

A view down the spillway of the Shasta Dam into the Sacramento River in Shasta Lake, California (Michael Macor/The San Francisco Chronicle via Getty Images)

California Water and Infrastructure Report For October 5, 2023

(With expanded coverage of all the Western States) by Patrick Ruckert

Published weekly since July, 2014 An archive of all these weekly reports can be found at both links below:

http://www.californiadroughtupdate.org

https://www.facebook.com/CaliforniaDroughtUpdate

For a free subscription to the weekly report: Send me an email-- patruckert@gmail.com

www.californiadroughtupdate.org/20230803-California-Water-and-Infrastructure-Report.pdf

A Note to Readers

In Oakland today, the temperature is at or near 90 degrees. That is about 20 degrees above the normal temperature for October. Though it is expected to begin to return to "normal" temperatures over the next few days, this heat wave (of about 3-4 days) follows a summer in which most days saw temperatures in the low 70s.

I guess we can be thankful that we avoided the extreme temperatures much of the rest of the nation experienced this past summer.

But, according to this report today from *pressenterprise.com*, Los Angeles will be getting a little heat over the next few days: "In Los Angeles County, temperatures are expected to remain in the mid to high 90s for much of the inland communities, about 10-15 degrees above average for this time of year,

and low to mid 90s along the coast, 15-20 degrees higher than normal, said meteorologist Ryan Kittel."

The *U.S. Drought Monitor* this week, as the new water year began on October 1, highlights the "miracle winter," as it is being called, that piled up snow and drenched the state with 9 atmospheric rivers this past winter. The reservoirs are overflowing and drought, after more than a dozen years of it, does not now exist in California.

Under my title, "Billionaire speculators and associate parasites lose round one," the article reports on how the attempt to create a "paradise" city in Solano County agricultural land by pitting one city's legal advisors against the city failed, miserably. An excerpt from the article follows, which you can find the link on page 5.

"For the first time since their plan to <u>build a city in Solano County</u> became public, representatives of <u>California Forever</u> went to a local government and asked for permission to do something. For the billionaire city-builders, it was a big-time bust."

Hydro-power production this year will decline by about 6%, even with California producing twice what it did last year. The big decline comes from the Northwest states due to drought in that region.

And a surprise from environmentalists in the Lake Tahoe region: They advocate cutting down trees, since the overgrowth of the forests creates water shortages and diseases that kill the trees.

With the Colorado River crisis not going away soon, if ever, Arizona is going to shut down Saudi Arabia's growing of alfalfa with the scarce water of the region.

The **Feature** this week demonstrates the kind of thinking that made the United States the greatest builder of infrastructure in history. The article is from some of my friends in Mexico, who present, in detail, how to do that again today, in Mexico. Only the introduction and a few paragraphs of the article are included, but the link is provided: *"The Water Revolution that Cannot be Postponed in Mexico, Thinking Big Is Key to the New Mexican-American Alliance."*

While that proposal can provide a real solution to the border crisis, the following video discusses how real infrastructure building in the U.S. itself, can make natural disasters more manageable:

LPAC Short: Real infrastructure—Not Biden's B.S. Would Have Made Hurricane Ida Manageable

By <u>Brian Lantz</u> October 02, 2023

A 16 minute video:

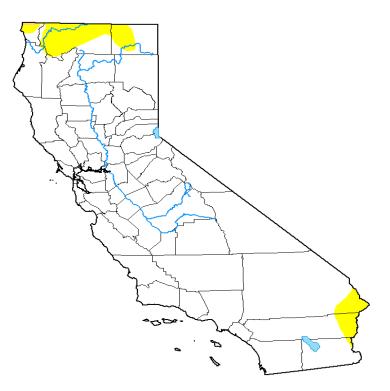
https://www.larouchepac.com/real_infrastructure_not_biden_s_b_s_would_have_made_hurricane_ida_manageable

Originally posted on September 12, 2021 - The damage done by Hurricane Ida is not due to climate change. Storms of that magnitude have occurred long before the industrial age. The damage was due to a lack of investment in infrastructure that could have been built with modern technology, none of which is in Biden's infrastructure.

U.S. Drought Monitor California

For October 3,

What the map this week shows is that barely 6% of the land area of the state is "Abnormally Dry." With the end of the water year on September 30, California, after what is called a "miracle water year," has reservoirs overflowing and for most areas of the state plenty of water for agriculture. An El Nino pattern is rapidly developing, which usually, but not always, means a wet winter for at least southern California.



