BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
BOARD OF DIRECTORS MEETING

May 10, 2024

Correspondence and media coverage of interest between April 10, 2024 and May 7, 2024

Correspondence

From: Info@losvaquerosjpa.com
To: Stakeholders
Date: April 30, 2024
Subject: Los Vaqueros Reservoir Joint Powers Authority Update

From: Steven R. Ritchie, Assistant General Manager, Water Enterprise
To: SFPUC Wholesale Customers
Date: April 15, 2024
Subject: Water Supply Availability Update

From: Shawn Saunders
Fenny Lin
Dennis McIntyre
Pam Rittelmeyer
To: BAWSCA Board Members
Date: April 10 – April 30, 2024
Subject: Restore Remote Participation at BAWSCA

Press Release

From: California Department of Water Resources
Date: May 6, 2024
Subject: Historic 2023 Water Year Delivered Big Boost to California's Groundwater Supplies

Water Supply Conditions:

Date: May 6, 2024
Source: SF Gate
Article: California's second-largest reservoir hits 100% of its total capacity

Water Infrastructure:

Date: May 7, 2024
Source: The Hill
Article: California groundwater levels rose in 2023 for the first time in 4 years

Date: May 7, 2024
Source: LA Times
Article: A wet year boosted California's groundwater, but not enough to address long-term Declines

Water Infrastructure, cont'd.:

Date: May 6, 2024
Source: Marin Independent Journal
Article: MMWD to study effects of climate change on dam system

Date: May 4, 2024
Source: ABC10
Article: The State Water Project, Restore the Delta and the Delta Tunnel in the age of climate change

Water Management:

Date: April 28, 2024
Source: New York Times
Article: Toilet to Tap: Recycling Wastewater Isn't Gross. It's Smart!

Water Quality:

Date: April 10, 2024
Source: CNBC
Article: New EPA limits on 'forever chemicals' in drinking water could cost $1.5 billion per Year to implement

Opinion:

Date: April 22, 2024
Source: San Francisco Examiner
Article: California desperately needs water reform, San Francisco is standing in the way

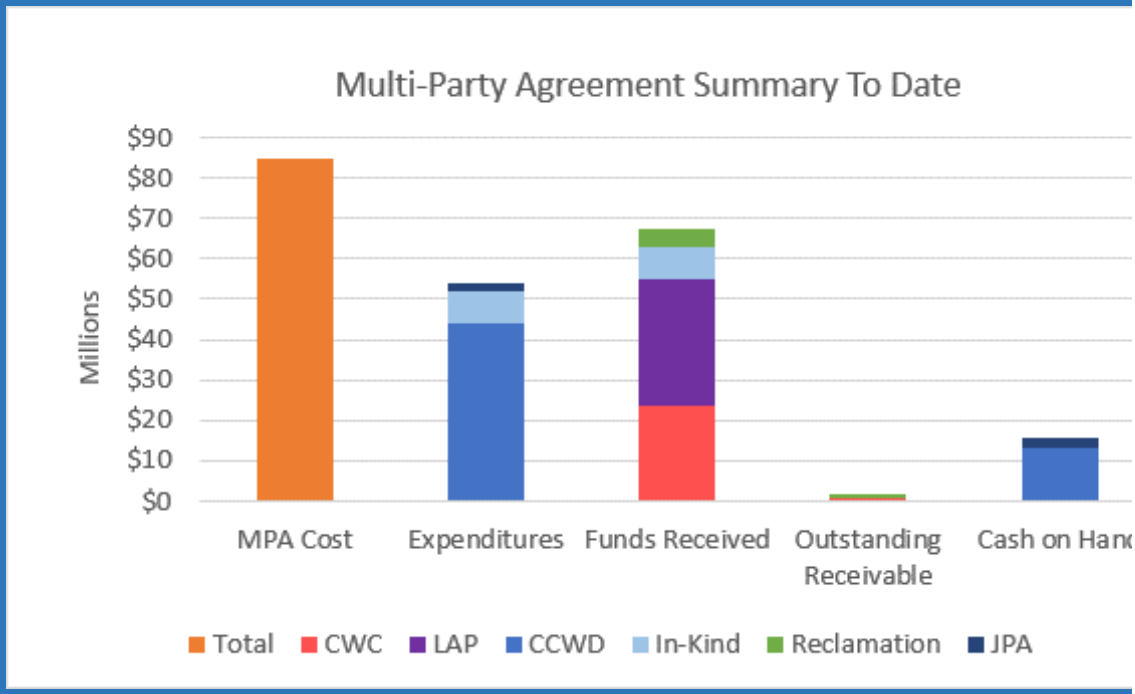
Date: April 11, 2024
Source: San Francisco Examiner
Article: Kicking the can down the road is not a climate option, says SFPUC head

April 30, 2024

Los Vaqueros Reservoir Joint Powers Authority Update

UPDATE ON MULTIPARTY COST SHARE AGREEMENT

The following chart provides an overview of the MPA expenditures through March 31, 2024, as well as in-kind services, funds received, outstanding receivables, and cash on hand.



APRIL BOARD OF DIRECTORS MEETING RECAP

On April 10, the JPA Board of Directors met in person at Zone 7 Water Agency. Discussion items included the Multiparty Agreement (MPA) amendment, program budget and schedule, agreements, and design and permitting. The Board also received updates on federal relations and activities with Reclamation. The next JPA Board Meeting is scheduled for May 3 at Zone 7 Water Agency. In accordance with the Brown Act, the meeting agenda packet will be posted on the **JPA website** in advance of the meeting.

JPA BOARD OF DIRECTORS RECOGNIZES DR. MAUREEN MARTIN

At its April 10 meeting, the JPA Board recognized Dr. Maureen Martin for her remarkable 16-year journey with the JPA. As Deputy Program Manager at Contra Costa Water District (CCWD), Dr. Martin's leadership was pivotal in coordinating CCWD's efforts with the JPA's Member Agencies for the Phase 2 Reservoir Expansion and securing over $500 million in funding for the Project. Her technical expertise and stakeholder engagement efforts were instrumental in gaining widespread support, ensuring the Project's success. Dr. Martin's dedication and contributions in forming the JPA and fostering collaboration among Member Agencies have left a lasting impact.

SUBMISSION AND REVIEW CONTINUE FOR PROJECT PERMITTING

Reclamation continues to coordinate with Contra Costa Water District (CCWD) to finalize the Memorandum of Agreement required under Section 106 of the National Historic Preservation Act, with execution anticipated in the coming months.

CCWD is incorporating the relevant terms from the final Incidental Take Permit (ITP) into the water rights change petitions. The ITP, issued by the California Department of Fish and Wildlife (CDFW) in early March, is for near- and long-term operations.

JPA AND CCWD CONTINUE TO COORDINATE ON DESIGN AND ENGINEERING EFFORTS

Design continues on Pumping Plant No. 1 Replacement. Once the 90-percent design is submitted, further work will be suspended, in accordance with the JPA's capital preservation strategy.

Revisions continue to the draft preliminary design report and drawings for the Transfer-Bethany Pipeline. Further work will be suspended once the 30-percent design is completed, in accordance with the JPA's capital preservation strategy.

Work continues to address remaining comments from the California Department of Water Resources on the Turn-In Agreement.

