

# Veles Water Weekly Report

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October 17<sup>th</sup> 2024

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VelesWater



## WATER FUTURES MARKET ANALYSIS

Welcome to ***WATERTALK***

by Joshua Bell

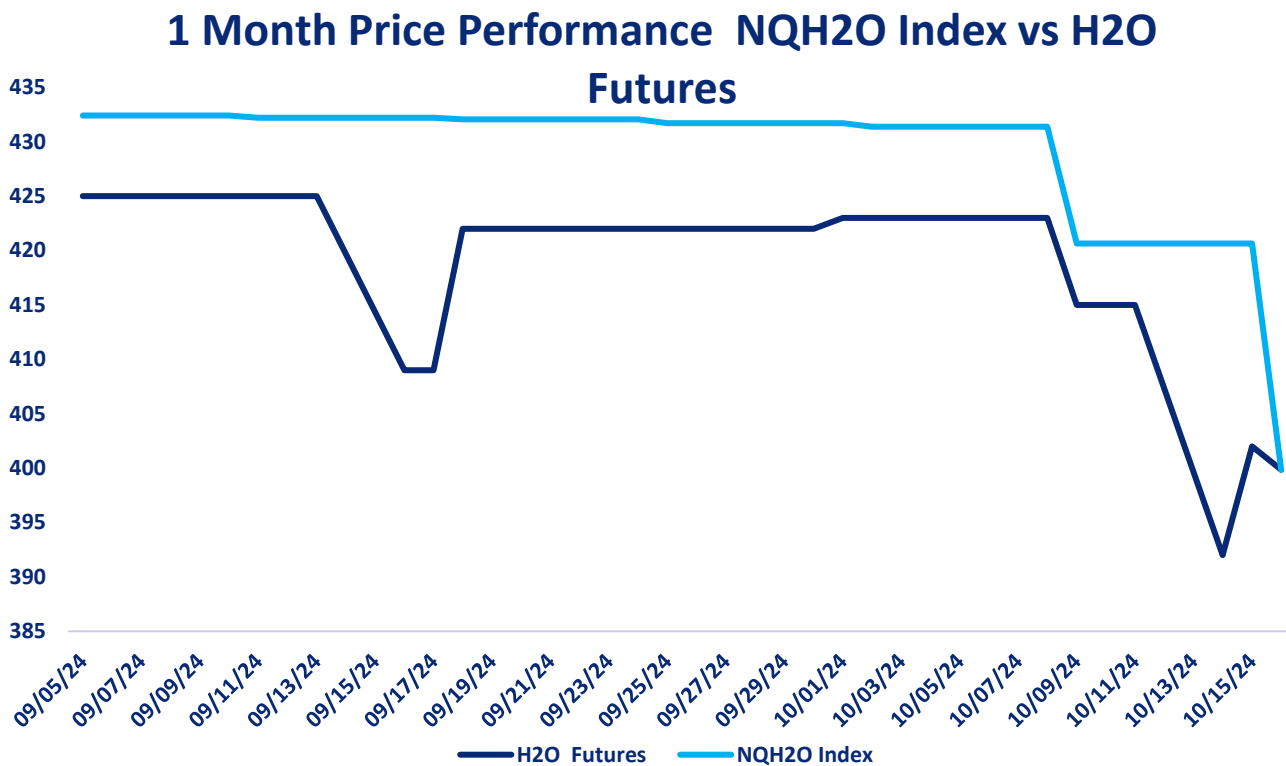
**CLICK THE LINK BELOW**

*“A 2 minute technical analysis video of H2O futures”*

<https://vimeo.com/1020508508?share=copy#t=0>



NQH2O INDEX PRICE vs H2O FUTURES PRICE



Price Chart Based upon Daily Close

The new NQH2O index level of \$399.84 was published on October 16<sup>th</sup> down \$20.81 or 4.95% from the previous week. The October contract settled at the new index level and the November contract is considered the front month. The futures prices have closed at a discount of \$5.65 to \$28.65 versus the index over the past week.

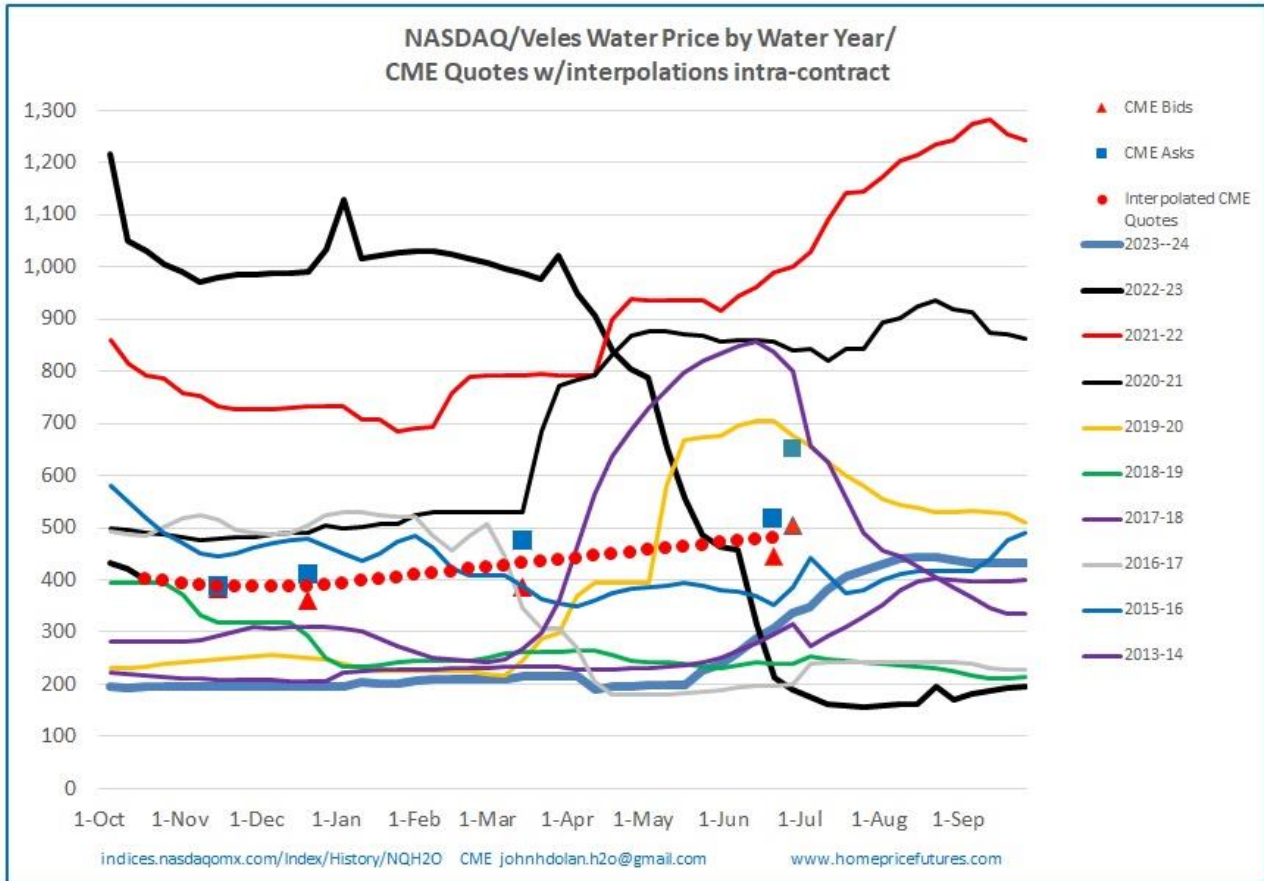
Below are the bid offer prices on different expiries being quoted in the market.

