Veles Water Weekly Report

March 11th 2021

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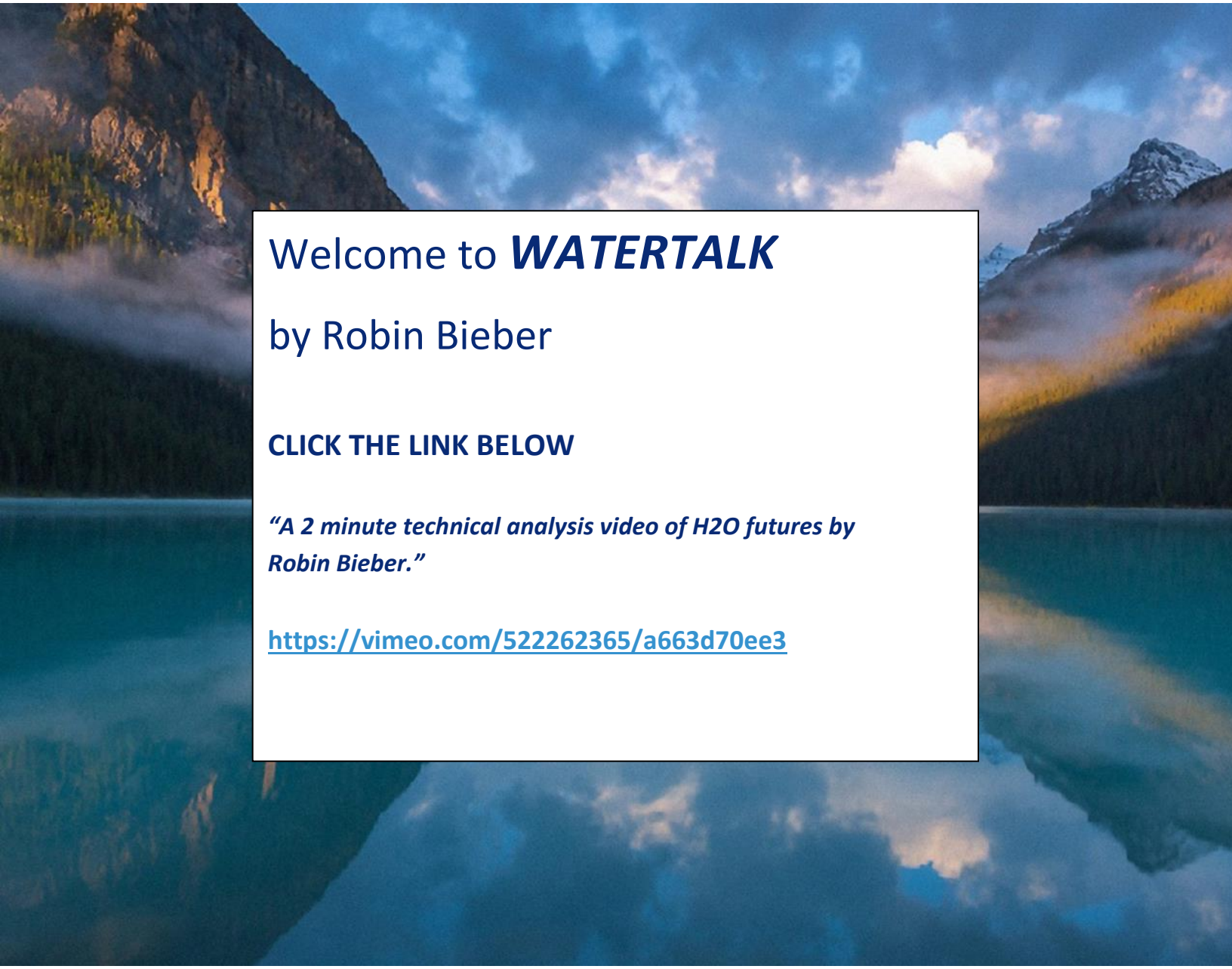
VelesWater

