Horseshoe Bend-- The Colorado River (Photo credit: Wikipedia)

California Water and Infrastructure Report For November 2, 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

Please excuse this rather perfunctory introduction. But time presses this evening.

We begin with the U.S. Drought Monitor map of California, and find little change from the previous week.

Then my “Mea Culpa” in regard to an article in last week's report.

Only California, the land of droughts and floods, would issue a “Water Plan” that has two out of three of its “overarching themes,” “climate change” and “equity.”

It may be November now, but, “A Southern California wildfire fueled by desert winds burned 2,487 acres (1,010 hectares) and prompted evacuation orders for more than 4,000 people in Riverside County, officials said on Tuesday.”

Here is my introduction to the most important article this week on the Colorado River crisis:

"The immediate article below is very important, for it raises the question that no one else has raised thus far: What if the decision by the Bureau of Reclamation to go 100% for the policy adopted by California, Arizona and Nevada to save 3 million acre-feet of water by 2026 is not enough to ensure that Lake Mead will not continue to decline toward 'dead pool'?"

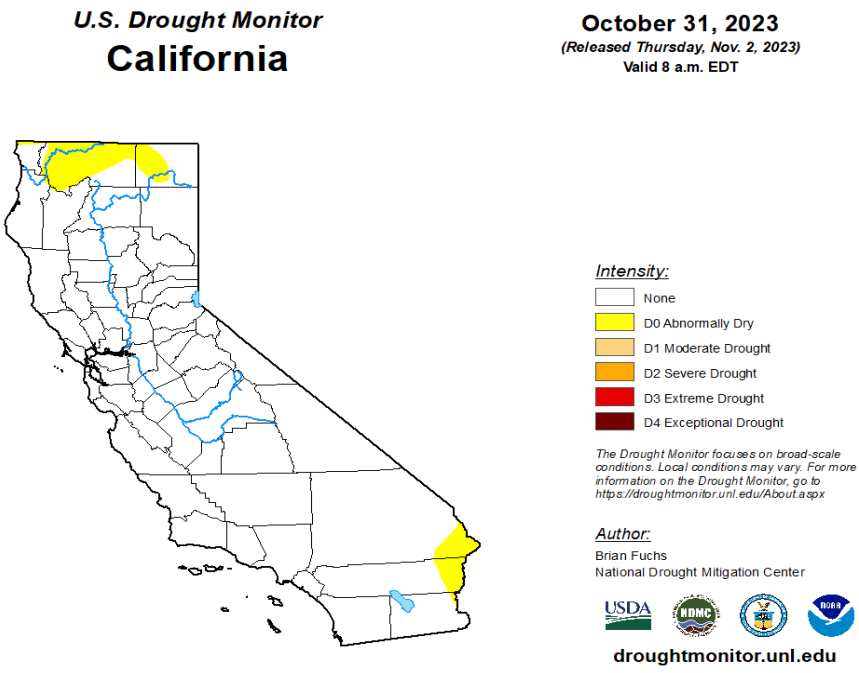
The article can be found on page 5.

And more on how the "sky is really falling," is the new report that includes the statement: *"The truth is that we are shocked by the ferocity of the extreme weather events in 2023. We are afraid of the uncharted territory that we have now entered."*

This week's final section is titled, "*Some 'Extra Credit' Reading for the Detail Inclined," and includes this introduction:*

"The two following articles discuss the technical and political options and the crises in the making for the southwest states, as population in the region grows and both the Colorado River and the pumping of groundwater are both at risk."

U.S. Drought Monitor
California



The West

Much of Montana and central to western Colorado saw the most significant precipitation for the week, with good amounts of snow in the higher elevations. Great Falls, Montana, recorded over 8 inches of snow for the week and Havre had 5.7 inches. Crested Butte, Colorado, recorded 13 inches of snow for the week while Steamboat Springs had 4.9 inches.