Nov 24	382@390
Dec 24	360@410
Mar 25	385@475
June 25	445@515
June 26	505@650





NQH20 INDEX HISTORY

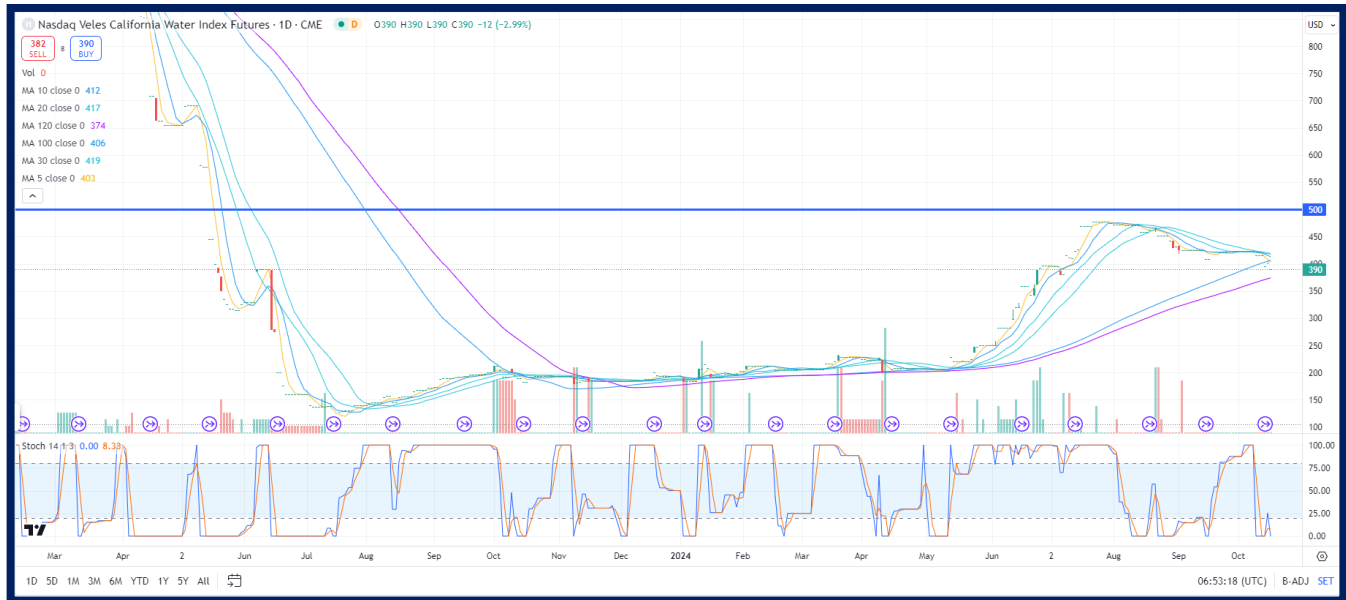


The graph above shows the CME water contracts for October 2024, November 2024, Dec 2024, March 2025, June 2025 and June 2026 superimposed over historical NASDAQ Veles water indices. The interpolated curves for 2024-25 and 2025-26 (to include June 2026 contract) are shown in red dots.

**(John H Dolan, CME Market Maker)**



## H2O FUTURES TECHNICAL REPORT



### Price Action

- **Current Price: 390**
- The price has **decreased by 2.99%** in this trading session, indicating bearish momentum.

### Moving Averages (MA) Analysis

- **MA 5 (5-day Moving Average): 403**
  - The current price is below the MA 5, indicating short-term bearish momentum.
- **MA 10 (10-day Moving Average): 412**
  - The price is also below the MA 10, suggesting continued short-term bearish momentum.
- **MA 20 (20-day Moving Average): 417**
  - The price is below the MA 20, indicating short-term weakness.
- **MA 30 (30-day Moving Average): 419**
  - The price is below the MA 30, signalling medium-term bearish momentum.
- **MA 100 (100-day Moving Average): 406**
  - The price remains below the MA 100, confirming a weakened long-term trend compared to recent sessions.



- **MA 120 (120-day Moving Average): 374**
  - The price is above the MA 120, suggesting that despite recent short-term weakness, the long-term trend is still relatively bullish.

### Support and Resistance

- **Immediate Resistance: 500**
  - This level has been tested several times and remains a key resistance point for a breakout.
- **Immediate Support: 390 (current price level)**
  - The current price may act as support, but if it breaks below this level, the next significant support would be around the MA 100 at 406.

### Stochastic Oscillator

- **Stochastic (K%: 0, D%: 8.33)**
  - The stochastic indicator shows that the market is in oversold territory, suggesting that the market could face downward pressure but also that a potential reversal or bounce could be on the horizon.

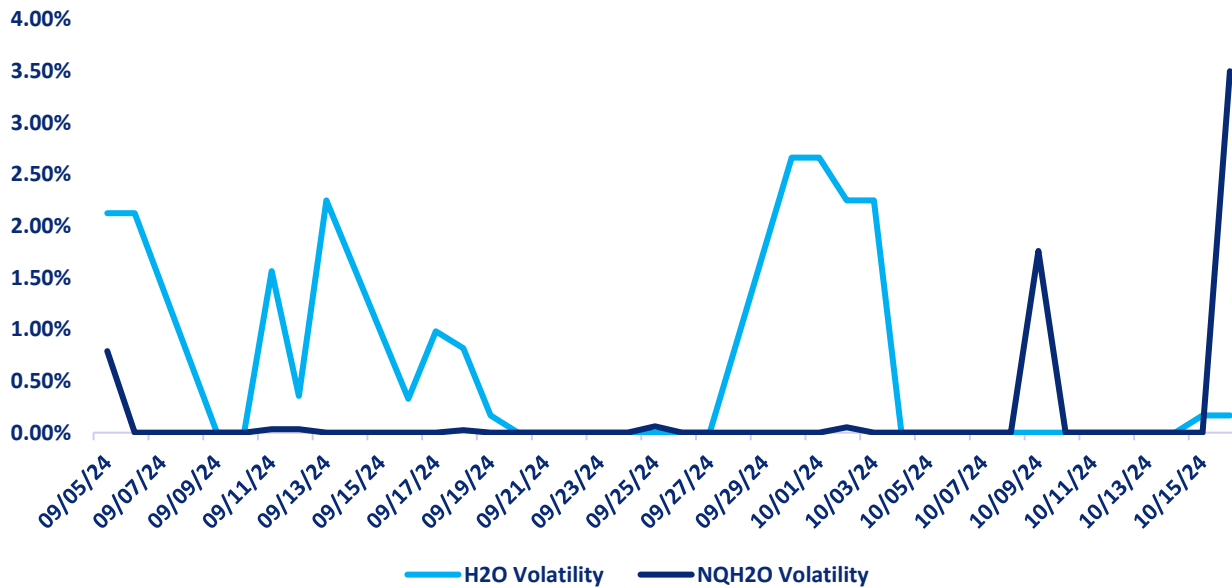
### Summary

- The price is currently experiencing short-term bearish momentum, as it is sitting below the MA 5, MA 10, and MA 20, and medium-term weakness is also confirmed by the price being below the MA 30.
- Despite this, the long-term trend remains relatively positive, as the price is still above the MA 120, though it's approaching the MA 100.
- The stochastic indicator signals that the market is in oversold territory, meaning further downside is possible, but a reversal may occur soon.
- Key levels to watch: Immediate support at 390 and resistance at 500. If the price continues to fall, support around the MA 100 at 406 should be closely monitored.



## H2O FUTURES AND NQH2O INDEX VOLATILITY ANALYSIS

### Daily H2O Futures Volatility vs Daily NQH2O Index Volatility



### DAILY VOLATILITY

Over the last week the October contract daily future volatility has been 1.74%.

ASSET	1 YEAR (%)	2 MONTH (%)	1 MONTH (%)	1 WEEK (%)
NQH2O INDEX	29.10%	4.86%	4.87%	2.46%
H2O FUTURES	N/A	9.25%	6.47%	6.62%

