

Veles Water Weekly Report

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VelesWater



WATER FUTURES MARKET ANALYSIS

Welcome to ***WATERTALK***

by Joshua Bell

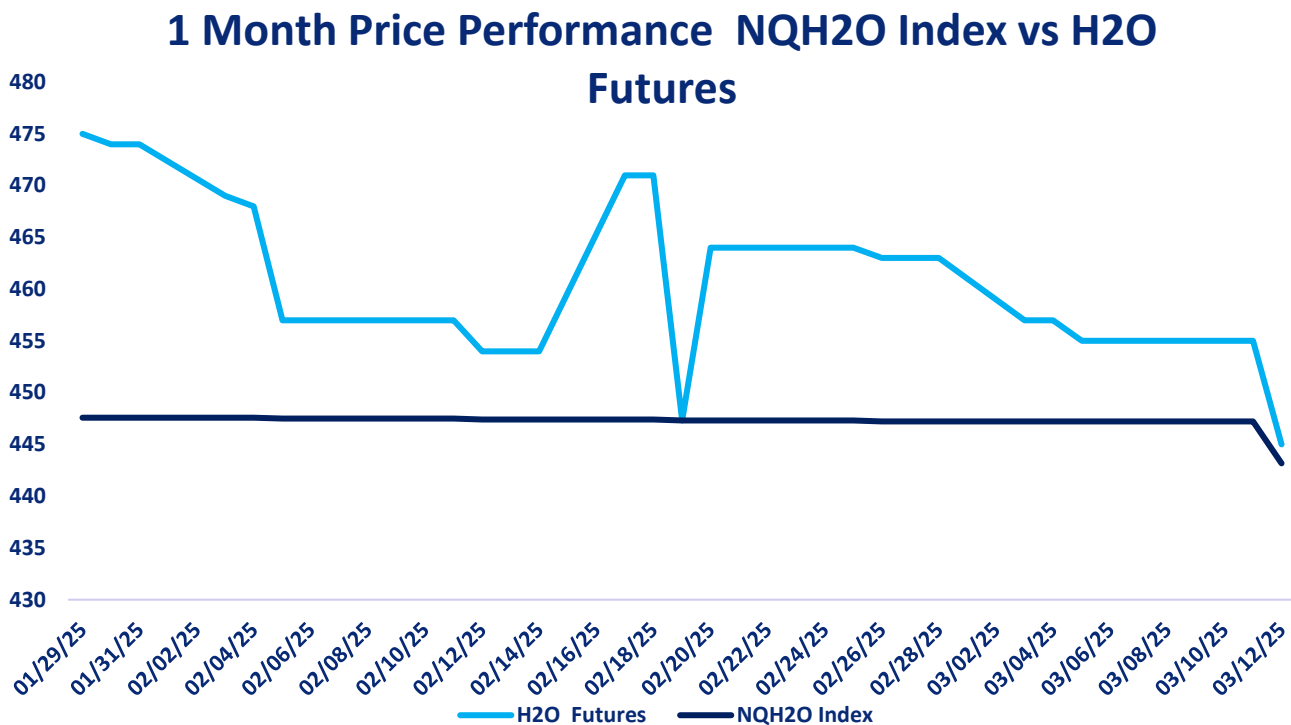
CLICK THE LINK BELOW

"A 2 minute technical analysis video of H2O futures"

<https://vimeo.com/1065389531?share=copy#t=0>



NQH2O INDEX PRICE vs H2O FUTURES PRICE



Price Chart Based upon Daily Close

The new NQH2O index level of \$443.17 was published on March 12th, down \$4.06 or 0.91% from the previous week. The March contract is considered the front month. The futures prices have closed at a premium of \$1.83 to \$7.77 versus the index over the past week.

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

Mar 25	440@445
Apr 25	445@467
May 25	470@592
June 25	480@510
June 26	560@620



H2O FUTURES TECHNICAL REPORT



Price Action

- **Current Price:** 445
- The price has decreased by 2.20% in this trading session, signaling short-term bearish pressure.

Moving Averages Analysis

Short-Term Averages:

- **5-day MA:** 453 – The price is below this level, indicating short-term bearish momentum.
- **10-day MA:** 456 – The price remains below the 10-day MA, reinforcing short-term weakness.
- **20-day MA:** 461 – The price is currently testing this level, which could act as an important support zone.

Medium-Term Averages:

- **30-day MA:** 461 – The price is currently testing this level, which could act as an important support zone.

Long-Term Averages:

- **100-day MA:** 436 – The price remains well above the 100-day MA, confirming that the long-term trend remains bullish despite recent short-term weakness.
- **120-day MA:** 433 – The price remains above the 120-day MA, reinforcing long-term stability.



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- **150-day MA:** 435 – The price is also above this level, suggesting continued long-term bullish structure.
- **200-day MA:** 421 – The price is significantly above this level, further confirming a strong long-term trend.

Support and Resistance Levels

- **Resistance at 500:**
This remains the key breakout level. A move above 500 could signal a continuation of bullish momentum.
- **Support at 445:**
This is the immediate support level. If broken, the next key support zones are:
 - 436 (MA 100) – A strong long-term support level.

Stochastic Oscillator

- K%: 0.00, D%: 20.51
- The stochastic oscillator is in oversold territory, suggesting that the market may be experiencing selling exhaustion. This could indicate a potential reversal if buying pressure increases, but further downside is still possible if selling continues.