Statistics

Statistics type

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	<u>2023-10-03</u>	94.01	5.99	0.07	0.00	0.00	0.00	
Last Week to Current	<u>2023-09-26</u>	94.01	5.99	0.07	0.00	0.00	0.00	
3 Months Ago to Current	<u>2023-07-04</u>	71.95	28.05	4.63	0.00	0.00	0.00	
Start of Calendar Year to Current	2022-12-27	0.00	100.00	97.94	80.56	35.50	7.16	
Start of Water Year to Current	<u>2023-09-26</u>	94.01	5.99	0.07	0.00	0.00	0.00	
One Year Ago to Current	<u>2022-10-04</u>	0.00	100.00	99.77	94.02	40.91	16.57	

Intensity

- None
- **D0** (Abnormally Dry)

- **D1** (Moderate Drought)
- **D2** (Severe Drought)
- **D3** (Extreme Drought)
- **D4** (Exceptional Drought)

The West

Following the drier-than-normal Monsoon, a 1-category degradation was warranted for parts of Arizona and western New Mexico. Conversely, heavy rainfall (more than 2 inches) on October 2nd led to a 1-category improvement for parts of eastern New Mexico. NDMC's short-term blend and soil moisture supported a 1-category degradation in eastern Utah. Extreme drought (D3) was improved to severe drought (D2) in parts of northern Montana based on indicators dating back 12 months. In addition, 28-day average streamflows are above the 5th percentile in northwestern Montana. During the past two weeks, coastal Oregon and the Puget Sound of Washington received 3 to 6 inches of precipitation which supported a 1-category improvement.

90 Degrees in Oakland on October 5

Bay Area heat wave: Today will be San Francisco's hottest day of the year

<u>Gerry Díaz</u>

Oct. 5, 2023 https://www.sfchronicle.com/weather-forecast/article/sf-bay-area-heat-wave-18406275.php



Future temperatures: Thursday 3:00 PM

Thursday afternoon's temperatures will range from the upper 80s to lower 90s, with pockets of 90degree temperatures possible west of the Oakland and Berkeley hills thanks to sunshine and dry winds.

The hottest weather in the region will be found Thursday afternoon in the East Bay. Hot winds are expected to spill into Oakland and Berkeley over the course of the day, raising temperatures to 90 by the afternoon. Inland residents in the Tri-Valley area can expect high temperatures in the lower to mid-90s.

The Reservoirs

'Miracle' water year in California: Rain, snow put state's reservoirs at 128% of historical average

By <u>ADAM BEAM</u>

Updated 11:09 AM PDT, October 4, 2023

https://apnews.com/article/california-water-year-rain-reservoirs-b6385c05b6eb82495f3963e067e568e1

SACRAMENTO, Calif. (AP) — California ended its "miracle" water year on Saturday with enough rain and snow to fill the <u>state's reservoirs</u> to 128% of their historical average, making it among the wettest years in recorded state history.

That's a welcome boon to a state that has spent much of the past dozen years in a deep drought, forcing state leaders to grapple with how the state should <u>share and manage its water</u> in the future. A series of winter storms in early 2023 busted the state's <u>most recent dry spell</u>.

State officials measured 33.56 inches (85.2 centimeters) of precipitation through the end of September. California's "water year" begins annually on Oct. 1 so it can include all of the fall and winter months when California gets the bulk of its rain and snow. The state depends on those wet months to fill its reservoirs that supply water for drinking, farming and environmental uses throughout the state.

Those reservoirs dipped to dangerously low levels in in recent years because of an extreme drought. That prompted <u>water restrictions</u> on homes and businesses and curtailed deliveries to farmers. It also threatened already endangered species of fish, including salmon, that need cold water in the rivers to survive.

Statewide, reservoirs held 27.4 million acre feet of stored water as September ended. One acre foot of water is enough to supply two families of four for a year. Of that, about 4.5 million acre feet are held in the State Water Project, a network of 30 reservoirs and storage facilities that provides water to 27 million people.

All of the rain and snow this year could have played a part in what has so far been a smaller wildfire season. Wildfires exploded in size during the drought in part because of the super dry conditions. So far this year, just over 476 square miles (1,234 square kilometers) have burned in California. That's well below the five year average of 2,031 square miles (5,260 square kilometers), according to the California Department of Forestry and Fire Protection.