Temperatures were below normal for almost all of the region with most areas 5-10 degrees below normal. Areas of Arizona and New Mexico were near normal to up to 5 degrees above normal while

Montana and Wyoming received the coldest air and temperatures for the week were 20-25 degrees below normal.

The precipitation in Montana allowed for improvement to the drought conditions, mainly in the northern portions of the state. Some improvements were made in western Colorado while there was some slight expansion to the abnormally dry conditions in Utah.

Improvements were also made this week in central Washington as the most recent wetter pattern started showing up in the drought indices and indicators, allowing for improvements on the map.

Statistics

Statistics type

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2023-10-31	94.34	5.66	0.00	0.00	0.00	0.00	
Last Week to Current	2023-10-24	94.32	5.68	0.00	0.00	0.00	0.00	
3 Months Ago to Current	2023-08-01	74.43	25.57	6.52	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	2023-09-26	94.01	5.99	0.07	0.00	0.00	0.00	
One Year Ago to Current	2022-11-01	0.00	100.00	99.77	91.83	43.06	16.57	

Mea Culpa

In last week's report I posted the following article, with my headline of: "*Blame Everything on Climate Change, Not the Incompetent Policies of the Past Decades.*"

The article: ***Fire, other ravages jeopardize California's prized forests; Forests in California may be disappearing***
By BRIAN MELLEY Associated Press
October 25, 2023, 10:07 PM
https://abcnews.go.com/US/wireStory/fire-ravages-jeopardize-californias-prized-forests-104341965

But I failed to be even more critical of its contents. In a letter to the editor of the *Chico Enterprise Record*, a reader goes after it more fully:

Letter: AP's forest story was detached from reality

By Letters to the Editor
October 31, 2023 at 2:48 a.m.
Chico Enterprise Record

Too bad your new "letters" policy doesn't apply to drivel from the Associated Press. Speaking as a licensed professional forester, Sunday's AP "Wildfires, other ravages jeopardize California's prized forests" was so disconnected from reality I almost tossed my Cheerios.

Author Brian Melley claims "logging of fire-resistant trees" caused the loss of forests to wildfire. The reality is the USFS 1980s Policy to stop harvesting and turn forests into "spotted owl old growth sanctuaries" doomed our forests. The lack of harvest choked the forest with fuel making them easy prey for the predictable drought with dry lightning scenario that is part of our Mediterranean climate.

Melley quotes environmentalist Hugh Safford who says there are “jungles of fuels in forest lands” but never mentions harvest. Managed harvest: sequesters carbon, cleans the air, protests soil and water, stops wildfires, protects wildlife, makes jobs, and could contribute to energy that drives our economy. Fire, wild or prescribed: dirties air, causes lung disease, causes erosion, kills wildlife, pollutes water and comes with a huge bill.

Melley also quotes environmentalist Chad Hanson, one of the 1980s architects of anti-harvest policies. Instead of falling on his sword and asking forgiveness for his role in policy that choked our forests with fuel, he and others say MORE fire is needed. Incredible!

Did you choke....

California wildfire, fueled by desert winds, forces evacuations

By Omar Younis
October 31, 2023 10:46 PM
https://www.reuters.com/world/us/california-wildfire-fueled-by-desert-winds-forces-evacuations-2023-10-31/

TEMECULA, California, Oct 31 (Reuters) - A Southern California wildfire fueled by desert winds burned 2,487 acres (1,010 hectares) and prompted evacuation orders for more than 4,000 people in Riverside County, officials said on Tuesday.

The Highland Fire nearly doubled in size from Monday night to Tuesday, blowing toward the west by Santa Ana winds. The seasonal phenomenon occurs when dry desert air blows toward the ocean, creating a fire hazard in Southern California.

The fire was 10% contained as of Tuesday night, the California Department of Forestry and Fire Protection (Cal Fire) said, after crews attacked the blaze on the ground and aircraft dropped fuchsia-colored retardant.

