing in-lieu water technologies for these large landscapes, with at least twenty percent compliance by 2026, at least sixty percent compliance by 2028, and one hundred percent compliance by 2030. After 2030, the supplier shall ensure at least 95% of large landscapes either have a dedicated irrigation meter installed or are employing offering in-lieu water technologies, as assessed on an annual basis.
973	(a)(1)	Mixed Use Meters - In-Lieu	(1) Suppliers shall employ for large landscapes that do not have DIMs at least two of the following efficient water use technologies:	DWR assessed and recommended a list of in-lieu technologies. DWR's recommendation did not require two in-lieu technologies to be implemented. Requiring two is duplicative and does not necessarily generate more savings.	Adopt DWR’s recommendation that only 1 in-lieu technology be required.	(a)(1) Suppliers shall employ for large landscapes that do not have DIMs at least two one of the following efficient water use technologies:
973	(a)(1)(C)	Mixed Use Meters - In-Lieu	(C) Hardware improvements with enhanced performance and functions, including but not limited to metering technologies that allow suppliers to identify outdoor water use, smart irrigation controllers and pressure-regulated sprinkler spray heads.	"Hardware improvements" excludes software improvements, which can also aid in improving efficiency.	Include software improvements as an efficient water use technology.	(C) Hardware and software improvements with enhanced performance and functions, including but not limited to metering technologies that allow suppliers or customers to identify outdoor water use, smart irrigation controllers and pressure-regulated sprinkler spray heads.
973	(a)(1)(E)	Mixed Use Meters - In-Lieu	(E) Landscape plant palette transformation programs, including green infrastructure such as swales or rain gardens that both reduce wet-weather runoff as well as offset irrigation needs	The requirement for green infrastructure that reduces wet-weather runoff and offsets irrigation needs in order to participate in lawn conversion programs could decrease participation.	It should be clarified that green infrastructure and swales and rain gardens aren't requirements for a lawn conversion program.	(E) Landscape plant palette transformation programs, which may include including green infrastructure such as swales or rain gardens that both reduce wet-weather runoff as well as offset irrigation needs
973	(a)(2)(B)	Mixed Use Meters - In-Lieu	(2) Suppliers shall employ the following water management practices for large landscapes that do not have DIMs: (A) Communications (B) Irrigation systems maintenance (C) Irrigation scheduling	Suppliers generally do not provide maintenance services for customer irrigation systems or irrigation schedules. That's the responsibility of the customer and could be a liability for suppliers.	Revise language to recognize what is within the purview of suppliers.	(A) Communications (B) Irrigation systems maintenance guidance (C) Irrigation scheduling guidance

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973	(b)	Mixed Use Meters - Quantification	(b)(1) Urban retail water suppliers shall estimate the volume of water used on commercial, industrial, and institutional landscapes with mixed-use meters (CIIMUM) by multiplying the area of those landscapes (LALL) by net reference evapotranspiration (Net ETO), by a Landscape Efficiency Factor of 0.76, and by a unit conversion factor of 0.62. This formula is expressed mathematically as follows: $CIIMUM = LALL \times Net\ ETO \times 0.76 \times 0.62$ (2) For purposes of this section, the area of the landscapes (LALL) shall include only landscapes associated with CII that have mixed-use meters and shall be quantified and substantiated by the supplier using data generated by the Department.	As a performance measure, suppliers should not be required to quantify mixed use meter water usage, particularly because any quantification is inclusive of process water and the Regulation does not provide the appropriate time for suppliers to investigate customer water usage for a compliance determination.	Strike this section.	(b) (1) Urban retail water suppliers shall estimate the volume of water used on commercial, industrial, and institutional landscapes with mixed-use meters (CIIMUM) by multiplying the area of those landscapes (LALL) by net reference evapotranspiration (Net ETO), by a Landscape Efficiency Factor of 0.76, and by a unit conversion factor of 0.62. This formula is expressed mathematically as follows: $CIIMUM = LALL \times Net\ ETO \times 0.76 \times 0.62$ (2) For purposes of this section, the area of the landscapes (LALL) shall include only landscapes associated with CII that have mixed-use meters and shall be quantified and substantiated by the supplier using data generated by the Department.
973	(c)	Mixed Use Meters-Timeline	(c) For commercial, industrial, and institutional large landscapes that have mixed-use meters, suppliers shall make annual progress in either installing dedicated irrigation meters or employing in-lieu water technologies for these large landscapes, with at least twenty percent compliance by 2026, at least sixty percent compliance by 2028, and one-hundred percent compliance by 2030. After 2030, the supplier shall ensure at least 95% of large landscapes either have a dedicated irrigation meter installed or are employing in-lieu water technologies, as assessed on an annual basis.	DWR CII-LAM data wont be delivered until 2026. Suppliers need adequate time to review the data and come into compliance. To implement this specific performance measure, suppliers would need to identify actual large landscape water use (e.g., remove the process water to see ACTUAL landscape water usage for CII) prior to implementation. The compliance schedule for MUM conversion should account for every customer being a unique and specific project, requiring budget and taking time to implement if a physical conversion is taking place. Additionally, we note general concerns with stacking all the CII Performance Measures on an overlapping 5-year compliance schedule.	Extend the 5-year timeline to complete mixed-use meter performance measures in order to provide time for suppliers' to review DWR CII-LAM data and complete CII Classifications. This will help reduce the resource burden on suppliers' of the compressed timeline to allow suppliers to more meaningfully engage with customers on in-lieu and meter conversion efforts.	(c) For commercial, industrial, and institutional large landscapes that have mixed-use meters, suppliers shall make annual progress in either installing dedicated irrigation meters or employing in-lieu water technologies for these large landscapes, with at least twenty percent compliance by 2026 26 ³¹ , at least sixty percent compliance by 2028 28 ³³ , and one-hundred percent compliance by 2030 30 ³⁵ . After 2030 30 ⁵ , the supplier shall ensure at least 95% of large landscapes either have a dedicated irrigation meter installed or are employing offering in-lieu water technologies, as assessed on an annual basis.
973	(c)	Mixed Use Meters-Timeline	Same as above	It may be more cost-effective or locally appropriate to complete all MUM Conversion Performance Measures on a schedule different than the proposed Regulation.	Provide flexibility for suppliers to complete the 100 percent compliance within the 5 years, rather than twenty percent timeline. Allow supplier to submit an alternative schedule to the State Water Board that identifies how it will complete the performance measure within the 5 years.	(d) A supplier may submit to the Board by 2031 an alternative compliance schedule to either install dedicated irrigation meters of employ in-lieu water technologies for one-hundred percent of large landscapes customers by 2035, as an alternative to 973(c).

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974	(a)	BMPs - Disclosable Buildings	(a) Each supplier shall identify all disclosable buildings in their service area by January 1, 2025. (b)(1) For every customer for which the square footage of its building meets the definition of a disclosable building in section 1681 of the California Code of Regulations at title 20, a supplier shall complete the following: (A) For each meter, the supplier shall deliver to the building owner or Owner's Agent the last four characters of the meter serial number serving the building. (B) For each meter, the supplier shall identify, aggregate, and provide all water use data, in monthly intervals, for at least the previous calendar year, and all available data for the calendar year in which data is requested, by one of the following methods: (i) Suppliers not using ENERGY STAR Portfolio Manager's Data Exchange Services shall send the data to the building owner or Owner's Agent using the template provided by ENERGY STAR Portfolio Manager. (ii) Suppliers using ENERGY STAR Portfolio Manager's Data Exchange Services shall provide the data by direct upload to the building owner's or Owner's Agent's ENERGY STAR Portfolio Manager account, or, at the building owner's or Owner's Agent's request, send the data to the building owner or Owner's Agent using the template provided by ENERGY STAR Portfolio Manager. (2) Suppliers shall make annual progress in providing the information in paragraph (1) to the owners or Owner's Agents of disclosable buildings and shall provide the information for at least twenty percent of disclosable buildings by 2026, at least sixty percent by 2028, and one hundred percent by 2030.	This section would place significant burden on suppliers' limited resources, without providing clear benefits or guaranteeing water savings. Concerns include: (1) Suppliers do not have or maintain square footage information to identify disclosable buildings. (2) Square footage is well correlated with energy use, but not necessarily with water use, so this may not be an effective use of limited resources. (3) Many suppliers currently provide monthly (or bi-monthly) water usage to customers in their bill with water use reports, or through an AMI portal. This effort would be redundant. Sending duplicative data to customers, particularly those that will not utilize it, is not good use of suppliers' limited resources. (4) Suppliers cannot determine what meter serves which buildings on an owner's parcel. Suppliers can associate meters with an account but they may not know the he customer's use and cannot identify how much water use goes to each building if there are multiple buildings on the meter. (5) Proposed timelines are not reasonable.	Strike this language.	(a) Each supplier shall identify all disclosable buildings in their service area by January 1, 2025. (b)(1) For every customer for which the square footage of its building meets the definition of a disclosable building in section 1681 of the California Code of Regulations at title 20, a supplier shall complete the following: (A) For each meter, the supplier shall deliver to the building owner or Owner's Agent the last four characters of the meter serial number serving the building. (B) For each meter, the supplier shall identify, aggregate, and provide all water use data, in monthly intervals, for at least the previous calendar year, and all available data for the calendar year in which data is requested, by one of the following methods: (i) Suppliers not using ENERGY STAR Portfolio Manager's Data Exchange Services shall send the data to the building owner or Owner's Agent using the template provided by ENERGY STAR Portfolio Manager. (ii) Suppliers using ENERGY STAR Portfolio Manager's Data Exchange Services shall provide the data by direct upload to the building owner's or Owner's Agent's ENERGY STAR Portfolio Manager account, or, at the building owner's or Owner's Agent's request, send the data to the building owner or Owner's Agent using the template provided by ENERGY STAR Portfolio Manager. (2) Suppliers shall make annual progress in providing the information in paragraph (1) to the owners or Owner's Agents of disclosable buildings and shall provide the information for at least twenty percent of disclosable buildings by 2026, at least sixty percent by 2028, and one hundred percent by 2030.
974	(c)	BMPs - Thresholds	(c) For those customers at or above the 80th percentile for water use in each of the classification categories described in section 972, excluding process water, each supplier shall, by January 1, 2025, design and implement a conservation program that includes at least one of the best management practices from each of paragraphs (1) through (5):	Suppliers need flexibility to develop programs and engage with their CII customers that have water savings potential, which will be driven by characteristics unique to each service area. Additionally, some CII classifications may have de minimis water use or are already efficient. The proposed methodology that suppliers' target the top 20% of water users for each CII classification is too prescriptive, ignores existing local and regional programs and efforts, and limits suppliers' ability to cost-effectively target customers with the greatest water savings potential.	Direct suppliers to implement programs for CII customers at or above the 80th percentile among all CII customers, rather than by individual CII classification.	(c) For those CII customers at or above the 80th percentile for water use in each of the among all CII customers classification categories described in section 972, excluding process water, each supplier shall, by January 1, 2025 35, existing or new design and implement a CII conservation programs that includes at least one of the best management practices from each of paragraphs (1) through (5):
974	(c)	BMPs - Clarification	(c) For those customers at or above the 80th percentile for water use in each of the classification categories described in section 972, excluding process water, each supplier shall, by January 1, 2025, design and implement a conservation program that includes at least one of the best management practices from each of paragraphs (1) through (5):	Language that requires suppliers to "offer" programs could be interpreted to not allow for regional, statewide or other partnerships that could help, cost-effectively achieve the CII BMP Performance Measures. We believe this is not the intent.	Make explicit that a supplier can comply with CII BMP Performance Measures by making programs available directly, or through regional, statewide or other partnerships.	(c) For those CII customers at or above the 80th percentile for water use in each of the among all CII customers classification categories described in section 972, excluding process water, each supplier shall, by January 1, 2025 30, make available, either directly or through regional, statewide or other partnerships, existing or new design and implement a CII conservation programs that includes at least one of the best management practices from each of paragraphs (1) through (5):
974	(c)	BMPs - Clarification	(c) For those customers at or above the 80th percentile for water use in each of the classification categories described in section 972, excluding process water, each supplier shall, by January 1, 2025, design and implement a conservation program that includes at least one of the best management practices from each of paragraphs (1) through (5):	The Regulation does not explicitly state that a single conservation program can satisfy the requirements for more than one BMP. We believe that is the intent, rather than requiring individual programs for each classification.	Make explicit that a single conservation program can apply to multiple BMPs.	(h) A single conservation program may satisfy the requirements for more than one best management practice from each of paragraphs (1) through (5) in subdivision (c).
974	(c)(1)(A)	BMPs - Clarification	(c)(1)(A) Direct contacts via site visits or phone calls	Suppliers may rely on other means of direct communication with customers, such as emails, video calls and direct mail. This provision should be broadened to allow other means of direct communication that suppliers' currently deploy.	Clarify language to include email, video calls and direct mail.	(c)(1)(A) Direct contacts via site visits, emails, video calls, direct mail , or phone calls
974	(c)(2)(A)	BMPs - Clarification	(c)(2)(A) Rebates and cost-sharing for replacing inefficient fixtures, equipment, irrigation systems or landscapes with water efficient ones	Innovative non-rebate incentives like financing are not included. These help advance water savings among CII Customers.	Make explicit that financing, cost-sharing and other innovative non-rebat incetnvies are eligible.	(c)(2)(A) Rebates, financing, cost-sharing and other innovative non-rebate incentives and cost-sharing for replacing inefficient fixtures, equipment, irrigation systems or landscapes with water efficient ones