Billionaire Speculators and Associated Parasites Lose Round One

California Forever's first foray into Solano County politics was all about water. It *didn't end well*

<u>J.K. Dineen</u> Oct. 3, 2023Updated: Oct. 4, 2023 11:14 a.m. <u>https://www.sfchronicle.com/bayarea/article/california-forever-solano-county-flannery-water-</u> <u>18404004.php?utm_source=marketing&utm_medium=copy-url-link&utm_campaign=article-</u> $\label{eq:share&hash=aHR0cHM6Ly93d3cuc2ZjaHJvbmljbGUuY29tL2JheWFyZWEvYXJ0aWNsZS9jYWxpZm9 ybmlhLWZvcmV2ZXItc29sYW5vLWNvdW50eS1mbGFubmVyeS13YXRlci0xODQwNDAwNC5waHA=& time=MTY5NjM5NTc1MTE2Mw==&rid=OWU3MmE4YmItMmFlMy00MGQ5LThiODAtODZhMTdh NDViM2Rk&sharecount=Mg==$

For the first time since their plan to <u>build a city in Solano County</u> became public, representatives of <u>California Forever</u> went to a local government and asked for permission to do something.

For the billionaire city-builders, it was a big-time bust.

In a unanimous decision Tuesday evening, the City Council of <u>Rio Vista</u> — a delta town of 10,000 that would be the closest city to where the new metropolis would sprout from dry farmland — rejected the idea that it would allow the city's outside legal counsel to also represent California Forever, parent company of the developer, Flannery Associates.

The law firm of Kronick, Moskovitz, Tiedemann & Girard, which has provided legal counsel to Rio Vista since 2011 — most small California cities hire outside firms rather than pay for their own legal departments — had asked the City Council for permission to also represent California Forever in its process of securing the water rights for the still unnamed, built-from-scratch city.

It was a resounding no.

While the vote was small potatoes in the context of a group that has spent \$800 million on buying 50,000 acres and is determined to spend billions more to create America's next great city, it demonstrated the political obstacles that California Forever will need to clear as it tries to convince the majority of Solano County of the wisdom of a project that would transform a corner of the Bay Area still mostly made up of farms and small towns like Rio Vista.

Neighbors were not persuaded by the law firm, and neither were elected officials.

After public comment in which all of a dozen or so Rio Vista residents urged the council to reject the idea, the five-member body quickly put the kibosh on the request.

Former Solano County Supervisor and project opponent Duane Kromm said the vote was significant because KMTG is one of the few firms that knows Solano County water rights issues inside and out.

"There is a limited subset of law firms highly specialized in California water rights," he said.

He said the lopsided dynamic of the fight over the future of eastern Solano County would continue to test the small cities in the area.

"It's not David vs. Goliath," he said. "It's David vs. an aircraft carrier."

Hydropower Generation to Decline by 6 percent

Hydropower out of whack thanks to record heat and precipitation

In California, hydropower output is expected to double this year. But in the hydro-dependent Northwest, abnormal heat could cause it to shrink 19%.

Julian Spector

5 October 2023

https://www.canarymedia.com/articles/hydropower/hydropower-out-of-whack-thanks-to-record-heatand-precipitation



A view down the spillway of the Shasta Dam into the Sacramento River in Shasta Lake, California (Michael Macor/The San Francisco Chronicle via Getty Images)

Hydropower, unlike wind and solar, can deliver power around the clock, on demand. But this renewable energy source's reputation for reliability is running up against dramatic regional fluctuations from extreme weather.

The U.S. Energy Information Administration just lowered its <u>2023 nationwide hydropower forecast</u> by 6% from last year's production level. An extremely hot summer quickly sapped snowmelt in several regions, pushing down their reserves for hydro generation through the end of the year. But electricity production operates on a local or regional basis, and that single-digit national change masks significant variation within specific regions.

The Northwest is experiencing the most foreboding swing: Hydropower production for the first half of the year fell 24% from the same period in 2022. The EIA predicts a 19% decrease for the whole year compared to last year. That's for a region that produces roughly half of all U.S. hydro generation — the EIA defines the Northwest, for this purpose, as running inland from the Pacific through Montana and down to Colorado.

Meanwhile, California's hydro production is expected to double compared to 2022 after historic snowfall in the Sierra Nevada mountains last winter. That's good news for grid operators in California: The newly abundant hydro reserves nicely balance the state's massive solar fleet by producing power day and night. The rest of the country, though, is heading for a third year of incremental hydropower decline.

