

FILE - The Colorado River in the upper River Basin is seen, May 29, 2021, in Lees Ferry, Ariz. (AP Photo/Ross D. Franklin, File)

California Water and Infrastructure Report For August 15, 2024

(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

 $\underline{https://www.facebook.com/CaliforniaDroughtUpdate}$

A Note to Readers

There are some new developments in regard to the Colorado River. California farmers will cut back their water use beginning this year by 700,000 acre feet, and states are at least somewhat working together on how to make permanent cuts in water use. Of course, the *Bureau of Reclamation*, that is the responsible agency in charge of the river, is directly involved in the negotiations.

The *U.S. Drought Monitor* for California still only shows a tiny corner of the state in any category of drought.

We do have coverage of the presidential race, with an article on how farmers in the Central Valley measure Trump and Harris. They like Trump on the water supply question, but consider Harris to be largely absent on the issue.

The *Sites Reservoir* project is now very near beginning construction. This "off-stream" reservoir has been on the construction menu for 50 years and will be only the second major water infrastructure project built in the state in 50 years.

Ag Alert reports that both federal and state agencies have a plan to limit water to agriculture.

Reporting on wildfires, there are two articles this week. The first on the devastating year for fires in Oregon, with one fire being the largest in Oregon history. The second is today's report on fires in California from Royal Burnett, a retired fire fighter who spent many years as a supervisor and manager of fire fighting operations. The report is from his *Face Book* page today.

This week's **Feature** has two items:

First is an article on how electricity-hungry data centers are threatening to derail California's "clean energy" goals.

Second we have the "Physical Economy and Technology Report for August 14, 2024" from Promethean Action.

U.S. Drought Monitor

California

U.S. Drought Monitor

USDA California Climate Hub

August 13, 2024 (Released Thursday, Aug. 15, 2024) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

				1		,
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	77.29	22.71	5.32	0.00	0.00	0.00
Last Week 08-06-2024	77.26	22.74	5.32	0.00	0.00	0.00
3 Month's Ago 05-14-2024	98.77	1.23	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	96.65	3.35	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	94.01	5.99	0.07	0.00	0.00	0.00
One Year Ago 08-15-2023	74.56	25.44	7.27	0.00	0.00	0.00

<u>Intensity:</u>	
None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. For more information on the
Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Curtis Riganti

National Drought Mitigation Center









droughtmonitor.unl.edu

The Presidential Campaign: Trump vs. Harris on California Water

Central Valley farmers like Donald Trump on water. On California's Kamala Harris, less so

Gillian Brassil

Tue, August 13, 2024 at 11:12 a.m. PDT·9 min read https://ca.news.yahoo.com/central-valley-farmers-donald-trump-181245005.html

Central Valley farmers feel former President <u>Donald Trump</u> more aligns with their water needs than Vice President Kamala Harris, a former U.S. senator and attorney general for California.

"The reason I say that is I have not seen anything positive in supporting farmers — supporting water supply for farms, for food security — from the Democratic administration, whoever's in charge," said Tom Barcellos, a lifelong farmer and president of the Lower Tule River Irrigation District. "We get lip service, but we don't get results."

California's Central Valley and in particular the San Joaquin Valley, which makes up its lower half, is one of the most agriculturally abundant areas in the U.S. More than half of the nation's fruits, vegetables and nuts are grown here. California produces the most milk in the nation too.

Harris and Feinstein

Looking at Harris' record as a senator, farmers and environmental advocates alike didn't connect her much to water issues, though on the 2016 Senate campaign trail she said she would not support efforts to weaken federal law governing endangered species.

"When we look at the bigger picture, Vice President Harris has been a strong supporter of infrastructure investments for agriculture," said Mike Wade, the executive director at California Farm Water Coalition. "Through the Infrastructure Investment (and Jobs) Act, her support there is helpful to get money out on the ground to repair old infrastructure, perhaps build new infrastructure, and that's a positive."