UPCOMING MEETINGS

May 3 - 9 a.m.
JPA Board Meeting (Zone 7 Water Agency)

May 16 - 10 a.m.
JPA Operations & Engineering Committee Meeting (Virtual)

May 23 - 1 p.m.
JPA Finance Committee Meeting (Virtual)

ADDITIONAL PROJECT INFORMATION

losvaquerosjpa.com
ccwater.com/lvstudies

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San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

TO: SFPUC Wholesale Customers

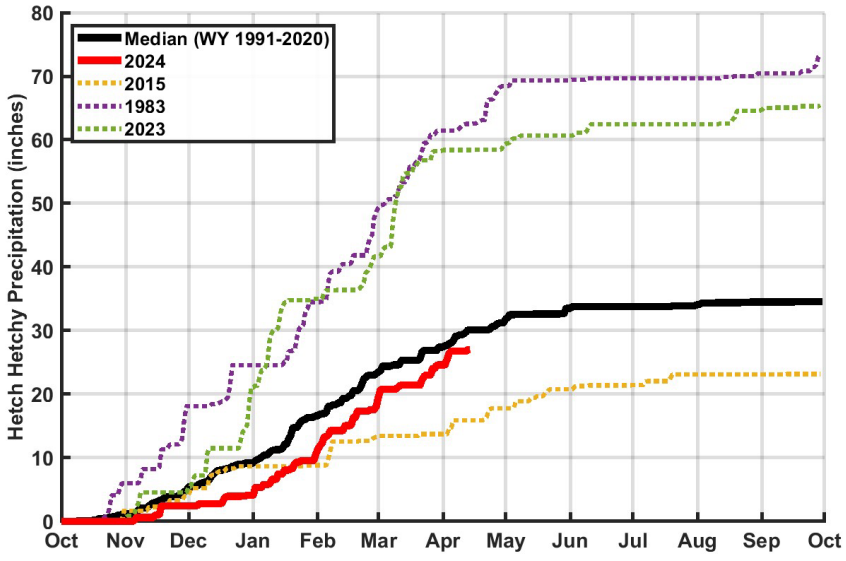
FROM: Steven R. Ritchie, Assistant General Manager, Water

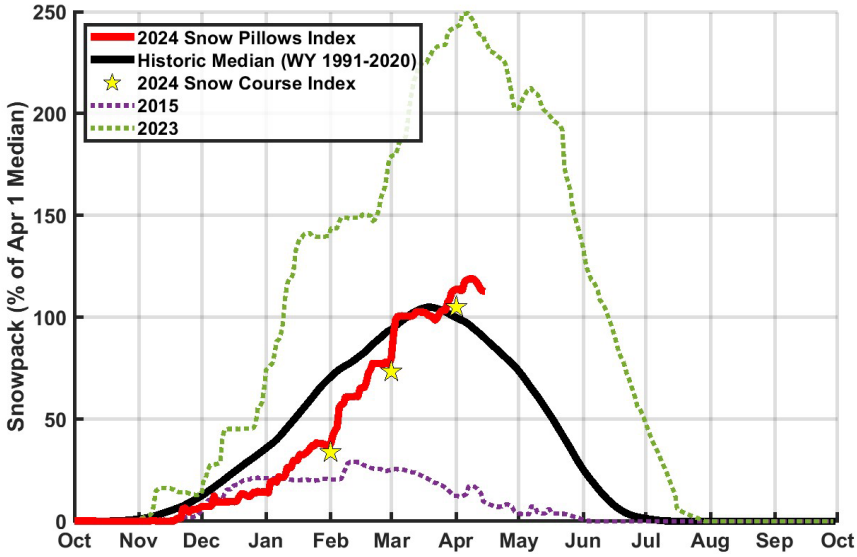
DATE: April 15, 2024

RE: Water Supply Availability Update

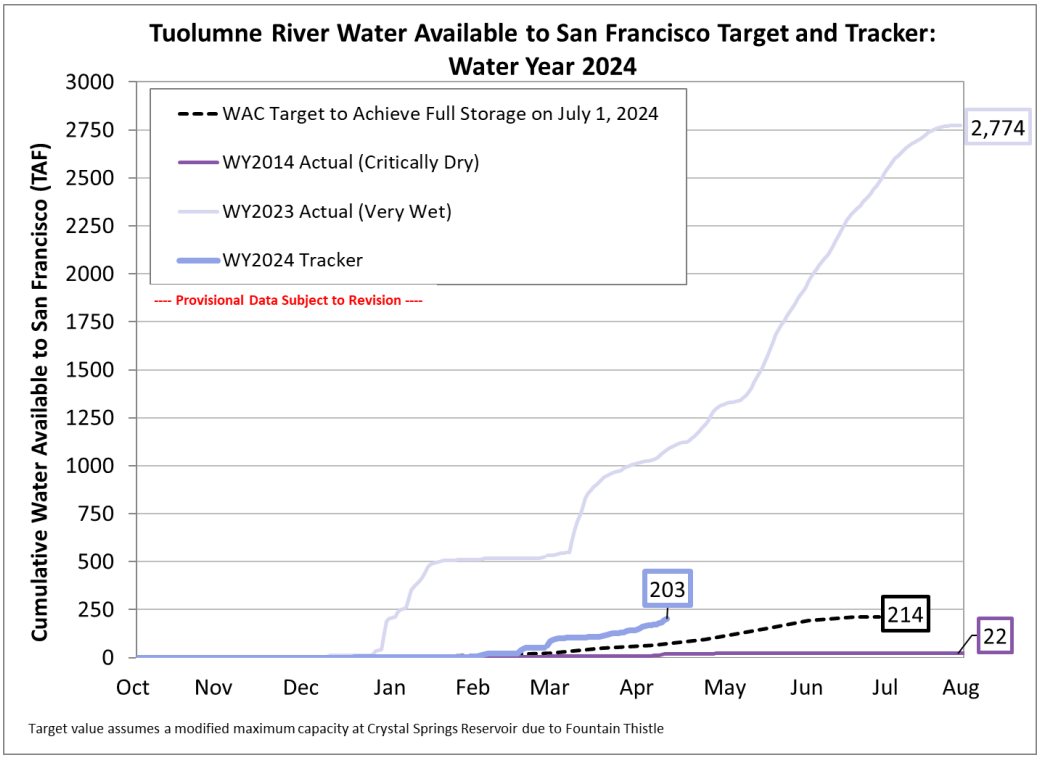
This memo provides the water supply availability estimate for Water Year 2024 and the current hydrologic conditions.

The plots below provide precipitation at Hetch Hetchy and snowpack in the watershed through April 15, 2024. As the plots show, the Hetch Hetchy watershed has experienced nearly average conditions this year. The April 1st manually measured snow course index is 105% of median April 1st snowpack indicated by the yellow star and about 114% of median April 1st snowpack indicated by snow pillow index (the red line). The latest snow course survey found at the Aspen Meadow snow measurement location which is elevation 7,000 feet in the North Fork of the Tuolumne River basin had a measured snow water content of 31.5" (April 1st survey).





Water available to San Francisco under the Raker Act has produced 202,662 acre-feet to date, with additional gains estimated during snowmelt from now through June. San Francisco needs 214,000 acre-feet to fill the system so this year we will fill the entire water system by July 1, 2024. Water Bank is currently full and will remain full through the year.



Though we continue to be in a solid position for water supply this year, as always, we appreciate the continued efforts of our customers to encourage water conservation in their service areas.

cc: Nicole Sandkulla, CEO/General Manager, BAWSCA

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From: Shawn Saunders (shawn@uptime24x7.com) Sent You a Personal Message
To: bawscaboardofdirectors
Subject: Restore Remote Public Comment at BAWSCA
Date: Tuesday, May 7, 2024 6:05:16 PM

Dear BAWSCA Board of Directors,

Dear Board Members,

The removal of remote participation in BAWSCA Board meetings has reduced the transparency of the agency and has excluded the voices of the elderly, working-class, and caregiving community members from sharing their vital perspectives on the actions BAWSCA takes.