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974	(c)(2)(A)	BMPs - Clarification	(2) Incentive best management practices.	Water-budget based rate structures and water budget-based management programs without a rate structure are not recognized. These help advance water savings among CII Customers.	Explicitly include water-budget based rate structures and water-budget based management programs without a rate structure are included in the "Incentive best management practices."	(D) Water budget-based rate structures (E) Water budget-based management program without a rate structure
974	(c)(3)(D)	BMPs - Clarification	(3) Landscape best management practices. (A) Landscape and irrigation management practices to promote improved water use efficiency (B) Irrigation system inspection and maintenance (C) Irrigation scheduling and maintenance training	It would be inappropriate for suppliers to maintain irrigation systems.	Remove language for suppliers to maintain CII customer irrigation systems, and instead include irrigation system maintenance training as a BMP.	(3) Landscape best management practices. (A) Landscape and irrigation management practices to promote improved water use efficiency (B) Irrigation system inspection and maintenance (C) Irrigation scheduling and maintenance training
974	(c)(3)(D)	BMPs - Clarification	(c)(3)(D) New development landscape inspection, workshops, and training	Landscape inspections, workshops and trainings should not be limited to new development.	Include new and existing landscapes as eligible.	(c)(3)(D) New development Landscape inspection, workshops, and training
974	(c)(3)(F)-(H)	BMPs - Clarification	(F) Programs to remove turf and replace it with climate-ready vegetation (G) Programs to decrease urban heat and reduce turf water use by planting trees (H) Programs to install green infrastructure such as swales or rain gardens that both reduce wet-weather runoff as well as offset irrigation needs		Remove these options as landscape BMPs.	(F) Programs to remove turf and replace it with climate-ready vegetation water efficient plants, a sustainability feature designed to capture rainwater and reduce runoff, and a low application rate irrigation system. Most exposed soils must be covered with mulch (G) Programs to decrease urban heat and reduce turf water use by planting trees (H) Programs to install green infrastructure such as swales or rain gardens that both reduce wet-weather runoff as well as offset irrigation needs.
974	(c)(5)(A)	BMPs - Clarification	(5) Operational best management practices. (A) Infrastructure changes (for example, smart meter replacement programs)	AMI is not included. AMI improves suppliers ability to collect accurate water usage data to detect leaks and improve water management.	Explicitly recognize AMI.	(5) Operational best management practices. (A) Infrastructure changes (for example, smart meter replacement programs, Automatic Meter Infrastructure (AMI))
974	(d)	BMPs	(d) For those commercial, industrial, and institutional customers that are at or above the 97.5th percentile for water use, excluding process water, each supplier shall, by January 1, 2025, design and implement a conservation program that includes at least two of the best management practices from each of paragraphs (1) through (5) in subdivision (c).	Customers at or above the 97.5th percentile for water use are already encompassed in the top 20% requirements of section 974(c). As proposed, this requirement does not recognize suppliers' current efforts to develop custom programs, in which these customers may already be efficiently using water. Additionally, conservation programs need to be offered broadly, not just limited to specific customers.	Strike this language. See section 974(c).	(d) For those commercial, industrial, and institutional customers that are at or above the 97.5th percentile for water use, excluding process water, each supplier shall, by January 1, 2025, design and implement a conservation program that includes at least two of the best management practices from each of paragraphs (1) through (5) in subdivision (c).
974	(e)(1)	Non-functional turf	(e) (1) Each urban retail water supplier shall ban the irrigation of non-functional turf with potable water on all commercial, industrial, and institutional (CII) landscapes in its service area by July 1, 2025. (2) Notwithstanding paragraph (1), a supplier is not required to ban the irrigation of nonfunctional turf on CII landscapes in its service area that is necessary to ensure the health of trees and other perennial non-turf plantings or that is necessary to address an immediate health and safety need. (3) Notwithstanding paragraph (1), a supplier may approve a request for continued irrigation of non-functional turf where the user certifies that the turf is a low water use plant with a plant factor of 0.3 or less, and demonstrates the actual use is less than 40% of reference evapotranspiration. (4) For purposes of this subdivision, CII landscapes include homeowners' associations, common interest developments, community service organizations, and other similar entities but do not include the residences of these entities' members or separate interests, as defined in section 4185 of the Civil Code.	This language does not align with AB 1572, which is currently pending the Governor's signature. If the Governor signs AB 1572, this language will not be necessary and its continued inclusion will cause confusion for suppliers and CII Customers.	Strike this language.	(e) (1) Each urban retail water supplier shall ban the irrigation of non-functional turf with potable water on all commercial, industrial, and institutional (CII) landscapes in its service area by July 1, 2025. (2) Notwithstanding paragraph (1), a supplier is not required to ban the irrigation of nonfunctional turf on CII landscapes in its service area that is necessary to ensure the health of trees and other perennial non-turf plantings or that is necessary to address an immediate health and safety need. (3) Notwithstanding paragraph (1), a supplier may approve a request for continued irrigation of non-functional turf where the user certifies that the turf is a low water use plant with a plant factor of 0.3 or less, and demonstrates the actual use is less than 40% of reference evapotranspiration. (4) For purposes of this subdivision, CII landscapes include homeowners' associations, common interest developments, community service organizations, and other similar entities but do not include the residences of these entities' members or separate interests, as defined in section 4185 of the Civil Code.

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974	(f)	BMPs - Timeline	(f) Suppliers shall make annual progress in meeting the requirements of subdivisions (c) and (d), with compliance of at least twenty percent by 2026, at least sixty percent by 2028, and one hundred percent by 2030.	We are proposing the CII Classification Performance Measure be completed between 2025 – 2030 and CII Mixed-Use Meter and CII BMP Performance Measures be completed 2030 – 2035. The currently proposed completion of all of the CII Performance Measures within the proposed five-year period, beginning 2025, would require significant resources and create implementation challenges. For example, it is unclear how suppliers would accurately implement BMPs for the top 20% of each classification while classifying CII customers. Unstacking the CII BMPs from the CII Classification will allow suppliers to spread limited resources over a 10 year period, while still meeting the goals of the Regulation. Additionally, the prescribed schedule for completing 20% of BMPs annually unnecessarily limits suppliers flexibility. Suppliers should be able to best determine how to meet the broader BMP Performance Measure requirements based on the unique local characteristics and existing programs.	Modify the timeline for suppliers to achieve 100 percent compliance with BMP Performance Measures by 2035. Remove prescriptive requirements of a percentage completion of CII BMP Performance Measures by years.	(f) Suppliers shall achieve make annual progress in meeting the requirements of subdivisions (c) and (d), with compliance of at least twenty percent by 2026, at least sixty percent by 2028, and one hundred percent compliance with subdivision (c) by 2035 30 . After 2035 30 , the supplier shall ensure at least 95% compliance, as assessed on an annual basis.
974	NA	BMPs - De Minimis	NA	Some suppliers have a very small amount of CII water usage. Consequently, the amount of effort required in this section will not yield meaningful water savings. We encourage the Regulation to recognize suppliers with de minimis CII water use, which should be less than 10% of total potable water usage, and exclude those suppliers from the requirements of this section. This will allow those suppliers to focus their resources where they better advance water use efficiency.	Exemption suppliers with less than 10% CII potable water usage from section 974.	(g) Suppliers with less than 10% CII potable water usage, based on a five year average that is re-evaluated every 5 years, shall be excluded from this section.

APPENDIX C: SUGGESTED REDLINE RECOMMENDATIONS OUTDOOR STANDARDS

966	(i)	Outdoor Standard - Alternative Compliance (Same as "Methodologies" Tab Row 3)	(i) Starting in 2035, a supplier meeting all the criteria in paragraphs (1) or (2) may, in calculating its budgets for efficient outdoor residential water use and for commercial, industrial, and institutional landscapes with dedicated irrigation meters, apply the standards described in sections 968(a)(2) and 969(a)(2) through 2040. (2) (A) The urban water use objective calculated by the supplier pursuant to section 966 would result in an objective that is 80 percent or less of the supplier's actual urban water use, calculated in accordance with section 10609.22. (B) The annual reports the supplier has submitted since 2030, pursuant to section 975, show that the supplier is making continued progress, reducing its actual urban water use by an average of no less than 2 percent per year. (C) The supplier verifies compliance with requirements of the G480 Water Conservation and Efficiency Program Operation and Management Standard established by the American Water Works Association. (D) The supplier verifies compliance with the Standards for Tree City USA Recognition. (E) The supplier manages a program dedicated to the creation and maintenance of climate-ready landscapes across its service area. Program elements shall include but are not limited to: (i) The supplier verifies annual conversion of no less than 0.1 percent of turf area into climate-ready landscapes. (ii) The supplier verifies use of a recognized, verifiable rating system, such as the ReScape Rated Landscape Scorecard or the Sustainable SITES Initiative, to assure its program is supporting climate-ready landscapes. (iii) The supplier verifies creation of or participation in regional and local	Our understanding is that this language is intended to serve as an Alternative Compliance Pathway for suppliers with a water use objective that would require a an unreasonable or unattainable reduction in water use and is intended to provide flexibility within the Regulation. This Alternative Compliance Pathway does not provide the necessary flexibility and is problematic as follows: (1) It does not address 2025 and 2030 compliance for suppliers. Some suppliers will be out of compliance with their objective beginning in 2025. This only addresses compliance in 2035. (2) 5 additional years will not resolve compliance for some suppliers. Some suppliers will require a pathway that includes an alternative objective and/or more than additional 5 years. (3) The eligibility requirements for the Alternative Compliance Pathway are cost prohibitive, and would divert suppliers' resources to actions that may not result in compliance -e.g., e.g. SITES rating system is \$9,600 per site to implement. (4) Special districts are ineligible for the Standards for Tree City USA. (5) Requirements to dedicate funding and 40% allocated to DACS conflicts with Proposition 218.	We request to work collaboratively with the State Water Board to develop an "Alternative Compliance Pathway" that provides suppliers with an unreasonable or unattainable objective to be eligible for an alternative objective and/or extension of time to comply. This pathway should balance the goals of achieving meaningful water savings and multi-benefits, while considering cost and affordability.	(i) Starting in 2035, a A supplier may be eligible for an Alternative Compliance Pathway for approval of the Board, that demonstrates a good faith effort toward improving water use efficiency and climate resiliency by meeting all the criteria in paragraphs (1) or (2) may, in calculating its budgets for efficient outdoor residential water use and for commercial, industrial, and institutional landscapes with dedicated irrigation meters, apply the standards described in sections 968(a)(2) and 969(a)(2) through 2040. (1) (A) The average median household income of the supplier's service area is less than or equal to 80 percent of the median household income of California. (B) The urban water use objective calculated by the supplier pursuant to subsection (b) would result in an objective that is 80 percent or less of the supplier's actual urban water use, calculated in accordance with section 10609.22. (C) The annual reports the supplier has submitted since 2030, pursuant to section 975, show that the supplier is making continued progress, reducing its actual urban water use by an average of no less than 2 1.5 percent per year. (D) The supplier shows to the satisfaction of the board that it is unable to meet its urban water use objective because of the applicable outdoor standards identified in sections 968 and 969. The supplier verifies it offers a proactive water use efficiency program that address indoor and outdoor water use, as well as low-income water users. (2) (A) The urban water use objective calculated by the supplier pursuant to section 966 would result in an objective that is 80 percent or less of the supplier's actual urban water use, calculated in accordance with section 10609.22. (B) The annual reports the supplier has submitted since 2030, pursuant to section 975, show that the supplier is making continued progress, reducing its actual urban water use by an average of no less than 2 percent per year. (C) The supplier verifies it offers a proactive water use efficiency program that address indoor and outdoor water use, as well as low-income water users. The supplier verifies compliance with requirements of the G480-Water Conservation and Efficiency Program Operation and Management Standard established by the American Water Works Association.
968	(a)(3)	Outdoor Standard - Timeline	(a)(1) Through June 30, 2030, the standard for efficient residential outdoor use (Soutdoor) shall be a landscape efficiency factor of 0.80. (2) Beginning July 1, 2030, and through June 30, 2035, the standard for efficient residential outdoor use shall be a landscape efficiency factor of 0.63. (3) Beginning July 1, 2035, the standard for efficient residential outdoor use shall be a landscape efficiency factor of 0.55.	The successful achievement of cost-effective multi-benefit landscape transformation programs requires water suppliers to analyze, design, resource and implement cost-effective water use efficiency programs. Additionally, the success of this Regulation requires long-term customer behavior change and significant investments. Educating Californians not only on the value of making these changes but also on the best, cost-effective manner to make these changes, while also supporting and expanding environmental multi-benefits requires time. Due to the delay of the Regulation and change in proposed standards from the Department of Water Resources' recommendations, suppliers and Californians are not being given a reasonable timeline to reduce water outdoor water use, which could result in impacts to shade trees and affordability, and disproportionate impacts to disadvantaged communities.	Modify the proposed timeline for the outdoor standard to provide an additional 5 years for all suppliers to achieve compliance, as follows: - 0.8 LEF by 2030 - 0.63 LEF by 2035 - 0.55 LEF by 2040	(a) (1) Beginning January 1, 2030 and through June 30, 2030 5 , the standard for efficient residential outdoor use (Soutdoor) shall be a landscape efficiency factor of 0.80. (2) Beginning July 1, 2030 5 , and through June 30, 2035 40 , the standard for efficient residential outdoor use shall be a landscape efficiency factor of 0.63. (3) Beginning July 1, 2035 40 , the standard for efficient residential outdoor use shall be a landscape efficiency factor of 0.55.
968	(a)(5)	Outdoor Standard - New Res.	(5) The standard for newly constructed residential landscapes (Snew) shall be the same factor as identified in section 492.4 for residential areas.	Water suppliers need certainty as they implement this Regulation most cost-effectively. MWEL0 can be modified absent a regulatory process, which could significantly impact water suppliers overall compliance with the Regulation and associated costs, which would not be captured in the SRIA.	Set the standard for newly constructed residential landscapes at a LEF of 0.55, instead of to MWLEO.	(5) The standard for newly constructed residential landscapes (Snew) shall be the same factor as identified in section 492.4 for residential areas a landscape efficiency factor of 0.55.
968	(b)(2)(B)	Outdoor Standard- INI	(B) Through June 30, 2027, a supplier may include in its residential landscape area up to twenty percent of the supplier's unique square footage of Irrigable Not Irrigated area provided by the Department to the Board on October 3, 2022, if the supplier's actual urban water use for the reporting year, calculated in accordance with section 10609.22, is greater than the urban water use objective calculated pursuant to section 966 without inclusion of Irrigable Not Irrigated area.	DWR conducted a statistical analysis of outdoor water use, LAM and INI data. The data concluded that the INI area is being irrigated at one fifth or 20 percent of the irrigable area. As a result, DWR correctly concluded that the calculation of annual outdoor water use must include 20 percent INI. Additionally, the inclusion of INI is consistent with the 2018 conservation legislation. Water Code §10609.6(a)(2)(B) directed "the standards shall apply to irrigable lands. The removal of DWR's recommended to include 20% for INI is statistically inaccurate.	DWR's findings was based on the recognition that its analysis was only a snapshot in time. It's follow-up analysis indicated that the snapshot missed 20% of the irrigated landscape that was irrigated either before or after the image was taken for the analysis. DWR recognized that this under counting of irrigated area would continue to be the case unless multiple images are conducted over the analysis year. This 20% should not be looked as additional, but as area that is actually being irrigated. Revert to DWR's recommendation with the inclusion of 20 percent INI. Suppliers would recalculate INI when DWR provides new LAM data.	(B) Through June 30, 2027, a A supplier shall include in its residential landscape area up to twenty percent of the supplier's unique square footage of Irrigable Not Irrigated area provided by the Department to the Board on October 3, 2022, if the supplier's actual urban water use for the reporting year, calculated in accordance with section 10609.22, is greater than the urban water use objective calculated pursuant to section 966 without inclusion of Irrigable Not Irrigated area. (1) If the Department provides updated landscape area data, a supplier would recalculate the inclusion of the suppliers' unique square footage of Irrigable Not Irrigated Area of twenty percent.