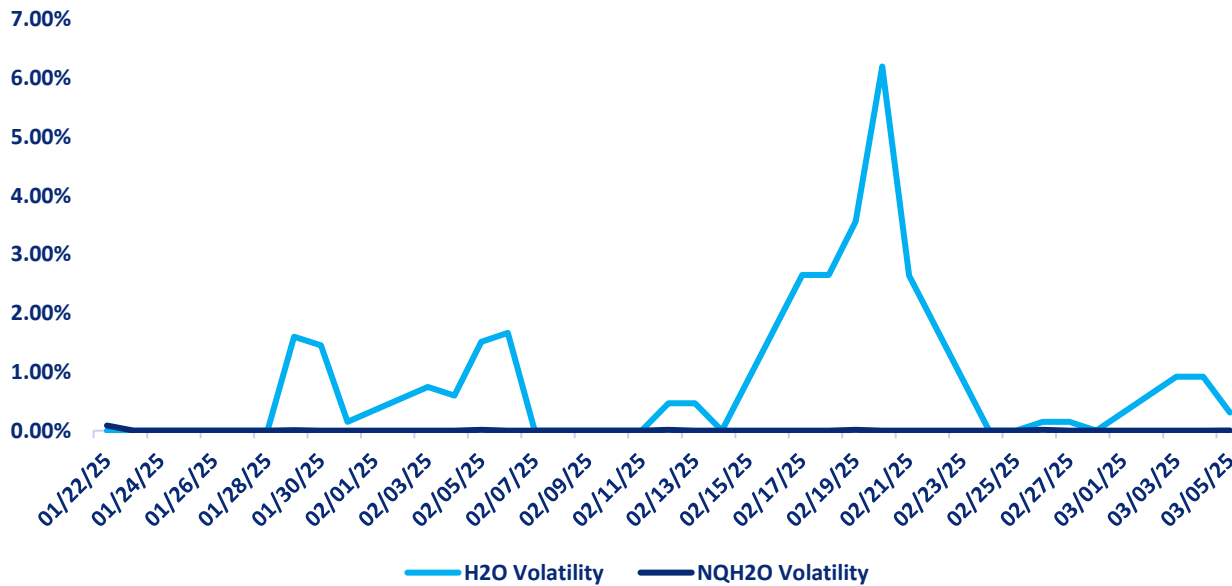
Summary and Key Takeaways

- Short-term momentum is bearish, as the price is below the 5-day, 10-day, and 20-day moving averages.
- The 30-day moving average at 461 is a critical support level to watch for potential price stabilization.
- The long-term trend remains bullish, as the price is well above the 100-day, 120-day, 150-day, and 200-day moving averages.
- The stochastic indicator suggests that the market is oversold, meaning that a bounce could occur if demand increases.



H2O FUTURES AND NQH2O INDEX VOLATILITY ANALYSIS

Daily H2O Futures Volatility vs Daily NQH2O Index Volatility



DAILY VOLATILITY

Over the last week the March contract daily future volatility high has been 1.55%.

ASSET	1 YEAR (%)	2 MONTH (%)	1 MONTH (%)	1 WEEK (%)
NQH2O INDEX	28.92%	3.04%	1.04%	0.91%
H2O FUTURES	N/A	14.07%	7.94%	2.20%

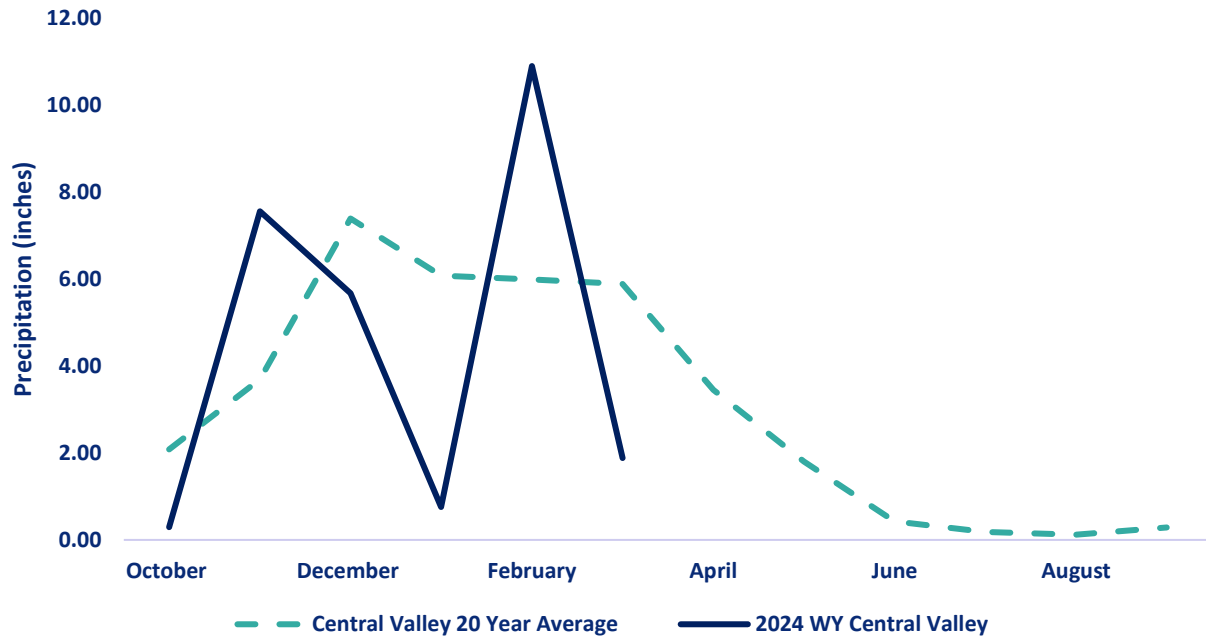
For the week ending on March 12th, the two-month futures volatility is at a premium of 11.03% to the index, down 0% from the previous week. The one-month futures volatility is at a premium of 11.84% to the index, down 4.94%. The one-week futures volatility is at a premium of 1.29% to the index, volatility.

*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 12/03/2025

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)	1.59	0.78	27.27	84	68
TULARE 6 STATION (6SI)	2.97	1.99	75.17	85	86
NORTHERN SIERRA 8 STATION (8SI)	1.09	0.48	13.86	98	114
CENTRAL VALLEY AVERAGE	1.88	1.08	32.02	89	89