Remote participation became the new normal during the pandemic and remains in place in the majority of California cities. BAWSCA has made great progress by returning livestreams of Board meetings and the Agency must continue by implementing remote public comment services. As BAWSCA considers continuing its anti-environmental lawsuit against the State Water Board and chooses to support environmentally harmful voluntary agreements (VAs), the Board must remain transparent and ensure the voices of marginalized communities are heard at public meetings.

The Board must restore remote participation, including remote public comment. Thank you for recognizing the impact that remote participation has on increasing the accessibility and transparency of BAWSCA.

Sincerely,

Sincerely,

Shawn Saunders
2040 W Avenue J13 Apt 11
Lancaster, CA 93536
shawn@uptime24x7.com
(912) 665-6398

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From: Fenny Lin (fhlmediastuff@gmail.com) Sent You a Personal Message
To: bawscaboardofdirectors
Subject: Restore Remote Participation at BAWSCA
Date: Tuesday, April 30, 2024 8:15:32 AM

Dear BAWSCA Board of Directors,

Please restore remote participation in BAWSCA Board meetings so that more people can have a voice and be aware! Thank you for your attention to this!

Dear Board Members,

The removal of remote participation in BAWSCA Board meetings has reduced the transparency of the agency and has excluded the voices of the elderly, working-class, and caregiving community members from sharing their vital perspectives on the actions BAWSCA takes.

Remote participation became the new normal during the pandemic and remains in place in the majority of California cities. BAWSCA must re-implement remote participation options including live streams of Board meetings and remote public comment services. As BAWSCA continues its anti-environmental lawsuit against the State Water Board and chooses to support environmentally harmful voluntary agreements (VAs), the Board must remain transparent and ensure the voices of marginalized communities are heard at public meetings.

The Board must restore remote participation, including live streams and remote public comment. Thank you for recognizing the impact that remote participation has on increasing the accessibility and transparency of BAWSCA.

Sincerely,

Sincerely,

Fenny Lin
1080 Jones Street
Berkeley, CA 94710
fhlmediastuff@gmail.com
(510) 704-3263

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From: Dennis Mcintyre (dmc3535@verizon.net) Sent You a Personal Message
To: bawscaboardofdirectors
Subject: Restore Remote Participation at BAWSCA
Date: Friday, April 12, 2024 12:29:43 PM

Dear BAWSCA Board of Directors,

Dear Board Members,

The removal of remote participation in BAWSCA Board meetings has reduced the transparency of the agency and has excluded the voices of the elderly, working-class, and caregiving community members from sharing their vital perspectives on the actions BAWSCA takes.

Remote participation became the new normal during the pandemic and remains in place in the majority of California cities. BAWSCA must re-implement remote participation options including live streams of Board meetings and remote public comment services. As BAWSCA continues its anti-environmental lawsuit against the State Water Board and chooses to support environmentally harmful voluntary agreements (VAs), the Board must remain transparent and ensure the voices of marginalized communities are heard at public meetings.

The Board must restore remote participation, including live streams and remote public comment. Thank you for recognizing the impact that remote participation has on increasing the accessibility and transparency of BAWSCA.

Sincerely,

Sincerely,

Dennis Mcintyre
11 Shorebreaker Dr
Laguna Niguel, CA 92677, CA 92677
dmc3535@verizon.net
(949) 295-3573

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From: Pam Rittelmeyer (pamrittel@gmail.com) Sent You a Personal Message
To: bawscaboardofdirectors
Subject: Restore Remote Participation at BAWSCA
Date: Wednesday, April 10, 2024 9:32:16 PM

Dear BAWSCA Board of Directors,

Not everyone who wants to attend can attend in person. Please provide opportunities for people to watch and participate in meetings remotely. Thank you!

Dear Board Members,

The removal of remote participation in BAWSCA Board meetings has reduced the transparency of the agency and has excluded the voices of the elderly, working-class, and caregiving community members from sharing their vital perspectives on the actions BAWSCA takes.

Remote participation became the new normal during the pandemic and remains in place in the majority of California cities. BAWSCA must re-implement remote participation options including live streams of Board meetings and remote public comment services. As BAWSCA continues its anti-environmental lawsuit against the State Water Board and chooses to support environmentally harmful voluntary agreements (VAs), the Board must remain transparent and ensure the voices of marginalized communities are heard at public meetings.

The Board must restore remote participation, including live streams and remote public comment. Thank you for recognizing the impact that remote participation has on increasing the accessibility and transparency of BAWSCA.

Sincerely,

Sincerely,

Pam Rittelmeyer
130 Barneson Ave., Apt. 4
San Mateo, CA 94402
pamrittel@gmail.com
(310) 351-8457

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CALIFORNIA DEPARTMENT OF
WATER RESOURCES

May 6, 2024

Contact:
Public Affairs, Department of Water Resources
916-820-8083 | media@water.ca.gov

Historic 2023 Water Year Delivered Big Boost to California's Groundwater Supplies

The James Irrigation District utilizing pumps from DWR's Emergency Pump Program to divert water and fill a basin for groundwater recharge in San Joaquin, Fresno County,

Sacramento, Calif. – The California Department of Water Resources (DWR) has released the latest Semi-Annual Groundwater Conditions report, and the data show that California achieved 4.1 million acre-feet of managed groundwater recharge during Water Year 2023, which is nearly the water storage capacity of Shasta Lake. The report also details an increase in groundwater storage of 8.7 million acre-feet.

Water Year 2023 is the first year since 2019 that there has been a reported increase in groundwater storage. A significant reduction in groundwater pumping in 2023 also led to favorable groundwater conditions, including a decrease in land subsidence, or sinking of the land. Some areas that had previously experienced subsidence actually saw a rebound (uplift) in ground surface elevation from reduced pumping in the deeper aquifers and refilling of groundwater storage.

The groundwater report released today includes, for the first time, groundwater sustainability plan Annual Report data reported by local groundwater sustainability agencies (GSAs) across 99 groundwater basins which make up over 90 percent of the groundwater use in the State.

Groundwater is one of California's most important natural resources and, more likely than not, groundwater is part of your life. Nearly 85 percent of Californians depend on groundwater for some portion of their water supply, and in dry years when surface water supplies are lacking, communities turn to groundwater to fulfill the needs of households, agriculture, and businesses. California's rich and abundant ecosystems also rely on groundwater to sustain the natural plant and animal communities that make California such an exceptional place to live, work and recreate.

While the last two rainy seasons have been good news for California's groundwater basins, there is still a lot of work to do. Long-term groundwater storage remains in a deficit of nearly 40 million acre-feet over the past two decades, due in part to years of pumping out more water than has been replenished. It would take nearly five consecutive above average, not just average, water years like 2023 to fill that gap. California needs to replenish what nature provides by expanding groundwater recharge projects, upgrading water infrastructure, and modernizing our

water distribution system through projects like the Delta Conveyance Project, to be able to move water during high flows to maximize storage.

“California is invested in preparing for weather extremes by maximizing the wet years to store as much water as possible in preparation for the dry years,” said Paul Gosselin, DWR Deputy Director of Sustainable Water Management. “The impressive recharge numbers in 2023 are the result of hard work by the local agencies combined with dedicated efforts from the state, but we must do more to be prepared to capture and store water when the wet years come.”