WATER FUTURES MARKET ANALYSIS



Welcome to ***WATERTALK***

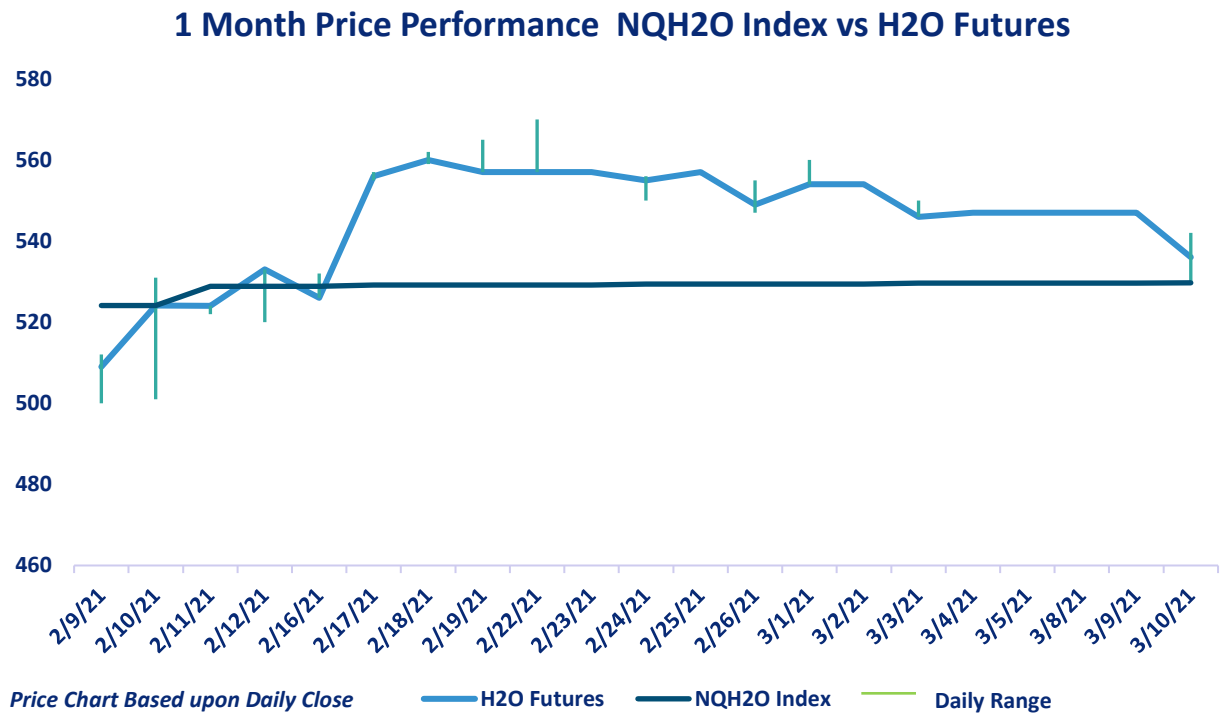
by Robin Bieber

CLICK THE LINK BELOW

"A 2 minute technical analysis video of H2O futures by Robin Bieber."

https://vimeo.com/522262365/a663d70ee3

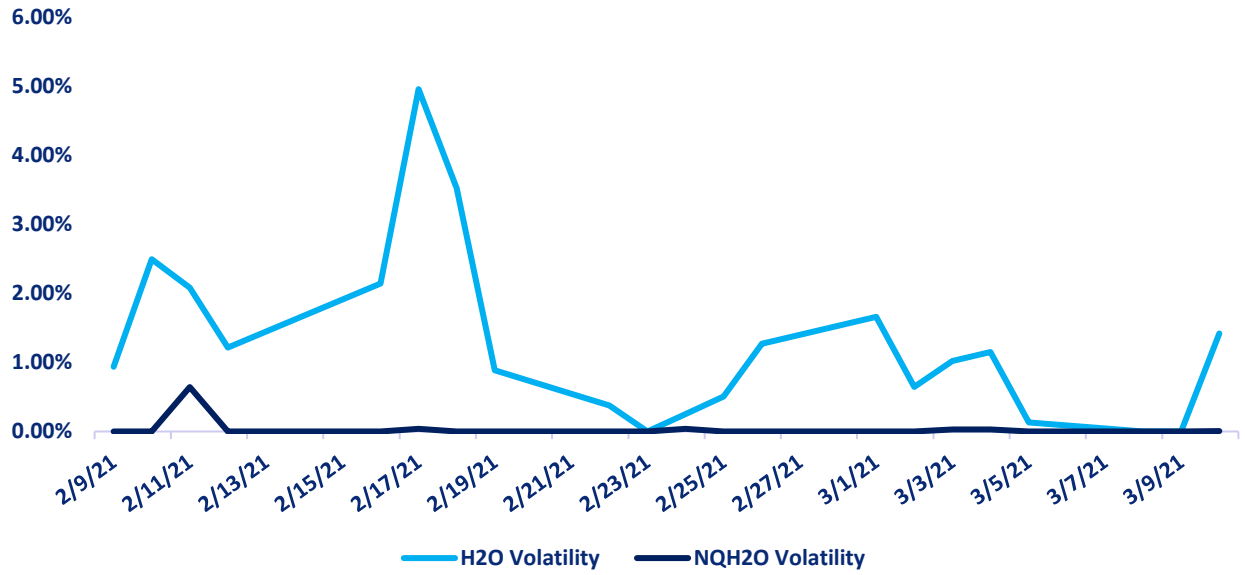
NQH2O INDEX PRICE vs H2O FUTURES PRICE



The week starting on the 3rd March began with a new index level of $529.66 up $0.23 from the previous week. The futures ranged from a low of $530 yesterday, closing at $536. The high trade of the week was $550 on the 3rd March and the highest closing price was $547 on the 4th to the 9th March consecutively. The futures continued trading at a reduced premium range of 6 to 17 points above the index, down 11 to 14 points from the previous weeks range. The new index level was published at $529.71 yesterday a small increase of $0.05. While the futures are continuing to trade at a premium this is diminishing, indicating convergence with the futures price moving closer to the index levels.