RESERVOIR STORAGE

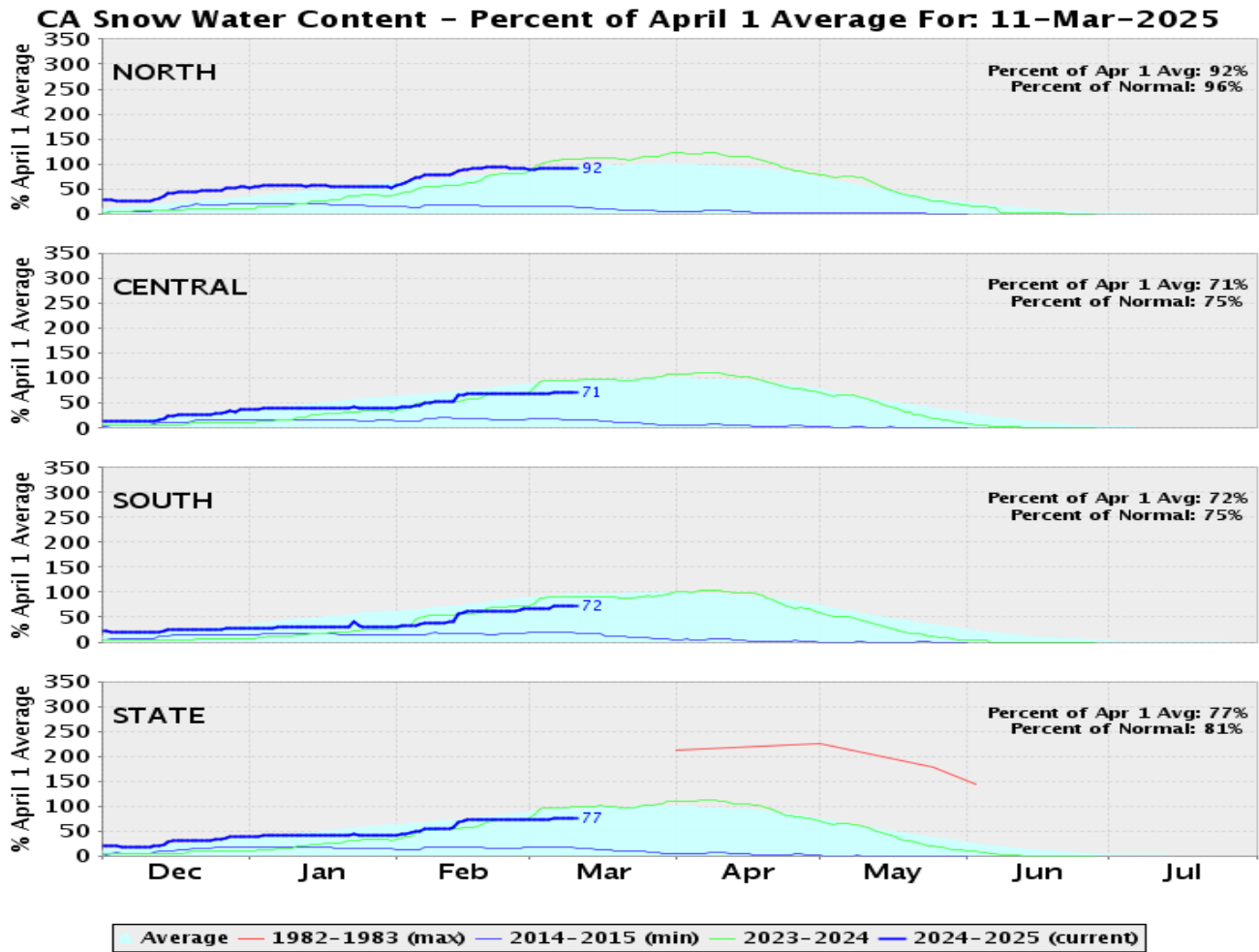
RESERVOIR	STORAGE (AF)	% CAPACITY	LAST YEAR % CAPACITY	*% HISTORICAL AVERAGE
TRINITY LAKE	2,017,758	82	75	118
SHASTA LAKE	3,669,494	81	85	109
LAKE OROVILLE	2,880,287	84	87	124
SAN LUIS RES	1,725,192	85	72	102

*% 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 2024. 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	23.8	-0.7	115	96	92
CENTRAL SIERRA	19.8	-0.1	101	75	71
SOUTHERN SIERRA	16.3	1.2	95	75	72
STATEWIDE	20	-0.1	104	81	77

*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.

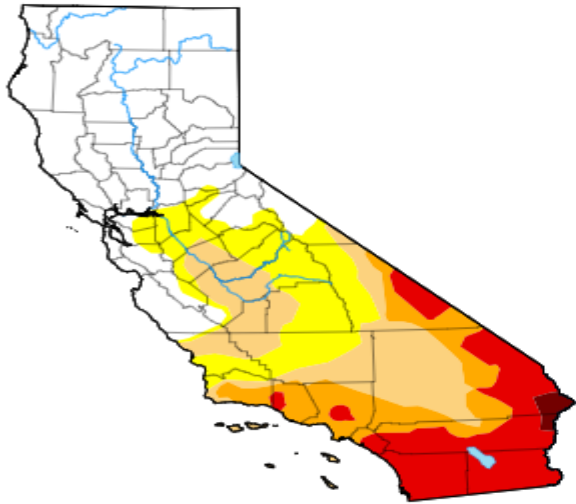
** April 1st is used as the benchmark as it when the snowpack in California is generally deepest. It has been used the benchmark date since 1941 by DWR and can be used to predict spring river flow.



DROUGHT MONITOR

California

[Home](#) / California



Map released: Thurs. March 6, 2025

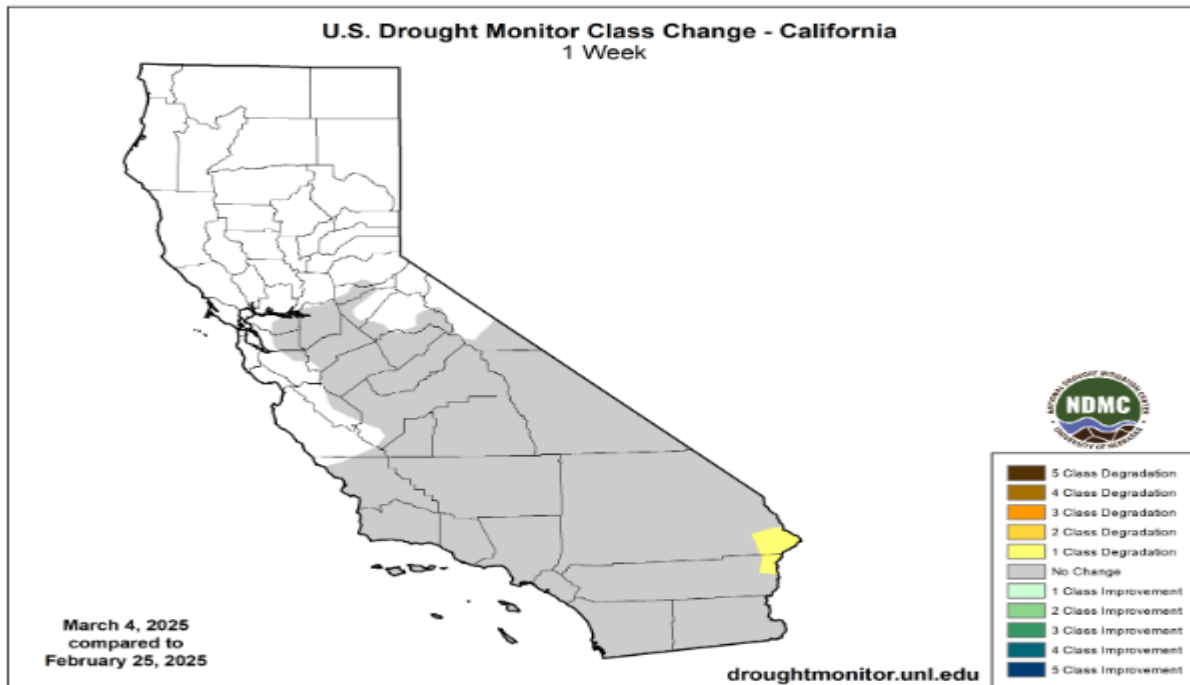
Data valid: March 4, 2025 at 7 a.m. EST

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):
[Curtis Riganti](#), National Drought Mitigation Center
 Pacific Islands and Virgin Islands Author(s):
[Brad Rippey](#), U.S. Department of Agriculture



Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2025-03-04	41.82	58.18	41.58	24.83	14.75	0.73	140
Last Week to Current	2025-02-25	41.82	58.18	41.58	24.83	14.75	0.00	139
3 Months Ago to Current	2024-12-03	56.78	43.22	16.72	5.70	1.03	0.00	67
Start of Calendar Year to Current	2024-12-31	40.90	59.10	31.52	5.70	1.06	0.00	97
Start of Water Year to Current	2024-10-01	28.40	71.60	10.67	0.08	0.00	0.00	82
One Year Ago to Current	2024-03-05	95.46	4.54	0.00	0.00	0.00	0.00	5

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

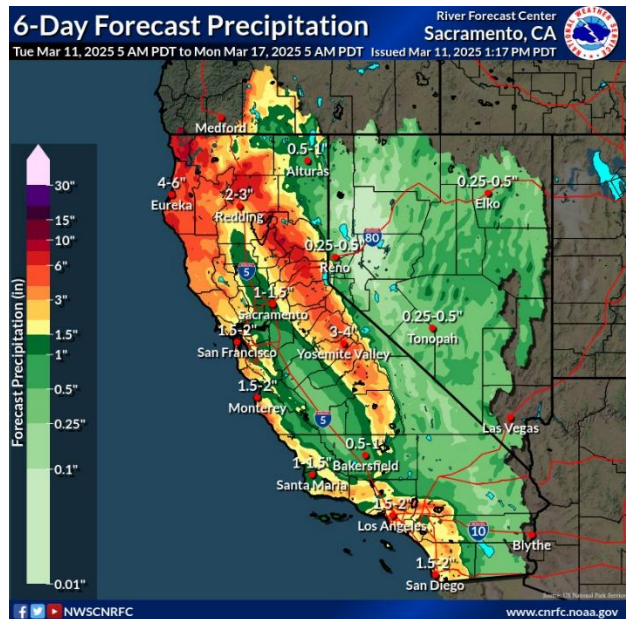
Two combining frontal systems are bringing substantial precipitation to the west coast of California. This will moves eastwards over the Rockies. This should clear up before the end of the weekend. The rest of the US is relatively clear and dry with some cloud cover over the Atlanta area and a small storm between Atlanta and Dallas.



Map Ref: Zoom Earth

10 Day Outlook

Disturbance moving through west-northwest flow aloft will be along the Pacific Northwest and northern CA coast to start the period as a building upr ridge is situated over the east Pacific along 145W and an up trof resides downstream and will be reinforced by this s/wv trof along the west coast. Not an abundance of moisture for this system to work with...which will also help to limit the amount of precip with this system. Best totals continue to look to fall over far northwest CA over the Smith and lower Klamath River basin along with inland over the southern Cascades and northern Sierra (0.50- to 1.50-inches). Precip totals will then taper off...with amounts of just around 0.10-inch for coastal southern CA.



Then for the beginning of the weekend...the positively tilted upr ridge will reach the west coast with drier conditions now on tap. Still model differences with the 11/12Z cycle in reference to a s/wv trof approaching the west coast on Sunday. CMC and GFS bring in



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precip a bit quicker than the EC at this time. WPC and NBM lean a bit toward the CMC and GFS...and was followed along with a blend of the previous forecast for the afternoon forecast issuance.

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

WESTERN WEATHER DISCUSSION

Precipitation fell across higher elevations of California, northern Idaho and western areas of Oregon and Washington this week. For the most part, drier weather occurred elsewhere. Temperatures were warmer than normal in most of the West, with the warmest conditions of 9-15 degrees above normal occurring in the central and eastern plains of Montana. Recent improvements to snowpack in northeast Nevada, Idaho and southwest Montana led to localized improvements to drought conditions. Meanwhile, to the south across Utah, Arizona and New Mexico, this week's continued dry weather led to widespread drought degradation as short- and long-term precipitation deficits grew amid soil moisture, streamflow and groundwater deficits. Drought conditions are especially bad from Phoenix westward to far southeast California, where exceptional drought developed this week.

Reference:

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



WATER NEWS

CALIFORNIA WATER NEWS

San Diego water rates are about to go up despite water surplus

Water rates in San Diego are set to rise, and many residents and business owners are voicing their frustrations.

On Tuesday, the San Diego City Council voted 6-3 to approve a 5.5% water rate increase, with additional hikes expected in the coming years.

For businesses like El Carrito, a restaurant in Barrio Logan, water is a daily expense.

“Washing dishes, we use water for everything—a big amount of water,” said owner Luis Santana.

Starting May 1, all residents and businesses will see their water bills increase. Santana, who currently pays about \$750 per month for water, estimates his bill will rise by an additional \$40 to \$50.

“Any little thing that goes up affects us financially,” he said. “The cost of living is very hard right now, so it’s really affecting us.”

San Diego Water Authority representatives told the council that rate increases are necessary due to higher costs for imported water, wage increases for workers and infrastructure improvement projects.

District 3 council member Stephen Whitburn, who represents the city on the water authority board, said he reluctantly voted in favor of the increase.

“That rate increase, which was given to us by the water authority, has put us between a rock and a hard place,” Whitburn said. “The question is: Does the city pass it along, or do we lay off city employees and cut the very programs that our residents have asked us to deliver?”

Councilmember Vivian Moreno, who represents District 8, voted against the increase, arguing that the water authority should cut costs instead of placing the burden on customers.

“My community is going to be impacted greatly. Folks on fixed incomes are going to be impacted tremendously,” Moreno said.

She also warned that this increase is just the beginning, citing a mayor’s study that projects water rate hikes of 13% next year, followed by increases of 14%, 11%, and 11% in subsequent years.

“It’s ridiculous,” she said.

For business owners like Santana, the long-term impact could be severe.

“Nobody is going to be happy with that,” he said. “I don’t know what we are going to do. I have no words for it—it’s hard.”



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During the meeting, Councilmember Sean Elo-Rivera told the water authority to find ways to sell excess water to other jurisdictions as a way to offset costs.

Original Article: [Fox 5 San Diego by Tony Shin](#)

California water wars: A century of wrangling over Los Angeles's water

Just before midnight on March 7, 1928, the St Francis Dam, located roughly 80km (50 miles) inland of Los Angeles, collapsed. There were no witnesses to the disaster – or none who survived – but investigators later determined that the 56-metre-tall (184ft-) barrier fell all at once, sending 12.4 billion gallons of water surging down the San Francisquito Canyon in a wave 43 metres (141ft) high.