During the 2023 Water Year, more than 1.2 million acre-feet of groundwater recharge was permitted by state agencies, more than 400,000 acre-feet of flood water was recharged using the Governor’s Executive Orders, and millions more acre-feet of managed and naturally occurring recharge was achieved. Groundwater recharge projects have proved critical during flood response, as we saw in 2023 when thousands of acre-feet of water were diverted off of streams, away from flood-prone areas, and put onto available open lands to recharge groundwater basins. Learn more about water infrastructure projects in your community at build.ca.gov.

Since groundwater is out of sight, beneath our feet, we need data and information from the underground aquifers to make informed groundwater management decisions that are backed by the most current science. DWR’s Semi-Annual Groundwater Conditions report provides current data to support the comprehensive California’s Groundwater (Bulletin 118) publication which is updated every five years. This suite of reports provides the latest knowledge and understanding about California’s groundwater system, helping state and local agencies manage groundwater resources for long-term water supply resiliency.

Ten years ago, the Sustainable Groundwater Management Act was signed into law to address ongoing impacts of groundwater declines throughout the state. As a result of this important legislation, we are collectively learning more than ever before about California’s groundwater basins from data being collected and reported by local GSAs as well as from state investments in new technologies and expanded groundwater monitoring.

The Semi-Annual Groundwater Conditions report includes the latest data and discussion on statewide groundwater levels, groundwater storage, recharge, land subsidence, well infrastructure and the status of California’s groundwater basins. These reports are not just for water managers, they are also important resources for anyone who wants to gain an understanding of their local water supply.

Groundwater is essential for human well-being, ecosystems, agriculture, and economies. Each year we’re learning more about how to address the challenges of a changing climate, and the data and information contained in DWR’s Semi-Annual Groundwater Conditions report provides the latest and best understanding of the vital water resource that lies beneath our feet.

# # #

California's second-largest reservoir hits 100% of its total capacity
SF Gate | May 6, 2024 | Katie Dowd

A drone view of Lime Saddle Marina on Lake Oroville in Butte County, California on April 26, 2024.
Sara Nevis/California Department of Water Resources

A surprisingly stormy spring has pushed one of California's largest reservoirs to capacity, state officials announced Monday. For the second straight year, Lake Oroville is full.

"This is great news for ensuring adequate water supply for millions of Californians and environmental needs," the state Department of Water Resources wrote in a statement.

Lake Oroville, California's second-largest reservoir, is currently filled with 3.5 million acre-feet of water. An acre foot is the amount of water it takes to cover 1 acre in 1 foot of liquid, normally about 326,000 gallons. A family of four uses about 400 gallons of water daily, the EPA estimates.

According to the Department of Water Resources database, Lake Oroville is at 128% of its historical average, which should reassure Californians with memories of the bone-dry lakebed. Just a few years ago, houseboats had to cluster in the middle of the lake as water levels dropped, exposing steep cliffs.

Reservoirs across the state are filling up as rain and snow continue remarkably late into the spring season. In Southern California, Lake Casitas is full for the first time since 1998. Shasta

Lake, the largest reservoir in California, is at 97% of capacity, but it's still 115% of its usual average at this time of year. It's a remarkable rebound for what was once the poster child of the California drought.

"Those last feet are hard to fill," U.S. Bureau of Reclamation spokesperson Michael Burke told SFGATE previously. "Think of it as a funnel, the bottom of it is easy to fill but as the top gets bigger, it takes a lot more water."

# # #

California groundwater levels rose in 2023 for the first time in 4 years
The Hill | May 7, 2024 | Sharon Udasin

Groundwater is pumped from an aquifer into a canal on the Terranova Ranch in 2021 in Helm, CA. Brian van der Brug / Los Angeles Times via Getty Images

Last winter's unusual onslaught of rain and snow led to California's first increase in groundwater levels in four years, state officials reported Monday.

The 2023 water year — which spanned from Oct. 1, 2022, through Sept. 30, 2023 — brought a welcome 4.1 million acre-feet of managed groundwater recharge and a total rise in groundwater storage of 8.7 million acre-feet, according to the California Department of Water Resources.

Managed groundwater recharge involves purposefully replenishing supplies by injecting excess water into an aquifer. The 4.1 million acre-feet recharge volume was equivalent to the entire storage capacity of Shasta Lake, the largest above-ground reservoir in California.

"California is invested in preparing for weather extremes by maximizing the wet years to store as much water as possible in preparation for the dry years," said Paul Gosselin, deputy director of sustainable water management for the Department of Water Resources, in a statement.

Of the total recharge amount, 93 percent — or 3.8 million acre-feet — occurred in the agriculture-rich San Joaquin Valley, according to the report. For reference, the average American household uses about 1 acre-foot of water each year.

Over the course of the 2023 water year, the state extracted 9.5 million acre-feet of groundwater, a sharp contrast to the 17 million acre-feet withdrawn the previous water year, the report noted.

Gosselin credited “the impressive recharge numbers in 2023” to the proactive work undertaken by local and state agencies, while also warning Californians to avoid becoming complacent.

“We must do more to be prepared to capture and store water when the wet years come,” he added.

# # #

A wet year boosted California's groundwater, but not enough to address long-term declines

LA Times | May 7, 2024 | Ian James

Near Dunnigan in Yolo County, California, fields were flooded in January 2023 in a state-supported effort to recharge groundwater. (Carolyn Cole / Los Angeles Times)

After years of pervasive declines, groundwater levels rose significantly in much of California last year, boosted by historic wet weather and the state's expanding efforts to replenish depleted aquifers.

The state's aquifers gained an estimated 8.7 million acre-feet of groundwater — nearly double the total storage capacity of Shasta Lake — during the 2023 water year that ended Sept. 30, according to newly compiled data from the California Department of Water Resources.

A large portion of the gains, an estimated 4.1 million acre-feet, came through efforts that involved capturing water from rivers swollen by rains and snowmelt, and sending it to areas where the water percolated into the ground to recharge aquifers. The state said the amount of managed groundwater recharge that occurred was unprecedented, and nearly double the amount of water replenished during 2019, the prior wet year.

Still, the increase in underground supplies follows much larger long-term declines, driven largely by chronic over pumping in agricultural areas. The gains only partially recouped the estimated losses of 14.3 million acre-feet of groundwater during the previous two years of severe drought, when farms relied heavily on wells and aquifer levels plummeted.

“It was a good bounce up,” said Steven Springhorn, a supervising engineering geologist at the state Department of Water Resources.

“However, we're in a large groundwater deficit,” Springhorn said. “Overall, the trend has been down for a long time.”

The Department of Water Resources released the information in its semiannual report on groundwater conditions. The report did not include data for late 2023 and early 2024, which will be assessed in the next update later this year.

In early 2023, a series of powerful storms ended three years of extreme drought, triggering flooding and leaving one of the largest accumulations of snow on record. The year ranked as the eighth wettest statewide in the last half a century.

The wet weather and the availability of water delivered in canals led agricultural well owners to pump less groundwater. The floodwaters spread out and naturally replenished the groundwater along rivers and wetlands. In some areas, local water agencies directed floodwaters to dedicated recharge basins or farm fields, where water percolated into the ground.

Most of the managed recharge efforts to date have occurred in farming areas of the San Joaquin Valley, where local agencies have been working on plans to combat overdraft and have made investments in infrastructure to transport water to recharge facilities.

According to the report, water levels rose by more than 5 feet in 52% of wells with available data, while there was little change in 44% of wells, and only 4% of wells declined by more than 5 feet.

Over the last five years, however, most areas have seen declining trends in water levels. The report’s authors said this “underscores the fact that a single year, or even a few years, of heavy precipitation is not enough to refill the state’s depleted groundwater basins” or make up for a series of critically dry years.