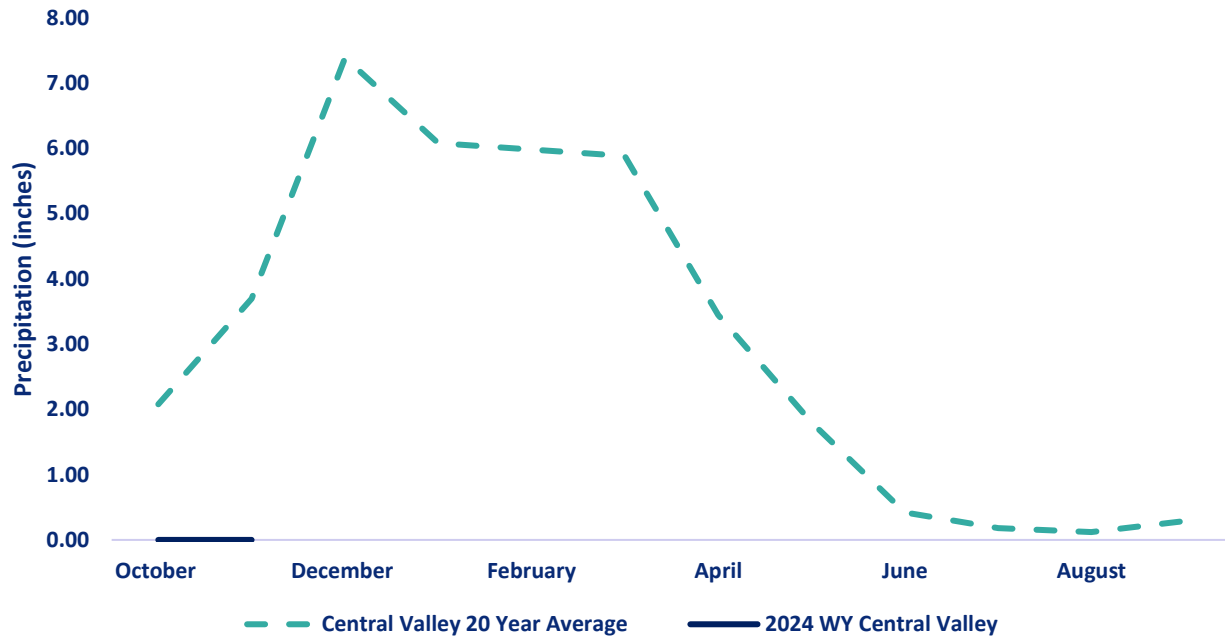
For the week ending on October 16<sup>th</sup>, the two-month futures volatility is at a premium of 4.39% to the index, up 0.98% from the previous week. The one-month futures volatility is at a premium of 1.60% to the index, down 4.23%. The one-week futures volatility is at a premium of 4.15% to the index, volatility.

*Above prices are all **HISTORIC VOLATILITIES**. All readings refer to closing prices as quoted by CME.*



## CENTRAL VALLEY PRECIPITATION REPORT

### Central Valley Precipitation Index



Central Valley average is calculated using data from 19 weather stations in the Central Valley, California.  
Data as of 16/10/2024

STATION	MTD (INCHES)	WEEK ON WEEK CHANGE (INCHES)	% OF 20 YEAR AVERAGE MTD	2025 WYTD VS 2024 WYTD %	2025 WY VS 20 YEAR AVERAGE TO DATE %
SAN JOAQUIN 5 STATION (5SI)	0	0.00	0.00%	0	0
TULARE 6 STATION (6SI)	0	0.00	0.00%	0	0
NORTHERN SIERRA 8 STATION (8SI)	0.04	0.04	1.37%	0	3
CENTRAL VALLEY AVERAGE	0.01	0.01	0.00%	0	0

## RESERVOIR STORAGE

RESERVOIR	STORAGE (AF)	% CAPACITY	LAST YEAR % CAPACITY	*% HISTORICAL AVERAGE
TRINITY LAKE	1,671,082	68	51	114
SHASTA LAKE	2,691,185	59	71	108
LAKE OROVILLE	1,789,887	51	71	96
SAN LUIS RES	1,059,791	52	77	119

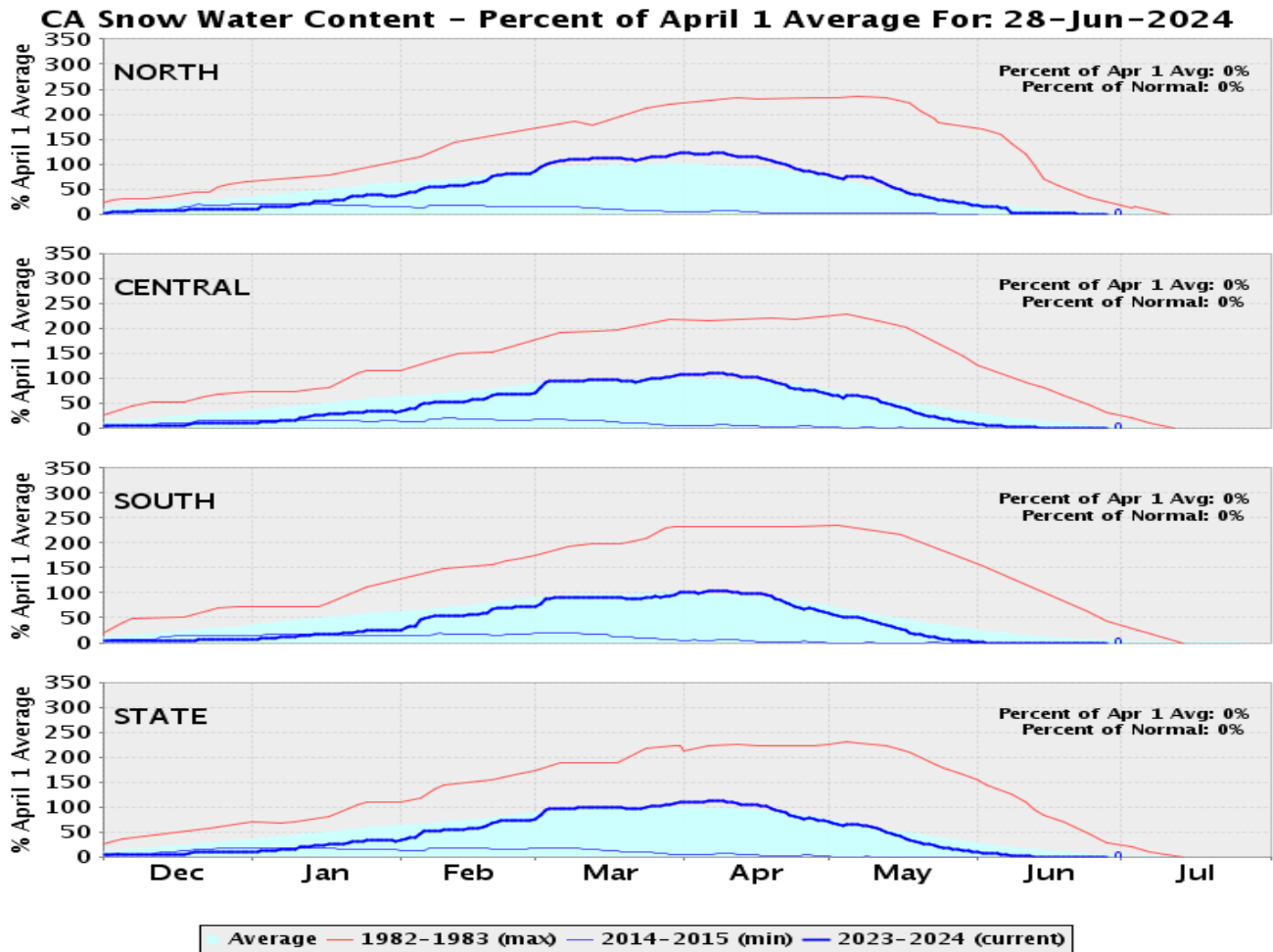
\*% Historical Average is based on a daily average that is interpolated from historical monthly averages. The monthly averages are computed using monthly data from water year 1991 to 2020. The monthly averages are updated every 5 years using a sliding 30 year period.

[Reference: California Water Data Exchange](#)





## SNOWPACK WATER CONTENT



REGION	*SNOWPACK WATER EQUIVALENT (INCHES)	WEEK ON WEEK CHANGE (INCHES)	% OF AVERAGE LAST YEAR	% OF 20 YEAR HISTORICAL AVERAGE	% OF HISTORICAL **APRIL 1ST BENCHMARK
NORTHERN SIERRA	0	0	0	0	0
CENTRAL SIERRA	0	0	0	0	0
SOUTHERN SIERRA	0	0	0	0	0
STATEWIDE	0	0	0	0	0

\*Snow Water Equivalent, or SWE, is a commonly used measurement used by hydrologists and water managers to gauge the amount of liquid water contained within the snowpack. In other words, it is the amount of water that will be released from the snowpack when it melts. SWE has regional variance.

\*\* April 1<sup>st</sup> is used as the benchmark as it when the snowpack in California is generally deepest. It has been used the benchmark date since 1941 by DWR and can be used to predict spring river flow.