Some 1,220 homes and 4,270 residents were under mandatory evacuation orders, with another 1,136 homes and 3,976 residents under evacuation warnings, Cal Fire spokesperson Thomas Shoots said.

Southern California has had a mild fire year in 2023, after unusually heavy rainfall that included the first tropical storm to reach heavily populated areas in the state in 84 years.

California Does it Again

Only California, the land of droughts and floods, would issue a “Water Plan” that has two out of three of its “overarching themes,” “climate change” and “equity.” But, here it is:

Draft California Water Plan Update 2023: A Brief Overview

October 27, 2023

Written by Kelly M. Doyle

https://somachlaw.com/policy-alert/draft-california-water-plan-update-2023-a-brief-overview/

Every five years, the California Department of Water Resources (DWR) prepares the California Water Plan, a statutorily mandated strategic plan to guide the management and control of the state's water resources. The main purpose of the 2023 California Water Plan (2023 Water Plan) is to outline the status and trends of California's water supplies, water-dependent natural resources, and agricultural, urban, and environmental water demands while also reflecting the current legislative and administrative priorities for water resources. Ultimately, the 2023 Water Plan will serve as a planning and policy roadmap that will guide DWR in the proceeding five-year period.

On September 20, 2023, DWR released a Public Review Draft of the 2023 Water Plan (Draft 2023 Plan), allowing members of the public to review and provide comments to the Draft 2023 Plan within a 30-day comment period, ending October 19, 2023.

Draft 2023 Plan Overarching Themes

The Draft 2023 Plan identifies three intersecting and interdependent themes that will further guide the enactment of future policies and programs by DWR in the proceeding five-year period:

> **Addressing Climate Urgency:** DWR states that California's changing climate will exacerbate challenges for California's statewide and interregional surface water storage and conveyance infrastructure and groundwater management.
>
> **Strengthening Watershed Resilience**
>
> **Achieving Equity:** The Draft 2023 Plan notes that equity in water resource management is to be a permanent pillar of proceeding Water Plan Updates and equity goals will continue to be measured and expanded for the foreseeable future.

The Colorado River

The immediate article below is very important, for it raises the question that no one else has raised thus far: What if the decision by the Bureau of Reclamation to go 100% for the policy adopted by California, Arizona and Nevada to save 3 million acre-feet of water by 2026 is not enough to ensure that Lake Mead will not continue to decline toward "dead pool"? I include here just a few paragraphs of the article, and urge readers to go to the link.

Lake Mead has a 1-in-4 chance of going low again by 2026, if we don't do more now

Opinion: Arizona water users have agreed to leave more water in Lake Mead. But it's not enough to fully drop the risk of the lake tanking by 2026.

Joanna Allhands
Arizona Republic
November 1, 2023
https://www.azcentral.com/story/opinion/op-ed/joannaallhands/2023/11/01/lake-mead-water-low-seis-alternative/71395549007/

Now that we're knee-deep in the long-term process to save the Colorado River, almost no one is asking whether we've done enough to stabilize it for the next few years.

A wet winter and billions of dollars in funding already solved that problem, right?

Well, in theory.

The federal Bureau of Reclamation has released Take 2 on a separate but related effort to decide how we keep Lake Mead and Lake Powell — the nation's largest reservoirs — from reaching dangerously low levels in the short term.

Mandatory cuts are off the table

The feds decided to take emergency action last year, when forecasts put Lake Mead on a rapid descent toward "dead pool," a worst-case scenario that would have almost completely cut off users downstream.

Reclamation had offered two alternatives to shore up the lake by doling out mandatory water cuts through 2026, when its current operating rules expire.

But both were painful and all but guaranteed to touch off a lengthy and bitter court battle.

Then in May, the states that rely on Lake Mead (Arizona, California and Nevada) came up with a third option, which mostly relies on paying people not to use water.

Reclamation paused work on its two alternatives to compare this third option and last week found (as expected) that it would essentially do what the other two had intended.