Trump's water plan

Frustration over water deliveries were building for decades when Trump came into office in 2017. He had a campaign promise to deliver more water to Central Valley farmers. Federal policy moves slowly and water rules take years to develop, but Trump's efforts signaled some potential relief.

Biden retracts Trump plan

Since Trump's plan was blocked, state and federal agencies have used interim annual agreements to govern water allocations. Officials have been working to redo the biological opinions that guide how the water is managed.

President Joe Biden's administration is trying to solidify new rules before he leaves office. It released an environmental study on the issue this month.

"While Kamala Harris and (running mate) Tim Walz's dangerously liberal record is earning endorsements from pro-Green New Deal activist groups, President Donald J. Trump has always balanced protecting our environment while standing up for farmers," said Rachel Reisner, the GOP regional communications director, "from securing water supplies to ensuring fair trade deals for American agricultural exports."

Sites Reservoir-- The Second Major Water Infrastructure Project in the State in 50 Years Is Now Near Beginning Construction

Long-awaited Sites Reservoir nears finish line

Water Lines: Project is heading toward construction.

Dan Keppen

August 13, 2024

https://www.farmprogress.com/commentary/long-awaited-sites-reservoir-nears-finish-line

Sites Reservoir will be a rain-fed flexible storage solution that will adapt to future climate conditions, which are predicted to bring more precipitation in the form of rain.USDA ARS

The long-envisioned construction of Sites Offstream Storage Reservoir in northern California is getting closer to the finish line.

Over the last six years, the Sites Project Authority—the lead agency for the project —has worked with its participants, government partners, and statewide stakeholders to design an off-stream reservoir that would benefit all of California.

Last year – 2023 - marked several existing milestones for the project. Sites qualified for a \$2.2 billion low-interest loan, and the Final Environmental Impact Report was certified. Gov. Gavin Newsom and the State Legislature certified Sites for streamlined judicial review. Sites was awarded \$110 million in federal funding from, bringing the total federal funding committed to the project through the end of 2023 to \$244 million.

Now, the project is moving into the final planning stages and heading toward construction. This is welcome progress, as California needs Sites Reservoir now more than ever.

In California and elsewhere in the West, it usually takes extreme drought or extreme flooding to drive policy makers towards meaningful solutions. Those extreme events are happening with increased frequency. Sites is a rain-fed flexible storage solution that will adapt to future climate conditions, which are predicted to bring more precipitation in the form of rain.

Sites Reservoir is closer than ever to becoming a reality. I am proud to support this project that will provide water for generations of Californians to come.

[Keppen is executive director of Family Farm Alliance.

Meanwhile, Both Federal and State Agencies Have a Plan to Limit Water to Agriculture

AG ALERT: Water operations long-term plan could limit supply

By Christine Souza, Ag Alert

August 7, 2024

https://mavensnotebook.com/2024/08/07/ag-alert-water-operations-long-term-plan-could-limit-supply/



State and federal agencies face a challenge to balance the <u>beneficial uses</u> of water needed by farmers with needs of the Sacramento-San Joaquin Delta ecosystem, as water officials plan for climate change impacts.

In seeking to coordinate long-term operation of the federal <u>Central Valley Project</u> and <u>State Water Project</u>, the U.S. Bureau of Reclamation released a draft environmental impact statement, or EIS, for the public to review by Sept. 9.

The EIS seeks to influence operations for California's two primary water-delivery systems, which guide pumping of water through the Sacramento-San Joaquin Delta, sending water south to tens of millions of people and to millions of acres of farmland.

The document was drafted in response to a 2021 executive order by President Joe Biden that called for a review of 2019 biological opinions under then-President Donald Trump related to coordinated long-term operation of the state and federal water projects.

The EIS document, released July 26, includes four proposed alternatives to the no-action alternative that establish different objectives for storage, release and diversion of water that would lead to different downstream flow, water supply and power generation impacts that change depending on water-year type and season.