Have Some Environmentalists Seen the Light? Or, Save the Forests By Chopping Down Some Trees

Losing the trees for the forest (Opinion)

<u>News News</u> | Oct 2, 2023 Amy Berry, CEO of the Tahoe Fund https://www.tahoedailytribune.com/news/losing-the-trees-for-the-forest-opinion/

As CEO of the Tahoe Fund, I spend a lot of time working to improve the Lake Tahoe environment. Since our founding in 2010, we have supported more than 130 different environment improvement projects around Tahoe, helping to secure more than \$100 million in philanthropic and public funds. Clearly, we have a thing for the environment. Which is why I know it sounds odd when I say that our number one priority is to remove trees from our forest.

Simply put, we have too many trees. And if we don't figure out how to lose some of them, we face the very real risk of losing all of them. Yes, I know this runs afoul of many people's ideas of taking care of Mother Nature. After all, the most quintessential statement of loving nature is hugging a tree.

Conventional thinking and the composition of our forests have changed since the advent of treehugging. There is now strong consensus among scientists, land managers and environmentalists about two things: our forests are overly dense, and they are dying because of it.

Now, we have a forest with too many trees that are competing for a very limited supply of water and sunlight. This leaves them prone to disease, infestation, and mortality, which in turn, makes them extremely potent fuel for catastrophic wildfire. According to the US Forest Service, over 200 million trees have died in California since 2010. Last year alone 36 million trees died.

An October 2022 report from Land Tender estimated that there are approximately 300 trees per acre in Tahoe. Historically, when the forest was healthier, the number of trees per acre was about 25. This represents an 1100% increase, and according to calculations, about 22 million too many trees in Tahoe.

On The Colorado River

Arizona moves to end Saudi farm's controversial groundwater deals to grow, export alfalfa

<u>Stacey Barchenger</u> Arizona Republic October 2, 2023 <u>https://www.azcentral.com/story/news/local/arizona-investigations/2023/10/02/arizona-to-end-saudi-firm-fondomonte-groundwater-deal/71038768007/</u>

Gov. Katie Hobbs' administration on Monday announced two steps to stop a controversial Saudi Arabian company from using groundwater beneath state land in western Arizona to grow and export alfalfa.

Hobbs said in a statement that the Arizona State Land Department had canceled one of its leases to Fondomonte Arizona, and would not renew three others that are set to expire in February.

Those four account for all of Fondomonte's leases in the Butler Valley near Bouse, though the company leases other state land elsewhere, according to the Governor's Office.

The company farmed about 3,500 acres of state land in Butler Valley to grow feed for dairy cows in Saudi Arabia and is allowed to pump groundwater for that purpose entirely unchecked and unpaid for.

The issue was brought to light last year by The Arizona Republic, which highlighted Fondomonte as an

example of companies that get below-market-rate leases on Arizona's vast stretches of state land. Fondomonte was unique in that its leases allowed it to draw water from a groundwater supply earmarked as a possible future source for Phoenix and other metro areas.

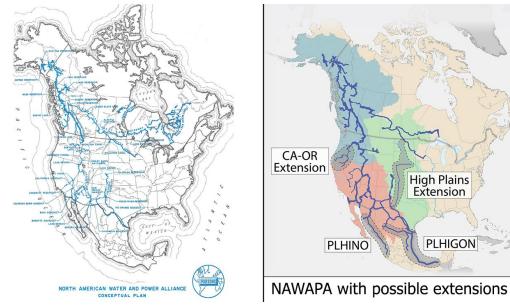
Fondomonte's presence in western Arizona became a political lightning rod as policymakers grappled with a megadrought, a decreasing supply from the Colorado River and increasing demand for water in the form of a growing population.

The original story: <u>Arizona provides sweet deal to Saudi farm to pump water from Phoenix's backup</u> <u>supply</u>

Feature: The Water Revolution that Cannot be Postponed in Mexico, Thinking Big Is Key to the New Mexican-American Alliance

By <u>LaRouchePAC Posts</u> September 30, 2023'

https://www.larouchepac.com/the_water_revolution_that_cannot_be_postponed_in_mexico_thinking_b ig_is_key_to_the_new_mexican_american_alliance



North American Water and Power Alliance, with possible extensions.

by Leonardo Espitia Jordan of the LaRouche Veterans of Mexico

As opposed to the empty concepts of the "Global South" and the "Global North," a sovereign alliance between Mexico and the United States, based on republican principles, demonstrates a true universal principle.