H2O FUTURES AND NQH2O INDEX VOLATILITY ANALYSIS

Daily H2O Futures Volatility vs Daily NQH2O Index Volatility



ASSET	1 YEAR (%)	2 MONTH (%)	1 MONTH (%)	1 WEEK (%)
NQH2O INDEX	51.11%	2.78%	0.04%	0.034%
H2O FUTURES	N/A	10.2%	7.62%	2.09%

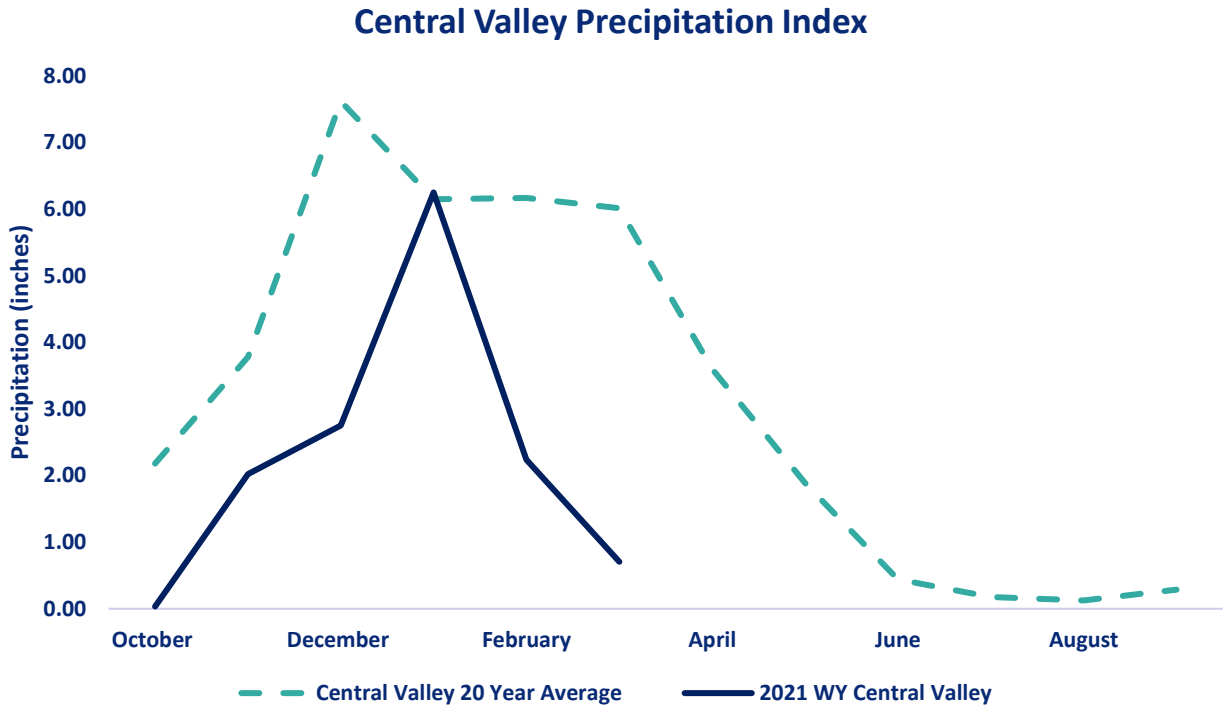
In the week beginning the 3rd March the two month futures volatility is at a premium of 7.42% to the index up 0.1%. The one-month futures volatility is at a premium of 7.58% to the index down 0.95%. The one-week futures volatility is at a premium of 2.056% to the index, down 0.05. The volatility of the futures is still trending at a premium to the index, as can be seen on the graph above, the premium increased during yesterday's trade.

DAILY VOLATILITY

The daily volatility high for futures for the week was 1.42% on the 10th March which is down 0.24% with a low of 0% on the 8th and 9th March. The biggest move of the week was the 12 points seen yesterday.

*Above prices are all **HISTORIC VOLATILITIES** and **IMPLIED VOLATILITIES** will be introduced once an options market has been established.*