**APPENDIX: SUGGESTED REDLINE RECOMMENDATIONS
OUTDOOR STANDARDS**

968	(d)(2)	MWELo	(d)(2) The existence of newly constructed residential landscape area shall be demonstrated by referencing annual reporting required by section 495(b)(6), provided the report has disaggregated newly constructed residential landscapes from the total landscape area reported.	The Regulation would require that suppliers demonstrate the existence of newly constructed residential landscapes through annual MWELo reporting. The majority of new residential landscapes are not subject to MWELo or MWELo reporting. MWELo reporting will be incomplete and will not reflect accurately newly constructed residential landscape area. Gr	Allow for DWR's recommend approach to account for newly constructed residential landscape areas, which included on-the ground measurement, remote sensing methods, and using service area level averages.	(d)(2) The existence of newly constructed residential landscape area shall be demonstrated by using any of the following approaches to quantify irrigable landscapes areas for new landscapes: referencing annual reporting required by section 495(b)(6), provided the report has disaggregated newly constructed residential landscapes from the total landscape area reported. (A) On-the-ground measurement. (B) Using remote sensing methods to quantify irrigable landscape areas. (C) Using service area level averages. In this approach, urban retail water suppliers only need to identify the total number of new developments (Nnd) and average landscape areas for each class at the service area level. The following is an outline of the steps needed to estimate aggregate areas for new landscapes using this approach: (i) Calculate the sum of areas for each of the irrigation status classes delivered by DWR or alternative data source. This involves adding each one of the three classes across all residential parcels in the service area to derive aggregate areas (II-total, INI-total, and NI-total). (ii) Obtain the total number of existing residential parcels (Np) in the service area. (iii) Divide II-total, INI-total, and NI-total by Np to get average II, INI, and NI for the service area (II-avg, INI-avg, NI-avg). (iv) Multiply II-avg, INI-avg, and NI-avg by Nnd. This produces aggregate II, INI, and NI for new developments (II-nd, INI-nd, and NI-nd).
968	(g)(2) (h)(1)	SLA- Pools	(g)(1) An urban retail water supplier may, in calculating its annual urban water use objective, include budgets for temporary provisions for residential outdoor use if the supplier submits supporting information meeting the criteria described in subdivision (i). (2) Temporary provisions may be requested for: (A) water for existing pools, spas, and similar water features (B) water for the planting of new, climate-ready trees (C) water for the establishment of qualifying landscapes (h) Temporary provisions available pursuant to subdivision (g) shall be calculated as follows: (h) Temporary provisions available pursuant to subdivision (g) shall be calculated as follows: (1) A temporary provision for existing pools, spas and similar water features is available beginning January 1, 2035, until January 1, 2040. This provision (Prpool) shall be calculated by multiplying the square footage of existing pools, spas, and similar water features (Apool), by 0.08, by net reference evapotranspiration (Net ETO), and by a unit conversion factor of 0.62.	Residential pools should not be a temporary provisions. The residential factor for residential pools should be same as public pools, which is 1.0. Water evaporates at about 1.0. Not allocating enough water to residential pools effectively further reduces the residential outdoor budget. Most pools are not subject to MWELo, as they are generally in backyards and existing.	Strike language 968(g)(2)(A) and h(1). Add language to 968(c) that residential pools area.	(c)(3) Pools, spas and similar water features shall have a landscape efficiency factor of 1.0. (g)(1) An urban retail water supplier may, in calculating its annual urban water use objective, include budgets for temporary provisions for residential outdoor use if the supplier submits supporting information meeting the criteria described in subdivision (i). (2) Temporary provisions may be requested for: (A) water for existing pools, spas, and similar water features- (B) A water for the planting of new, climate-ready trees (C) B water for the establishment of qualifying landscapes (h) Temporary provisions available pursuant to subdivision (g) shall be calculated as follows: (h)(1) Temporary provisions available pursuant to subdivision (g) shall be calculated as follows:(1) A temporary provision for existing pools, spas and similar water features is available beginning January 1, 2035, until January 1, 2040. This provision (Prpool) shall be calculated by multiplying the square footage of existing pools, spas, and similar water features (Apool), by 0.08, by net reference evapotranspiration (Net ETO), and by a unit conversion factor of 0.62. This formula is expressed mathematically as follows:- Prpool = Apool x 0.08 x Net ETO x 0.62 The square footage of existing pools, spas, and similar water features (Apool) shall be either (A) the value provided by the Department to the Board on October 3, 2022, or any updates thereafter, or (B) alternative data, if the supplier demonstrates to the Department and Board that the data are equivalent, or superior, in quality and accuracy to the data provided by the Department.-
968	(h)(3))b (i)	SLA - Recycled Water	(i) In order to receive approval for either a variance, a temporary provision, or the inclusion of special landscape areas for a given reporting year, an urban retail water supplier must submit to the Board, by no later than October 1, for review and approval by the Executive Director, or the Executive Director's designee, a request that includes the following: (1) Information quantifying and substantiating each request, including showing how it protects beneficial uses of water; demonstrating that the amount of water requested was delivered by the supplier for the requested use; and verifying that the approval of the request would not jeopardize the ability of a permittee within the supplier's service area to comply with existing permit requirements; and (2) A description of efforts to prioritize water for existing trees, including, but not limited to rebate, direct install, and educational programs focused on transitioning from turf- to tree-centric irrigation systems that promote deep and healthy root growth. Tree-centric irrigation systems include but are not limited to soaker hoses, deep drip watering stakes, drip tubing, and emitters. (3) If the request is denied, the volume of water associated with the variance, provision, or special landscape area shall not be included in the objective.	Recycled water should not be a temporary provision. Sites irrigated with recycled water generally do not change and are on DIMs. The requirement to annually apply for a variances and temporary provisions places a significant burden to both State Water Board staff and water suppliers.	Recycled water should not be a temporary provision.	(h)(3)(b)(i) In order to receive approval for either a variance, or a temporary provision, or the inclusion of special landscape areas for a given reporting year, an urban retail water supplier must submit to the Board, by no later than October 1, for review and approval by the Executive Director, or the Executive Director's designee, a request that includes the following: (1) Information quantifying and substantiating each request, including showing how it protects beneficial uses of water; demonstrating that the amount of water requested was delivered by the supplier for the requested use; and verifying that the approval of the request would not jeopardize the ability of a permittee within the supplier's service area to comply with existing permit requirements; and (2) A description of efforts to prioritize water for existing trees, including, but not limited to rebate, direct install, and educational programs focused on transitioning from turf- to tree-centric irrigation systems that promote deep and healthy root growth. Tree-centric irrigation systems include but are not limited to soaker hoses, deep drip watering stakes, drip tubing, and emitters. (3) If the request is denied, the volume of water associated with the variance, or a temporary provision, or the inclusion of special landscape areas shall not be included in the objective.
969	(c)(2)	SLA - Recycled Water	(2) In order to calculate an outdoor budget for CII landscapes with DIMs pursuant to this subdivision, a supplier may include special landscape areas for CII landscapes with DIMs only if the supplier submits supporting information meeting the criteria described in section 968 (i).	Same as above	Same as above.	(c) (2) In order to calculate a residential outdoor budget pursuant to this subdivision, a supplier may include residential special landscape areas only if the supplier submits supporting information meeting the criteria described in subdivision (i).