"A lot of documents have been dropped on the street by the federal agencies in the last couple weeks," said Thad Bettner, executive director for the Sacramento River Settlement Contractors, which holds contracts with the bureau to divert water from the Sacramento River. "We've also been reviewing the state Department of Water Resources document for operation of the <u>State Water Project</u>, and that process has to align with the federal process."

For the Sacramento River Settlement Contractors, Bettner said the draft alternatives mean irrigators would see less water in critically dry years, as water is diverted for instream uses and to protect cold water resources at Shasta Reservoir.

"Really, the end result is the water yield coming out of the project is going to be dedicated to the fish and to the environment," Bettner said. "That is going to be the outcome of the new biological opinions and what the state is going to issue."

Fire Report-- It Is Not Just California That Is On Fire

Durkee Fire becomes one of largest blazes in Oregon history: 'We are working with every tool we have to protect people'

Timothy McGill Sun, August 11, 2024 at 4:00 PM PDT·3 min read https://www.yahoo.com/news/durkee-fire-becomes-one-largest-230000782.html

Extreme summer heat and ongoing drought have created conditions in Oregon conducive to massive wildfires. As of Aug. 7, the <u>Durkee Fire</u> had charred nearly 300,000 acres and was the state's fifth largest wildfire in over 20 years. At one point in late July, it was the country's largest active wildfire.

What's happening?

Heat has hit the Pacific Northwest particularly hard this summer. Portland just had its <u>hottest July on record</u>, as local station KGW8 reported. It's not only hot — it's also very dry.

More than half the state was in a <u>moderate drought</u> as of early August, as tracked by <u>Drought.gov</u>. The heat, coupled with drought across most of the state, has made the area vulnerable to wildfires.

In the Durkee Fire — which has been <u>95% contained</u> as of Aug. 7 — firefighters have battled one of the worst wildfires in Oregon's history. In late July, the Durkee Fire was the largest wildfire burning in the country, as the Associated Press <u>reported</u>. It was eventually surpassed by the mammoth Park Fire in California, that state's fourth-largest ever, as the New York Times <u>reported</u> on Aug. 8.

A Report From California by Retired Forest Fighter Supervisonr and Manager-- As Posted on His Face Book Page

Royal Burnett

https://www.facebook.com/royal.burnett.5

<u>soeonSdptrmam8m221mi7i6amul0hu291h238ha2l6t2l5uug70u26546402</u> ·

Thursday August 15, 2024



Good news...There is a Rumor of Rain! The Weather Guessers are predicting possible rain for NorCal on Saturday. A rain might settle the dust, but it won't affect the fuels unless we get deluge. Our 1,000 hour fuels, those dead forest fuels 3 to 8 inches in diameter, are extremely dry. The current readings are 9% for the Sacramento Valley and 11% for NorthWest California where the Boise fire is located. Both readings are at or below the critical level which means those fuels, when they burn will add to the combustion process...in short they increase the probability of a fuel driven fire.

The Park fire is 429,263 acres and 45% contained. It has not spread for 2 days. Crews are performing mopup and rehabilitation of dozer lines etc. This work will go on for months.

Redding and much of Northern California has been under a smoke cloud for the last couple of days...The Boise fire is now 9680 acres...Here's a nice picture of Boise at sunset... I copied it off Watch Duty...

I read conflicting stories from the USFS Six Rivers NF. In some cases they say this is a full suppression fire and in other cases they say they plan to manage this fire and allow it to burn into the perimeter of previous fires... that would be in agreement with Chief Forester Randy Moore's letter of intent published last spring., its natural. Its my understanding that this patch of timber 5 miles South of Orleans has not burned for 100 years so the forest is overstocked with new growth and has accumulated a large fuel loading of dead and down material.

I further understand the USFS stated that initial attack efforts failed and they plan to manage this fire to burn to the old burns when fuel loading is less and fire fighting is easier. Infra red maps show active fire on all perimeters indicating to me the that Forest Service is lighting more fire than its fighting. Studies have shown that in Pre Columbian times these forests burned on a 15 year cycle and USFS uses that as justification...its natural, don't fight it...well, so is syphilis and cancer. We have the ability to manipulate fuels using fire in less critical conditions if that's what is needed.