CENTRAL VALLEY PRECIPITATION REPORT



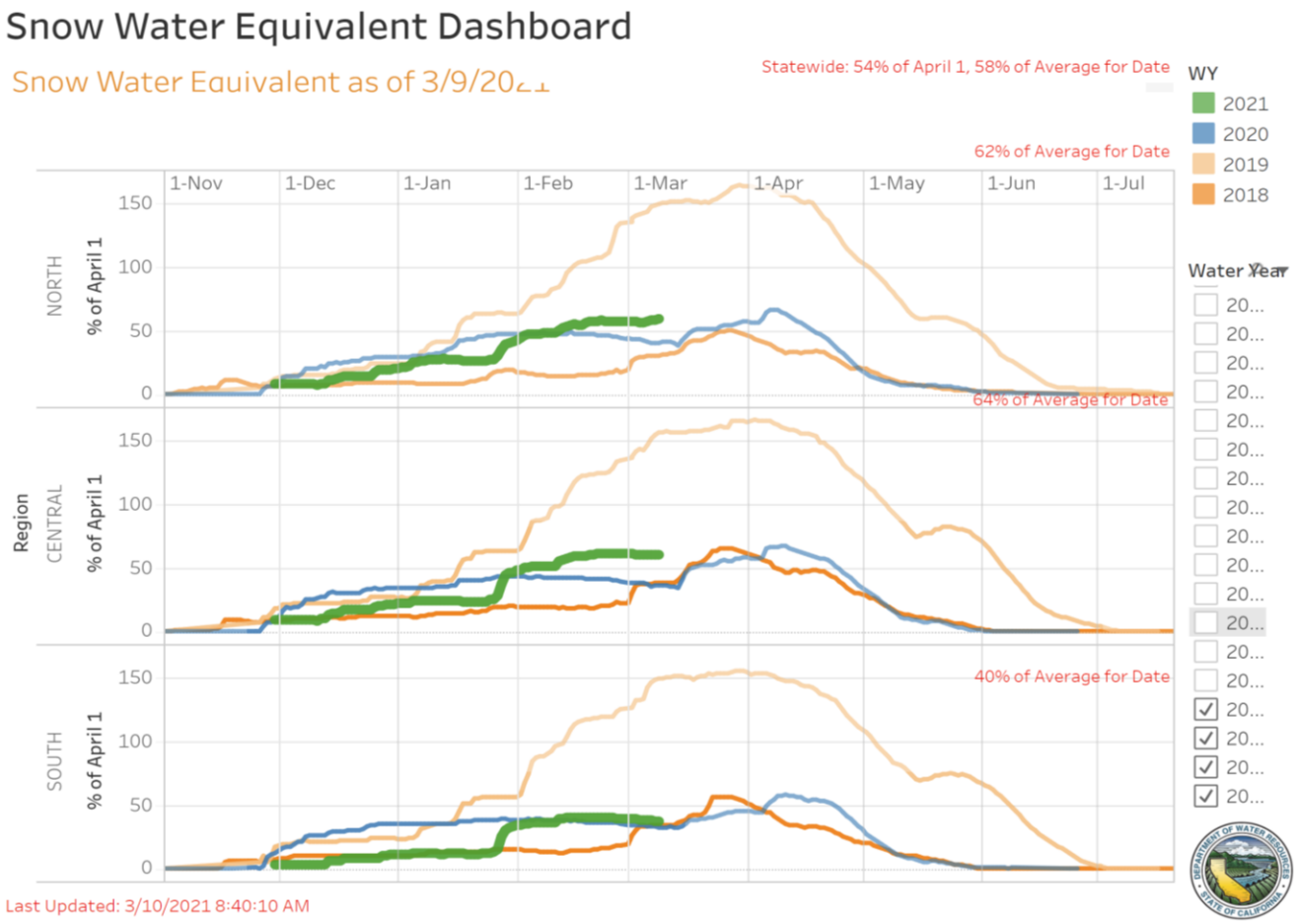
Central Valley average is calculated using data from 19 weather stations in the Central Valley, California.
Data accurate as of 03/10/2021

STATION	MTD (INCHES)	WEEK ON WEEK CHANGE (INCHES)	% OF 20 YEAR AVERAGE MTD	2021 WYTD VS 2020 WYTD %	2021 WY VS 20 YEAR AVERAGE TO DATE %
SAN JOAQUIN 5 STATION (5SI)	0.54	+0.54	9%	43	52
TULARE 6 STATION (6SI)	0.13	+0.13	3%	45	39
NORTHERN SIERRA 8 STATION (8SI)	1.44	+1.44	18%	50	50
CENTRAL VALLEY TOTAL	2.11	+2.11	10%	46	47

RESERVOIR STORAGE

RESERVOIR	STORAGE (AF)	% CAPACITY	LAST YEAR % CAPACITY	HISTORIC ANNUAL AVERAGE CAPACITY %
TRINITY LAKE	1,276,232	52	83	69
SHASTA LAKE	2,288,150	50	78	67
LAKE OROVILLE	1,365,173	39	64	54
SAN LUIS RES	1,151,852	56	68	65

