Feature: The Francis Scott Key Bridge, Part II **(See page 10)**
"Sinking the USA? Free Trade Brought Down the Francis Scott Key Bridge"

California Water and Infrastructure Report For April 4, 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

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

A Note to Readers

The **Feature** this week is titled, "The Francis Scott Key Bridge, Part II." And it presents an article by my associate Brian Lantz: "Sinking the USA? Free Trade Brought Down the Francis Scott Key Bridge." He summarizes the argument thus: *"The real problem exposed by the collapse of the Francis Scott Key Bridge in Baltimore was free-trade, financialization lunacy."*

Yesterday I had an account problem and called customer service. The service person was a woman in South Africa. She inquired about my Web page, where these reports are published, and we had a brief discussion, mentioning the ongoing water crisis in South Africa.

I looked into the situation there, and you will find a brief report on page 8: *"A Case Study: Water Crises in Much of the World Is Due to Lack of Infrastructure to Deal With Drought-- The Case of South Africa"*

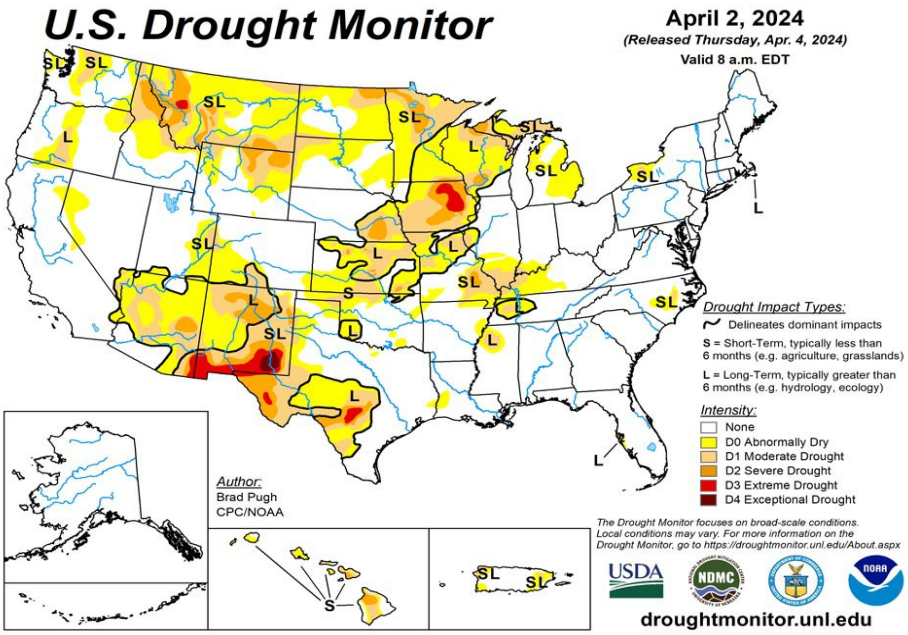
I have a series of articles highlighting the current snowpack and water supply in the reservoirs. This is the second winter that precipitation and the snowpack have been above average. While that ensures no drought this year in California, and actually, much of the nation is now out of drought, drought is

continuing in the Northwest states, Texas, Idaho and Montana.

While this state will avoid drought, we know it will return, thus the issue of conservation is politically dividing the state, with Gov. Newsom now releasing the state's annual report of looking forward. As usual, with the woke governor, the top priority in water policy is ensuring “equity.”

This week's report on the Colorado River has just one item, posted by jfleck: *“With the submission of two additional proposals last week, we now have five major proposals for post-2026 Colorado River management.”* The article provides links and background to all of the proposals.

U.S. Drought Monitor



Summary

April 4, 2024 - An active early springtime pattern continued through late March and into the beginning of April. A pair of low pressure systems and trailing cold fronts tracked across the east-central contiguous U.S. (CONUS). A swath of 1 to 3 inches of precipitation supported improvements extending from parts of the Midwest to southeastern Kansa and northeastern Oklahoma.

