

**Parts of CA return to drought levels for 1st time this year: July marks the end of a nine-month drought-free period**

# **California Water and Infrastructure Report**

## **For July 18, 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>**

**<https://www.facebook.com/CaliforniaDroughtUpdate>**

### **A Note to Readers**

Drought has returned to California, though only a small portion of the state has entered official drought status, and that is only at the “Moderate Drought” category.

The *U.S. Drought Monitor*, pictured below tells the story.

The major focus of this week's report is how California's "conservation as the only solution" orientation has both escalated and has received setbacks.

President Biden and Governor Newsom are attempting to "Trump proof" the state in case he wins the November election (which at this point is all but certain), in order to prevent a rational water policy.

Also, as covered in this article, below, the state is already imposing a 40 gallons per usage on residents.

The article below is, "California Imposes Permanent Water Restrictions on Residents."

Edward Ring, once again, provides not only alternative means of increasing the state's available water supply, but also without rationing (see article below), and at much less the cost.

And the state Water Board received a set back on one of its edicts recently. This article explains, "Judge temporarily blocks state order to growers who depleted groundwater."

The Sites Reservoir project, despite opposition from the usual suspects, is moving ahead. See the article on page 7.

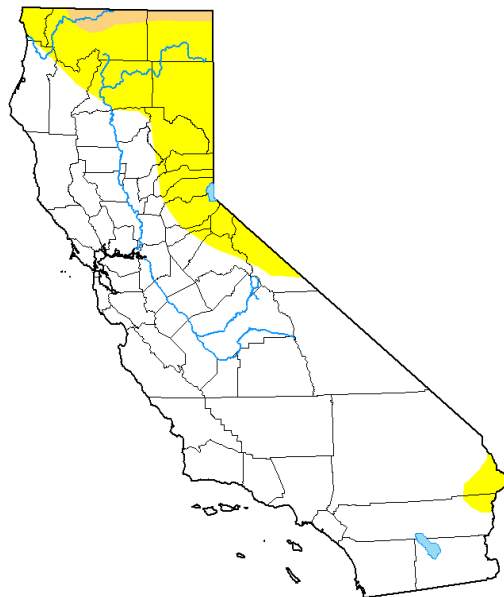
The **Feature** this week is "*Global Warming May Not Be the Big Catastrophe After All. But a Return to An Ice Age Really Would Be.*"

The article provides evidence that the great flood of 1862, which created a 300 mile lake 20 feet deep in the Central Valley, was not the worst flooding the region has experienced. Going back more than 1,000 years, scientists have discovered evidence of much worse flooding in our history.

## U.S. Drought Monitor

### California

**Map released: Thurs., July 18, 2024**



## Statistics

Statistics type

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	<a href="#">2024-07-16</a>	78.80	21.20	1.62	0.00	0.00	0.00	
Last Week to Current	<a href="#">2024-07-09</a>	80.72	19.28	0.77	0.00	0.00	0.00	
3 Months Ago to Current	<a href="#">2024-04-16</a>	97.32	2.68	0.00	0.00	0.00	0.00	
Start of Calendar Year to Current	<a href="#">2023-12-26</a>	96.65	3.35	0.00	0.00	0.00	0.00	
Start of Water Year to Current	<a href="#">2023-09-26</a>	94.01	5.99	0.07	0.00	0.00	0.00	
One Year Ago to Current	<a href="#">2023-07-18</a>	74.45	25.55	6.29	0.00	0.00	0.00	

**Estimated Population in Drought Areas: 13,958**

## “Parts of CA return to drought levels for 1st time this year: Here's a look at recent data”

### July marks the end of a nine-month drought-free period

Sunday, July 14, 2024 4:30PM

<https://abc7news.com/post/parts-california-return-drought-levels-ending-9-month/15059218/>

SAN FRANCISCO (KGO) -- For the first time this year, parts of California returned to drought levels.

Northern parts of the state are dry, and a portion of one county, [Siskiyou County](#), reached the "moderate drought" level.

The U.S. drought monitor has shown trends in this direction.

No widespread drought is expected in California for the next two years, through 2025 and into early 2026, AccuWeather forecasters announced.

Three months ago, 97% of the state was at normal levels.

Recently, nearly 6% of the state moved into abnormally dry.