SNOWPACK WATER CONTENT

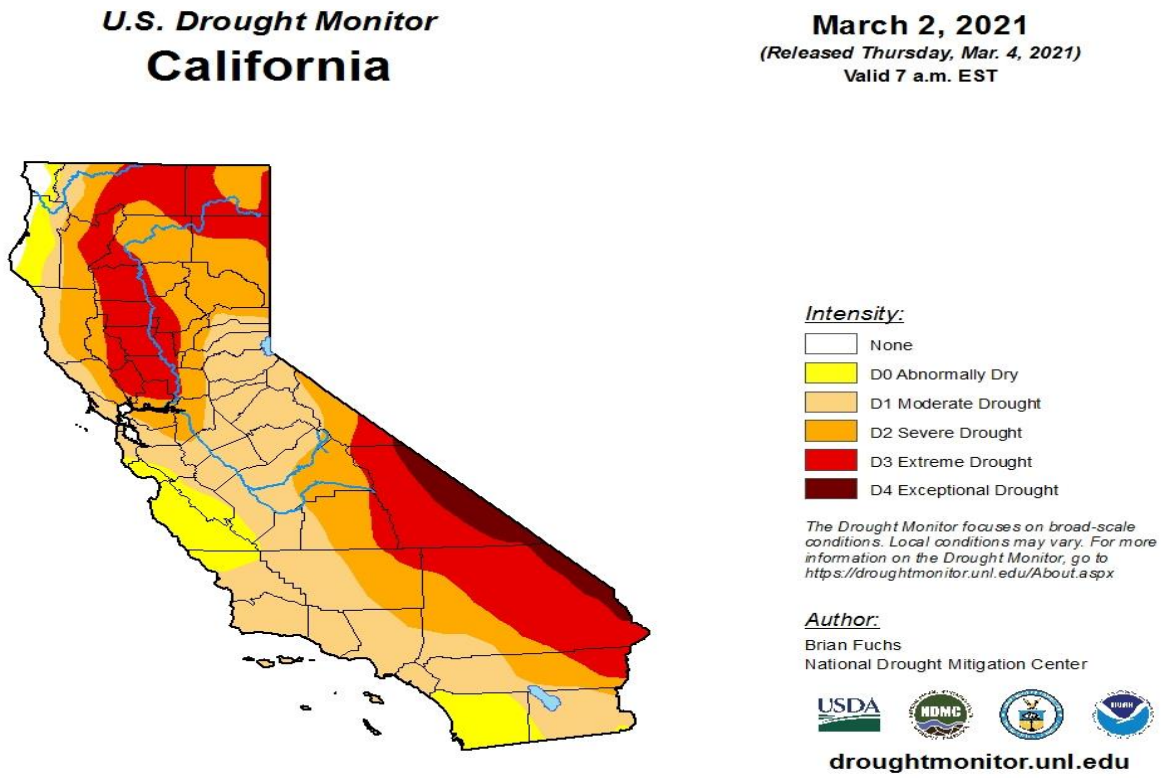


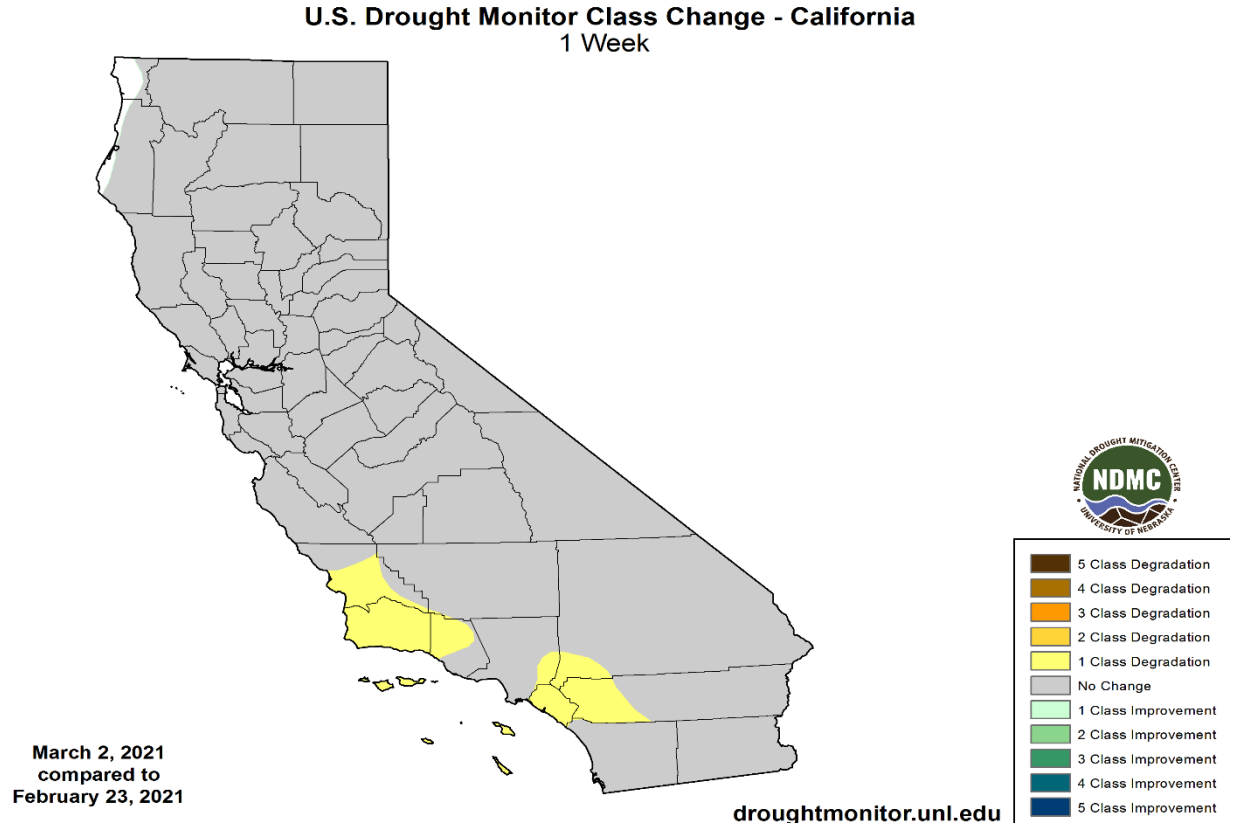
REGION	*SNOWPACK WATER EQUIVALENT (INCHES)	WEEK ON WEEK CHANGE %	% OF AVERAGE LAST YEAR	% OF 20 YEAR HISTORICAL AVERAGE	% OF HISTORICAL **APRIL 1ST BENCHMARK
NORTHERN SIERRA	16.8	1.05%	42	62	59
CENTRAL SIERRA	17.6	-1.01%	39	64	60
SOUTHERN SIERRA	9.6	-4.00%	35	40	37
STATEWIDE	15.1	0.67%	38	58	54