APPENDIX: SUGGESTED REDLINE RECOMMENDATIONS METHODOLOGIES

Reg. Sec.	Sub. Sec.	Topic	Current Regulatory Text	Concern	Recommendation	Suggested Redline
966	(c)	Methodology - WUE Formula	(c) The objective shall be composed of the sum of the following budgets: (1) A budget for efficient indoor residential water use (Rindoor) as described in section 967. (2) A budget for efficient outdoor residential water use (Routdoor) as described in section 968. (3) A budget for efficient water use on commercial, industrial, and institutional landscapes with dedicated irrigation meters or equivalent technology (CIIDIM) as described in section 969. (4) A budget for efficient real water losses (L) as described in section 970. (5) Budgets for any approved variances (V) and temporary provisions (Pr) as described in sections 967, 968, and 969. (6) A bonus incentive for potable reuse (BPR) as described in section 971.	The Regulation should recognize that there are and will continue to be inherent data quality limitations that impact suppliers' compliance with their water use objectives, such as landscape area measurement data, effective precipitation and population data. Currently, the Regulation does not account for data errors and variability. We note that the water loss performance standards do account for data variability.	Include a "Data Error Factor" (DEA) in the formula for calculating suppliers' urban water use objectives. The DEA would be a percentage, of either five or ten percent, applied to a supplier's budget for efficient indoor residential water use, efficient outdoor residential water use and efficient water use on a CI landscapes with a dedicated irrigation meter or equivalent technology, as follows: $WUO = (Rindoor + Routdoor + CIIDIM)DEA + L + V + Pr + BPR$ The DEA would recognize suppliers' historic progress and achieved savings (SB X7-7 based) and acknowledge that data used to develop and evaluate standards has intrinsic errors. The magnitude of the DEA would reduce over time as suppliers achieve progress towards their water use objective. We are proposing a five percent DEA for suppliers achieving less than 20 percent reduction from SB X7-7, and a 10 percent DEA for suppliers achieving 20 percent or greater of reduction from SB X7-7.	(c)(7)A Data Error Adjustment (DEA) added to Rindoor, Routdoor, and CIIDIM to account for variability in data accuracy. The percentage will be applied based on a comparison with SB X7-7 targets as follows: (i) TIER 1: Suppliers achieving <= 20% reduction from SB X7-7: +5% of (Indoor + Routdoor + CIIDIM budget) (ii) TIER 2: Suppliers achieving > 20% of reduction from SB X7-7: +10% of (Indoor + Routdoor + CIIDIM budget)
966	(i)	Methodology - Alternative Compliance	See "Outdoor Standards" Tab Row 3.	See "Outdoor Standard" tab Cell E3.	See "Outdoor Standard" tab Cell F3.	(i) Starting in 2025, a supplier may be eligible for an Alternative Compliance Pathway for approval of the Board, that demonstrates a good faith effort toward improving water use efficiency and climate resiliency by meeting all the criteria in paragraphs (1) or (2) may, in calculating its budgets for efficient outdoor residential water use and for commercial, industrial, and institutional landscapes with dedicated irrigation meters, apply the standards described in sections 968(a)(2) and 969(a)(2) through 2040. (1) (A) The average median household income of the supplier's service area is less than or equal to 80 percent of the median household income of California. (B) The urban water use objective calculated by the supplier pursuant to subsection (b) would result in an objective that is 80 percent or less of the supplier's actual urban water use, calculated in accordance with section 10609.22. (C) The annual reports the supplier has submitted since 2030, pursuant to section 975, show that the supplier is making continued progress, reducing its actual urban water use by an average of no less than 2 1.5 percent per year. (D) The supplier shows to the satisfaction of the board that it is unable to meet its urban water use objective because of the applicable outdoor standards identified in sections 968 and 969. The supplier verifies it offers a proactive water use efficiency program that address indoor and outdoor water use, as well as low-income water users. (2) (A) The urban water use objective calculated by the supplier pursuant to section 966 would result in an objective that is 80 percent or less of the supplier's actual urban water use, calculated in accordance with section 10609.22. (B) The annual reports the supplier has submitted since 2030, pursuant to section 975, show that the supplier is making continued progress, reducing its actual urban water use by an average of no less than 2 percent per year. (C) The supplier verifies it offers a proactive water use efficiency program that address indoor and outdoor water use, as well as low-income water users. The supplier verifies compliance with requirements of the C480 Water Conservation and Efficiency Program Operation and Management.
966	NA	Methodology - Compliance	NA	A supplier may not comply with its water use objective because it is unable to obtain the information required for variances due to resource or other limitations. The State's goal should be for successful compliance with the Regulation. Prior to taking any enforcement action, the State should offer technical assistance to a supplier to determine if the unique water uses in its service area, for which variances are available, would bring the supplier into compliance.	Clarify that if a supplier does not meet its water use objective because it is unable to obtain the information required for the variances, prior to the issuance of any enforcement action, technical assistance must be offered to the supplier.	(i) If a supplier does not comply with section 966(a) because it is unable to obtain the information required in section 967(c) and 968(f) due to resource or other limits, prior to the issuance of any enforcement action, technical assistance must be made available to the supplier.
967	(c)	Variances - Eligibility	(b)(1) An urban retail water supplier may, in calculating its urban water use objective, include budgets for variances identified in paragraph (2) for residential indoor use, if: (A) The supplier submits supporting information meeting the criteria described in subdivision (e); and (B) The associated water use, for any individual variance, represents 5% or more of the sum of the budgets associated with the standards described in section 966 (c)(1) through (4).	The enacted legislation requires the State Water Board to establish appropriate variances for unique uses that can have a material effect on water use of an urban retail water supplier. The regulation currently proposes that an individual variance must represent 5% or more of the sum of a water suppliers budget. This threshold fails to recognize the cumulative impact unique water uses could have on suppliers' ability to comply with their water use objectives. Variances are not a "bonus" or "alternative compliance" mechanism. Variances were intended to account for unique water uses within suppliers' service areas in order to provide an accurate water use objective.	Establish a cumulative threshold for variances of 5%.	(b)(1) An urban retail water supplier may, in calculating its urban water use objective, include budgets for variances identified in paragraph (2) for residential indoor use, if: (A) The supplier submits supporting information meeting the criteria described in subdivision (e); and (B) The associated water use, for the sum of all any individual variances, represents 5% or more of the sum of the budgets associated with the standards described in section 966 (c)(1) through (4).
967	(d)	Variances - Recycled Water	(d) An urban retail water supplier may request a temporary provision to respond to negative impacts to wastewater collection, treatment, and reuse systems, if the supplier shows to the satisfaction of the Board that meeting the objective pursuant to section 966 would require adhering to the applicable residential indoor standard identified in Water Code section 10609.4 and that meeting the budget for efficient residential indoor use is causing challenges within wastewater collection, treatment, and reuse systems.	Recycled water is a permanent and long-term investment. The Governor's signing message for SB 1157 encourage the State Water Board to develop a variance to reflect local investments in recycled water and infrastructure.	Remove "temporary."	(d) An urban retail water supplier may request a temporary provision to respond to negative impacts to wastewater collection, treatment, and reuse systems, if the supplier shows to the satisfaction of the Board that meeting the objective pursuant to section 966 would require adhering to the applicable residential indoor standard identified in Water Code section 10609.4 and that meeting the budget for efficient residential indoor use is causing challenges within wastewater collection, treatment, and reuse systems.

APPENDIX: SUGGESTED REDLINE RECOMMENDATIONS METHODOLOGIES

967	(e)(1)	Variances - Eligibility	(e) In order to receive approval for a variance or a temporary provision for a given reporting year, an urban retail water supplier must submit to the Board, by October 1, for review and approval by the Executive Director, or the Executive Director's designee, a request that includes the following components:	We do not anticipate significant annual variability of water use associated with the variances. Requiring annual submittal and approval of the variances will place significant administrative burden on suppliers that does not achieve actual water savings, as well as the State Water Board.	Allow for variances, once approved, to be valid for five years.	(4) If a variance is approved it will be valid for a minimum of five years unless conditions change significantly. (5) If a variance has not been approved or denied by November 30 after submittal on October 1, the supplier can include the variance in its objective.
968	(e)(1)(B)	Variances - Eligibility	(e)(1) An urban retail water supplier may annually, in calculating its urban water use objective, include budgets for variances for residential outdoor water use if: (A) the supplier submits supporting information meeting the criteria described in subdivision (i); and (B) the associated water use, for any individual variance identified in paragraph (2)(A) through (C), represents 5% or more of the sum of the budgets associated with the standards described in section 966 (c)(1) through (4); or	Same as Cell E4.	Same as Cell F5.	(e)(1) An urban retail water supplier may annually, in calculating its urban water use objective, include budgets for variances for residential outdoor water use if: 13 (A) the supplier submits supporting information meeting the criteria described in subdivision (i); and (B) the associated water use, for the sum of all any individual variances identified in paragraph (2)(A) through (C), represents 5% or more of the sum of the budgets associated with the standards described in section 966 (c)(1) through (4); or
968	(h)(3)(B)(i)	Variances - Eligibility	(i) In order to receive approval for either a variance, a temporary provision, or the inclusion of special landscape areas for a given reporting year, an urban retail water supplier must submit to the Board, by no later than October 1, for review and approval by the Executive Director, or the Executive Director's designee, a request that includes the following:	Same as Cell E6	Same as cell F5	(i) In order to receive approval for either a variance, a temporary provision, or the inclusion of special landscape areas for a given reporting year, an urban retail water supplier must submit to the Board, by no later than October 1, for review and approval by the Executive Director, or the Executive Director's designee, a request that includes the following: (1) Information
975	(a)	Reporting - Fiscal Year	(a) Each urban retail water supplier shall submit to the Board, no later than January 1, 2024, and by January 1 every year thereafter, the report required by Water Code section 10609.24. The report shall reflect the conditions of the previous state fiscal year.	Water Code Section 10609.20 (b) states the objective calculation "shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year." However, the Regulation limits flexibility and would require suppliers report the conditions of the previous state fiscal year. It is unclear the benefit of requiring all suppliers to report on a fiscal year. Suppliers should be provided the discretion to report most accurately and cost-effectively to the State, based on available data. This would be consistent with water loss reporting which also provides suppliers discretion to report on either a fiscal or calendar year.	Provide flexibility for water suppliers to either report on a state fiscal year or calendar year, consistent with the water code.	(a) Each urban retail water supplier shall submit to the Board, no later than January 1, 2024, and by January 1 every year thereafter, the report required by Water Code section 10609.24. The report shall reflect the conditions of either the previous state fiscal year or calendar year.

Governor Newsom Streamlines Sites Reservoir Project

Maven's Notebook | November 6, 2023 | Office of the Governor

Press Release

Today, Governor Gavin Newsom took action to accelerate the Sites Reservoir project, utilizing new tools from the [infrastructure streamlining package](#) to build more faster. This project, if ultimately approved, would capture water during wet seasons and store it for use during drier seasons – holding up to 1.5 million acre-feet of water, enough for 3 million households' yearly usage.

The project has received a total of \$46.75 million in early funding from the state. In all, Sites is eligible for \$875.4 million of Proposition 1 funding. Total project cost is estimated at \$4 billion.

[Sites-Project-Certification](#)

HOW IT WORKS:

SB 149 allows the Governor to certify qualifying infrastructure projects for judicial streamlining under the California Environmental Quality Act (CEQA).

Courts must decide CEQA challenges to certified projects within 270 days to the extent feasible – saving months or even years of litigation delays after a project has already passed environmental review, while still allowing legal challenges to be heard.

HOW WE GOT HERE:

In July, Governor Newsom signed into law a package of bills to accelerate critical infrastructure projects across California that will help build our 100% clean electric grid, ensure safe drinking water and boost the state's water supply, and modernize our transportation system.

By streamlining permitting, cutting red tape, and allowing state agencies to use new project delivery methods, these new laws will maximize taxpayer dollars and accelerate timelines of projects throughout the state, while ensuring appropriate environmental review and community engagement.

The package will take full advantage of an unprecedented \$180 billion in state, local, and federal infrastructure funds over the next ten years while creating an estimated 400,000 good-paying jobs.

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For Release: Nov 2, 2023

**Reclamation and Sites Project Authority finalize plans to create
new water storage in Northern California**

*Sites Reservoir would increase California's existing water supply by
providing 1.5 million acre-feet of additional storage capacity to the state during times of drought*

SACRAMENTO, Calif. – Today, the Bureau of Reclamation and Sites Project Authority released final plans to create new off-stream water storage in the Sacramento Valley. The proposed reservoir—Sites—would be the second largest off-stream reservoir in the nation and would increase Northern California's water storage capacity by up to 15 percent.

"Investing in Western water infrastructure is a top priority for Reclamation and the Biden Administration as witnessed by the commitment of funding from the Bipartisan Infrastructure Law," said Commissioner Camille Calimlim Touton. "We are proud to support projects that will provide operational flexibility and more reliable water delivery to benefit farms, communities, and the environment. We stand in partnership with the State of California and the JPA with projects like Sites Reservoir."

"This is a really big step forward for the Sites project and another example of how state and federal agencies are working together to build our water resilience amidst climate change," said California Natural Resources Secretary Wade Crowfoot. "Sites Reservoir promises to help us adjust to intensifying floods and droughts by storing water in big, wet winters like we just had for use during the dry years that we know will return. The environmental review that has just been completed for the project will guide how this project can operate in alignment with existing water and environmental management, as well as other water infrastructure. We have no time to waste to put these climate solutions into place."

President Biden's Investing in America agenda represents the largest investment in climate resilience in the nation's history and is providing much-needed resources to enhance Western communities' resilience to drought and climate change. Through the Bipartisan Infrastructure Law, Reclamation is investing a total of \$8.3 billion over five years for water infrastructure projects, including water storage and conveyance, dam safety, water purification and reuse, and desalination.

A \$30 million investment to the project under the Bipartisan Infrastructure Law was announced in October 2022 and an additional \$30 million in July 2023. The project was also authorized

\$173.7 million from the Water Infrastructure Improvements for the Nation Act, for a total of \$233.7 million in federal contributions to date.

Located 81 miles northwest of Sacramento, Sites Reservoir would store water diverted from the Sacramento River, after all other water rights and regulatory requirements are met. Water will be released to beneficiaries throughout the state primarily during drier periods when it is needed. The proposed project includes an off-stream reservoir located north of the Sacramento-San Joaquin Delta where the majority of California's rainfall occurs.

"We are pleased to partner with Sites Project Authority on this unique off-stream storage project to create operational flexibility and additional water storage in California," said Regional Director Ernest Conant. "The multi-beneficial Sites Reservoir provides water supply and flood protection, plus environmental and recreation benefits for generations to come."

"Sites Reservoir is a new way of managing water that will adapt to our changing climate and provide a more reliable water supply for California's communities, farms, and environment," said Fritz Durst, Chair of the Sites Project Authority. "We are grateful for the ongoing support of the Bureau of Reclamation, which exemplifies the spirit of collaboration that's been a hallmark of Sites Reservoir."

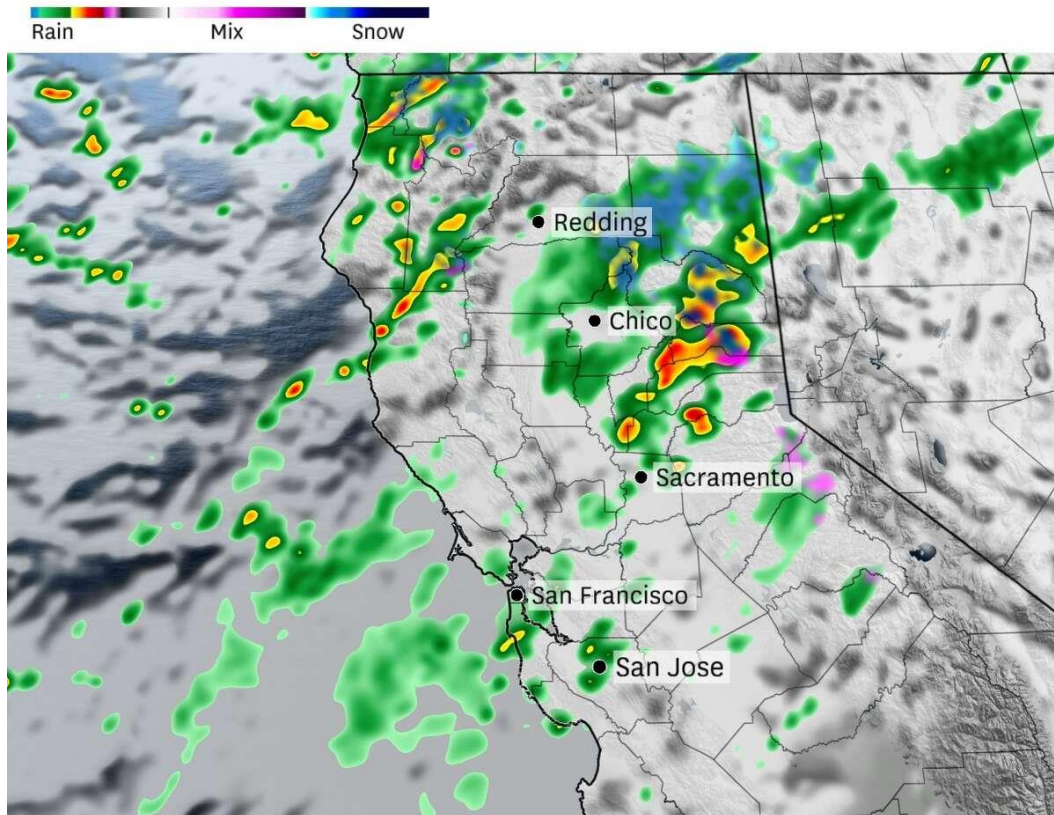
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View the combined final environmental impact report/environmental impact statement online at https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=29024 or <https://sitesproject.org/environmental-review/>. To learn more about the project, visit <https://sitesproject.org>.