Within days, we saw a sizable jump amid summer heat waves.

Now, about 19% of the state is in dry conditions with nearly 1% in drought.

## How To Add More Water to the State's Supply; and How Not To.

Edward Ring, once again, provides not only alternative means of increasing the state's available water supply, but also without rationing (see article below), and at much less the cost. His full article is available at the link below.

### Ringside: California’s Water Economy – The Three Biggest Choices

We could have abundance again with more reservoirs, more wastewater recycling, more urban runoff

harvesting, and desalination

By [Edward Ring](#), July 18, 2024 2:45 am

<https://californiaglobe.com/fr/ringside-californias-water-economy-the-three-biggest-choices/>

If water strategy in California had to be distilled down to just three projects with the greatest impact, the answers might vary a great deal depending on who was asked. But in terms of quality of life impact, the ongoing implementation of State Water Resources Control Board to “Make Conservation a Way of Life” is the clear winner. In terms of financial impact, it’s the proposed “Delta Conveyance.” And in terms of potential to actually increase California’s water supply by a significant, game-changing quantity, it’s the San Joaquin County Blueprint’s “Fish Friendly Diversions” proposal.



California Bay Delta water (Photo: USGS.gov)

Let’s consider these one at a time.

The state legislature’s approach to water scarcity has been invariably to mandate additional conservation. As we have seen, urban water use in California has declined even as population has increased. At this point, a prudent way to build resilience might be to develop more sources of water supplies, and consider any “excess” consumption to constitute a safe surplus that leaves room to further reduce demand if a truly perilous situation develops. A failed levee in the Delta; a cyber attack on the Tehachapi pumps; a crashed power grid. Leaving some fat in the system is common sense.

Prioritizing more supply, however, is not on the minds of California’s water bureaucrats. They are in the process of [mandating a reduction](#) in indoor water use to 40 gallons per person per day, with similar restrictions on outdoor water use.

An independent study estimated the [cost to implement](#) this next level of urban water rationing at \$7 billion. By the state’s own projections, it will [save 400,000 AF/year](#). Recall that California receives 180 million acre feet of rain in the average year. That’s \$7 billion to put two-tenths of one percent of California’s total water budget back into the system. It’s absurd.

There are alternatives, which brings us to our third example, a project proposal with a huge and unambiguously positive potential impact. Another way to transport water from the delta to farms and cities in Southern California is via so-called [Fish Friendly Delta Diversions](#). This proposal is so promising, offering such a cost-effective way to move so much water, that it ought to be a research priority at every water agency in the state. If it lives up to its potential, it would fix everything, and harm nothing.

The proposal calls for a channel to be cut in an island in the delta, with a liner in the bottom and perforated pipes buried under rocks. The pipes would withdraw water using nothing but gravity, which would not alter the current and would not trap fish. Initial pilot studies indicate that a 200 acre channel could withdraw 15,000 acre feet per day. And the estimated cost? About \$5 billion; maybe less. For such a relative pittance, you could build this, *and* build the tunnel.

There are other ways to increase water supplies. All of them have their virtues, and if Californians were willing to invest in abundance again, we might do them all. More reservoirs, more wastewater recycling, more urban runoff harvesting, and desalination. But in an era of tight budgets and tough environmental concerns, fish friendly delta diversions may be the answer we've been looking for.

## **But, California, With Its Usual Non-solution, Is Now Imposing Rationing, and More**

### **California Imposes Permanent Water Restrictions on Residents**

Story by Giulia Carbonaro

July 5, 2024

[https://www.msn.com/en-us/news/us/california-imposes-permanent-water-restrictions-on-residents/ar-BB1psiSb?item=flightsprg-tipsbsc-v1a%3Futm\\_source%3Dmlei.news&apiversion=v2&noservercache=1&domshim=1&renderwebcomponents=1&wcseo=1&batchservertelemetry=1&noservertelemetry=1](https://www.msn.com/en-us/news/us/california-imposes-permanent-water-restrictions-on-residents/ar-BB1psiSb?item=flightsprg-tipsbsc-v1a%3Futm_source%3Dmlei.news&apiversion=v2&noservercache=1&domshim=1&renderwebcomponents=1&wcseo=1&batchservertelemetry=1&noservertelemetry=1)

For the first time in its history, California has introduced permanent water restrictions for its cities and towns in an effort to address the issues of water conservation and resilience in the drought-stricken state.