***Snow Water Equivalent*, or SWE, is a commonly used measurement used by hydrologists and water managers to guage 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 snow pack in California is generally deepest. It has been used the benchmark date since 1941 by DWR and can be used to predict spring riverflow.**

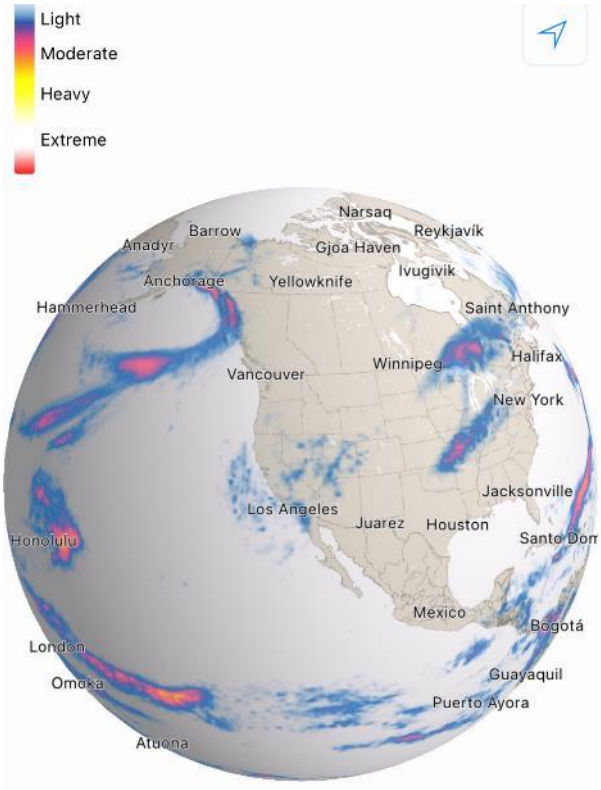
DROUGHT MONITOR





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



There is currently a weather pattern moving in from the west effecting much of California and bring much needed precipitation to the region.

According to the US Drought Monitor conditions in parts of Southern California have degraded by one class. New drought statistics are expected later this week. Looking at the current weather patterns we expect drought conditions to improve slightly.

See "Climate Forecast" for 1-10 day outlook and full weather discussion.