California weather: Heavy rain, thunderstorms and mountain snow are in forecast

San Francisco Chronicle | November 6, 2023 | Anthony Edwards

Future clouds and precipitation: Monday 2:00 PM



Rain showers, heavy at times, are expected across Northern California on Monday. Snowfall is expected as low as 5,000 feet in the Sierra Nevada on Monday night. Baron/Lynx

A passing cold front will bring active weather to Northern California on Monday. Chilly air, heavy rain showers, isolated lightning strikes and Sierra Nevada snow are all in the forecast for the next 24 hours.

The cold front will bring a line of moderate rain showers to the Bay Area in the morning and early afternoon. These showers will fall as snow in the Sierra Nevada, where half a foot is forecast at ski resorts. Additionally, lightning strikes are possible over the North Bay and Sacramento Valley. Highs will be in the 60s, with lows dropping to the 40s.

Turbulent Northern California weather

Over the weekend, the heaviest rain remained well north of the Bay Area, but Monday is expected to be different.

A cold front will move over the North Bay and Peninsula in the morning into the East and South Bay by noon. This cold front will generate areas of light to moderate rain showers. Isolated

downpours are also possible, heavy enough to lead to ponding water on roadways in the North Bay and along the Peninsula during the morning commute.

Showers will continue in the afternoon, some of which could be in the form of thunderstorms. Expected impacts include lightning, heavy rain, small hail and gusty winds. The most likely chance of storms will be along the North Coast, Sacramento Valley and North Bay.

Expected rainfall totals are 0.4 inch in the North Bay; 0.25 inch in San Francisco, Oakland and the Peninsula; 0.1 inch in the Tri-Valley and Santa Clara Valley. Locally, higher totals are possible under downpours and on the west-facing slopes of hills and mountains.

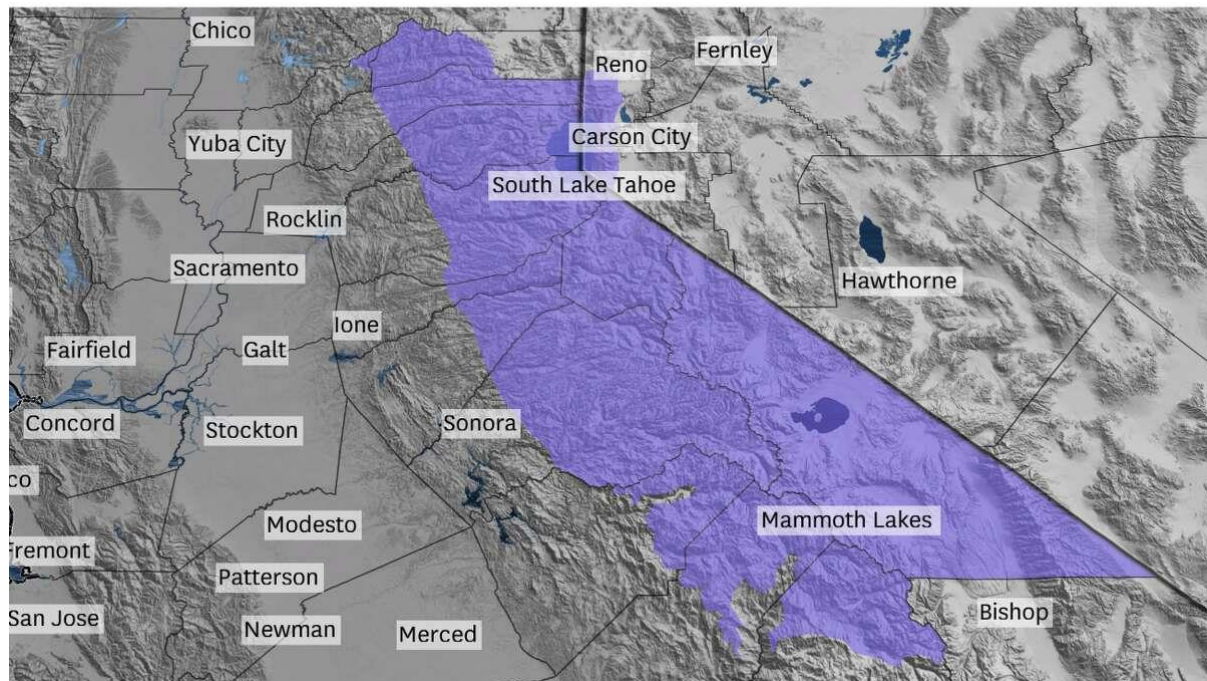
Sierra snow

Winter weather alerts

Winter Storm Warning

Winter Storm Watch

Winter Weather Advisory



The National Weather Service has issued winter weather advisories for the Sierra Nevada on Monday. Up to 8 inches of snow is possible at Sonora and Tioga passes. Baron/Lynx

Colder air filtering in behind the weather system Monday night will drop snow levels across the Sierra Nevada, falling from 6,500 feet Monday afternoon to 5,000 feet Tuesday morning. A dusting of snow is expected at Lake Tahoe, with up to half a foot at Kirkwood, Heavenly and Mammoth ski resorts, and even more at Sonora and Tioga passes.

Rest of the week

Showers will taper Monday night, with clouds slowly clearing into Tuesday morning. The recent rains will lead to areas of fog Monday night, with the most dense fog likely in the North Bay.

Highs will stay on the cool side Tuesday, Wednesday and Thursday, in the 60s to lower 70s. Lows will be chilly, in the 40s. Parts of Wine Country will drop into the 30s Tuesday and Wednesday nights. Precipitation chances return to the Bay Area by Friday.

Monday breakdown

San Francisco: Rain showers are likely around the city, with the greatest chance between 6 a.m. and noon.

Showers will start off light before becoming more intense by mid- to late morning as a cold front passes through. Rainfall totals are expected to be 0.1-0.25 inch, with the highest totals near Twin Peaks. The sun should peak through the clouds at times later in the day, but scattered rain showers will continue in the afternoon and evening.

Highs will be in the lower 60s in the Sunset and Richmond districts and in the mid-60s downtown, South of Market and in the Mission District. Lows will drop to near 50.

North Bay: Showers and thunderstorms are forecast across the North Bay on Monday. While the overall likelihood of lightning strikes is low, the greatest chance will be in Sonoma and Napa counties. Rain showers, heavy at times, are expected to come in waves, with the most widespread showers in the morning as the cold front passes.

Showers will continue into the afternoon, but the sun is expected to break through at times. Brief downpours, gusty winds and occasional lightning strikes are possible.

Highs will be in the mid- to upper 60s, except along the Marin coastline, where temperatures will remain in the lower 60s. Lows will drop to the 40s overnight, with fog expected across most of the area. Fog will be most dense in the Petaluma and Sonoma and Napa valleys.

East Bay: Light early morning drizzle in Richmond, Berkeley, Oakland and Alameda is expected to give way to heavier rain showers by the late morning as the cold front passes through. Showers will then be scattered, some heavy at times, in the afternoon.

Rain totals are expected to range from 0.15 inch in Fremont to 0.3 inch in the Oakland and Berkeley hills. In the rain-shadowed Tri-Valley, accumulations are expected to be lower.

Highs will be in the mid-60s along the bay shoreline to upper 60s in Concord, Walnut Creek, Dublin and Livermore. Lows will be in the mid-40s inland and near 50 by the bay.

Pacific Coast and Peninsula: The wettest day of the season so far is probably in store for the Peninsula. Overcast skies and moderate rain showers are forecast for the morning before giving way to a mix of sun and showers in the afternoon.

The biggest accumulations will be in Daly City, Pacifica and Half Moon Bay, and along Highway 92, with up to 0.3 inch. Totals will be lower in San Mateo and Redwood City. Highs will be in the

mid-60s at the coast and upper 60s along the bay shore. Lows will drop to the upper 40s with patchy fog.

South Bay and Santa Cruz: The cold front is expected to lose some of its punch by the time it reaches the South Bay, but widespread midday showers are expected to bring light accumulations to Santa Clara County.

The greatest rainfall totals will be in the Santa Cruz Mountains, with around a quarter inch. The Santa Clara Valley will be rain-shadowed by the mountains, so precipitation accumulations will be less in San Jose. Highs will be in the mid-60s in Santa Cruz and near 70 in San Jose. Lows will fall to near 50, except for the Santa Cruz Mountains, where mid-40s are likely. Fog is likely to form overnight in the Santa Clara Valley.

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Maps show California's remarkable drought recovery. Here's what comes next

SF Chronicle | November 6, 2023 | Gerry Díaz, Jack Lee

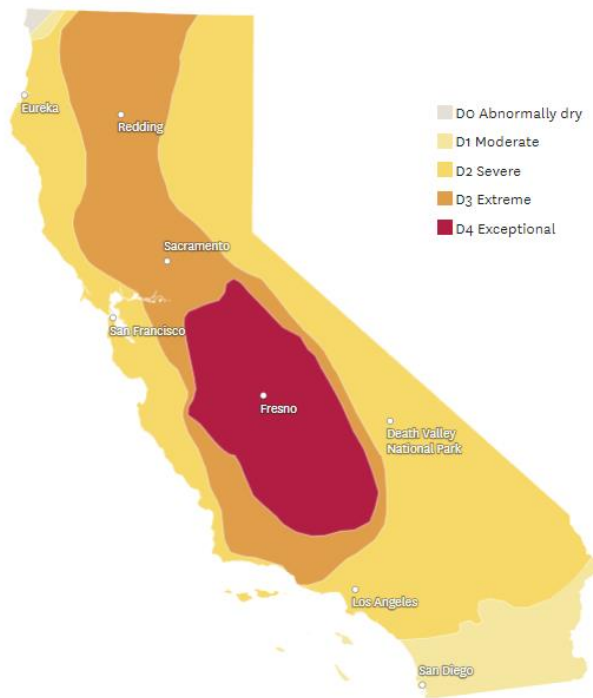
After years of enduring severe drought, U.S. Drought Monitor data reveals an apparent end to California's prolonged parched conditions. Maps and tables show that the Golden State has seen a remarkable turn of events since last November, as an abundance of rain and snowfall replenished dry landscapes.

California drought map as of Oct. 31, 2023



Map: Jack Lee / The Chronicle • Source: [U.S. Drought Monitor](#)

California drought map as of Nov. 1, 2022



Map: Jack Lee / The Chronicle • Source: [U.S. Drought Monitor](#)

The most recent map shows the state officially out of drought conditions.

There are only two small areas with abnormally dry conditions, places that are in drought recovery. A map from one year ago is vastly different and shows much of the state covered in drought.

Beginning last fall, waves of low-pressure systems arrived in California and raised occasional showers. These rains lead to subtle improvements by November 2022, but by then over 90% of the state was still afflicted with severe drought conditions.

The transition between La Niña and a neutral phase in the tropical Eastern Pacific picked up after November 2022, and was one of several factors that led to an intense wet pattern through the winter. By January, the constant stream of atmospheric rivers paired up with an onslaught of storm systems that lasted for months. Cold conditions enabled historic amounts of snow in the Sierra.

“The April 1 snowpack was only the fourth time since 1950 where the statewide average cleared 200%,” said Michael Anderson, state climatologist with the California Department of Water Resources, during an October media briefing.

Additional rounds of wet weather popped up in the summer, as the Eastern Pacific’s active hurricane season gave rise to Hurricane Hilary. Californians in Los Angeles and San Diego were issued the first tropical storm warnings in the state’s history as historic rains fell across Southern California, further stomping out extreme drought conditions.

By September, storms hosed down wildfires in Del Norte and Siskiyou counties, effectively ending extreme drought conditions in the northern tier of the state. The latest U.S. Drought Monitor update ended with 0% of the state afflicted with any drought conditions: a complete 180 from just one year ago.