The new regulation, which was approved by the California State Water Resources Control Board (SWRCB) on Wednesday, will require the state's largest water utilities—which serve 95 percent of California residents—to reduce the amount of water they provide over the next 15 years. It doesn't apply directly to households or individuals in the state.

The board has previously introduced temporary water conservation measures during drought emergencies, but this is the first time that the Golden State has adopted permanent measures to save water. The idea is to now ask suppliers to save the precious resource at all times in order to prevent the need for the state to scramble to save water during droughts. This, according to SWRCB, will help "make conservation a California way of life."

A solution to save water is desperately needed in the state, which has suffered two major droughts in the last decade and is expected to face a 10 percent water supply shortfall by 2040 due to hotter and drier weather conditions.

Under the new regulation, which is expected to come into effect by January 1, 2025, suppliers must calculate water budgets based on the needs of each community, considering the following factors: residential indoor water use; residential outdoor water use; commercial, industrial and institutional landscapes with dedicated irrigation meters; and a supplier's maximum allowable volume of water loss from leakage.

The sum of these water budgets, called the "water use objective," is what urban retail water suppliers

will have to comply with eventually, according to SWRCB. Suppliers are expected to deliver up to nearly 40 percent less water to residents; if they don't cut back on delivery, they will be hit by fines of up to \$10,000 a day.

## **And It Is from Biden and Newsom**

### **Biden, Newsom race to cement Calif. water grab ahead of potential Trump victory**

New federal rules that govern the Central Valley's water supply are on track to be codified before a change of power in the event of a potential Biden defeat in November.

[By Daniel Gligich](#)

June 6, 2024

<https://sjvsun.com/ag/biden-newsom-race-to-cement-calif-water-grab-ahead-of-potential-trump-victory/>

President Joe Biden is planning to cement new, strenuous rules governing how California's water is managed by the end of the year, completing a four-year fight to shred a water boost for Valley farmers and southern California instituted under President Trump.

According to a federal agency schedule published by POLITICO, the Biden administration plans to have new biological opinions in place by Dec. 6 to pare back how water flows via the Central Valley Project and the State Water Project.

**The backstory:** The 2019 biological opinions put in place by the Trump administration were developed with an eye toward cutting edge science driving adaptive water management in the Sacramento-San Joaquin Delta to help boost water supplies to farmers in the Central Valley and southern California communities.

The biological opinions themselves were the result of an eleventh hour mad scramble by the Obama administration to bracket more sweeping changes by the incoming Trump administration in late 2016.

## **At Least One Judge Has Acted to Block Some of the Water Boards Edicts**

### **Judge temporarily blocks state order to growers who depleted groundwater**

by [Rachel Becker](#) July 16, 2024

<https://calmatters.org/environment/water/2024/07/growers-kings-county-judge-blocks-groundwater-probation/>

#### **In summary**

**A Kings County judge granted a temporary restraining order against the state's unprecedented mandate. Growers there will not have to meter their groundwater use for now.**

A Kings County judge today issued a temporary restraining order against the state that pauses its unprecedented move to crack down on groundwater depletion in California's agricultural heartland.

The decision by Superior Court Judge Kathy Ciuffini grants Kings County growers a temporary reprieve from a state mandate to monitor and report how much water they pump from heavily over-



pumped aquifers. The order will last through a hearing in August, when the judge will consider issuing a preliminary injunction.

The State Water Resources Control Board [in April put Kings County water managers on probation](#) under the state’s landmark groundwater law — a first step towards wresting control of the severely depleted Tulare Lake groundwater basin in the San Joaquin Valley.

The groundwater basin serves vast swathes of dairies, ranches and farms, including those controlled by agricultural giants J.G. Boswell Company and Bay Area developer John Vidovich.

These powerful companies have representatives that serve on the local groundwater agencies that were put on probation in April, [after repeated warnings that their plans failed](#) to adequately address dried up wells, contaminated water and sinking earth worsened by over pumping.

Calling the judge’s decision a “[massive step](#)” toward a victory, the Kings County Farm Bureau has argued in court that the state’s actions will cause them “imminent harm.”

“The way that it’s been implemented so far is completely inappropriate and wrong,” said farm bureau Executive Director Dusty Ference.