However, moderate drought (D1) was introduced to the lower Ohio Valley which has missed out on precipitation during the late winter and early spring. Increasing short-term dryness and periods of enhanced winds led to expansion of abnormal dryness (D0) and moderate drought (D1) in southwestern Kansas, northwestern Oklahoma, and western Texas.

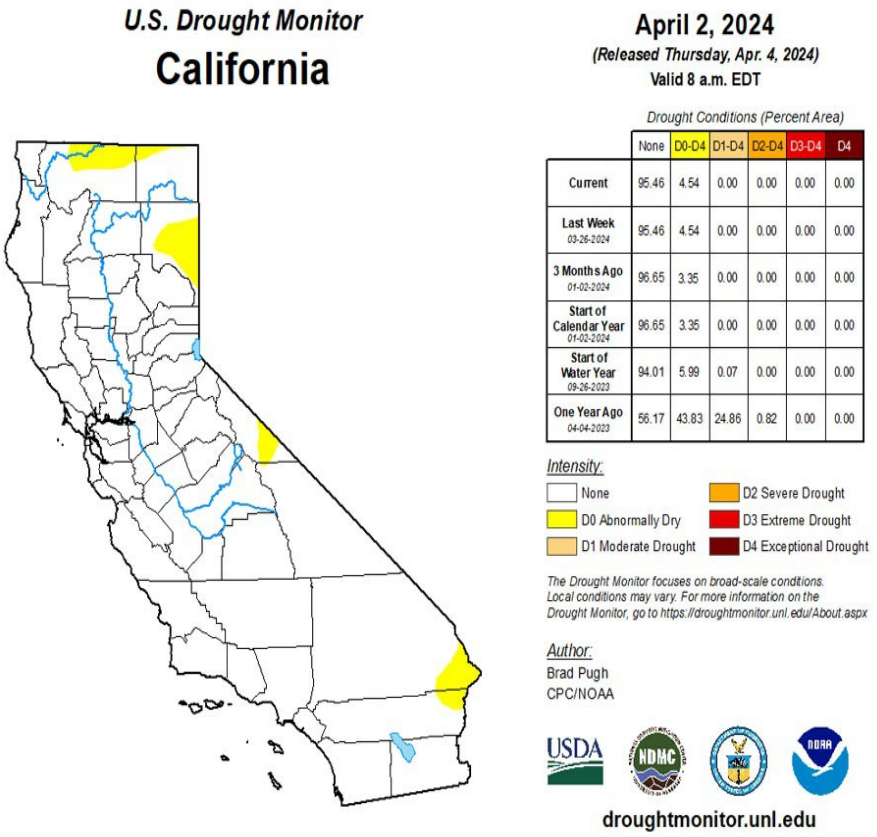
March was relatively wet across Arizona where additional improvements were warranted before a drier time of year sets in later this spring.

Below-normal snowpack supported an increase in D1 across the northern Cascades of Washington. 7-day (March 26 to April 1) temperatures averaged below (above)-normal across the western and north-central (eastern) CONUS.

Alaska remains drought-free, while leeward sides of Hawaii had a broad 1-category degradation.

Following recent improvement across much of Puerto Rico, no changes were made this past week.

California



The West

Multiple low pressure systems and enhanced onshore flow resulted in above-average precipitation for much of Arizona, Utah, Nevada, and California from March 26 to April 1. According to the California of Water Resources on April 2, snow water equivalent (SWE) averaged at or slightly above normal for the Sierra Nevada Mountains.

A relatively wet March and widespread precipitation amounts of 0.5 to 1 inch, liquid equivalent, this past week supported improvements for Arizona. Given the recent precipitation, the drought impact was modified to reflect only long-term drought for most of Arizona.

Eastern and southern New Mexico have remained mostly dry during the past 30 days. According to USDA's National Agricultural Statistics Service, 81 percent of New Mexico topsoil moisture is rated as short to very short. Washington, northern Idaho, and western Montana have below-normal SWE heading into early April. Abnormal dryness (D0) and moderate drought (D1) was expanded across the northern Cascade Mountains of Washington due to this low snowpack.