California's drought recovery

Percentage of California in different U.S. Drought Monitor criteria Nov. 1, 2022 vs. Oct. 31, 2023

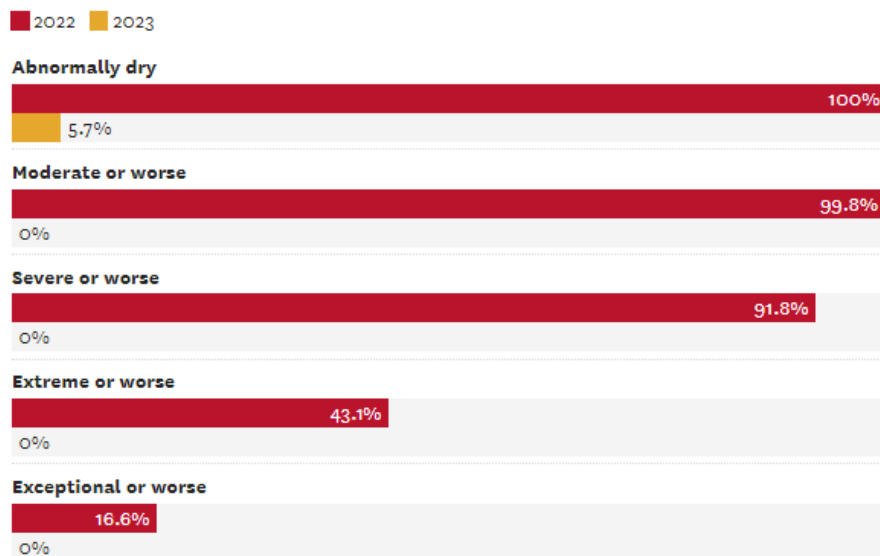


Chart: Anthony Edwards / The Chronicle • Source: [U.S. Drought Monitor](#)

The impacts of the years-long drought are still apparent despite the deluges over the past year. Snowmelt from the historic snowpack in the Sierra Nevada this past spring and summer replenished reservoirs across California. Other places in the southwest are still gripped by drought, though, including several reservoirs like Lake Mead in Arizona and Nevada, which still remains below capacity.

“(Lake Mead)” was at such a historic low level this past year that it’s still below the tier 1 shortage threshold,” said Daniel McEvoy, a researcher at the National Oceanic and Atmospheric Administration. “There still is a water shortage in Lake Mead and the Colorado River reservoir on the order of years and decades.”

It will take time for the region to fully recover from the effects of the years-long drought, especially depleted groundwater aquifers. The intense rainfall over the past several months served as an example

of the climate sensitivity between years of drought and sudden periods of heavy precipitation that has become a growing issue in California.

The coming months could continue to bring wet weather to the state, as the latest forecast from the Climate Prediction Center calls for conditions warmer and wetter than average. This year's wet season could be a different story compared to the last, with a potentially smaller snowpack and more flood concerns as rainwater falls on saturated soils.

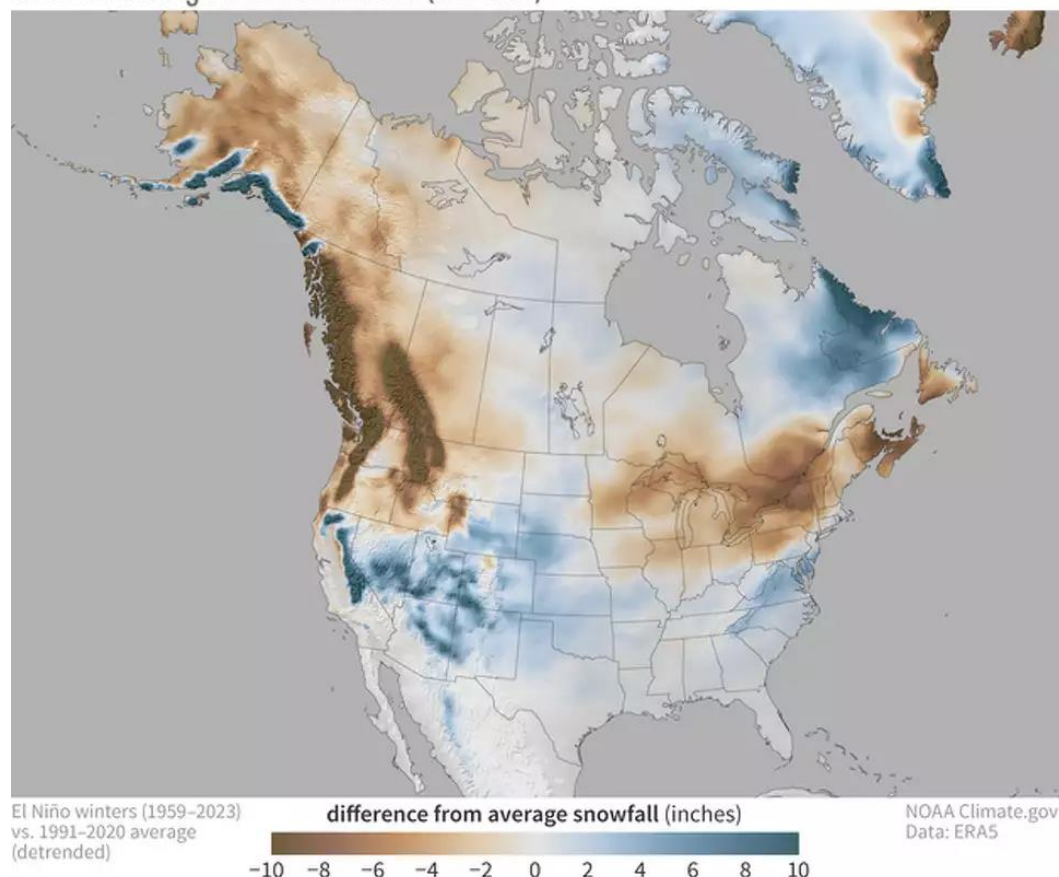
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What NOAA's new snow maps say about California's upcoming winter

SF Gate | November 6, 2023 | Amy Graff

Snowfall during all El Niño winters (Jan-Mar)



"Snowfall during all El Niño winters (January-March) compared to the 1991-2020 average (after the long-term trend has been removed). Blue colors show more snow than average; brown shows less snow than average," a description of the map reads from NOAA's Climate Prediction Center. NOAA's Climate.gov map is based on ERA5 data from 1959-2023 analyzed by Michelle L'Heureux. NOAA Climate Prediction Center

New maps from the National Oceanic and Atmospheric Administration show that a large part of California's Sierra Nevada has, on average, seen above-normal snowfall during El Niño events. With a strong El Niño pattern predicted to occur this winter, you may jump to the conclusion that the Golden State could see a massive snow pile-up this year.

But Michelle L'Heureux, a physical scientist at NOAA's Climate Prediction Center, cautions against viewing the maps as a forecast for what is likely to happen this winter. Rather, they are historical data that show how snowfall deviated from the average in winters marked by El Niño weather patterns. On the map, which uses data from 1959 to 2023, brown depicts less-than-normal snowfall and blue is above normal.

The key is to recognize that within the average, the Sierra has seen wild swings in snowfall, with some years recording above-normal snowfall and others below-normal. In fact, L'Heureux and her

team found that in the Sierra, depending on the region of the mountain range, there were six to eight El Niño years with above-average snowfall and five to seven with below-average.

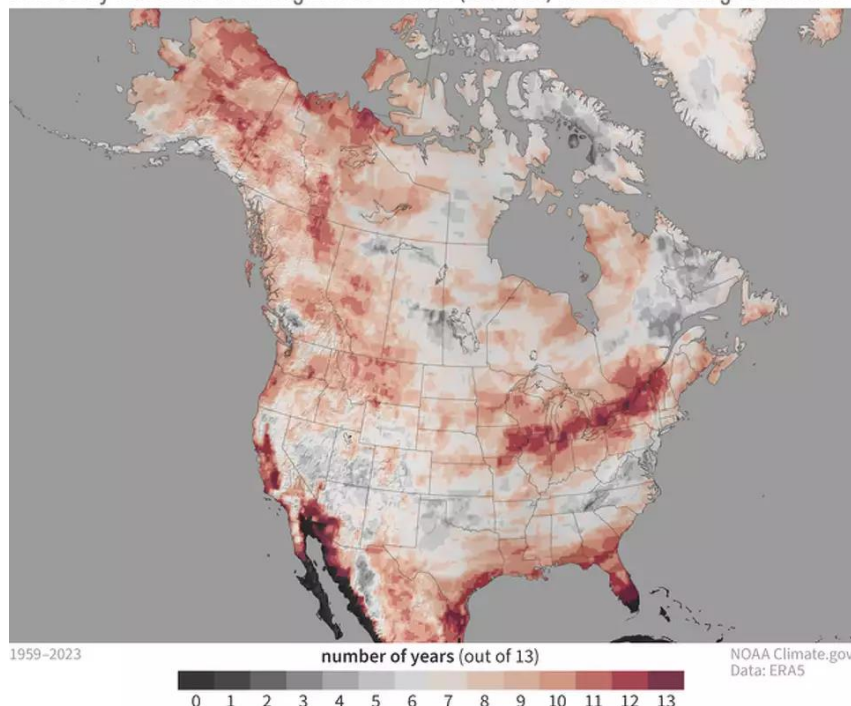
In those above-average years, the deviation was greater than in the below-average ones. Because of this, the big snow years dominate the map, giving the impression above-average snowfall is likely in an El Niño year. In reality, what happens in the Sierra is "more of a coin flip," L'Heureux wrote in an email.

El Niño develops in the equatorial waters of the Pacific Ocean when the trade winds ease and warm ocean water collects at the equator in the central and eastern Pacific. The warmer sea surface temperature in an El Niño year can shift the jet stream, high-altitude winds that generally move west to east over the continents. Movement in the jet stream can impact weather across the globe, especially in winter months, leading some areas to be drier and some areas to be wetter than is normal.

"The jet stream tends to extend eastward and shift southward during El Niño winters," L'Heureux and her team wrote in a blog post featuring the maps. "You can think of the jet stream as a river of air, which carries more moisture and precipitation along the southern tier of the United States during El Niño. As a result, it is not surprising to see a stripe of increased snowfall (blue shading) over the southern half of the country."

Sometimes in an El Niño year, the jet stream sets up in a way that brings increased snow to California, but that's not always the case. El Niño conditions developed over summer and are expected to persist into the spring, according to the most recent forecast from the Climate Prediction Center. There's a 75-85% chance a strong El Niño will occur November through January.

How many moderate-to-strong El Niño winters (Jan-Mar) had below-average snowfall?



"Number of years with below-average snowfall during the 13 moderate-to-strong El Niño winters (January-March average) since 1959. Red shows locations where more than half the years had below-average snowfall; gray areas below-average snowfall less than half the time," a description of the map reads from NOAA's Climate Prediction Center. NOAA's Climate.gov map is based on ERA5 data from 1959-2023 analyzed by Michelle L'Heureux. NOAA Climate Prediction Center.

California's state climatologist Michael Anderson called the new maps "a great data product for climate analyses," but he said it's important to understand the caveats.

"A key caveat is that the maps depict average conditions and each storm event, and each winter is likely to be different than the average," Anderson, who works for the California Department of Water Resources, wrote in an email. "This is particularly true for California as we are seeing more extremes on both ends of the wet/dry spectrum. In 2015 (a weak El Niño year), California had its lowest snowpack on record, while in 2019 (a weak to moderate El Niño year), California experienced one of the 5 largest snowpacks on record. The super El Niño of 2016 produced the only near-average snowpack in the past decade. This variability can't be ignored in California.

"Bottom line, the new data set is a great way to map snowfall across North America and evaluate changes as the world warms, but averages associated with El Nino and Southern Oscillation phases are not always good predictors for seasonal outcomes for California."

Anderson said the Department of Water Resources is working with a team of researchers to explore how to produce "more skillful" long-range season outlooks for the state that incorporate other climate influences, including weather patterns beyond El Niño and the inverse La Niña. The Madden-Julian Oscillation, marked by thunderstorms that circle the equator and help foster storms, may have helped drive the historically wet 2022-23 winter.

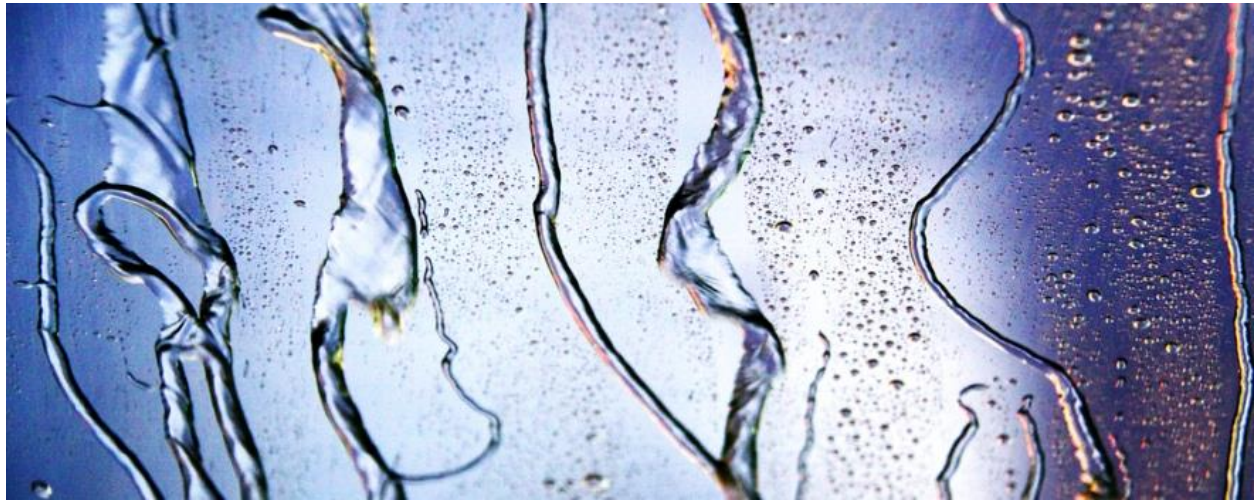
Until more accurate outlooks are available for California, it's good to be prepared for any of one three scenarios in the Sierra: above-normal, below normal or even ordinary, normal snowfall.