## **And Despite Some Dams Now Being Dismantled, the Sites Reservoir Continues to Progress**

**In an era of dam removal, California is building more**

[High Country News](#)

July 12, 2024

<https://mavensnotebook.com/2024/07/12/high-country-news-in-an-era-of-dam-removal-california-is-building-more/>

*by Theo Whitcomb, High Country News*



The proposed dam site for the Sites Reservoir near Maxwell, California.

When the largest dam removal in U.S. history began on the Klamath River this year, it seemed as if the

era of dam building was over in the West. Just a month later, however, the federal government finalized \$216 million dollars in funding for a controversial dam project south of the Klamath, adding to the \$1 billion in direct grants already pledged to the project known as Sites Reservoir. Rights for the water are being distributed this summer.

This would be California's first major new reservoir in half a century. The project will require building two main dams on a pair of streams that typically only run during big winter rains. Most of the water would come from much farther away, however: Filling the reservoir means piping water from the Sacramento River uphill, away from the Central Valley. If it's built, the reservoir will inundate Antelope Valley, 14,000 acres of hilly grassland in the California Coast Range, northwest of Sacramento.

Project boosters claim these will be the most environmentally focused dams in California's history, with water earmarked for environmental purposes ([a first](#), according to the Sites Authority) as well as minimum flow requirements for the Sacramento River. They also argue that the reservoir will actually work *better* with climate change, which is turning the snow that historically served as a natural reservoir into rainfall. The dams will be able to store the water from those winter rains so that it becomes available during drier spells — which, according to climate projections, will be longer and more frequent.

The Sites Project Authority plans to divert water only during high flows, when the river is rushing and full of water from its many tributaries. But that water has a critical function of its own. As it meanders through the river's [floodplain](#), it feeds the unique ecosystem along the Sacramento River, now home to farms that host some endangered species. For example, rice farms flooded during winter storms have recently become [habitat](#) for chinook salmon.

The project's backers see it as a critical piece of water resilience for the state, a wise investment in a time of climate insecurity. "I view Sites as an opportunity to add another asset into the water system to help its performance," said Ali Forsyth, environmental planning and permitting manager at Sites Project Authority, the agency in charge of the reservoir. "The more tools we have, the better off we are, just like your retirement account. Every asset performs different."

In spite of critics' objections, the governor has [fast-tracked the project](#) to "cut red tape." This month, the State's Water Board is in proceedings to offer water rights.

## Feature:

# Global Warming May Not Be the Big Catastrophe After All. But a Return to An Ice Age Really Would Be

## California has underestimated the epic potential of future flooding, research shows

Grace Toohey

June 2, 2024 at 3:00 AM

<https://www.aol.com/news/california-underestimated-epic-potential-future-100007069.html>

For well over a century, the Great Flood of 1862 has remained among California's worst natural disasters — a megastorm that's been used as a benchmark for state emergency planners and officials to [better prepare for the future](#).



A [dreaded repeat](#) of the flood — which killed at least 4,000 people and turned the Central Valley into a 300-mile-long sea — would probably eclipse the devastation of a major California earthquake and [cause up to \\$1 trillion in damage](#), some experts say.

Yet even as California scrambles to cope with the effects of climate whiplash and increasingly extreme weather, new research suggests the potential magnitude of such events could be far greater than that of the 1862 deluge.

After analyzing layers of sediment at Carrizo Plain National Monument, researchers at Cal State Fullerton say they have identified two massive, unrecorded Southern California flood events within the last 600 years.

Shockingly, their analysis suggests the deluges were far larger than [the Great Flood](#), which reshaped much of the Central Valley and Los Angeles Basin.

Researchers based their conclusions on multiple core samples taken from a "sag pond" along the San Andreas Fault in the southeastern corner of San Luis Obispo County. Analysis of the core samples revealed signs of two epic floods — one occurring sometime between 1470 and 1640 and the other between 1740 and 1800.

What they could not find in the core samples, however, was a sign of the Great Flood, suggesting perhaps that it was far less consequential than the other two.

[The findings](#), which were published recently in the Journal of Paleolimnology, add to a growing body of research that suggests Californians may be ignorant of just how devastating future floods could be. If such large floods have always been part of California's natural cycle of drought and downpour, just how much worse could they be in a period of climate change?