How long will the states' plan last?

We're not done saving Lake Mead

Future of the Colorado River Project

By Jack Schmidt

https://www.inkstain.net/2023/10/water-year-2023-in-context-a-cautionary-tale/

The end of September marked the end of Water Year 2023 (WY2023). This is a good time to take stock of the year's runoff and to understand how much reservoir storage improved. What kind of a year was WY2023? How long will any added storage last? Can we ease our collective effort to reduce consumptive uses and losses in the basin?

In Summary

The short answer is that WY2023 was certainly a good year for runoff, reservoir inflow, and increases in reservoir storage—but the same amount of inflow would have to occur for several additional years to fully recover storage to what it was in summer 1999 when the system was last full. Such a string of high flow years has not occurred in the 21st century and is unlikely in the future.

History also warns that we should work to conserve the gains of WY2023. In notably wet WY2011, WY2017, and WY2019, extra storage that accumulated during each year's snowmelt runoff was totally consumed in approximately two years. *Thus, our past shows that there is potential to quickly consume the benefits of a good water year. We've done it before. It is imperative to keep a keen eye toward accomplishing significant reductions in water use throughout the basin to save what we have gained.* We should not expect Mother Nature to bail us out again.

More on the “sky is falling” Theme

“We are afraid:” Earth’s vital signs are now in “uncharted territory,” climate scientists warn

Renewable energy use is rising, but so is extreme weather, as 2023 has seen

By Paul Rogers | progers@bayareanewsgroup.com | Bay Area News Group
PUBLISHED: October 31, 2023 at 3:22 p.m. | UPDATED: October 31, 2023 at 4:16 p.m.

https://www.eastbaytimes.com/2023/10/31/we-are-afraid-earths-vital-signs-are-now-in-uncharted-territory-climate-scientists-warn/?campaign=ebtbreakingalert&utm_email=45203441656465920 5A55473A5&active=no&lctg=4520344165646592 05A55473A5&utm_source=listrak&utm_medium=email&utm_term=https%3a%2f%2fwww.eastbaytimes.com%2f2023%2f10%2f31%2fwe-are-afraid-earths-vital-signs-are-now-in-uncharted-territory-climate-scientists-warn%2f&utm_campaign=bang-ebt-nl-breaking-news-alerts-nl&utm_content=alert

Massive wildfires in Canada, Greece and Hawaii. All-time record heat waves. Hurricanes with surprising ferocity, like the one that devastated Acapulco last week.

This year has presented stark evidence that Earth is already in “uncharted territory” with climate change, scientists say, to the point that unless major progress is made to reduce greenhouse emissions, parts of the world that are home to one-third to one-half of the global population could face extreme heat, food shortages and water shortages by the end of this century.

That’s the conclusion of a new study from researchers at Oregon State University and other institutions around the world, that has been drawing growing attention since its publication last week.

“As scientists, we are increasingly being asked to tell the public the truth about the crises we face in simple and direct terms,” the researchers wrote. “The truth is that we are shocked by the ferocity of the extreme weather events in 2023. We are afraid of the uncharted territory that we have now entered.”

Some “Extra Credit” Reading for the Detail Inclined

The two following articles discuss the technical and political options and the crises in the making for the southwest states, as population in the region grows and both the Colorado River and the pumping of groundwater are both at risk.

I do not endorse the views of the authors, but they do provide plenty of detail that is extremely useful for those who dig deep into the water management issues in the next few years ahead.

The Water Wars Deciding the Future of the West

From conservation to importing water from the Pacific, Democrats say they have all the answers to historic drought. The one thing no one wants to talk about: stopping the sprawl.

Photographs by Rebecca Noble for The New Republic

https://newrepublic.com/article/176163/water-wars-future-american-west

Water Wars: The Other Circular Economy

As Western water grows more precious, what is the future of farming?

https://thebreakthrough.org/issues/food-agriculture-environment/water-wars-the-other-circular-economy