I simply don't understand how any Agency who's motto is "Caring for the Land and Serving the people" can allow a fire to burn through a hundred year old stand of timber in mid summer. If this fire (Boise) is allowed to burn to the old fire boundaries it will burn around 25,000 to 30,000 acres. USFS will not be deterred by rain, they relit the Pearch fire three times last year.

This policy is reminiscent of the Vietnam War when commanders said "We've got to destroy this village to save it"...it was bad policy then and its bad policy now.

If the USFS wants to use fire as a management tool, it should do so in planned manner...with and Environmental Impact report, planned ignitions and not using airtankers and emergency funds. I am dead certain that no planned ignition would occur when the fuels are in this parched condition. First Put Out the Fire... then we'll manage the forest.

The Colorado River



FILE - The Colorado River in the upper River Basin is seen, May 29, 2021, in Lees Ferry, Ariz. (AP Photo/Ross D. Franklin, File)

As Colorado River states await water cuts, they struggle to find agreement on longer-term plans

By <u>SUMAN NAISHADHAM</u> Updated 2:30 PM PDT, August 14, 2024

https://apnews.com/article/colorado-river-california-arizona-climate-change-drought-690ec20790e10819b8bb1341772534ac

WASHINGTON (AP) — The federal government is expected to announce water cuts soon that would affect some of the 40 million people reliant on the <u>Colorado River</u>, the powerhouse of the <u>U.S. West</u>. The Interior Department announces water availability for the coming year months in advance so Western cities, farmers and others can plan.

Behind the scenes, however, more elusive plans are being hashed out: how the basin will share water from the diminishing 1,450-mile (2,334-kilometer) river after 2026, when many current guidelines that govern it expire.

The Colorado River supplies water to seven Western states, more than two dozen Native American tribes, and two states in Mexico. It also irrigates millions of acres of farmland in the American West and generates hydropower used across the region. Years of overuse combined with rising temperatures and drought have meant less water flows in the Colorado today than in decades past.

That's made the fraught politics of water in the West particularly deadlocked at times. Here's what you need to know about the negotiations surrounding the river.

What are states discussing?

Plans for how to distribute the Colorado River's water after 2026. A series of overlapping agreements, court decisions and contracts determine how the river is shared, some of which expire at the end of 2025.

In 2007, following years of drought, the seven U.S. states in the basin — Arizona, Nevada, California, Colorado, New Mexico, Utah and Wyoming — and the federal government adopted rules to better respond to lower water levels at Lake Mead and Lake Powell. Those are the river's two main reservoirs.

The 2007 rules determine when some states face water cuts based on levels at Lake Mead. That's why states, Native American tribes, and others are drafting new plans, which anticipate even deeper water cuts after 2026 based on projections of the river's flow and climate modeling of future warming in the West.

Massive cuts to Colorado River supply for Imperial Irrigation District begin

Environmental and community groups say lucrative deal that led to cuts was rushed, and will harm public and wildlife. Officials strongly disagree.

Janet Wilson

Palm Springs Desert Sun

August 13, 2024

https://www.desertsun.com/story/news/environment/2024/08/13/massive-cuts-to-colorado-river-supply-for-iid-imperial-irrigation-district-begin/74785417007/

Less than 12 hours after the Biden Administration and the Imperial Irrigation District approved an

unprecedented deal to conserve 700,000 acre feet of Colorado River water through 2026, the flow of river water to the rural valley three hours south of Los Angeles slowed. District personnel moved out before sunrise to install more than 1,600 locks on gates to canals supplying hundreds of farm fields, cutting off water deliveries for up to 60 days this year. The process will be repeated over the next two summers.