# DROUGHT MONITOR

## California

[Home](#) / California

Map released: Thurs. October 10, 2024

Data valid: October 8, 2024 at 8 a.m. EDT

### Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

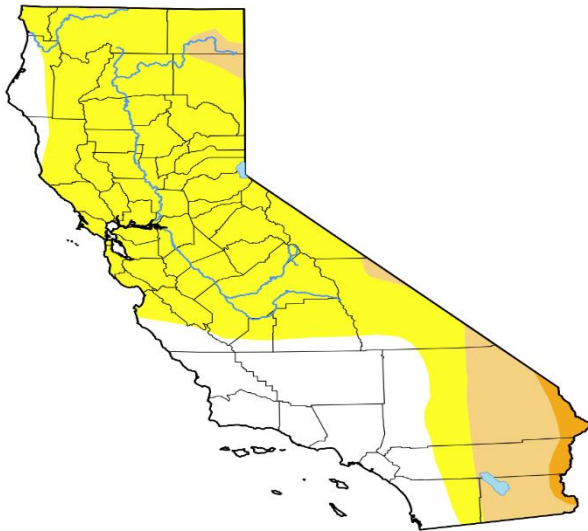
### Authors

United States and Puerto Rico Author(s):

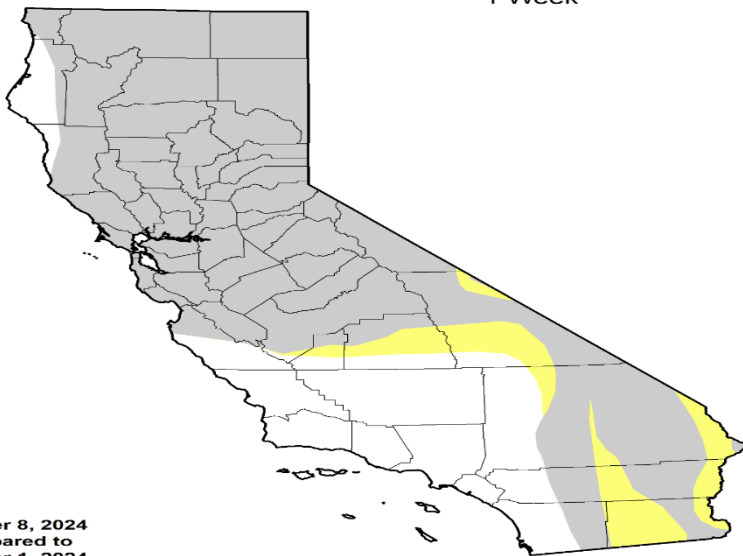
[Richard Tinker](#), NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):

[Denise Gutzmer](#), National Drought Mitigation Center



**U.S. Drought Monitor Class Change - California**  
1 Week



October 8, 2024  
compared to  
October 1, 2024



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

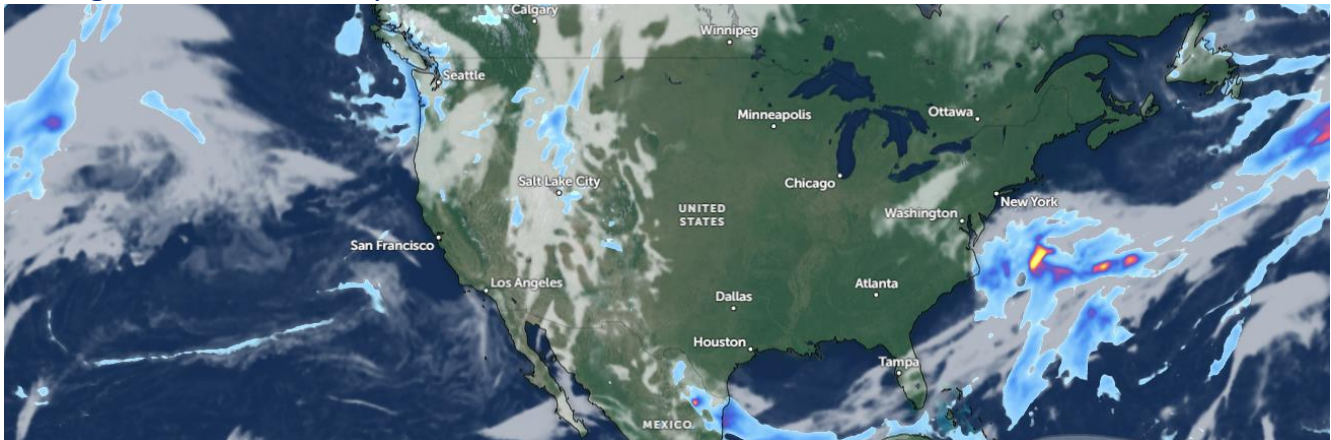
Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	<a href="#">2024-10-08</a>	24.68	75.32	13.77	1.72	0.00	0.00	91
Last Week to Current	<a href="#">2024-10-01</a>	28.40	71.60	10.67	0.08	0.00	0.00	82
3 Months Ago to Current	<a href="#">2024-07-09</a>	80.72	19.28	0.77	0.00	0.00	0.00	20
Start of Calendar Year to Current	<a href="#">2023-12-26</a>	96.65	3.35	0.00	0.00	0.00	0.00	3
Start of Water Year to Current	<a href="#">2024-10-01</a>	28.40	71.60	10.67	0.08	0.00	0.00	82
One Year Ago to Current	<a href="#">2023-10-10</a>	93.98	6.02	0.07	0.00	0.00	0.00	6

The U.S Drought Monitor is jointly produced by the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. Map courtesy of NDMC.



### CURRENT SATELLITE IMAGERY

The satellite picture shows stormy winter weather coming in off the Pacific over the northwestern regions. A line of cloud with associated precipitation over the Rockies with another system following closely behind. The Midwest is clear and storm systems are exiting the east coast at present.

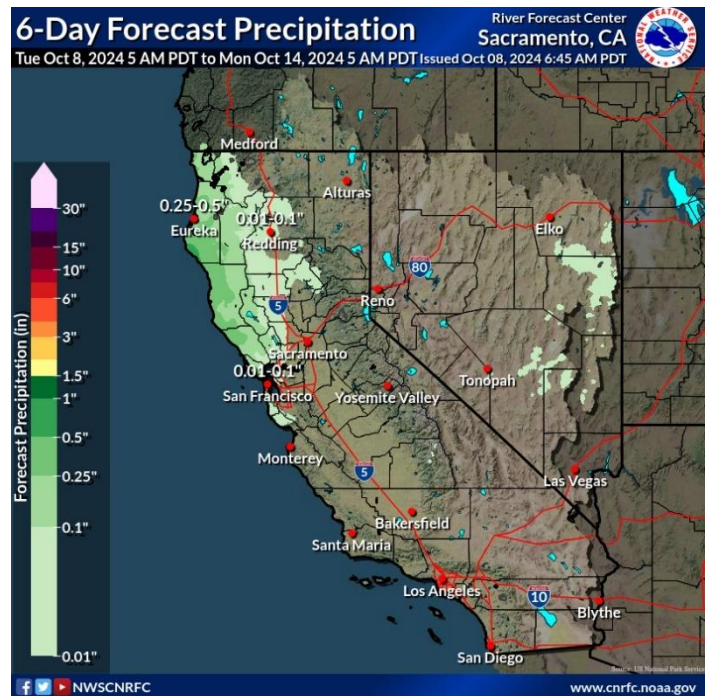


### 10 Day Outlook

The trough is expected to drop showers across northern CA and NV into early Thursday as it moves through along with slight chances of thunderstorms over parts of nrn CA and over most of NV.

Another trough will then spin up off the back side of the main low on Thursday dropping into the PacNW and nrn CA by the afternoon. This will bring afternoon highs down to 5 to 15 deg F below normal for Thursday/Friday with some areas as much as 20 deg below normal on Friday. It will also bring another round of showers, and possible isolated thunderstorms, to northern CA and NV late Thursday morning through Friday morning. Model differences are not quite as drastic with this system, coming into better alignment than yesterday on the majority of the precip falling north of the OR border. All the QPF clusters are showing less than 0.50" at the far nw corner of the Smith Basin with generally light amounts elsewhere across nrn CA and NV. The det runs are a little wetter over nrn CA bringing showers a bit further south into nrn CA than the ensembles, but amounts are around 0.10-0.25" or so.

Map Ref: Zoom Earth





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QPF was a combination of morning WPC guidance, the NBM, and the ECMWF. Majority of the precip expected in the near term will be over srn OR, the northern Sierra/ne CA, and over nrn NV. QPF through 12z Friday: 0.30-0.80" nrn NV, 0.25-0.50" northern Sierra/ne CA/srn OR Cascades, 0.10-0.25" the rest of the CA/OR border and the central Sierra, and generally a tenth of an inch or less for the rest of nrn CA. Some light showers over far southern coastal CA possible with that second system later Thursday as it digs deeper into the region.