Five hours later, the waters finally dumped into the Pacific Ocean, leaving chunks of concrete in their wake as heavy as 10,000 tonnes. By then, the gush of water was nearly 3km (2 miles) wide, laying waste to several towns along the way, cutting power throughout the region, and ultimately killing at least 431 people, many of whom were washed out to sea, their remains found as late as 1994 and as far as the Mexican border. The dam had been marred by cracks and leaks ever since its reservoir began filling with water in 1926, but its builders deemed such issues inconsequential and continued to fill as planned. The water it contained – extracted amid much contention from Owens Valley, a lush oasis in a desert region between the Sierra Nevada and White Mountains some 320km (200 miles) to the north – was needed to provide for Los Angeles's rapidly growing population.

Over the next two years, new cracks formed and seepage became increasingly apparent around the abutments where the dam met the sides of San Francisquito Canyon. By February 1928, large leaks were releasing so much water that farmers in the area began to worry. Again, the dam's chief engineer – William Mulholland – declared it was normal. On the morning of its collapse, Mulholland and his colleagues had conducted a thorough inspection of the dam, determining even then that it was safe but in need of future repairs. Hours later, the waters burst through it. An investigation would later conclude the breach was due to “defective foundations”.

It was the largest American civil engineering disaster of the century – a byproduct of western expansion and the struggle known as the California Water Wars, which pitted the public against private business interests and set the stage for a century of conflict over the state's most contested resource.

‘We are going to turn that country dry’

Water is still a major issue for California nearly 100 years later. During the fires that ravaged Los Angeles in January 2025, firefighters' ability to battle the blazes was hampered by low hydrant water pressure. [Investigators](#) said this was caused by unusually high demand driven by firefighting efforts, while then-President-elect Donald Trump blamed state Governor Gavin Newsom, claiming the water shortage was due to



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“overregulation” – referring mostly to regulations designed to protect endangered species in the surrounding areas.

In [recent interviews with firefighters](#), Al Jazeera was told the difficulty in obtaining enough water to fight the fires was likely unavoidable.

“There’s no urban municipal water system that could support that,” said Bobbie Scopa, who spent nearly 45 years as a firefighter. “You’re going to run out of water, no matter what. It’s not that uncommon. It happens when there’s large fires.”

While water shortage is certainly a valid concern as California faces historic droughts, it turns out the most pressing issues surrounding the Los Angeles water system may have less to do with lack of water than where it’s ending up, with residents going without as big agriculture and water investors extract or privatise what short supply there is. According to studies by the University of Southern California, just 10 percent of state water goes to residents, while the bulk – 80 percent – is used for irrigating crops.

This dynamic is a continuation of a series of events that dates back to the water system’s creation a century ago, which instigated a pattern of resource theft, political corruption and ultimately death due to the collapse of the dam. The result: An uncertain future in which vulnerable residents are increasingly parched by powerful business interests.

Original Article: [Aljazeera by Nick Hilden](#)

El Niño Yields to Upwelling in the California Current, Renewing Productivity of West Coast Ecosystem

According to the NOAA California Current Integrated Ecosystem Assessment’s [annual report](#), the [California Current Ecosystem](#) pulled out of a strong [El Niño](#) pattern in 2024. That El Niño delayed the onset of the annual spring upwelling of nutrient-laden water that, was nevertheless strong enough to fuel the rich West Coast ecosystem and improv environmental conditions for salmon.

NOAA Fisheries scientists presented the report to the Pacific Fishery Management Council to inform upcoming decisions on fishing seasons. The report provides a snapshot of ocean conditions, fish population abundance and habitat, and fisheries landings and fishing communities’ conditions. It gives short-term forecasts and longer term projections of how conditions across the ecosystem may evolve in 2025 and beyond.

Report Highlights

- [Upwelling](#) resumed even more strongly and consistently than normal, supplying a greater influx of nutrient-rich waters that improved forage conditions for many species
- Productive waters supported abundant forage species such as anchovy and krill and strong production of young hake and juvenile rockfish that could contribute to commercial fisheries in future years



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- Improved freshwater streamflows should support survival of juvenile salmon migrating downstream in California to the ocean
- [California sea lions](#) found enough prey amid the El Niño warming, while experiencing harmful algal blooms that led to premature birth of pups and strandings along the coast

“Each year we learn more about how this marine ecosystem functions and what we should be watching to anticipate change,” said Andrew Leising, a research oceanographer at NOAA Fisheries’ Southwest Fisheries Science Center who coauthored the new report. “We’re getting better at forecasting what is coming at us, at the same time we see some new twists.”

Forage Species Plentiful

While delayed by El Niño, annual spring upwelling along the coast provided nutrients for rapid growth of zooplankton to feed the marine food web. Studies of the diets of highly migratory predators such as swordfish and some species of tuna benefited from abundant forage species such as anchovies and hake, and myctophids.

[Harmful algal blooms](#) closed some fisheries and [killed some marine mammals](#) in Southern California. However, the strong upwelling of cold water along most of the coast helped hold a large marine heatwave offshore. Similar marine heatwaves have [repeatedly formed](#) in the Pacific over the last decade, shifting species and reducing productivity. Salmon have suffered from the warmer waters, which often reduce survival of salmon in the ocean.

Declining salmon returns associated with warmer ocean waters forced the closures of salmon fishing in California over the last 2 years. The boom in anchovies, which contain an enzyme that breaks down thiamine, a nutrient important to the health of their many predators, has also left many salmon [deficient in thiamine](#), or Vitamin B. The offspring of adult salmon that preyed heavily upon anchovies often cannot swim and survive, with 25 percent or more dying from malnutrition.

Colder Waters Benefit Salmon

This year, though, cooler coastal waters should improve survival of young salmon entering the ocean in California. It could also promote improved Chinook salmon returns to the Columbia River system. The report predicted positive expectations for 2025 Columbia Chinook returns and better conditions for California salmon smolts migrating down rivers to the ocean.

The report adds that catches of juvenile yearling coho salmon were above average for a second straight year. This suggests an increasing five-year trend in their early marine survival.

The weight and growth of California sea lion pups in 2023 was slightly lower than usual. The renewed upwelling in 2024 supported enough forage species for above average pup survival. However, harmful algal blooms off Southern California produced a neurotoxin



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called domoic acid that affected sea lions in some rookeries and haulouts. Many pups were born prematurely, and many stranded on beaches, sometimes with seizures caused by the neurotoxin.

Scientists also evaluated their predictions from last year as to how the ecosystem would change over the course of the year. For instance, they correctly predicted that the size and abundance of krill would decline with El Niño, but then quickly recover.

Revenue from the Dungeness crab fishery in California rose, as did coastwide landings for commercial fisheries, including highly migratory species, market squid, and shrimp. The whiting (hake) fishery is the largest on the West Coast by volume; landings declined from 2023 to 2024 due to a combination of a southerly shift in the species' distribution and a decline in fishing capacity in the whiting mothership sector. In addition to providing indicators on fisheries targeting diverse species groups, the report also assessed the engagement of coastal communities in fisheries and their socioeconomic vulnerability to large-scale challenges like severe reductions in fish stock availability to fisheries.