Instead of promoting that universal principle, the globalist establishment insists that "We will neither allow an industrial Mexico, nor allow an Abraham Lincoln or a Franklin Roosevelt back into the US presidency!"

This establishment and its British Imperial plans were shattered by the arrival of Donald Trump in the White House in January 2017, and then by the overwhelming triumph of Andrés Manuel López Obrador (AMLO) that made him President of Mexico in December 2018.

The establishment's fear was well-founded. AMLO and Trump established a firm friendship and strengthened an alliance of principle between Mexico and the United States that allowed AMLO to regain Mexico's sovereign control of its oil.

That relationship was interrupted by the establishment's electoral coup against Trump. But today, Donald Trump is back, committed to ending the threat of nuclear war and to stopping environmental globalism from destroying the world. He faces relentless persecution to get him off the ballot.

In Mexico, Claudia Sheinbaum has been chosen as the 2024 presidential candidate of the party founded by President AMLO. She has declared that she will continue AMLO's legacy, even though she identifies herself as an "environmentalist," a commitment that conflicts in principle with AMLO's projects for industrialization.

Unlike the "anti-establishment" movement that made possible the triumph of Donald Trump in 2016 and that of AMLO in 2018, today's globalist movements, even those called "anti-imperialist," turn a blind eye to the fierce battle that Donald Trump is waging in the United States. Worse, those movements hope for the downfall of America. And what is more, all these globalist movements champion the green agenda.

What they overlook is that the coming American election is not just an American affair. It is the battle between the Republic and the Anglo-Dutch Empire.

From the electoral processes that are underway leading into the 2024 Presidential elections in Mexico and in the United States, we need to build the pathway towards a new alliance of principles around a New Bretton Woods world monetary/credit system.

That is why we cannot allow Mexico's industrialization project to be destroyed, using the tactics of irregular and financial warfare as during the government of President José López Portillo (1976-82)—now combined with a green environmentalist vision of *fake* economic development. This time the consequences would be fatal. A wave of pessimism and confusion would grip the population, paving the way to an oligarchical parliamentary dictatorship.

In this Mexican Presidential campaign, it is urgent to define the great infrastructure projects of the next government, to be able to deepen the industrialization project while establishing a new principled relationship with the United States.

Mexico's survival depends upon development of water projects. To move from merely enough water for survival to the necessary abundance of water, we must revive the water infrastructure project presented by a team from the Secretariat of Water Resources during Luis Echeverría's government (1970-1976), as updated. This project represents the historical legacy of the principled sovereign relationship between Mexico and the United States.

The Paradigm of Franklin Roosevelt

An outstanding leader in planning and building large national water infrastructure projects was the late Engineer Leandro Rovirosa Wade (1918-2014), Secretary of Water Resources during Luis Echeverria Álvarez's term (1970-1976) and governor of the State of Tabasco (1977-1982).

Rovirosa Wade, "The Water Man," was responsible for the construction of large dams such as La Chicoasén, La Angostura, and La Villita, built by the Secretariat of Water Resources and the Federal Electricity Commission. The Cutzamala System, a large-scale project to provide water to Mexico City,

was conceived and begun under Rovirosa Wade's leadership. For the first time in Mexico, a National Water Plan was drafted, designed to take advantage of the enormous volumes of water that are concentrated in specific regions. The project included the Northwest Water Plan (PLHINO), the Gulf Water Plan (PLHIGON), and the Southeast Water Plan. Rovirosa Wade's plan was designed to provide for the growing agricultural, industrial and urban demand for water that was projected for more than 50 years into the future.

Also during President Luis Echeverría's term, the construction began on the Laguna Verde nuclear power plant. Water and energy are inextricably linked.

Rovirosa Wade belonged to the generation of builders sprung from the strong influence of President Franklin Delano Roosevelt's projects in Mexico. Roosevelt's greatest project of water and electrical infrastructure was built in the Tennessee River basin; a region mired in poverty, pounded by recurrent and catastrophic floods, and ravaged by malaria. Roosevelt created the TVA (Tennessee Valley Authority) corporation, in charge of directing an intensive investment into water and electrical infrastructure, accompanied by communications, sanitation, agricultural programs, and industrial and urban infrastructure. From a poverty-stricken region, the greater Tennessee Valley, covering all of Tennessee and parts of six other states, became a prosperous global model that created a new paradigm.