That Thursday trough will deepen into a closed low by early Friday morning as it heads into the Four Corners. The back edge of the low may result in some lingering showers over eastern NV and se CA. Behind the low, a ridge will build back into the eastern Pacific drying conditions out the rest of Friday and through at least mid Sunday morning while also raising temperatures back to near/above normal from nw to se. Just on the heels of the ridge is another trough that will move into the PacNW over the weekend. This may bring additional showers to the northern regional boarder late Sunday into Monday, but there are some timing differences between the GFS/ECMWF as well as disagreement on the structure of the trough. Kept amounts light for now blending WPC/NBM with the drier det GFS/ECMWF. This amounted to a few hundredths to just over 0.10" across the Smith Basin and a few hundredths to a tenth for the rest of the north coast. Some of the ensemble clusters are a bit wetter along the north coast with about half of the ECMWF ensemble members showing potential for over an inch. Will keep an eye on this over the next several days.

Reference: National Weather Service / California Nevada RFC / Sacramento CA



**WESTERN WEATHER DISCUSSION**

For the last couple of weeks, several tenths of an inch to over an inch of precipitation fell from the Cascades of Washington and northern Oregon westward to the Pacific Ocean, allowing temperatures to climb only slightly above normal and bringing an end to abnormal dryness in a small section of northwestern Washington where precipitation has been most significant. Slightly-elevated temperatures extended eastward through the state of Washington and some adjacent areas, but the rest of the West Region was significantly warmer than normal, with many areas reporting record or near-record heat for this time of year. Areas from southern Montana, central Idaho, and southern Oregon southward through the Great Basin, California, Arizona, and western New Mexico reported high temperatures averaging over 10 deg. F above normal, with most of California and the adjacent Southwest enduring almost summerlike heat 15 to 20 deg. F above normal for this time of year. For the past 2 months, high temperatures have averaged 4 to 8 deg. F above normal over central and eastern Montana, and through most of Arizona and some adjacent areas, including southern Nevada. A few locations in eastern Montana averaged more than 8 deg. F higher than normal. Drought tends to move slowly this time of year in the West Region, where light precipitation often doesn't keep up with water loss to evapotranspiration and human usage, but the excessive heat has caused drought conditions to intensify at a quicker rate than usual. This past week, much of the West south and east of the Cascades saw conditions deteriorate sufficiently to justify an increase in the Drought Monitor classification, with a large D2 expansion in the Southwest as well as parts of eastern Washington and Idaho. D2 to D4 conditions (severe to exceptional drought) also covered western Montana, unchanged over the past several weeks. On the southern tier of the West Region, D2 and D3 conditions increased slightly in coverage over southern New Mexico. The area with some improvement was found in central Idaho due to the sustained effects of precipitation a few weeks back.

Reference:

Lindsay Johnson, National Drought Mitigation Center  
Richard Tinker, NOAA/NWS/NCEP/CPC





## WATER NEWS

### CALIFORNIA WATER NEWS

#### **State backs environmentalists after water shutoff kills thousands of fish in Kern River**

California officials have joined a legal effort to restore water to the Kern River after an abrupt shutoff of water dried up the river and killed thousands of fish in Bakersfield.

The decision by state officials and Atty. Gen. Rob Bonta to intervene in the court case gives new impetus to environmental groups as they try to compel the city of Bakersfield and agricultural water districts to bring back a flowing river.

Bonta announced Monday that he and the California Department of Fish and Wildlife filed a brief supporting the environmental groups in the case before the state's 5th District Court of Appeal.

"California's waterways and ecosystems are the lifeblood of our state's rich and diverse wildlife and natural habitats," Bonta said. "Yet, in Bakersfield, the sudden loss of Kern River flows due to the city officials' decisions to divert all water away from the river, is leaving behind a dry wasteland where fish are dying in droves."

The river suddenly dried up along several miles of its channel in Bakersfield starting in late August. Those who first noticed the abrupt loss of water included Rae McNeish, an associate professor at Cal State Bakersfield who was conducting biological surveys with her students.

They gathered data on the devastation as the flowing river dwindled to a dry riverbed, leaving masses of dead fish scattered on the sand and mud. By mid-September, they had counted more than 3,000 dead fish.

The collapse of the river came as a shock in Bakersfield, where residents had grown accustomed to seeing water flowing past parks and beneath bridges after two wet winters. It followed an appeals court ruling that cleared the way for city officials and water managers to reduce flows upstream, keeping some water behind a dam and sending other supplies to farms.

Bonta said with the filing of the friend-of-the-court brief, "we urge the Court to allow enough water to flow in the Kern River, as required by law, to preserve ecosystems and ensure sustainability and viability of our fish populations."

In the state's brief, Bonta focused on the importance of a certain state environmental statute: Fish and Game Code Section 5937. It requires that all dam owners and operators release sufficient water to keep fish below the dams in "good condition."

Six environmental groups have also cited this statute in their case. The groups, led by Bring Back the Kern and Water Audit California, sued Bakersfield in 2022, arguing that



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allowing water diversions to dry up the river violates California's public trust doctrine, the principle that certain natural resources must be preserved for the public. The city controls several weirs where water is diverted. Some of the water is used in Bakersfield, but much of it is used by agricultural water districts to supply farms that produce almonds, pistachios, grapes, oranges and other crops.

Last year, a judge granted the environmental groups a preliminary injunction requiring the city to ensure sufficient water to keep the river flowing and provide for fish. But agricultural water districts appealed that ruling. And earlier this year, an appeals court froze the judge's order, effectively allowing for the river to be drained and dried up while the case is pending in Kern County Superior Court.

The attorney general's office said in its announcement that in late August, the city of Bakersfield "once again diverted all of the flows from the Kern River below the Calloway Weir to deliver to agricultural customers, leaving thousands of fish to die."

The attorney general's brief argues that city officials must follow the law and release sufficient water to keep the river flowing and fish in "good condition."

The dewatering of the river and the mass fish die-off sparked an outpouring of concern in the community. City officials have said they would like to make more water available for the Kern River but that the recent court decision does not currently allow for that.

A spokesperson for the city declined to comment about the attorney general's decision to intervene in the case.

The environmental groups' lawsuit is directed at the city but also lists agricultural irrigation districts that receive water as parties, including the Kern Delta Water Storage District, North Kern Water Storage District and Rosedale-Rio Bravo Water Storage District.

Original Article: [The LA Times by Ian James](#)

### **California Atmospheric River Forecast: 'Big Changes' in Storm Path Expected**

Atmospheric rivers are forecast to "drench the West Coast" this winter, according to a recent meteorological report.

Last winter, the West Coast faced a slew of atmospheric rivers that caused devastating floods and landslides. The storms also brought a deluge of rain that supplemented California lakes and rivers, helping to eliminate the state's drought. Meteorologists are again predicting a wet winter for the West Coast, according to an AccuWeather report published Monday, and meteorologists are warning of a "big change" expected in the Golden State by midseason.



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Atmospheric rivers are a "long, narrow region in the atmosphere—like rivers in the sky—that transport most of the water vapor outside of the tropics," according to the National Oceanic and Atmospheric Administration.

Moisture in the Pacific Northwest will begin to increase in November and December, the report said, after California battled weeks of heat that sent temperatures soaring well past 100 degrees in some areas earlier this summer. California has endured heat-related weather warnings as recently as October.

Paul Pastelok, an AccuWeather senior meteorologist and long-range expert, told Newsweek that another strong atmospheric river winter could further improve California's water situation, as drought is restricted to the state's northeast and southeast corners.

The Los Angeles River is swollen by storm runoff on February 5 as a powerful long-duration atmospheric river storm continues to affect Southern California. Meteorologists are forecasting that atmospheric rivers will "drench" the West Coast... More Mario Tama/Getty

Meteorologists forecast that the first half of winter will produce atmospheric rivers in the Pacific Northwest and Northern California before the storms trek inward over the Rocky Mountains. However, a "big change" is expected when 2025 arrives.

More From Newsweek Vault: What Is an Emergency Fund?

"Look for a potential shift in the storm track midwinter," Pastelok said in the report.

The new weather pattern will create prime conditions for storms to shift southward and affect Central and Southern California. Meteorologists anticipate that January will be the wettest month of the year for Los Angeles and San Diego. Other cities throughout the Southwest will experience wet weather as the storms move inland.

Storm patterns will shift back to Northern California in February, the AccuWeather report predicted.