Springhorn pointed out that researchers have estimated the losses of groundwater in the Central Valley at roughly 40 million acre-feet over the last two decades.

Since 2000, California has also received much less precipitation than the 20th century average. State water officials call this the “accumulated precipitation deficit,” reflecting repeated droughts and the worsening effects of climate change.

Farms in the Central Valley have long depended on a mix of river water and groundwater to produce crops such as almonds, pistachios, grapes and hay to feed dairy cows.

Declining groundwater levels have left thousands of families with dry wells over the last decade. But after 1,494 dry wells were reported in the 2022 water year, the total fell to 669 dry wells the following year, and has continued declining.

The problem of sinking ground, which is linked to declining groundwater, also eased substantially. Land subsidence affected smaller areas. Between October 2022 and October 2023, areas totaling about 800 square miles — largely on the west side of the San Joaquin Valley — saw a measurable “uplift” of the ground surface of more than 1.2 inches.

Springhorn said local agencies’ efforts to boost groundwater had a positive effect.

“These numbers are great. And they really are reflective of a tremendous amount of work at the local level,” he said. “But there is still a lot more work to be done to reach sustainability in our groundwater basins."

He noted that California will mark the 10th anniversary of the Sustainable Groundwater Management Act this year. The landmark law requires local agencies in many areas to develop groundwater plans and curb overpumping by 2040.

In January, the Department of Water Resources finished reviewing local agencies’ groundwater plans.

State officials have declared those plans inadequate in six areas of the San Joaquin Valley, and last month regulators voted to place one of those regions — the Tulare Lake subbasin — on “probationary” status for failing to adopt sufficient measures to address chronic overpumping.

Some of the areas where the state has declared serious problems of overdraft, such as the Tule and Kaweah subbasins, are also among the regions that did the most aquifer recharge during the last year.

“The impressive recharge numbers in 2023 are the result of hard work by the local agencies combined with dedicated efforts from the state, but we must do more to be prepared to capture and store water when the wet years come,” said Paul Gosselin, the Department of Water Resources’ deputy director of sustainable water management.

He said that in light of the continuing groundwater deficit, “we need to continue streamlining processes and investing in water management strategies and infrastructure, like stormwater capture and groundwater recharge.”

The state agency has provided about $121 million to support dozens of local projects aimed at increasing groundwater replenishment.

California has also recently mapped large portions of the state's aquifers. Using a helicopter equipped with a ground-penetrating electromagnetic imaging system, state officials scanned up to 1,000 feet underground to map optimal areas for recharging aquifers.

The data are now accessible to help in planning locations for groundwater recharge. Officials hope to take advantage of channels left by ancient rivers, or what scientists call paleovalleys. These areas have coarse-grained sand, gravel and cobbles that make for highly permeable pathways to replenish groundwater.

"The more that we understand where these preferential pathways, or fast paths, to the subsurface are, the better they can be optimized" as areas to send water when it's available, Springhorn said. "It allows us to utilize this natural infrastructure that we have in California to adapt to climate change."

Experts say that replenishing groundwater alone won't be enough to address the problems of declining aquifers in areas with serious overdraft problems, and that meeting state-mandated goals in the coming years will also require substantial reductions in pumping.

The last two wet winters have been good for the state's groundwater, and the recharge projects to date represent an important start toward prioritizing more replenishment of aquifers, said Graham Fogg, a professor emeritus of hydrogeology at UC Davis.

"That is literally just the tip of the iceberg in terms of the potential," Fogg said. "There is much, much, much, much more potential for managed aquifer recharge."

For one thing, there is plenty of space underground to store water. In the Central Valley alone, the unused aquifer space where water has been drained by pumping could hold more than three times the total capacity of the state's aboveground reservoirs, Fogg said.

He said California is on the cusp of more dedicated efforts to replenish water reserves that have long been largely out-of-sight, out-of-mind.

"It is important that whenever you get these wet winters, you maximize the potential benefit to recharge," he said. "Did we maximize it? We didn't come anywhere near maximizing what could have been done."

# # #

MMWD to study effects of climate change on dam system
Marin Independent Journal | May 6, 2024 | Adrian Rodgriguez

Runoff water flows down the Bon Tempe spillway in Fairfax on Jan. 24, 2024. (Sherry LaVars/Marin Independent Journal)

The Marin Municipal Water District is embarking on a yearlong study to examine the impact of frequent, severe storms on the utility's seven dams.

The district board authorized spending up to $1.06 million to evaluate the capacity of the dam spillways, and to use climate change projections to assess potential hazards.

The study is a response to a critical Marin County Civil Grand Jury report published last summer. The watchdog panel said dam safety plans for the Marin Municipal Water District and the North Marin Water District are failing to account for more regular "atmospheric river" storms brought on by climate change.

The grand jury recommended, among other actions, that the water districts update their dam hazard mitigation plans with the latest science on climate change effects on storms.

Elysha Irish, engineering manager for the Marin Municipal Water District, said it has a thorough dam safety program and that the state Division of Safety of Dams has determined the agency's dams to be safe for continued use.

"This effort of confirming our spillway capacity is a proactive and precautionary review given projections of future atmospheric rivers," Irish said. "The spillway capacity assessment is being performed to ensure the spillways are appropriately sized for our changing climate conditions."

MMWD operates seven of the eight large dams in Marin. Six are earthen dams, and Alpine Dam is concrete. The reservoirs can hold up to about 80,000 acre-feet of water, about a two-year supply. An acre-foot is about 326,000 gallons.

The agency said its hazard plan was updated in 2022 and contains information on dam failure in relation to climate change.

In addition to the spillway capacity analysis, the study includes a subsurface assessment of the Bon Tempe spillway that will involve surveying cracks in the system.

The study would potentially do similar work at Peters dam at Kent Lake, Seeger Dam at the Nicasio Reservoir and the Soulajule spillway.

"This is really great work, and I appreciate the dedication to safety and being responsive to the grand jury report," board member Monty Schmitt said. "I know that it's the intention is to draw attention to dam safety as an issue that affects, frankly, all dams, especially the older they get, and especially given changing climate."

Schmitt said considering the district is also looking at potentially increasing water storage, it would be good to know if one dam might be a candidate for a safety retrofit, because "that might significantly shift the cost-benefit."

The North Marin Water District's dam safety plan is incorporated into the countywide hazard mitigation plan. The plan was last updated in 2018.

Tony Williams, general manager of NMWD, said the district is in the middle of a study in partnership with the county flood district. The analysis of the Novato Creek watershed, where Stafford Lake and its dam are located, includes an analyses of the dam's structure, incoming flows to the lake and other details.

A draft of the study is expected to be completed this summer, Williams said.

An engineering analysis of a proposed adjustable spillway gate at Stafford dam, which could help increase the reservoir's storage capacity, is also expected to be presented in the coming months.

The grand jury report also recommended that Marin water suppliers form a committee to plan strategies to prevent potential dam failures.

Earlier this year, the two water districts and the county joined the Center for Western Weather and Water Extremes Water Affiliates Group in an effort to understand extreme weather better.

The group researches atmospheric rivers and other severe weather to improve water management, mitigate flood risk and increase water supply reliability.

The National Oceanic and Atmospheric Administration says atmospheric rivers are storms that move most of the water vapor out of the tropics. According to the Water Affiliates Group, heavy rainfall from these flows of condensed water is responsible for almost 85% of floods on the West Coast.