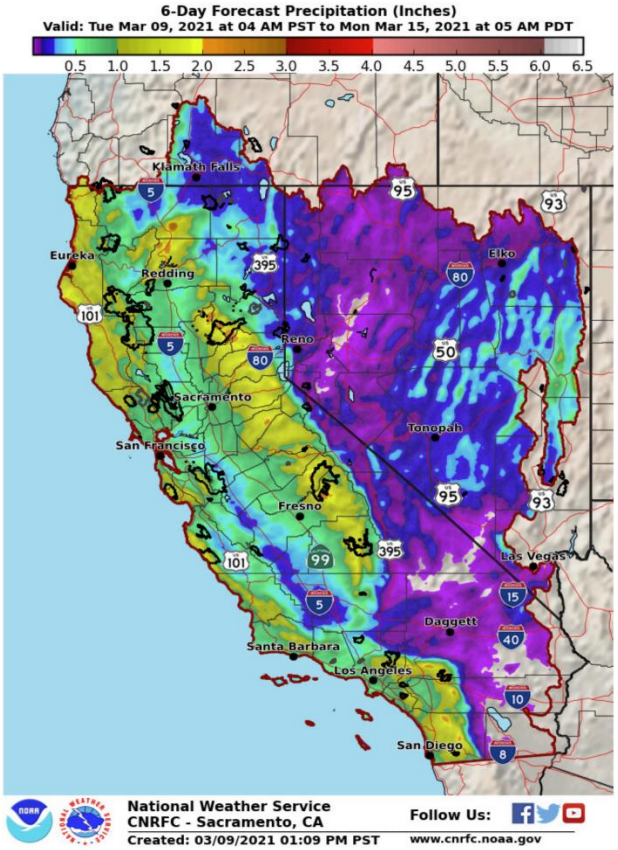
Ref. Dark Sky

CLIMATE FORECAST

1-10 Day Outlook

Showers and a few thunderstorms continued to spread across northern California yesterday afternoon, as an area of low pressure gradually approached the northern Californian coast. Expected precipitation became more widespread across the region through Wed and then begining to shift out of far northern California.

Heaviest amounts are still expected throughout the week for the central/southern regions of California.
Overall, this week trended a bit wetter mainly for coastal areas compared to the previous forecast.



CALIFORNIA WEATHER DISCUSSION

Over the past 7 days California has seen some precipitation. We are yet to see how this has affected drought levels in the region as we are expecting an update later this week from the US Drought Monitor. Northern California saw the most precipitation especially in the far northwest, seeing between 3-3.5 inches. The most recent weather front clung to the coastal regions as it moved south. The Central Valley has seen small amount of precipitation, up from the previous week where there was none. However the central valley is sitting around 47% of its 20 year average to date. High winds brought precipitation into southern California, with Los Angeles and San Diego seeing between 05-1.5 inches of rain.

When looking at snowpack there hasn't been much change. The northern Sierra range saw a 1% increase from the previous week. In the southern range level dipped 4% from last week. Reservoir levels are still looking alarmingly low. Lake Oroville sits at 39% of capacity as of March 11th ,it's the second largest reservoir in California. In 2014 Lake Oroville dropped to 30% capacity, an historic low. Lakes Shasta and Trinity sit at 50% and 52% respectively.

After examining near-term forecasting data provided by NOAA, there is a small amount of light at the end of the tunnel with new weather fronts moving into the region over the next couple of days.

Again, we ask the question can there be enough precipitation in March to reduce the pressure already straining the water systems in California?

REGULATORY NEWS

Utah Senate backs new agency to battle neighboring states over Colorado River

UTAH- Bill HB297 would establish a new agency with a $9 million war chest to ensure Utah receives its share of water.

The state Senate approved a bill Wednesday that would establish the so-called Colorado River Authority of Utah, along with a $9 million "legal defense fund," intended to ensure that the state receives its allotted share of the Colorado's dwindling flows.

Utah has shared the Colorado River's flow with six Western states under a century-old agreement, but the Beehive State has been slow to push its stake, according to backers of HB297. Accordingly, Utah uses 54% of its share, Senate President Stuart Adams, R-Layton, said shortly before the Senate approved the measure in a 24-3 vote.

Critics say this new water agency is really geared toward advancing the proposed Lake Powell pipeline and risks igniting a water war with the six other states, now on record opposing the pipeline that would funnel Colorado River water to St. George.

Source: Salt Lake Tribune

Nevada may create 'water court' system

NEVADA- Nevada's high court on Wednesday held a public hearing on a petition that would create a new commission that would study how water cases in Nevada are adjudicated, as well as how the state can improve education, training, timeliness and efficiency of of the state's courts in handling complex water cases. The court did not vote on the proposal during Wednesday's hearing.

Four other western states — Colorado, New Mexico, Idaho and Montana — have implemented some kind of specialized court to handle water cases. The water courts in those states typically also involve some specialized education and training for judges.

Source: LV Review Journal

New water law helps conservation work for all Arizonans

ARIZONA- Governor Ducey recently signed important legislation that updates how Arizona's longstanding "use it or lose it" water policy is applied. That's good news for Arizonans, our economy and the environment. Under the new law, HB2056, water right holders such as ranchers and farmers can intentionally and voluntarily leave their water in a stream without fear of losing their water rights through forfeiture or abandonment.

This new law helps clarify longstanding and complex issues around water use in Arizona. Arizona's forfeiture law provides that in some cases a surface water right may be forfeited after five years of non-use. There has been uncertainty about how and when this law applies, creating risks—or in some cases perceived risk—that a surface water user choosing to conserve water may forfeit valuable water rights. The new law makes it clear that conserving water, as part of an approved conservation plan, doesn't constitute forfeiture or abandonment.

Source: AZ Capitol Times

Court ruling upholds $2.8 million penalty, protects sensitive marsh land in Suisun Bay

CALIFORNIA –In a ruling that could strengthen vital wetlands protections throughout California, the First District Court of Appeal has upheld a cleanup and abatement order and a $2.8 million fine issued by the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Water Board) for unauthorized levee construction and other activities in the Suisun Marsh. Located in Solano County, Suisun Marsh is the largest contiguous, brackish marsh on the west coast of North America and a critical part of the Bay-Delta estuary.