“We know that changes will continue to affect the California Current Ecosystem, so we want to understand what that means to the environment and the economy,” said Mary Hunsicker, coauthor of the new report. “Are the species and the economy healthy and diverse enough to provide the resilience that they need going forward?”

Original Article: [NOAA Fisheries](#)

Water is about to get a lot more expensive for millions of Californians

Millions of Californians are set to see significant [water rate](#) hikes over the next few years, with prices for essential water supplies jumping by double-digit percentage points. In one large city, cumulative increases could see prices jump about 70% just in the next five years.

San Diego County, the [second-largest county](#) in California by population, will see its water rates [jump 14% for 2025](#), according to the San Diego County Water Authority. The public water agency, responsible for providing the majority of water to nearly two dozen area municipalities, including the city of San Diego, currently imports the majority of its water from elsewhere. The utility blamed the rate hikes on increased costs to import water, among other issues. Those costs, handed from a supplier directly to a consumer, are known as “passthrough costs.”

While the San Diego County Water Authority's board of directors does approve percentage rate increases, as a purchaser of water from elsewhere, it does not control these passthrough costs. The agency “is required by law to set rates at the cost of service,” according to the water authority.



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“We realize cost increases are hard to swallow, and we are doing everything possible to combat rate inflation now and in the future,” water authority general manager Dan Denham said [in a news release](#) last summer.

Now the city of San Diego, home to nearly 1.4 million people, is preparing for the worst of the county’s rate hikes, with prices jumping as much as 70% between 2025 and the end of the decade. The San Diego City Council is staring down [proposed rate hikes](#) of 13.7% for 2026, 14.5% for 2027, and 11% or more in 2028 and again in 2029, the San Diego Union-Tribune reported.

The rate hike for 2025, which was narrowly approved by the city council this month and goes into effect on May 1, is only 5.5%. That number was negotiated down with the water authority from a previously proposed rate hike that could have been as high as 24%.

Cumulatively, those rate hikes could see average San Diego single-family homes go from paying about \$90 to \$145 or more by 2030, according to the Union-Tribune. The proposed hikes, as outlined in a city-funded budget analysis, will go in front of the San Diego City Council for a vote this fall.

Interestingly, despite statewide warnings of an incoming [period of drought](#), the county’s rate increases aren’t because of a lack of water. For decades, the water authority has built out a robust infrastructure network to store water and supply San Diego County even during dry periods, but new water reclamation and desalination projects mean that the region may not need that much imported water in the very near future.

Yet for now, the cost of the water itself, and the price of maintaining all that infrastructure, is leading to increased rates for homeowners. [Per the Union-Tribune](#), the rate hikes would be used to “cover sharply rising costs for workers, imported water, chemicals, energy, construction projects and other priorities.”

In 2015, San Diego’s Claude “Bud” Lewis Carlsbad Desalination Plant — the largest in the nation — came online, and it is currently producing water for area businesses and residents. And in 2027, the city of San Diego’s [Pure Water program](#), which purifies recycled water, is set to begin. That project should be fully operational by 2035, further reducing the need for imported water from the water authority.

Original Article: [SF Gate by Farley Elliot](#)

Real Estate Values and Agricultural Transitions in California's Central Valley

In California's Central Valley, the value of farmland is closely tied to agricultural production, which relies on water. Cropland prices can range from less than \$10,000 per acre to over \$60,000 per acre. These values vary based on many factors, such as soil suitability, the types of crops grown, and water availability. Location is important and can account for development pressures. Microclimates and proximity to markets or



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production facilities can influence profitability. Land sales also fluctuate with changing economic trends in real estate or the agricultural sector. If commodity prices fall, there can be reduced demand for production from current fields.

Land prices can also be influenced by longer-term changes in water scarcity and environmental factors. For instance, implementation of the Sustainable Groundwater Management Act (SGMA), passed in 2014, will likely require reductions of intense agricultural production in areas of long-term groundwater overdraft. If less irrigation water is available, how will cropland production and acreage be affected? Are long-term regulatory changes already getting incorporated into farmland values in the state? Parsing out these influences from the many factors affecting farmland values requires lots of data, especially to detect both spatial and temporal trends.

Two types of analysis can help investigate these questions. First, we can understand the trajectory of farmland values over several decades to give context to recent trends since 2014 (Kishore et al 2023). Analyzing historical data on cropland and agricultural land cover from the U.S. Department of Agriculture (USDA) shows that across California, from 2001 to 2021, both the acreage and average value of sold farmland increased significantly. For instance, in the Central Valley, farmland sales averaged \$8,150/acre in 2001, but by 2021, average prices had risen to over \$52,200/acre, which equates to more than a [530% increase](#). During the same period, farmland productivity, based on sales per acre, [increased by over 330%](#), with net farm income rising from \$300/acre to over \$1,800/acre throughout the state. Cropping trends also changed in the Central Valley, with high-value perennial crops replacing low-value annual crops. Since 2008, the share of land in cultivation with perennial crops has increased by 40% or more, with corresponding decreases in annual crop acreage. Widescale adoption of efficient irrigation technologies likely allowed for this expansion.

Second, more detailed data and visualizations can find correlations in farmland values, irrigation water sources, and crop types. Based on data compiled by Acres, Inc, between 2018 to 2023, the monthly amount of cropland sold for annual crops varied widely, with only 8,000 acres sold in April 2023, but more than 30,000 acres April 2021, when farmland sales totaled over \$600 million. The distribution of values for land sales of annual crops also varied across the valley, with areas of the western San Joaquin Valley seeing less than \$20,000/acre, and areas near Stockton and Merced selling for more than \$40,000/acre. Acreage of farmland sold under permanent crop cultivation was larger, ranging from 20,000 acres to more than 60,000 acres in the Spring months of 2019, 2020, and 2021.

Original Article: [The Confluence by Erik Christian Porse, Josh Viers, Aaron Shew And Siddarth Kishore](#)



EPA chief addresses Tijuana River sewage crisis in San Diego County

The new administrator of the U.S. Environmental Protection Agency has seemingly responded to Imperial Beach Mayor Paloma Aguirre’s letter urging federal action on the Tijuana River sewage crisis impacting southern San Diego County.

Lee Zeldin, the 17th administrator of the Environmental Protection Agency (EPA) since January 29, 2025, [posted on X Saturday evening](#) that he was recently briefed on the large amounts of raw sewage flowing into the U.S. from Mexico, which is impacting the water and air quality for residents in San Diego’s South Bay.

[Imperial Beach mayor heads to Washington to push for action on Tijuana sewage crisis](#)

“I was just briefed that Mexico is dumping large amounts of raw sewage into the Tijuana River, and it’s now seeping into the U.S. This is unacceptable. Mexico MUST honor its commitments to control this pollution and sewage!,” [Zeldin’s post on X reads](#).