At last week's meeting, Ranjiv Khush, the MMWD board chair, said he is interested in learning if there is agreement between the near-term projections by the Water Affiliates Group and the longer-term projections that will be revealed as part of the new study.

"Keep us updated on the results," he told staff.

# # #

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The State Water Project, Restore the Delta and the Delta Tunnel in the age of climate change

Climate-proofing California's water is not easy or agreeable. We spoke with Tony Meyers of the State Water Project & Barbara Barrigan-Parrilla of Restore the Delta.

ABC10 | May 4, 2024 | Brenden Mincheff

SACRAMENTO, Calif. — Perhaps no environmental topic is as controversial in California as the Delta Tunnel.

It was once proposed as a pair of tunnels by Governor Jerry Brown, the current project under Governor Gavin Newsom is a single tunnel, larger than the English Channel tunnel. The tunnel is a key part of the State Water Project's new risk-informed strategic plan.

That strategic plan is known as Elevate to '28. It lists five goals that it says will help to make the State Water Project (SWP) "the most reliable, sustainable, and resilient water provider for the people and environment of California, now and for future generations."

To learn more about the plan, ABC10 Meteorologist Brenden Mincheff invited Tony Meyers, the Principal Operating Officer for the State Water Project for a conversation. Here are some key takeaways from that.

California's Climate Conversation: The State Water Project and the Delta Tunnel

1. What is the State Water Project?

The SWP is responsible for delivering water to 27 million Californians, more than two-thirds of the state's population.

"The State Water Project is the largest state-owned water facility in the United States and one of the largest in the world," said Meyers. "It stretches more than 700 miles, more than two-thirds of the length of the state. And it also captures and stores up to 5.8 million acre feet of water every year."

That's enough water for 15 million homes every year in storage. But it's more than just water storage. It also provides flood protection, and from the human standpoint, it's opportunity.

There's 2,400 people working on the SWP, "providing services to help keep the engine oiled and running so we can provide that water throughout the state from Northern California all the way down through Southern California," said Meyers. One of the challenges with regards to the SWP workforce is what Meyers referred to as the "silver tsunami."

"The acceleration of retiring peoples that are exiting with 25, 30 and 40 years experience," said Meyers. "We have to accelerate our ability to train up new leaders and step into the gap to be able to take over and continue this incredible operation.

2. Optimizing Infrastructure for Climate Change
"Elevate to '28 was created for the need to address a number of accelerating risks that we're facing since our last plan was published in 2019," said Meyers. "Key among those (is) our new hotter and drier climate reality that we're facing in light of climate change."

The State Water Project has been around for decades, however the climate and weather patterns it was designed for no longer exist.

"We've got 40 to 60 year old assets... and just think of it as driving around in a 40 to 60-year-old car that's continuing to work every day, day after day, the maintenance on that is incredible to keep it fully functioning and operational," said Meyers. "Our hotter and drier climate reality is already here, not something we're talking about in the future. It's something that we've got to not just plan for but we got to start enacting."

Key among those infrastructure adaptations is the Delta Conveyance Project, better known as the Delta tunnel.

3. The Delta Tunnel
"One of our greatest climate adaptation strategies that we have right now to ensure that we can continue delivering affordable, clean, sustainable and resilient water into the future for the next 20 to 40 years is the Delta Conveyance Project," said Meyers. "And in fact, this year, and this year alone, if Delta conveyance had been constructed by now we'd have been able to move more than 900,000 acre feet of water that we haven't been able to. Oh, and also be able to do that without impacting endangered species. We can do that without harming the fish that are in the Delta or trying to migrate through the Delta. So it's a very key element of our strategy for mitigating for climate change and climate adaptation."

Meyers also explained how the tunnel would protect against sea level rise, saltwater intrusion and even earthquakes.

"If we had an earthquake of roughly 6.3, 6.5 size on any one of the multiple faults that underlie the Delta (it) could level the levees that are in the Delta and cause the water system to completely come to a halt," said Meyers. "50% of all the water that moves through California to serve water populations flows through the Delta."

When asked about the opposition to the tunnel, specifically regarding part of a statement from Restore the Delta, he called it a little shortsighted.

"The ability to have a water system that you've modeled six ways from Sunday, that you understand that you're only taking that water when the water is available, not at low flow conditions, but when there's a lot of excess water, where you get your bypass that's just flowing out to the ocean through the bay, you have the ability to capture that water and move that water with minimal impacts through the tunnel, and not through the Delta... It's critical to get that under

control and make sure we have a robust system that can address earthquakes and climate change," said Meyers.

Mincheff also sat down with Barbara Barrigan-Parrilla, executive director of the aforementioned Restore the Delta. She's head of an organization that works to protect and, as the name implies, restore the Delta. She's also a very vocal critic of the tunnel.

Restore the Delta on climate change adaptation, protecting the environment, and the Delta Tunnel

1. Protecting The Delta
"Restore the Delta is a 501(c)(3) organization whose mission is to work and advocate for a healthy Delta, estuary and healthy communities situated within that estuary," said Barrigan-Parrilla.

She's been with the organization for decades and she calls the Delta home. She knows what she's fighting for.

"It's the largest estuary on the west coast of the Americas," said Barrigan-Parrilla. "It is home to 750 native species. It's the largest strip of prime farmland in California. It's 1,100 miles of waterways. And it has one of the most wonderful diverse communities in the world, definitely within the state. It is... becoming a hub of technology, industry and agriculture. There are wonderful urban rural connections, and it's a very young region also."

2. Opposition to the Tunnel
With all of the Delta's importance, there also comes controversy.

When asked about the SWP's Elevate to '28 strategic plan, Barrigan-Parrilla was quick to answer: "It's woefully incomplete."

"In some ways, (it) has some good pieces," said Barrigan-Parrilla. "But it's really misguided because it is still tied to a water management system that withdraws and takes too much water from the Delta, and the Delta tunnel will exasperate it all."

I shared with her what Meyers had said about the tunnel and why the state views it as necessary, from protecting against earthquakes to climate change.

"This is the part that continues to break our hearts," said Barrigan-Parrilla. "We sat with the design construction group for two years and tried to figure out if we could get real answers to make the project work. When you dig into the details of the environmental impact report, it simply allows for greater exported water during dry periods. And that's what we can't sustain."

"We had to file litigation against the Delta tunnel project. There are a number of lawsuits," continued Barrigan-Parrilla. "That's the route we had to take because our concerns were not addressed."

Ultimately, Barrigan-Parrilla isn't against sharing water.

"We know we're always going to have to share water. But there are ways to do it much more cost effectively, share that water and protect the estuary," she said.

The state has made it clear that the Delta tunnel is going to be a key part of California's water future. Meyers said construction should start around 2030, and it's hoped the tunnel will be online by 2044.

"The tunnel is going to take between permitting and construction 20 years to bring online," said Barrigan-Parrilla. "There is a lot that's going to happen with climate change in those 20 years. They have to shore up the levees. They have to make the Delta really climate resistant now, so that water can continue to be exported to Southern California."

3. Moving Forward

Barrigan-Parrilla knows the clock is ticking.

"What's going to happen with the estuary is going to be harder to manage climate change going in the future, if we don't get it right now," she said.

To that end, outside of the lawsuits and workshops with state agencies on the tunnel, Restore the Delta is doing a lot of work alongside other Delta organizations including the Delta Stewardship Council, the Delta Conservancy and the Delta Protection Commission.

"There's a lot of good work, and there's a lot of goodwill," said Barrigan-Parrilla. "There are a lot of people who want to work together. If we could just get the Bay Delta Plan finished and the tunnel out of the way, I think it would move forward rapidly."