Point Buckler Cub advertises itself as an exclusive kiteboarding club and is a 15-minute helicopter flight from Silicon Valley. It is historically a managed wetland used for duck hunting. In 2016, the board issued a cleanup and abatement order requiring Sweeney and the club to restore the tidal circulation and marsh habitat at the island and imposed a $2.8 million fine. The large fine reflected the brazen nature of the dischargers' activities and the extent of the ecological harm. The Bay Conservation Development Commission (BCDC) also issued a $752,000 penalty in 2016 and required restoration, mitigation, and monitoring requirements.

Source: CA State Water Board

WATER NEWS

Nestle Acquires Functional Water Brand

A few week after agreeing to sell its Norther American Water Business to One Rock Capital Partners for approximately $4.3 billion, Nestle SA has acquired Essentia Water. The terms of the agreement have not been disclosed.

Essentia Water is a processor of ionized water alkaline water. Last year Essentia generated $192 million in sales according to Nestle USA. "With the addition of Essentia we continue to transform and best position our water business for long-term profitable growth here in the US and globally," said Steve Presley, chairman and chief executive officer of Nestle USA, to Food business news. "Essentia gives us an immediate strong presence in the high-growth, functional water segment and supports our efforts to capture opportunities with emerging consumer trends such as healthy hydration."

Source: CPS News

In 2019, the Biggest Coal Power Plant in the West Shut Down. What's Happening with the Water it Once Used to Rely On?

Navajo Generating Station was the largest coal-fired power plant in the American West, but the facilities time is now up. In November 2019, the coal plant stopped producing electricity and six weeks ago the plant the last of its functioning infrastructure was demolished.

It used to provide electricity to power the pumps that kept the Central Arizona Project flowing. However over time the energy used by the CAP transitioned to solar, hydropower and various other sources.

The water the plant relied on to remove heat from the power generating process was sourced from nearby Lake Powell, a Colorado river reservoir. In 2018 the power station consumed 18,100 AF according to the Bureau of Reclamation.

The Upper Colorado River Compact of 1948, negotiated among the states and endorsed by Congress, provides Arizona's upper basin with 50,000 acre-feet of Colorado River water.

The 1968 tribal council resolution states that the Navajo would not claim the water as long as Navajo Generating Station was operating. If the plant shut down, the resolution directs the Secretary of the Interior to return the water "to the Navajo Tribe for their exclusive use and benefit."

Pollack, the water lawyer, said in an interview with Circle of Blue that the Navajo Nation's position is that the 50,000 acre-feet in Arizona's upper basin allocation "was intended for the benefit of the Navajo Nation."

How does the state view its role? In response to written questions posed by the circle of blue, the Arizona Department of Water Resources described what it believes is the process for allocating upper basin water.

"An entity wishing to use any of Arizona's Upper Basin allocation would need to apply to ADWR for a permit to appropriate the water," according to the statement. "The director of ADWR would make a decision on the application based on criteria in statute, including whether the entity would put the water to a beneficial use. Water from Arizona's Upper Basin allocation could also be allocated to an Arizona Indian tribe pursuant to a Congressionally approved Indian water rights settlement."

While the legal conflict simmers, the Bureau of Reclamation is continuing to build out the Navajo-Gallup supply system, a project that includes about 280 miles of pipeline in addition to two treatment plants and several pumping stations.

Source: Circle of Blue

Supreme Court Hears Water Dispute Between Georgia and Florida

For three decades, Georgia and Florida have been battling over how to share a precious resource: water. Georgia has it, and Florida, which is downstream, says it's not getting its fair share. The dispute is over the allocation of water in the Apalachicola-Chattahoochee-Flint river system. Once again headed to the U.S. Supreme Court, where Florida wants the justices to cap Georgia's water use. But a court-appointed special master recently rejected that idea.

The complicated water dispute has appeared more than once in the U.S. Supreme and district courts over the eight years of litigation. In January 2018, Supreme Court justices heard the first round of oral arguments and conducted evidentiary procedure; the case, however, was remanded to a lower court to rule on a water dispute technicality. Droughts and environmental disasters have significantly impacted the community in Apalachicola Bay.

The bustling oyster industry, which at one point supplied more than 90% of Florida's oysters, has experienced devastating wildfires, the coronavirus pandemic, and long droughts and overharvesting, which local and state officials blame Georgia for causing.

In December, the Florida Fish and Wildlife Conservation Commission approved a five-year suspension of oyster harvesting in Apalachicola Bay with the hopes of reviving the industry.

The suspension went into effect Feb. 1, long before the Supreme Court will hear oral arguments that will impact the future of the Apalachicola community.

Regardless of how the Supreme Court decides, any decision will impact the flow of water to different communities that need it to survive.

Source: Bloomberg-Energy

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