Frequent atmospheric rivers are more common during the El Niño climate pattern, which was underway this past winter. La Niña is forecast for this winter, although the climate pattern is expected to be weak, which could influence weather on the West Coast.

AccuWeather reported that even though La Niña climate patterns are not known for their frequent atmospheric rivers, a weak La Niña winter in 2022-23 produced nearly 40 atmospheric rivers across the Western U.S.

Pastelok told Newsweek he expects this incoming season to resemble 2022-23 in terms of atmospheric rivers, but the forecast could change if the water temperatures in the Pacific undergo a drastic change. If the warmest waters shift east, Pastelok warned, California could experience a dry, warm winter similar to the 2013-14 season.



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Outside of California, AccuWeather is predicting a slightly warmer than normal winter across much of the rest of the U.S., although the Pacific Northwest and inland states like Idaho, Montana and Wyoming are expecting a cooler than normal winter.

Original Article: [Newsweek.com by Anna Skinner](#)

### **OCWD wins legal victory upholding authority over groundwater basin management**

On October 7, 2024, the California Court of Appeal upheld the Orange County Water District's (OCWD) authority to [manage the Orange County Groundwater Basin](#) in the case *Irvine Ranch Water District v. Orange County Water District et al.*

This ruling ensures the continued ability of OCWD to achieve sustainable management of the basin, a vital source that provides 85% of the water for 19 cities and water districts serving 2.5 million Orange County residents.

The court's decision reaffirms OCWD's groundwater management practices and statutory authority, ensuring the continued equitable distribution of groundwater across north and central Orange County.

This legal validation allows OCWD to maintain its proven framework for managing basin resources while protecting water quality and local water supplies.

"In 2018, the Los Angeles Superior Court ruled in favor of the District, and now the California Court of Appeal has fully affirmed it," said OCWD President Cathy Green in a press release. "This victory reflects the outstanding work of OCWD and the agencies we serve. We remain committed to ensuring a reliable, cost-effective water supply for the communities we've supported for decades."

Since its founding in 1933, OCWD has led the way in groundwater management, employing innovative strategies that have doubled the basin's water yield ensuring a low cost. These advancements have allowed cities and water districts to increase groundwater pumping, significantly reducing dependence on expensive imported water. Recognized globally for its expertise, OCWD was also consulted by California's governor and key policymakers during the creation of the 2014 Sustainable Groundwater Management Act, playing an important role in shaping the state's framework for long-term management of groundwater supplies.

Original Article: Stormwater Solutions

### **California's New Water Fee Hikes Stir Concerns Among Farmers and Ranchers**

According to the California Farm Bureau Ag Alert, the California State Water Resources Control Board has approved fee increases for water rights and water quality programs for the 2024-25 period to address budget shortfalls. The new fees impact farmers and ranchers, particularly for groundwater recharge projects aimed at replenishing critically



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overdrafted aquifers under the state's Sustainable Groundwater Management Act (SGMA).

Agriculture representatives, including the California Farm Bureau, expressed concern that high fees could deter participation in vital groundwater recharge efforts. Proposed fee hikes include substantial increases for permits, with some costs rising from \$6,000 to as much as \$58,000, depending on the timing of applications. While the board opted for a 50% reduction in water rights fee increases, other water quality fees, such as those for wastewater discharge and irrigated lands, will rise by around 5%.

Despite the increases, state officials, including Gov. Gavin Newsom, emphasize groundwater recharge as crucial for water conservation efforts. Stakeholders are encouraged to collaborate with the board to manage water resources and compliance costs more effectively.

Further discussions on the fee increases are expected in a fall stakeholder meeting.

Original Article: [Sierra Daily News](#)

### **America's largest water district raising rates 40%, says conservation cut revenue**

America's largest water district says declining revenues due to increased water conservation are forcing the agency to significantly raise water rates to remain solvent. The Metropolitan Water District of Southern California, which supplies water for 19 million Americans, is raising its rates 8.5% in 2025 and another 8.5% over baseline levels in 2026. The district's projections include raising rates an additional 11.5% in 2027 and another 11.5% in 2028 to finance an \$8.2 billion water recycling plant that could provide enough annual water for 1.5 million people.

MWD had already planned on spending \$37 million of its reserves to make up for rising costs and selling water at a loss.

Given that MWD based its rate increases on the assumption it will sell 1.34 million acre feet of water in fiscal year 2024-2025, it's likely water sales could still come in below MWD's expectations, which could cause problems for the budget.

Each of the 40 members of the MWD board of directors is appointed by a public agency he or she represents, which includes cities and water districts. MWD's board has final say on everything from staffing to budgeting and water use, and approved the latest rate increase.

Original Article: [MSN by Kenneth Schrupp/ The Centre Square](#)





## US WATER NEWS

### **EPA Allocating About \$24,898,000 To Address Lead And Copper Pipes In New Mexico's 700 Drinking Water Systems**

The Biden-Harris Administration this week issued new regulations requiring drinking water systems nationwide to locate and replace lead pipes within a decade, a mandate that will affect hundreds of New Mexican water systems.

In support of this mandate, the U.S. Environmental Protection Agency is allocating approximately \$24,898,000 in new funding for New Mexico's drinking water infrastructure to pay for lead pipe inventory and replacement projects.

These funds come in the form of loans, subsidies and grants, with at least 49% allocated to underprivileged communities in the form of grants or principal forgiveness not requiring repayment.

The fresh funds are in addition to hundreds of millions of dollars NMED already offers to help build up water infrastructure systems throughout New Mexico. NMED spent about \$78 million on water projects in fiscal year 2024, a sign of the agency's commitment to helping water systems get back into compliance and serve safe drinking water to their customers.

Approximately 700 New Mexico water systems are affected by the new EPA rule. Communities and water systems must apply for these funds through the Bipartisan Infrastructure Law via New Mexico's Drinking Water State Revolving Funds. They are administered through the New Mexico Finance Authority, with the New Mexico Environment Department assisting community water systems to qualify for the funding. More information regarding applying can be found on the NMED website. The application for these funds can be found [here](#).

"Starting today, drinking water systems can take advantage of these funds to remove metals like lead and copper from their drinking water," New Mexico Environment Secretary James Kenney said. "With record levels of federal water infrastructure dollars flowing into our state, safe and reliable drinking water is within reach of every utility in our state."

Lead is a potent neurotoxin and there is no safe level of lead exposure, particularly for children. In children, lead can severely harm mental and physical development, slow down learning and irreversibly damage the brain. In adults, can lead cause increased blood pressure, heart disease, decreased kidney function, and cancer. If someone is impacted by lead exposure, there is no known antidote.

The Lead and Copper Rule Improvements (LCRI) mandate more stringent testing protocols for drinking water and establish a reduced threshold for communities to address lead presence in drinking water — thereby safeguarding individuals from harmful exposure.



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This definitive regulation also enhances communication within communities, ensuring that families are comprehensively informed about the potential risks associated with lead in drinking water, the identification of lead pipes, and the strategies for their replacement.

Original Article: [LA Daily Post by Carol A Clarke](#)

### **CAP board candidates discuss potential Colorado River deal hopes, worries**

Candidates running to manage Arizona's largest water provider want the federal government to take a stronger role in stalled Colorado River negotiations.

Speaking during a candidates' debate on Tuesday, Heather Macre, one of six people seeking a seat on the Central Arizona Water Conservation board, argued that the U.S. Bureau of Reclamation — the federal agency responsible for managing dams — should provide "contours" to guide the seven Colorado River basin states toward a solution for managing the river's recent decline.

"That's something we have been asking for and haven't really gotten," Macre said.

Macre and fellow board incumbent Terry Goddard said the bureau should at least clarify that any proposals will have to conform to the the conditions of the 1922 Colorado River Compact, a critical treaty that divides the river among the seven states.

"We need assurances that the compact will in fact be enforced," said Goddard, who is board chair. "Nobody has given us a strong answer. If they would, I think the (Upper Basin states) would immediately come to the table."

Though Macre and Goddard were the only two candidates at Tuesday's debate who called on the federal government to make that assurance, Goddard said the board has broadly supported the position.

Central Arizona Water Conservation District board member Alexandra Arboleda, who is not running for election this year, gave introductory remarks before candidates spoke during Monday's ...

All six candidates running for the water conservation district's board of directors attended Tuesday's debate, hosted by The Arizona Republic. This year's contenders are running for five open seats on the 15-member board, all representing Maricopa County. The Central Arizona Water Conservation District board sets fiscal and technical policy for the Central Arizona Project, the 336-mile canal that brings Colorado River water to cities and farms in the Phoenix and Tucson areas. The system serves over 6 million people, providing nearly 40% of the water used in Phoenix alone.