# # #

TOILET TO TAP

RECYCLING WASTEWATER ISN'T GROSS. IT'S SMART!

BY CHRISTINE NGUYEN · ILLUSTRATION BY CRISTINA SPANÒ

WOULD YOU DRINK a glass of water that had been flushed down someone else's toilet? In December, California gave the OK for cities and towns to take water from their sewers, purify it and send it straight back to houses to use as drinking water. Totally disgusting, right? Nope! It's actually really smart. Climate change is making California hotter and drier. By 2040, the state's water supply is expected to shrink by 10 percent. So it needs to figure out how to save water wherever it can. And if you're grossed out by the idea, know this: Recycled purified wastewater will be as clean and fresh as any bottled water you could buy at the store. Often, it'll be even cleaner. That's because it'll go through a major process in which it's treated for every possible germ and pollutant. Water companies will still need to sign up to send purified water straight to homes, and the projects will take several years. But here's how it will eventually work.

FLUSH!

Everything that leaves your toilet flows into the tunnels of the sewage system. It meets up with other wastewater, like from sinks, and heads to a treatment center. There, giant combs scrape out the chunks of trash, while strainers sift out little bits, like sand, and skimmers lift out grease.

MUNCH, MUNCH

What's left is a cloudy liquid that's still pretty disgusting! Friendly bacteria that eat nasty germs and muck are added to the water to feast, along with chemicals and light that kill more of them. Then the future drinking water gets piped to a purification center for a few more steps.

FILTER

Lots of filters are up next. First, a gas is added that takes apart pollutants to make them easier to filter out. Then the water flows into straws with teeny-tiny holes in their sides that bacteria can't get through. Another filter stops viruses, medicines, pesticides and microplastics in their tracks.

ZAP

As the water whizzes through long tubes, it's zapped by ultraviolet bulbs. (UV light, which is a component of sunlight, kills a lot of things.) Finally, a shot of hydrogen peroxide is added to destroy any remaining unpleasantness.

AHHH! DELICIOUS.

In less than a day from first flush, the water at the purification center is so clean, it tastes … bad. That's because water actually needs minerals in it to taste good. Once those are added back in, the water can be sent to houses to flow out of the tap on demand. Cheers! ◆

TASTE TEST!

So now you're convinced the water's clean. But how does it actually taste? We got a sample and asked five kids from San Jose, Calif., to do a blind taste test. The result: None of them could pick out the purified recycled water from a lineup that also included tap water, bottled water and distilled water. And in fact, some of them thought it actually tasted best! Here's what a few had to say.

"I get why people wouldn't want to use the water. Like, I think it's gross. But it smells like nothing. It tastes good — just like water."
HELEN NAGLE, 12

"This is the best water. I thought it would be green and dark."
XAVIER HERNANDEZ, 7

"It tastes like the kind of water I get at hotels."
SHIVANI BALA, 12

Death Ray: Illustration by Irena Gajić. Cicadas: Mandel Ngan/AFP, via Getty Images; inset data: Gene Kritsky, Mount St. Joseph University; inset map: Denys/Getty Images.

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New EPA limits on ‘forever chemicals' in drinking water could cost $1.5 billion per year to implement

CNBC | April 10, 2024 | Lindsey Jacobson,

In this photo illustration, water flows from a tap on July 06, 2023 in San Anselmo, California. According to a study by the US Geological Survey, nearly half of the tap water in the United States is contaminated with “forever chemicals” that are considered dangerous to human health. Justin Sullivan | Getty Images

- The EPA issued a new rule requiring water treatment facilities to remove some specific carcinogenic chemicals, commonly referred to as PFAS or "forever chemicals."

- Compliance with the rule will cost about $1.5 billion annually, according to the EPA, but other research suggests compliance could cost closer to $3.8 billion annually.

The Environmental Protection Agency released long-awaited regulations Wednesday on some toxic "forever chemicals" found in drinking water.

Known as PFAS, the chemicals are perfluorinated and polyfluorinated alkyl substances. They are made by attaching two carbon molecules to fluorine, Tom Neltner explained to CNBC in 2023, when he was working as Environmental Defense Fund's senior director of safer chemicals. The bonds are incredibly strong and take a very long time to break down, earning them the nickname "forever chemicals."

The chemicals are helpful for many modern-day applications from weather-proofing clothing to creating nonstick pans. But over time they can leach into the environment and end up in the water supply.

At least 45% of tap water in the U.S. is known to contain PFAS, according to the U.S. Geological Survey.

Exposure to PFAS over long periods may be carcinogenic and can result in serious illnesses that decrease a person's quality of life and even result in death, according to the EPA. Exposure during pregnancy and early childhood can also have adverse health impacts.

The EPA's new final rule sets limits on five individual PFAS: PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (also known as GenX chemicals.) The EPA also set a hazard index level for PFAS when two or more of four are mixed: PFNA, PFHxS, HFPO-DA and PFBS.

	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (M
	0	4.0 ppt
	0	4.0 ppt
	10 ppt	10 ppt
	10 ppt	10 ppt
s)	10 ppt	10 ppt
nd	Hazard Index of 1	Hazard Index of 1

el Goal (MCLG): The level of a contaminant in drinking water below which there is
ealth. MCLGs allow for a margin of safety and are non-enforceable public health g

In this final rule, EPA is setting limits for five individual PFAS: PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (knownas GenX Chemicals). And EPA is also setting a Hazard Index level for two or more of four PFAS as a mixture:PFNA, PFHxS, HFPO-DA, and PFBS.EPA

The maximum contaminant level for PFOA and PFOS chemicals in drinking water is set at 4.0 parts per trillion. PFNA, PFHxS and HFPO-DA (GenX chemicals) are limited to 10 parts per trillion. The mixtures of two or more PFNA, PFHxS, HFPO-DA and PFBS have a hazard index limit of 1.

Compliance with the rules will cost about $1.5 billion annually, according to the EPA.

Precisely who will foot the bill is still being sorted out, but it will likely be a mix of private sector and government funding, and potentially fees or taxes levied on those who access water via the public water system.

The White House has allocated $9 billion from the 2021 Bipartisan Infrastructure Law to help communities affected by PFAS pollution in their drinking water.

The law also makes another $12 billion available to make general drinking water improvements to local communities' water supply, including PFAS contamination.

M. Susan Hardwick, president and CEO of American Water, the largest investor-owned utility, said the company will continue to prepare to comply with the new rules as well as to advocate "for funds to help mitigate compliance costs."

American Water says it provides water and wastewater services to customers in 14 states, including 18 military bases. Hardwick said the company has been actively treating PFAS in New Jersey, Pennsylvania and California.

However, a report commissioned by the American Water Works Association estimates that compliance with the rule will cost closer to $3.8 billion annually.

The American Chemistry Council said in a press release that the rule "ignores science" and "undercuts other water priorities."

# # #

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California desperately needs water reform. San Francisco is standing in the way.
San Francisco Examiner | April 22, 2024 | Peter Drekmeier and Scott Artis

The Tuolumne River is a major source of water for the San Francisco Public Utilities Commission. Shutterstock

The recently announced closure of the salmon fishing season delivered yet another devastating blow to the thousands of families that depend on commercial and recreational fishing for their livelihoods. For the second year in a row, fishing boats at Fisherman's Wharf will remain mothballed.

The recent drought contributed to the salmon decline, but the larger problem is archaic water policies that allow too much water to be diverted from our rivers and the Delta. As a result, salmon experience manmade droughts almost every year, and the droughts we notice become mega-droughts for fish.