The social media post comes just one week after Imperial Beach Mayor Paloma Aguirre sent a letter to Zeldin urging a “new review of the Lower Tijuana River Valley’s toxic cross-border sewage crisis for Superfund designation and further EPA action.”

Original Article: [Fox 5 San Diego by Anna Askcraft](#)

Mojave groundwater project secures big investment

[Cadiz, Inc.](#) has announced a new investment for an \$800 million groundwater project that will soon be underway in the Mojave Desert. According to lead engineer Stantec, it will be among the largest new water infrastructure projects in the Southwestern United States, and will help ensure affordable water supplies to communities in California and Arizona.

Cadiz, Inc. announced it has entered into a Letter of Agreement (“LOA”) with a lead investor to invest up to \$175 million in the Mojave Groundwater Storage Company, LLC (“MGSC”). The MGSC is a new entity established by Cadiz for purposes of construction, ownership, and operation of Cadiz’s groundwater banking project in the Mojave Desert and related projects.

Under the terms of the LOA, the investor, a publicly traded company focused on investing in water infrastructure projects, will act as lead investor (the “Lead Investor”) in the newly formed MGSC, and will invest up to \$175 million in the MGSC. This LOA is separate from and in addition to previously announced prospective investments by non-profit or public sector investors, including federally recognized Native American Tribes (“Tribes”) with whom Cadiz has entered into Letters of Intent. Cadiz expects the Lead Investor, along with other qualified investors, including the Tribes, to provide up to \$401 million of equity capital to acquire assets and fund construction of Mojave Groundwater Bank facilities. The parties will coordinate to seek available grant funding for any remaining construction costs.



“This is the pivotal milestone we’ve been working towards,” said Susan Kennedy, Chairman and CEO of Cadiz. “We made tremendous progress last year and had great momentum coming into 2025, but having our lead equity investor in place to complete project financing is the key to getting this project built and operational on an aggressive schedule.”

Under the terms of the LOA, Cadiz will be responsible for project development activities and, upon completion of certain funding commitments by MGSC, will transfer and contribute certain assets to the MGSC, including (i) 100% of its ownership of the Northern Pipeline, (ii) the Southern Pipeline right of way, and (iii) 51% of the water storage rights in the Mojave Groundwater Bank. In consideration of such transfer of assets, MGSC will pay Cadiz, among other consideration, approximately \$51 million and provide up to an additional \$350 million for development and construction of Mojave Groundwater Bank facilities. Cadiz will retain 49% of the water storage rights and 100% of water supply purchase contracts entered into among Cadiz and public water systems.

Cadiz has established a special purpose entity, the East Mojave Water Company, LLC (“EMWC”), to serve as the managing member of MGSC. The distribution of profits from revenues anticipated to be received by MGSC will prioritize MGSC investors until they achieve an annual yield of 7.5%, with incremental distributions thereafter to the investors and Cadiz as the managing member and to low-income disadvantaged communities and Tribes participating in an advisory council.

The LOA does not create any binding obligations for the parties to close the contemplated transactions unless and until definitive agreements are executed, and the parties intend to negotiate and finalize the definitive agreements as soon as practicable. Any definitive agreement will be subject to conditions including the Lead Investor obtaining shareholder approval of the contemplated transactions.

Original Article: [Water FM](#)



US WATER NEWS

Record low March 1 snowpack in some New Mexico watersheds

The preliminary March 1 runoff forecast from Karl Wetlaufer, the federal government employee at the USDA's Natural Resource Conservation Service who provides vital information to help us make informed water management decisions, is *yikes*:

February brought another month of well [below median precipitation](#) across the entire Rio Grande basin. As one would anticipate this generally led to lowered forecast volumes over a month ago. It is worth noting that similar to last month there remains a broad gap between current percent of median [snowpack](#) and water year [precipitation](#). This is a result of a wet October and early November followed by several months of dry conditions. These persistent dry conditions have led to [record lowest](#) or otherwise very [low rankings of snowpack](#) compared to the period of record for March 1st.

As Wetlaufer noted in the email discussion he distributes each month to New Mexico water managers, it's a bit tricky this year, because early precipitation last fall fell as rain, not snow. That helps the runoff by wetting soils in the high watersheds, but doesn't show up in the snowpack numbers. So yes it's bad, but not quite as bad as it appears if you only look at the snowpack.

The midpoint flow estimate for Otowi on the Rio Grande is 205,000 acre feet, 36 percent of the long term average. It could be higher or lower, depending on what happens in the next few months. But as Friend of Inkstain Rolf Schmidt-Petersen pointed out in the comments last month:

The median assumes near average conditions going forward but that sure hasn't been the case for several months and no one I know is predicting a turnaround to wet this Spring.

Original Article: [Ink Stain by JFleck](#)

DuPont launches new ultrafiltration water treatment tool

DuPont Water Solutions, a division of the \$32.67 billion market cap industrial giant DuPont (NYSE: DD), has introduced WAVE PRO, an advanced online modeling tool for ultrafiltration (UF) water treatment processes, the company announced today. The tool is designed to assist in the design and optimization of UF systems for various applications, including drinking water and wastewater treatment, as well as seawater desalination. According to [InvestingPro](#) data, DuPont maintains a strong financial health score of "GOOD," supporting its continued investment in innovative solutions.

WAVE PRO is the latest iteration of the Water Application Value Engine (WAVE), a tool that provides water professionals with a digital platform for simulating and designing water treatment systems using ultrafiltration technology. The application is engineered



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to deliver precise calculations, enabling users to tailor designs to specific water conditions and to evaluate different scenarios to achieve optimal system configurations. Gary Gu, Global Technology Leader at DuPont Water Solutions, stated that WAVE PRO is a reflection of the company's commitment to advancing water treatment technologies and supporting the operational and financial objectives of their customers.

The tool offers backward compatibility for existing users of the WAVE platform and boasts features such as cross-platform compatibility, secure online access, and collaborative design capabilities. WAVE PRO is expected to receive regular updates, including the integration of additional technologies like reverse osmosis and nanofiltration.

Ultrafiltration is a critical process in water purification, capable of removing particles, bacteria, viruses, and colloids to meet stringent global water-quality standards. The technology also aligns with sustainability goals, as it can function without the need for pretreatment chemicals and reduces sludge disposal costs. When combined with reverse osmosis, UF can minimize membrane fouling and lower operational expenses.

Original Article: [Investing.com](https://www.investing.com)

Arizona allocates \$700K for rural and tribal infrastructure projects

The state of Arizona has allocated \$700,000 for rural and tribal infrastructure projects, [Gov. Katie Hobbs announced](#) on Wednesday.