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Annual Supply Report shows water suppliers well positioned for 2023

Maven News and Features | October 23, 2023



The 2023 Annual Water Supply and Demand Assessment Summary Report summarizes the Department of Water Resources' review of Urban Water Suppliers' Annual Water Shortage Assessment Reports for the State Water Resources Control Board. The report includes water shortage information at the supplier level, as well as regional and statewide analyses of water supply conditions.

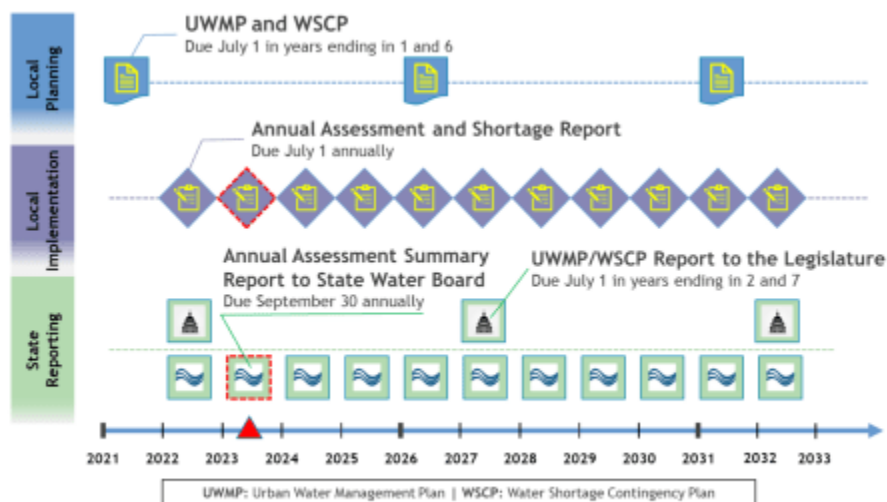


Figure ES-1. Water Shortage Contingency Planning and Implementation Timeline

To effectively address any near-term shortages, urban water suppliers are required to have appropriate shortage response actions in place, aligned with different shortage levels. This proactive approach allows suppliers to effectively manage and balance supply and demand during anticipated shortages, preventing them from becoming a reality. During times of drought emergency, the State Water Board defers to the locally adopted plans wherever possible.

In the second year of reporting, suppliers submitted their reports in a more timely manner. Additionally, some suppliers who didn't submit a report last year did so for the first time

this year. The reports from suppliers reflect improved water supply conditions statewide, with a greater number reporting adequate supplies and no potential shortages. Even the few reports projecting shortages showed that suppliers had planned actions to resolve them.

Based on the completed Annual Shortage Reports, DWR has classified urban water suppliers into the following categories:

- No projected shortage: 95% of suppliers have assessed that they will have ample supplies to meet projected demand, even in a dry year.
- Fully addressed shortage: 5% of suppliers identified appropriate water shortage response actions to manage and mitigate potential shortages.
- Not fully addressed shortage: None of the suppliers that submitted reports showed remaining projected shortages.
- Unknown shortage status – unsubmitted reports: Less than 0.5% of suppliers have not submitted their reports.

Furthermore, urban water suppliers have reported planned actions based on the projected shortage levels. The analysis shows that fixing customer water leaks, outdoor water use restrictions, and restrictions on commercial, industrial, and institutional (CII) water use are among the commonly chosen actions.

The Annual Shortage Reports provide valuable information about local water supply conditions to the State. They also help urban water suppliers proactively prepare for potential water shortages in the coming year.

However, DWR recommends ongoing reassessments of water supply and demand be conducted throughout the year to effectively implement appropriate shortage response actions based on actual conditions. Continuous efforts to revisit water supply and demand assessments will ensure water supply reliability for customers and enable proactive measures to be taken.

[Click here](#) for 2023 Annual Water Supply and Demand Assessment Summary Report

#

Why Bay Area groundwater rebounded faster than elsewhere in California after winter storms
San Francisco Chronicle | October 28, 2023 | Clare Fonstein



A gauge shows the depth of water in the McClellan Groundwater Recharge Pond in Cupertino.
Jessica Christian/The Chronicle

After years of drought sapped groundwater in California, water tables rose as a result of the last rainy spring — with the largest year-over-year water level increases seen in the Bay Area.

And forecasters are predicting another rainier than average winter, which could further lift supplies.

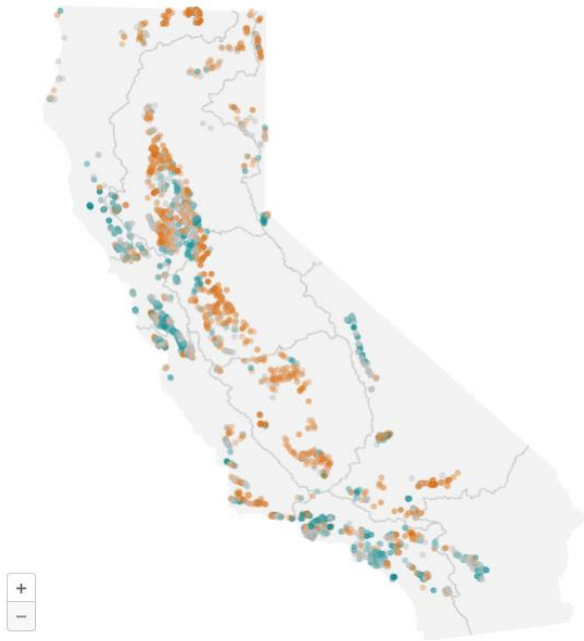
A small but measurable percentage of Bay Area wells reached historic highs this year — more than in any other region measured by the California Department of Water Resources.

“I was actually pretty impressed by how much water they did get in the ground this last year,” said Jean Moran, a hydrology expert at Cal State East Bay, though she noted that more years of significant rainfall would be needed to make a big dent.

California groundwater levels in spring 2023

Relative to historical well measurements during the same months

Lowest on record Much below normal Below normal Normal Above normal
Much above normal Highest on record



Map: Jack Lee / The Chronicle • Source: California Department of Water Resources

Most groundwater wells in the state, including in the Bay Area, have declined over recent decades, as pumping and drought have taken a toll.

“Long term and (in the) overall picture (California is) still way, way in a very big deficit from the last several decades,” Moran said.

Water tends to percolate downward from the surface into the aquifer more quickly in the Bay Area than in the Central Valley, where deep aquifers fuel the state’s vital agricultural industry. That’s partly because Central Valley soils have large amounts of clay, which causes water to pond near the surface.

“As any gardener knows, if you have a lot of clay in your soil ... you’re not going to get downward movement of water,” Moran said.

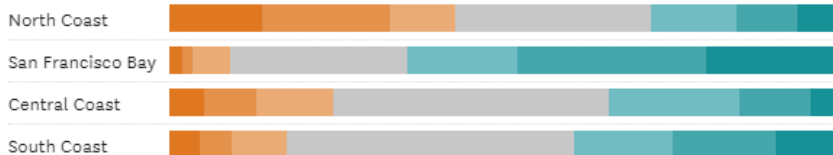
Groundwater aquifers also tend to be shallower in the Bay Area than the deeper basins in the Central Valley, leading to faster recharge here, Moran said — though shallow groundwater is more likely to be contaminated with pollutants like nitrates than deeper wells.

Regional variation in groundwater levels in spring 2023

Share of wells in each region, categorized by how measurements compare to historical data for the same months

Lowest on record Much below normal Below normal Normal Above normal
Much above normal Highest on record

Coastal California



Central Valley



Eastern California

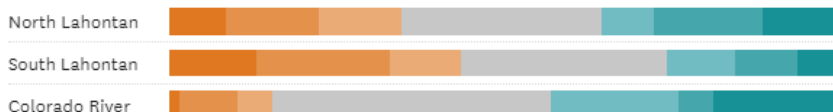


Chart: Jack Lee / The Chronicle • Source: California Department of Water Resources

Groundwater can take anywhere from weeks to hundreds of years to be restored when depleted, the California Department of Water Resources reported.

“A lot of people, when they’re explaining how fast groundwater moves say, ‘It’s slower than a snail’s pace,’ ” said Michelle Walden, groundwater resources manager for the Alameda County Water District, where water levels generally rose as a result of the wet winter.

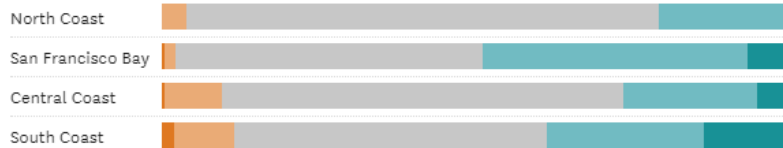
Statewide, after the past winter, groundwater levels were higher at 21% of wells when compared with levels five years ago.

Regional variation in one-year groundwater level change

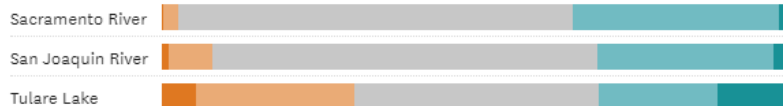
Share of wells in each region, categorized based on the change in well measurements between spring 2022 and spring 2023

Decreased more than 25 feet Decreased 5 to 25 feet No significant change Increased 5 to 25 feet Increased more than 25 feet

Coastal California



Central Valley



Eastern California



Chart: Jack Lee / The Chronicle • Source: California Department of Water Resources

But the longer-term picture remains quite bleak. Forty-five percent of the state's wells recorded lower water levels than 20 years ago, according to Department of Water Resources data. Bay Area wells closely tracked the state average, with slightly less than 45% of local wells dropping in water level since 2003.

While some Bay Area rural and agricultural regions rely almost completely on groundwater, the Bay Area is less dependent on groundwater than other parts of the state. San Francisco, for example, gets most of its water from the Hetch Hetchy reservoir. Across California, groundwater usually makes up about 40% of the water supply, increasing to 60% in dry years.

Another wet winter could be helpful in replenishing aquifers. Federal forecasters' winter outlook, released Oct. 19, gives the Bay Area higher than average odds of a wet (and warm) winter.

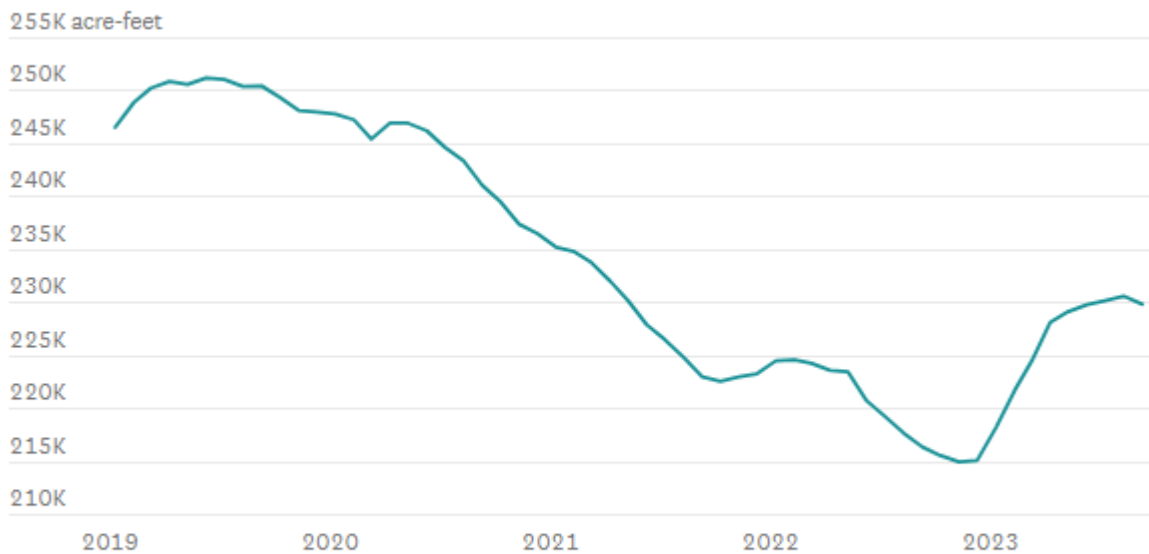
Before last winter's atmospheric rivers, many of Sonoma County's groundwater basins sat at or near historic lows as a result of multiple dry years and heavy pumping, according to Marcus Trotta, Sonoma Water's principal hydrogeologist.

While groundwater levels in Sonoma Water's basins have largely been recovering from drought, Trotta said that in some parts of Sonoma and Marin counties, the recent wet winter was not enough. In the Sonoma Valley in particular, Trotta said, groundwater levels have been declining for decades and recharge hasn't kept up with pumping.

East Bay groundwater levels have experienced a partial recovery from drought.

From January 2020 to October 2022, the water elevation at the Livermore Valley groundwater basin — which supplies about 15% of the water for more than 260,000 people in the Tri-Valley area — dropped 46 feet. This year, it rose 29 feet, according to data from the Zone 7 Water Agency, which serves the region.

Livermore Valley groundwater storage, 2019-23



One acre-foot equals about 326,000 gallons

Chart: Jack Lee / The Chronicle • Source: Zone 7 Water Agency

“The water levels are going back up to where they should be,” said Ken Minn, groundwater resources manager for the agency. In addition to relying on natural recharge, the agency, like many others across California, also works to boost aquifer levels by diverting spare surface water to areas, including ponds, where the sediment is conducive to water percolating down into the aquifer or the water can be pumped down.