Frontline communities in the Delta also suffer from inadequate freshwater inflow. Warm, nutrient-rich water fuels toxic algae blooms that can kill pets and wildlife and make people sick. So much for taking a plunge on a hot summer day.

In the summer of 2022, a toxic algae bloom in San Francisco Bay killed tens of thousands of fish. It was fueled by nutrient-rich wastewater released into the Bay by surrounding communities.

California desperately needs water reform, but strong opposition has come from what might seem like an unlikely suspect. The San Francisco Public Utilities Commission, which manages our Hetch Hetchy Water System, is one of the worst culprits when it comes to poor stewardship of our aquatic ecosystems.

Our Hetch Hetchy water comes from the Tuolumne River in Yosemite National Park. The river is heavily tapped for agriculture and urban uses, with four out of every five gallons diverted. As a result, the Tuolumne has experienced the worst salmon decline of any Central Valley river.

While agriculture accounts for most of the water diversions, the SFPUC is equally responsible for the environmental mess.

They have a contractual obligation to "support the [Irrigation] Districts' negotiating position regarding volumes of water to be provided for fish flows…" In 2019, San Francisco joined several agricultural irrigation districts in suing the State Water Board over a requirement to increase flows in the Tuolumne.

The lawsuit delayed relief for the beleaguered river for more than five years but was recently settled. San Francisco and its allies lost. The question is whether they will appeal the decision and stall a solution even further.

The SFPUC's opposition to environmental flows is misguided. They have the most secure water supply in the state, with enough reservoir capacity to hold six years worth of water. During the recent drought, the SFPUC never had less than enough water to last four years, yet they imposed a drought surcharge on San Francisco ratepayers.

Driving SFPUC mismanagement is their "Design Drought." This manufactured drought scenario arbitrarily combines two of the worst droughts from the last century to create a mega-drought that might be expected once in 25,000 years, according to a document uncovered through a Public Records Act request.

The SFPUC is also planning for their customers to increase water use by as much as 30%, despite the fact that demand has declined steadily for the past three decades. To prepare for these inflated demand projections, they developed a plan to produce expensive alternative water supplies that won't be needed yet could unnecessarily double their budget. Imagine what that would do to water rates.

Enough is enough. It's long past time for the SFPUC to step up and become the environmental leader Bay Area residents expect and deserve.

We invite you to join us for our Earth Day Rally for the River on the steps of San Francisco City Hall on Tuesday, April 23, from noon to 1 p.m. If enough of us demand change, it will happen. That's the power of Earth Day.

# # #

Peter Drekmeier serves as Policy Director for the Tuolumne River Trust. Scott Artis is the Executive Director of the Golden State Salmon Association.

Kicking the can down the road is not a climate option, says SFPUC head
San Francisco Examiner | April 11, 2024 | Dennis Herrera

SFPUC operates Hetch Hetchy Reservoir in northwestern Yosemite National Park, which supplies water to residents of San Francisco and three other Bay Area counties. Courtesy SFPUC

We've seen a historic drought followed by record-breaking storms. Climate change is already affecting our systems, region and ratepayers as weather becomes more extreme — but the San Francisco Public Utilities Commission and our more than 2,200 employees are fighting back.

We've mobilized our resources to create a $3.2 billion two-year capital budget and an $11.8 billion 10-year infrastructure plan that invests smartly in climate resiliency, broadens our commitment to a healthy San Francisco Bay and expands clean-energy options. It does that while creating more than 50,000 jobs over the next decade, mostly in the private sector.

At the same time, we are addressing climate change and the lingering economic effects of the pandemic. In doing so, we're investing in critical infrastructure so that you will still have clean drinking water and flushing toilets after the next major earthquake.

What's at stake? Our city as we know it.

Here's just one example: The southern part of Ocean Beach is under siege from tides and increasing storms, threatening critical wastewater infrastructure and limiting public shoreline access and recreational opportunities.

To protect against these threats, the SFPUC will begin construction on San Francisco's first major climate-change adaptation project in 2025, creating new public open space at Ocean Beach, protecting key public assets and ensuring coastal access in the face of climate change.

Other crucial climate-resilience investments include green stormwater infrastructure such as rain gardens and permeable pavement, which divert millions of gallons of stormwater annually, and the Folsom Area Stormwater Improvements Project, which reduces the risk of flooding in a historically vulnerable neighborhood.

The SFPUC is also a leading environmental steward of a healthy San Francisco Bay. We're proposing to invest $1.5 billion to reduce wastewater nutrients in the bay, which contribute to algal blooms. This is the largest investment in nutrient reduction in the region to date. In doing so, we're creating a model that other local water agencies can replicate to protect San Francisco Bay now and in the future.

Through CleanPowerSF, the SFPUC offers renewable, affordable, and accessible energy to 385,000 San Francisco customers. At the same time, our Hetch Hetchy Power delivers 100% greenhouse-gas-free electricity to more than 6,000 residential, commercial and municipal customers, including San Francisco's airport, the Muni transit system and many affordable-housing sites. Our two power services saved customers more than $170 million on electric bills in 2023 compared with PG&E.

The SFPUC's clean-energy expansion includes $97 million for electricity transmission infrastructure to support ferries transitioning to zero emissions and future electrical needs at the Port of San Francisco. It also includes a $331 million rebuild of a critical section of our water conveyance system to our Sierra Nevada-based hydropower facility, which has been generating clean power since 1925.

We're also increasing the replacement of aging water and sewer mains in San Francisco. Parts of our water system are about 100 years old, and the oldest parts of our sewer system date back to the Gold Rush.

We know these investments add up to a lot of money. We also know that shortchanging utilities and failing to invest in our water, power and sewer infrastructure might lead to the very crises that have occurred in the United States in the last few years.

Think Flint, Mich., Jackson, Miss., and Houston, where residents had no access to clean drinking water during crises. In a state like California that faces droughts, we can't — and we won't — let that happen here. Kicking the can down the road is not an option.

By prioritizing sustainability and climate action, we're protecting the environment and paving the way for a clean and healthy future for generations to come.

At the same time, we are mindful that capital projects can drive up utility rates. We are a not-for-profit public utility. Our rates cover the true cost of operating, maintaining, and upgrading our systems — nothing more. Yes, our rates are going up to pay for these investments, but we are doing it in a way that is thoughtful, responsible, and fair.

That’s why in November 2023, the SFPUC adopted an Affordability Policy to ensure sustainable budget planning and rate setting. The policy established clear ways to assess the effect of budget increases on future rates and guidelines for keeping rates affordable, with special consideration for equity and low-income customers.

We’re also advancing ratepayer affordability in other ways, including our Customer Assistance Program, which offers discounts of 25% to 40% to low-income customers. Program participation has grown 209 percent over three years, from 2,100 to 6,500 customers, thanks to our large-scale multilingual outreach in low-income, Black, immigrant and environmental-justice communities.

There will be other very tangible benefits to making these investments in our collective future. Our proposed $3.2 billion two-year capital budget and 10-year Capital Improvement Plan will catalyze sustained economic growth and more than 50,000 jobs over the next 10 years. Many of these jobs will be good-paying union jobs that benefit communities and provide a path to the middle class. Our plan prioritizes union labor, ensuring workers receive fair compensation, safe working conditions and a secure future. These jobs and their associated spending will support countless local businesses and the local economy throughout the 10-year plan.

With our robust two-year budget and strategic 10-year capital plan, the SFPUC is meeting the moment. To do that, our rates are increasing, but these are needed investments in San Francisco’s economy, infrastructure and environment.

# # #

Dennis Herrera is the General Manager of the San Francisco Public Utilities Commission.