How will the Colorado River states negotiate a deal?

Board members elected this year will not participate directly in interstate discussions over the strained Colorado River. Still, they will have strong input on Arizona's positions. The deadline for the interstate negotiation process will fall during the terms of this year's election winners.



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Candidates spent most of Tuesday's debate discussing the stalled negotiation process over how Colorado River states will distribute water cuts during shortage years. The Lower Basin states (California, Arizona and Nevada) released a proposal in March that would see those three states accepting most of the cuts in dry years while Upper Basin states took cuts during the most serious shortages.

Upper Basin states (Colorado, Utah, New Mexico and Wyoming) submitted their own conflicting proposal, which would hold the Lower Basin responsible for all the cuts. Upper Basin states argue that the Lower Basin is uniquely responsible for low water levels in Colorado River Reservoirs.

"I don't think (water cuts on the river) are something that the Lower Basin should be shouldering entirely," Macre said.

Original Article: [AZ Central by Austin Corona](#)

### **End of fluoridation of US water could be in sight after federal court ruling**

or decades, drinking water fluoridation opponents were often portrayed as a fringe element and conspiracy theorists, but a federal ruling in the US may put an end to the practice and marks a pivotal point in their campaign to convince the public and policymakers of the substance's dangers for infants' developing brains.

Armed with a growing body of scientific evidence pointing toward fluoride's neurotoxicity, public health advocates say the legal win shows they are overcoming "institutional inertia" and the unwillingness of federal public health agencies to admit they may have been wrong.

The order last week requiring the US Environmental Protection Agency (EPA) to begin the process of strengthening fluoride regulations represents a "landmark" legal win that has long been in the making, said Stuart Cooper, director of the Fluoridation Action Network advocacy group.

"After many years of them ignoring us and defending fluoridation, we had an opportunity to get a fair and balanced adjudication in courts," Cooper said.

The Obama-appointed US judge Edward Chen found fluoridation could cause developmental damage and lower IQ in children at levels to which the public is generally exposed in drinking water. Though the ruling did not state the level at which fluoridation would damage brains, the levels in US water present an unreasonable risk, the court found.

The EPA now must perform a risk assessment that is among the first steps in setting new limits under the Toxic Substances Control Act.

US water has been fluoridated since 1945, though the recommended levels have since been lowered over health risks. Fluoride strengthens teeth and reduces cavities by replacing minerals lost during normal wear and tear, according to the US Centers for



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Disease Control and Prevention, and dentistry groups say it protects young children's gums and developing teeth.

It is added to drinking water for more than 200 million Americans, or about 75% of the population, at recommended levels of 0.7 milligrams of fluoride per liter of water.

Though those opposed to fluoridation can point to credible evidence to back their case, anti-fluoridation history has included conspiracy theories that the process was a post-second world war communist plot, or, later, a coordinated effort to sap US society of intelligence.

But there has always been evidence of the risks, and the practice is rare in most other countries, including those in Europe. The last 15 years have seen an "uptick" in high-quality scientific research demonstrated the risks, said Michael Connett, a Food and Water Watch lead attorney on the case.

The EPA had been "a good soldier" and toed the federal government's line, but that required it to ignore evidence and abandon its statutorily required duties, Connett said. "You have agencies that have aggressively promoted fluoridation for decades in a very un-nuanced, sledgehammer way, so it's quite a departure from that party line to say, 'Oh, oops, looks it might actually be damaging the brain,'" Connett said. "There's an institutional credibility and inertia issue."

Still, even after the ruling, many fluoridation supporters are not backing down. Much of the medical establishment supports the process. In a statement last week, the American Dental Association, which supports fluoridation, said: "The key takeaway for the public and public health community from this ruling is that it does not conclude with any certainty that fluoridated water is injurious to public health."

Cooper pointed to a statement made by an American Pediatric Association official during the court case in which she said she would not oppose fluoridation even if it reduced five IQ points for up to 10% of the population.

Cooper said the fight over fluoridation over the last several decades had been with the medical establishment and regulatory agencies, while everyday residents generally agreed that the practice should end.

"The vast majority of the public was always on our side, there was never a citizen who said, 'Yes, please give us fluoridated water,'" Cooper said.

The shift in part picked up momentum as scientists like Linda Birnbaum, a former head of the EPA's toxic chemicals program, came out in support of ending fluoridation, and some government agencies over the last several years found unreasonable risk.

Original Article: [The Guardian by Tom Perkins](#)



## GLOBAL WATER NEWS

### **Only one-third of Europe's surface water qualifies as good or better, study finds**

Only about one-third of Europe's surface water is in good health or better, a report has found, despite an EU target first set for 2015 to bring all bodies of water up to good quality.

About 37% of Europe's surface waters qualified as having at least a good ecological status and 29% a good chemical status in 2021, according to data from 19 member countries compiled by the European Environment Agency (EEA). The original deadline for the EU target has been extended to 2027 but data suggests this is on track to be missed by a wide margin.

"The health of Europe's waters is not good," said Leena Ylä-Mononen, the EEA's executive director. "Our waters face an unprecedented set of challenges that threatens Europe's water security."

The report found that farms had the biggest effect on Europe's surface water and groundwater, drawing out too much water and pumping in too many pollutants, along with the impact of coal-fired power plants that spew out toxic particles.

Parts of western and central Europe such as Germany and the Netherlands had a particularly high share of water bodies in poor health, the report found.

It highlighted the "catastrophic" die-off of fish in the Oder River in 2022 that was mainly caused by pollution from salt mines and nutrients from urban wastewater.

The EU introduced sweeping rules on water management almost 25 years ago that sent member countries racing to improve the quality of their bodies of water. But efforts over the last decade "have rarely translated into improved status overall", the EEA found, in the most thorough assessment of the continent's waterways to date.

The report found that Europe's groundwater was in better health than its surface water, with 91% rated as having at least a good quantitative status and 77% achieving a good chemical status. On both metrics, groundwater quality had improved by just one percentage point since 2015.

The EEA said solutions to the poor state of Europe's water included reducing demand, releasing fewer harmful substances, and restoring rivers and wetlands. The scientists pointed to the floods that ravaged central Europe last month as examples of weather events that have made action more urgent.

Original Article: [The Guardian by Ajit Niranjana](#)





## How Mexico City Averted All-Out Drought

As severe drought parched the Valley of Mexico earlier this year, news outlets began a countdown to a total failure of the water system. Reservoirs more than 100 kilometers away from Mexico City were at dangerously low levels and some areas already were facing acute shortages. Tanker trucks loaded with potable water sloshed down residential avenues to deliver emergency supplies.

Without ample rain, “Day Zero” would theoretically arrive in June. But that darkest fear of urban planners, politicians, residents and academics never came to pass. How did one of the world's largest cities avert all-out disaster?

What saved the metropolitan area’s 22 million residents from a calamitous water-system collapse was a combination of just-in-time rainfall, urgent political pressure and underground reserves that saw the city through the worst. The drawn-out crisis vaulted the region’s aging infrastructure to television screens and newspaper front pages, spurring everyday chilangos — as capital dwellers are known — to wonder if years of neglect and indifference by politicians would change.

“The model of water management in Mexico City is no longer functioning, and it’s important that we think of long-term solutions,” said Rodrigo Gutiérrez Rivas, a researcher focused on constitutional and water rights at the National Autonomous University of Mexico, or UNAM. “Water became one of the main issues during the campaign cycle and now that it's won by a wide margin, the government of Mexico City has a huge opportunity to transform the model.”

The Cutzamala System that brings water to Mexico City was threatened by the water crisis. Photographer: Hector Vivas/Getty Images

No water authority actually said the city would run completely dry. But you would have been forgiven for thinking otherwise after reading headlines such as “92 Days to Day Zero.” One key source — the Cutzamala System that pumps water to the capital from distant lakes — was, in fact, on the brink of a shutdown. The network of reservoirs and tunnels supplies a quarter of the city’s water, and if it ceased to function, millions would be in peril. Authorities opted to take less water from that system to ease the strain, but that led to more shortages in some areas.

On another level, the drought played into the hands of politicians looking to unseat the ruling party in June elections. The rare occurrence of empty taps in wealthy neighborhoods drew the attention of those vying in neck-and-neck mayoral and district races in the politically divided city. On Avenida Presidente Masaryk, one of Latin America’s ritziest boulevards, one newspaper noted that even the Louis Vuitton shop was short of water.