In Napa County, which gets 47% of its water supply from groundwater, the groundwater levels were also lower than they had been in past years going into 2023. The region’s main groundwater subbasin showed significant recovery following the rainy season but didn’t completely bounce back, said Jamison Crosby, natural resources conservation manager for Napa County.

“We were kind of filling something that was artificially low, so we haven’t filled it all up yet,” Crosby said.

In Santa Clara County, wells in some areas that have been measured for decades reached historically high levels following the rainy season, according to Vanessa De La Piedra, groundwater unit manager at Santa Clara Valley Water District. In the past, groundwater depletion was so extreme in the Santa Clara Valley that portions of land subsided 13 feet, according to the district.

De La Piedra said that for the most part, groundwater used by the agency was either fully back to pre-drought levels or nearly there.

So how long will the bounty last? That will depend on the climate and pumping habits, according to Trotta, who noted that groundwater levels typically drop in the summer and fall months, as the dry season takes hold and pumping increases.

If a parade of multiple, closely spaced atmospheric rivers arrives, the groundwater can actually rise to a problematic level in some areas, including the East Bay, Moran noted. If the water table gets high enough it can flood basements or storm sewers, she said.

“If you have three big atmospheric rivers in a row, you can have a situation where the system gets overwhelmed and you end up with water in places you didn’t want it,” Moran said.

Conversely, the effects of low groundwater can also be seen in the ecosystem. Groundwater feeds into surface water in some areas, supplying water for creeks and wetlands. Low groundwater levels would deplete the water supply for those waterways, Trotta said.

“Our strategy is always to keep our groundwater basin pretty full because we know there’s going to be another drought,” De La Piedra said. “We just don’t know when it’s going to be, so we always want to keep our basins as full as we can ... because that’s kind of our emergency storage buffer.”

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Recent delta earthquakes a reminder of why modernizing our water infrastructure is vitally important

DWR News | October 24, 2023



From the Department of Water Resources:

News of yet another earthquake in the heart of the Delta in the last week is a serious reminder about the importance of modernizing and protecting water supply infrastructure.

In a report by CBS News last week, Austin Elliott with the US Geological Survey (USGS) said that “a very large earthquake, centered near the Delta, would pose a particularly significant threat to both protective systems that the levees provide, as well as the water distribution and intake systems.”

He also said that “Larger earthquakes magnitude — five or six — would begin to produce liquefaction and damage some of the infrastructure and geotechnical work there.” And according to the USGS, there is a 72 percent chance of a 6.7 or greater magnitude earthquake occurring in the Bay Area by 2043.

The Delta Conveyance Project is meant to help the State Water Project guard against these seismic threats.

DWR has also invested millions of dollars to reinforce many Delta levees through the Delta Levees Special Flood Control Projects programs. Additionally, DWR has been planning for and strategizing how to address the earthquake risk and potential disruption to California’s water supply and has developed detailed plans to guide response and recovery efforts.

For more information on how the proposed Delta Conveyance Project would make California's water supply more earthquake resilient, check out this digital article and these two in-depth videos ([Part 1](#) and [Part 2](#)).



###

State Water Board's Delta Plan Is No Fix for Fish and Hurts Farms

California Farm Water Coalition | October 26, 2023

In announcing its new Bay-Delta Water Quality plan, the California State Water Resources Control Board said it wanted to “change the channel” on California’s water debate.

We completely agree it’s time to move away from outdated thinking and embrace new, collaborative, science-based solutions and therefore are puzzled that the board is stubbornly clinging to the same failed approach of the past.

In a stated attempt to help endangered fish populations, the “new” plan dramatically increases the amount of water that must remain in the San Joaquin, Stanislaus, Tuolumne and Merced rivers, which significantly decreases the amount available for farms, cities, schools and others.

The problem is that flushing water through the system and out to sea is exactly what officials have done for more than 25 years to no effect – fish have continued to decline. All the board is doing is doubling down on the same unsuccessful strategy.

There’s no question fish need water. However, what scientists have learned is that rather than focusing on the total amount of water in the river, we should pursue “functional flows” that release water when, where and how it makes sense from a biological perspective. We’ve also learned that fish continue to decline for a host of reasons, in addition to water. Their numbers are affected by an increase in predators, loss of habitat and a decrease in food supply, which is why scientists now recommend a holistic approach to policy that addresses multiple factors, instead of just one.

And these are not just studies. Locally driven projects throughout California have had success increasing fish populations by employing these tactics. Just one of many examples is the Butte Creek salmon recovery project. Through the efforts of agricultural, urban and environmental communities working together to address multiple factors, more than 10,000 spring-run salmon return on average to Butte Creek each year, up from fewer than 100 in some years as recent as the mid-1990s.

We also need to examine this policy from the other side of the ledger. Not only does doubling the amount of water left in the rivers fail to help fish, it causes serious harm to the people deprived of that water. The proposed policy would strip farms and communities of almost 350,000 acre-feet of additional water from February to June during dry years – enough to irrigate 100,000 acres of farmland or meet the domestic needs of more than 2 million people for an entire year.

There’s no doubt that the farms Californians count on to deliver fresh food to their families would be devastated. This plan will leave thousands of acres of farmland with zero surface supply in certain water years, stripping the Central Valley of over 6,500 jobs and \$1.6 billion in economic

output, according to Turlock and Modesto irrigation districts.

However, it's important to note that the damage doesn't stop with farms. During the past several years, as this policy has been considered, people throughout the state have written the board, asking that their voices be heard: Education officials are concerned about water supplies for schools, water experts worry this will stall groundwater replenishment, health officials are troubled by potential impacts on sanitation, cities large and small don't know how they will replace the lost supply, Bay Area experts are alarmed by potential cuts to water supply, lost jobs and lost economic activity ... the list goes on and on.

Despite dozens of meetings and hearings, as well as thousands of letters and pieces of testimony from cities, farms, school districts, water experts and scientists, the board has not adjusted the policy at all.

Changing the channel works only if you have the sound turned on.

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About California Farm Water Coalition

CFWC is a non-profit, educational organization formed in 1989 to provide fact-based information on farm water issues to the public. The organization works to help consumers, elected representatives, government officials and the media make the connection between farm water and our food supply.

City of Pacifica weighs options after hate-filled calls

Pacifica Tribune | October 3, 2023 | Peter Tokofsky

After a series of individuals disrupted the most recent meeting of the Pacifica City Council by spewing racist vitriol over Zoom during public comment, Mayor Tygarjas Bigstych said he would confer with the council and staff to determine best steps to prevent it from happening again.

“We’re thinking it through deeply,” the mayor said, “because this affects our staff, the community and city council.” In the meantime, council meetings will not allow remote public comment.

Bigstych said he and other council members became aware just minutes before the meeting that the attacks on decency that have hit other councils around the Bay Area and across the country could occur in Pacifica. He expressed his gratitude to staff, and said it gave them a warning to begin planning a response.

As they consider options, council members will weigh the increased access that remote participation allows against abuses of the anonymity it provides. Bigstych will also solicit guidance from the city attorney on First Amendment issues that limit the ability of council to censor offensive speech.

“I don’t think anyone has in mind taking away remote participation indefinitely,” the mayor said. “We will discuss how to go forward.”

While some residents expressed fear that the culprits might show up in person, Bigstych said, “I am not afraid.” On the contrary, he urged them to come. “If they set foot in the chambers, they will distinguish themselves from the cowardice.” If they come in person, the mayor added, “they will have the opportunity to be touched with the power of love we have in our community.”

Similar “Zoom-bomb” attacks have occurred in other Bay Area cities in recent weeks. The callers typically use fake names and do not show their faces when speaking, making it difficult to track them down and determine if they have any connection to the city. Traditionally, it has not been necessary to have any connection to the city in order to speak during public comment periods. Bigstych said he has seen reports suggesting callers could be as far away as Florida.

State Sen. Josh Becker, who was in Pacifica on Friday to record an installment of “The Mayor’s Office” video series with Bigstych, said he is aware of the problem and that his staff is preparing a set of best practices to guide city councils when they confront the disruptions.

In the meantime, cities across the region are girding for further hate speech. “We will be ready if it happens,” Half Moon Bay Mayor Deborah Penrose wrote in an email.

Becker said that some of the Zoom intrusions could qualify as stochastic terrorism, a term used to describe vilifying a group of people in order to incite violence in unpredictable ways. By keeping their comments unspecific, speakers engaging in this variety of terrorism try to avoid responsibility.

Becker and Bigstych both said they expect officials will continue to look for ways to curb the tactic while preserving access to democratic processes.

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Public comment abuse leads to changes in Redwood City's meeting protocols

Mayor Gee responds to 'Zoom Bombing', First Amendment expert weighs in

Almanac | October 3, 2023 | Michelle Iracheta

In what Mayor Jeff Gee calls a “proactive step” to avoid “vile, racist, anti-semitic” comments and disruptions ahead of council meetings, the city of Redwood City has overhauled its procedures, allowing only email or in-person comments during meetings.

The city will no longer allow virtual comments. The policy will be reevaluated in January 2024.

“This was a proactive step to try to minimize that from coming to Redwood City,” Gee said. ... “We’re trying to figure out how to not have our communities intimidated by others who want to espouse hate and a number of other less-desirable traits.”



The announcement to change public comment protocols came just 72 hours before Monday’s council meeting.

Mayor Jeff Gee, Vice Mayor Lissette Espinoza-Garnica and Council Member Alicia C. Aguirre, get ready after attending a close session held at the beginning of the City Council meeting on March 13, 2023. Photo by Sebastian Miño-Bucheli.

At Monday's council meeting, resident Rona Gundrum, who appeared in person, told the city council that the new procedures placed a burden on the public by making them sift through lengthy agenda materials and send emails within a short time, restricting people from commenting in real-time after hearing presentations or responding to a previous speaker.

In an emailed comment sent ahead of Monday's meeting, resident Carrie Bloomquist asked the city council to explain who was responsible for the decision to change the public comment procedure. She emphasized the importance of free speech and expressed unease about what content and speech are acceptable.

But other commenters agreed with the decision.

Resident Nick Chiochios said he applauded the city council's efforts to change the protocols.

"Restricting real-time commenting is not free speech suppression," he wrote.

According to Gee, the city "has had two past incidents of 'zoom bombing.'" He added that it has also happened on another board he's on.

Gee said other public officials he's spoken with are also reviewing their public comment procedures.

In Atherton on Sept. 20, the city council meeting was bombarded with attendees who filled the Zoom call with hate-laden, antisemitic speech and images.

According to The Almanac, a sister website from the Embarcadero Media network, the ambush began when an antisemitic image appeared on the screen, and later, commenters continued to disrupt the meeting on Zoom with racist comments and by using profanities.

Other media reported similar disruptions in nearby cities.

In San Carlos, "Zoombombers" called into the city council meeting on Sept. 25 and dropped "racist, antisemitic and Islamophobic" comments, according to the Daily Post. In Pacifica, several people called in to the city council meeting to deliver antisemitic comments and used the phrase "white power," according to the Pacifica Tribune.

According to David Loy, legal director for the First Amendment Coalition, a virtual public comment option is only required if one or more city council members are participating virtually. If all council members are present in person, there's no need for a virtual comment option.

"I think they should, frankly, because it does better promote the opportunity for the public to participate, and obviously, it's very, very unfortunate when people use remote comments to say hateful things," Loy said. "I think it'd be unfortunate to allow a few bad actors to deprive the general public of the opportunity to participate remotely because that's actually a significant advantage to sit in participation when people cannot always attend in public.

"When you cut off remote comments, that, ironically, may disproportionately impact the people that we're reportedly trying to protect," he said, adding that low-income and people of color may rely on the use of the virtual options.

According to the Ralph M. Brown Act, government agencies are required to provide a specific time for public comment during public meetings. The public must be told how they can comment, but they can't be forced to comment before the meeting. However, written comments can still be made before the meetings start. The Brown Act also specifies that public officials cannot make any decisions if technical issues stop the public from accessing the meeting. Attendees do not have to disclose their locations during virtual meetings, according to the Brown Act.

"I think it's just terrible that the cities that have had this happen have (had) to put a warning sign on their videos or their meetings," Gee said.

Gee also acknowledged challenges with virtual public comment, such as controlling and verifying the identity or intent of online attendees, adding that a city council meeting was unlike a “talk show,” and a moderator could not screen callers.

The Brown Act does not require attendees or callers to disclose their identities, Loy said, adding that the law does allow the city to use a log to coordinate the order of speakers.

He added that while some speech can be negative, pre-screening or deciding what's acceptable paves the way for potential unchecked censorship.

"I realize that some speech can be hateful and abusive...," Loy said. "But it's very dangerous to start giving the government the power to decide what speech is acceptable."

Gee said that anyone who has a suggestion for a “halfway step” for making public comments should email him.

“We're all struggling with trying to find the right balance between receiving public comment and allowing it to come virtually and, at the same time, prevent abuses,” Gee said. “And this is what I would call what's happening in the state and throughout our communities. An extreme case of abuse of public comment.”

What are the New Procedures for Public Comment?

Residents wishing to provide public comments for City Council meetings have two avenues: in person or via email at publiccomment@redwoodcity.org

Although City Council meetings remain accessible for public viewing on Zoom, attendees will no longer have the facility to offer comments through the platform.

Should the city receive an email with a public comment by 5 p.m. on the meeting day, which either relates to an item on the agenda or is a general comment falling within the city's purview, it will be vocalized during the council meeting. It's important to note that every public comment is regarded as a public record.

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