In exchange, the powerful agency and farmers who volunteer to not receive the water and hold off on growing hay in hot summer months <u>will be paid nearly \$700 million in federal funds</u> — by far the largest of <u>numerous agreements</u> struck with water agencies and tribes to prop up the overused, drought-ravaged river and its reservoirs.

For irrigation district officials, the agreement, which will conserve a huge amount of water, about as much as the state of Nevada uses annually, caps years of arduous negotiations and multiple federal reviews.

"IID's efforts provide an example for other states and regions to follow as we plan for a drier future in the Colorado River basin," said California's Colorado River Commissioner J.B. Hamby, who also is the irrigation district board's vice chair. "IID has cleared enormous hurdles to make this deal happen—there is no excuse for inaction anywhere along the river."

But the way the deal was finalized and its potential impacts on the also rapidly dwindling <u>Salton Sea</u> and <u>local public health</u> angered numerous environmental justice and policy groups. They said the U.S. Bureau of Reclamation and the powerful water agency rushed through cursory approvals and ignored much of their lengthy comments, including ideas on how to monitor and reduce air quality and wildlife impacts that they say will occur from holding back such a huge amount of water.

Feature: Two items this week:

First: electricity-hungry data centers threaten to derail California's "clean energy" goals.

Second: Physical Economy and Technology Report for August 14, 2024 from *Promethean Action*.

Explosion of power-hungry data centers could derail California clean energy goals

https://www.latimes.com/environment/story/2024-08-12/california-data-centers-could-derail-clean-energy-goals

By Melody Petersen Staff WriterFollow Aug. 12, 2024 3 AM PT Share

Near the Salton Sea, a company plans to build a data center to support artificial intelligence that would cover land the size of 15 football fields and require power that could support 425,000 homes.

In Santa Clara — the heart of Silicon Valley — electric rates are rising as the municipal utility spends heavily on transmission lines and other infrastructure to accommodate the voracious power demand from more than 50 data centers, which now consume 60% of the city's electricity.

And earlier this year, Pacific Gas & Electric told investors that its customers have proposed more than two dozen data centers, requiring 3.5 gigawatts of power — the output of three new nuclear reactors.

While the benefits and risks of AI continue to be debated, one thing is clear: The technology is rapacious for power. Experts warn that the frenzy of data center construction could delay California's transition away from fossil fuels and raise electric bills for everyone else. The data centers' insatiable appetite for electricity, they say, also increases the risk of blackouts.

Even now, California is at the verge of not having enough power. An analysis of public data by the nonprofit GridClue ranks California 49th of the 50 states in resilience — or the ability to avoid blackouts by having more electricity available than homes and businesses need at peak hours.

"California is working itself into a precarious position," said Thomas Popik, president of the Foundation for Resilient Societies, which created GridClue to educate the public on threats posed by increasing power use.

Physical Economy and Technology Report for August 14, 2024

Today's report covers ongoing work on space technology, fusion and fission technologies, water management, 3D-printed home construction, and reports on consequences of Biden's depression policies.

By <u>Michael James Carr</u>

https://www.prometheanaction.com/physical-economy-and-technology-report-for-august-14-2024/

Posts in today's report:

- Video Update from NASA SpaceFlight on SpaceX, Starship 30, & Starbase
- Axiom Space's Fourth Private Astronaut Crew Begins Training in Houston, Texas
- Firefly Aerospace Sets Record for Quick Launch
- A Tour of Stoke Space
- Interesting Engineering Reports: Microwave Heating Key to Smaller, Efficient Tokamaks
- Fusion Industry Association Points out China's Advantages in Pursuit of Commercial Fusion
- Westinghouse Develops Safer, Long-lasting Uranium Fuel Pellets for Nuclear Plants
- A Tour of the French Nuclear Reprocessing Facility
- "California Water and Infrastructure Report": California Can Return to Water Abundance
- World's Largest 3D-printed Neighborhood Nears Completion in Texas
- More Layoffs Ahead for Freight-related Companies Across U.S.