What water did arrive often repelled residents. Mayoral hopeful Santiago Taboada brandished jars of yellow water from various neighborhoods during a televised debate. “Here’s the water of Iztapalapa, contaminated,” he said. “The water of Benito Juárez,



contaminated. The water of Taláhuac, contaminated. The water of Xochimilco.” He then invited rival Clara Brugada — now the city’s new mayor — to bathe in it. It was incredible, in hindsight, for a city that Mexico’s indigenous people built in a valley of five lakes some 700 years ago. As recently as the nineteenth century, one could canoe to Mexico City’s downtown market. But as the conurbation expanded and modernized, the lakes were drained, freshwater springs were stanching, and more and more rainwater ran off concrete and asphalt surfaces.

The aquifer beneath the sprawling metropolis had been drawn upon faster than it could be replenished with fresh rains, raising the risks of worsening the sinking problem that cracks pipes. Leaks are so endemic that the water authority estimates supply losses are close to 32%. It all came to a head with the worst drought in more than a decade. Searing heat, scant rain and the weather phenomenon known as El Niño combined to stress every pressure point in the water network.

Original Article: [Bloomberg by Maya Averbuch](#)

### **Fidelity International launches blue transition bond fund**

Oceans and freshwater play a crucial role in regulating our climate, providing food and livelihoods, and supporting diverse ecosystems. Yet they are under threat and their protection is underfunded; the United Nations Sustainable Development Goal (SDG) “Life Below Water” remains the least funded SDG, not far behind “Clean Water” and Sanitation”, which is the sixth least funded\*.

As part of its ongoing commitment to sustainable investing, Fidelity International (“Fidelity”) announces the launch of its Fidelity Funds 2 – Blue Transition Bond Fund (the “Fund”), the first blue transition fixed income fund to launch globally according to its market analysis\*\*.

The blue transition aims to balance ocean, coastal and in-land river system usage and resources with the conservation of healthy and productive marine and freshwater ecosystems.

The Fund aims to achieve capital growth over the long term, focusing on supporting the transition towards improved ocean and freshwater health by investing in global bonds or bonds of issuers that:

- (i) Contribute to ocean and freshwater objectives aligned with one or more United Nations Sustainable Development Goals (SDG)
- (ii) Use bond proceeds to finance projects benefiting ocean and freshwater related sustainability (including blue bonds)
- (iii) Aim to improve management of water-related risks and opportunities
- (iv) Reduce the negative impact of climate change on the ocean or freshwater

A minimum of 80% of the Fund’s investments are used to meet the environmental or social characteristics promoted by the fund.



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The Fund will be managed by Kris Atkinson and Shamil Gohil. Together, they have over 42 years' experience and are backed by Fidelity's extensive global investment and sustainable investing resources. The launch follows Fidelity's broader commitment to developing thematic fixed income investment solutions that address climate change, social issues and the broader UN Sustainable Development Goals.

Kris Atkinson, Portfolio Manager, comments: "The bond market is uniquely positioned to help support the blue transition, given its size and greater number of issuers across both public and private entities in the corporate and sovereign issuer space.

"We are particularly focused on Blue Bonds, a sub-component of the green bond market, which finance ocean and freshwater related projects. However, Blue Bonds alone are not sufficient for investors looking to support ocean and freshwater themes while aiming to generate attractive risk-adjusted returns. A broader more holistic approach needs to start at the issuer level, investors should consider how a company operates, which products and services it offers, and how these align to the blue transition.

"The blue transition is a global challenge and so our approach is global too, covering the broadest fixed income investment universe possible. As credit investors we need to ensure we back our principal and interest so we use Fidelity's vast and experienced team of investment professionals to screen out bonds which don't meet our credit fundamental and valuation thresholds. The result is a globally diverse, high-quality, fixed income portfolio which helps to support the blue transition."

Original Article: [IFA Magazine by Matt Williams](#)

### **Algeria to invest \$3bln in second phase of water desalination expansion**

Algeria will invest \$3 billion in the second phase of its ambitious water desalination expansion, with six new plants planned by 2030.

This initiative is part of a \$5.4 billion project to bolster the country's ability to provide drinking water as it faces increasing climate-related challenges, local news daily AlBorsaa reported.

Lotfi Zennadi, CEO of the state-owned Algerian Energy Company, announced that this second phase will follow the commissioning of five new desalination plants in 2024 as part of \$2.4 billion Phase 1.

The new plants will raise the amount of drinking water the country can produce from the Mediterranean from 2.2 million cubic metres per day (m<sup>3</sup>/day) to 3.7 million m<sup>3</sup>/day.

Together, the 11 sea water reverse osmosis (SWRO) plants, each capable of producing up to 300,000 m<sup>3</sup>/day of drinking water, will increase Algeria's desalination capacity to 5.8 million m<sup>3</sup>/day, providing 60 percent of the country's drinking water by the end of the decade.



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Algerian Energy Company will operate the plants and charge the state-owned water distribution company Algérienne Des Eaux between 52 to 100 Algerian dinars/m<sup>3</sup> (\$0.39 to \$0.76/m<sup>3</sup>).

Original Article: [Zawya by Majda Muhsen](#)

### **Sydney Water awards contract for \$170M project**

Sydney Water has secured a delivery partner to manage the first stage of a multi-billion-dollar program of work, which will enable the construction of 90,000 new homes in Western Sydney.

Jacobs and Seymour Whyte (JSW), a joint venture, has been awarded a management contract for stage one of the Upper South Creek Networks Program. Together, in this first stage, the two companies will oversee the design, procurement and construction of up to \$170 million in critical wastewater infrastructure.

Sydney Water Program Director, Deanne McDonald, said it's an essential partnership as work begins to service the unprecedented development in the area including Bradfield City and Western Sydney International Airport.

"By 2056, it is estimated 90,000 new homes and 200,000 jobs will be created in the Upper South Creek catchment, which spans between North Luddenham and Catherine Fields," Ms McDonald said.

"That's why this partnership is so important, and that work gets underway ahead of this growth to ensure everyone has access to critical services by the time they move in."

The entire program of work will deliver over 96km of wastewater pipelines and nine pumping stations within the Upper South Creek precinct over the next 12 years.

"Most of this work will eventually be invisible to the public, but it is significant infrastructure that will allow new neighbourhoods and businesses to thrive," Ms McDonald said.

The enormous network of new pipelines and pumping stations will soon transfer flows to the state-of-the-art \$1.2 billion Advanced Water Recycling Centre (AWRC) at Kemps Creek where it will be highly treated and available for use for non-drinking purposes in homes and businesses, and in parks and open spaces to support a cooler, greener region.

Sydney Water said that work for stage one will be underway before the end of 2024 and will take around three years to complete. Sydney Water will seek to appoint additional delivery partners in the near future to continue supporting the construction of this program and the \$34 billion Major Projects pipeline.

Original Article: [Utility Magazine by Katie Livingston](#)



### **Ex-Thames Water owner Macquarie pledges £20bn for UK infrastructure**

Ex-Thames Water owner Macquarie has unveiled plans to pump billions of pounds into its UK infrastructure portfolio, spanning gas and water networks.

A pledge for some £20 billion of investment was reiterated on the sidelines of London's International Investment Summit [on Monday](#), including support for the UK's first reservoir in 30 years in the southeast.

A plan to roll out 650 electric vehicle charging points across Macquarie-owned Roadchef motorway service stations was also announced, alongside investment for offshore wind, battery storage, gas transmission and broadband projects.

"We believe that infrastructure investment helps create strong foundations for economic growth, job creation [and] better services," chief executive Shemara Wikramanayake said.

"We are fully invested in the UK's success and look forward to playing our part in delivering the investment the country needs."

Macquarie, which is headquartered in Sydney, Australia, owned Thames Water between 2006 and 2017.

The company has faced heavy criticism over its ownership of Britain's largest water company, which is on the brink of nationalisation due to a growing debt pile.

Thames' debt grew from £6 billion to £11 billion under Macquarie's control, while some £879 million worth of dividends were paid out.

Macquarie has previously stressed that 2.5 times more was invested in the water company under its ownership than when was in public hands.

The firm added on Monday that it had supported £60 billion worth of investment in UK infrastructure since expanding beyond Australia in 1989.

Original Article: [Proactive Investors by Josh Lamb](#)





***Note the attachment is not an inducement to trade and Veles Water does not give advice on investments.***