The funding, which will be distributed via the Greater Arizona Development Authority (GADA), will be used to support libraries, roads, water systems and more.

Up to \$100,000 will be disbursed as low-interest loans that can be repaid using GADA's financial assistance program. [Funding applications](#) may be submitted until March 15 at 5 p.m.

"Investing in local infrastructure projects means strong communities, a healthy economy and opportunity for people throughout Arizona who have too often been ignored and left behind," Governor Katie Hobbs said in a press release.

Since 1997, GADA has supported 84 projects in Arizona, issuing more than \$574 million in bonds to aid with engineering plans, feasibility studies and architectural drawings. Some of the projects GADA funding has helped with in the past, according to the release, include:

- A disbursement of \$19.9 million which funded a new library and recreation center in Cottonwood
- A disbursement of \$3.6 million that helped Williams build a justice center and upgrade water infrastructure
- A disbursement of \$58 million which funded Lake Havasu's wastewater expansion project



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“Capital infrastructure projects like safer roads, water systems and new community spaces require extensive planning and resources,” GADA Director Mary Foote said in a press release.

“This program delivers the technical assistance rural and tribal communities need to scale these projects from start to finish, bringing meaningful benefits to residents’ daily lives, plus financial assistance and can be paid back through future GADA financing.”

Original Article: [KTAR News by David Veenstra](#)

GLOBAL WATER NEWS

Crop diversification to reuse: Haryana meets 85% water conservation goals

Haryana achieved 85% of its target by saving 5.8 billion cubic meters (BCM) of water from March 2023 till Feb 2025, according to an estimate by the Haryana Water Resources Authority (HWRA).

Officials said this was done by reusing treated wastewater, promoting efficient cultivation methods, encouraging crop diversification, adopting micro-irrigation techniques, and enhancing groundwater recharge.

The state aims to save 6.9 BCM by the end of March 2025. The initiative was introduced after HWRA calculated between 2020 and 2022 that Haryana has 20.9 trillion litres of water available, including surface water, groundwater, and treated wastewater.

But the state's demand for this period was 34,96,300 crore litres, leaving a gap of 14,02,700 crore litres to be filled. Conserving water is critical as 60% of the state's geographical area was in the ‘red’ category for excess groundwater exploitation, according to an assessment by the Central Groundwater Authority in 2020.

Original Article: [Times of India by Ipsita Pati](#)

India's water reservoirs at 71 pct of capacity in past week-govt

Water levels in India's main reservoirs in the week to Sept. 4 were at 71 percent of capacity, down 11 percentage points from a year earlier, government data showed on Friday, reflecting this year's overall weak monsoon rains.

However, the latest level is higher by 5 percentage points from the previous week and 2 percentage points from the 10-year average, following a revival of the rains.

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Weather officials expect the monsoon rains to remain active over the next week.

Rains during the four-month season were 43 percent below the normal level in June, 10 percent below normal in the key planting month of July and again 10 percent below in August.

Water level in reservoirs is vital for hydropower generation and irrigation. Reservoirs also provide water later in the year to irrigate winter crops such as wheat and rapeseed.

Original Article: [Reuters](#)

Highland Spring secures bank backing

Highland Spring Group has completed a competitive process to refinance its business, with Bank of Scotland and Barclays appointed as its funding banks.

They will provide financial support as the Perthshire-based water business progresses towards its stated ambition of £200m sales by 2030.

In 2023, sales grew by 15.5% to £130.6m and the Highland Spring brand consolidated its position as the UK's number one plain water brand for a seventh successive year.

The financial backing, which includes term and revolving credit facilities of £50m, should “further accelerate the evolution of the brand and business to meet the growing demands of retail partners”.

Britain's Got Talent: Simon Cowell halts audition

A recent launch into the 400 million litre flavoured water category, with a new Highland Spring Flavoured Still Water range supported by a £10m investment at the group's main site in Blackford, providing 25% of extra capacity.

Its dedicated rail freight facility there also transports 40% of the water supplied from the main bottling plant by rail, removing 8,000 heavy goods vehicle movements from the roads, and saving around 3,000 tonnes of CO2 every year.

John Young, finance director at Highland Spring Group, said: “The Bank of Scotland and Barclays funding provides a springboard for us to further invest in our business to boost sustainable growth.

“This package reflects their confidence in our strong operational and market performance, talented team, and iconic brand.”

Simon Sweeney, director at Bank of Scotland, commented: “Highland Spring Group was the first major water brand to introduce a 100% recycled [cap and label excluded] and recyclable bottle in the UK in 2019 and it is clear that its drive to innovate, grow the business, and prioritise environmental sustainability remain its top priorities.

“We're pleased to support the business with this financing package as it progresses in its next chapter of delivering its ambitious growth plans, including initiatives which reduce carbon emissions across its operations.”

Original Article: Insider.co.uk by [Peter A Walker](#)



Floods, mass power cuts as wild weather bashes eastern Australia

[Gusts and torrential rain](#) have blacked out more than a quarter of a million properties and swamped parts of Australia's east coast, officials said Sunday (Mar 9), with one driver confirmed dead and a dozen [troops injured](#) in the wild weather.

After days hovering off the coast as a category 2 tropical cyclone generating heavy weather across the region, Alfred weakened into a tropical depression before making landfall on Saturday evening.

But as the remnants of the cyclone moved inland, hundreds of thousands of people remained without power on Sunday, and video images showed knee-high water pouring through roads in some of the worst-hit areas of southeast Queensland and northeast New South Wales.

A total of 23cm of rain had descended on the Queensland resort of Hervey Bay in the past hours, flooding homes and forcing emergency rescues in rapid waters, the state's premier, David Crisafulli, told a news conference.

The weather system "continues to pack a punch" as it moves inland, Crisafulli said, adding that more than 1,000 schools shuttered across the state would gradually start reopening on Monday.

Utility companies said about 268,000 homes and businesses in southeast Queensland and another 12,500 in northeast New South Wales were still without power on Sunday. "Customers need to be prepared to be without power for several days," Queensland's Essential Energy said.

"The biggest challenges to getting power back on will be rising flood waters and swollen creek beds, fallen vegetation and mudslides impacting access roads," it said in a statement.

About 14,600 people are under emergency warnings related to the weather system in New South Wales, the state's emergency services said.

"In the last 24 hours, 17 incidents have occurred as a result of people driving into flood waters," said emergency services deputy commissioner Damien Johnson.

"Not only is it a danger to yourself and your family, it is also dangerous as well for the volunteers, the emergency services workers that need to rescue you."

A 61-year-old man's body was found Saturday after his four-wheel-drive pickup truck was swept off a bridge into a river in northern New South Wales.

He had escaped from the pickup and tried in vain to cling to a tree branch in the river before disappearing into the rapid waters on Friday, police said.

Original Article: [Channel News Asia](#)



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