Now Some Detailed Reports

The U.S. is in the Smallest Drought Since 2020

April 04, 2024 02:00 PM •
Amber Weaver

https://www.rfdtv.com/the-u-s-is-in-the-smallest-drought-since-2020

The National Oceanic and Atmospheric Administration says this comes after a wet winter and early spring for a good part of the country. Drought across the U.S. has dropped to 18%, down from the 20% seen in February and the 36% at the beginning of the winter season. This is the lowest amount of dry conditions seen since May of 2020. The percent of the country rated in the extreme and exceptionally dry categories was around 1% at the end of March, which is also the lowest in four years.

Drought is however still a problem for livestock producers and for those heading into planting season, especially in the Midwest and West.

The latest U.S. Drought Monitor shows heavy precipitation brought little improvement throughout the Midwest, but the lower Ohio Valley continues to miss out on early spring rain, which led to an expansion of drought.

As for the West, California is not the issue. Drought is found primarily in New Mexico, Arizona and Montana. Both soil moisture and stream flows are low for farmers in those regions.

Snow drought plaguing Pacific Northwest, Rockies

Experts fear recent storms across the Western U.S. have not done enough to bring drought relief to many mountain ranges.

Natalie Hanson / April 3, 2024
https://www.courthousenews.com/snow-drought-plaguing-pacific-northwest-rockies/

Emigrant Peak towers over the Paradise Valley in Montana north of Yellowstone National Park, on Nov. 21, 2016. (AP Photo/Matthew Brown, File)

SACRAMENTO, Calif. (CN) — With the snow season drawing to a close across the West, the Pacific

Northwest and northern Rockies face a snow drought that could spell disaster later in the year.

Many climate stations in Washington state, northern Idaho, Montana and much of northern Wyoming report a snow water equivalent measurement at 30% of average or less. Some stations in western Montana and in the Bighorn Mountains of northern Wyoming report record lows for snow water equivalent, according to the National Oceanic and Atmospheric Administration's National Integrated Drought Information System.

"A dry March worsened conditions, with some locations receiving less than 50% of average precipitation for the month," NOAA scientists said in a statement Wednesday.

Some areas have already reached the peak snowfall expected during the water year.

Western Montana and northern Wyoming face some of the worst conditions, and the U.S. Drought Monitor reports moderate to extreme drought across most of the northern Rocky Mountains which is likely to worsen as summer approaches.

State Releases California Water Plan Update 2023: A Roadmap to Water Management and Infrastructure for a Water Resilient Future

Published: Apr 02, 2024

https://water.ca.gov/News/News-Releases/2024/Apr-24/State-Releases-California-Water-Plan-Update-2023?utm_source=facebook&utm_medium=social&utm_content=ap_ie49y8tb4f&fbclid=IwAR2bZiF-npvtpVEB1_8uKV2nzg5UTIOjS5_hrXPHMu6lNeaJ9PsLABRBMCI_aem_AbkHUSbBSjq6AUZch9wtUMlD4jjhRJpKCpjFRWk9SIpk6hAag6nI1VlE86DB-fX7Z8qDun267EzLC_l-FrX_C8OR

The 2023 update focuses on equity, watershed resilience, and climate urgency

SACRAMENTO, Calif. – The California Department of Water Resources (DWR) has released the final version of California Water Plan Update 2023. This plan is a critical planning tool and can now be used by water managers, such as water districts, cities and counties, and Tribal communities, to inform and guide the use and development of water resources in the state.

California Water Plan Update 2023 began with the vision: *"All Californians benefit from water resources that are sustainable, resilient to climate change, and managed to achieve shared values and connections to our communities and the environment."* To tackle this ambitious vision, California Water Plan Update 2023 focuses on three intersecting themes: addressing climate urgency, strengthening watershed resilience, and achieving equity in water management.

"With climate change posing uncertain challenges, California Water Plan Update 2023 highlights the importance of innovation and investments in the state's watersheds, water systems, and frontline communities," said DWR Director Karla Nemeth.

California Water Plan Update 2023 weaves equity throughout the document and dedicates a full chapter to this very important topic.

With California's Rainy Season Wrapping Up, Will We See Water Restrictions?

By Jacob Margolis
Published Apr 1, 2024 5:00 AM
https://laist.com/news/climate-environment/with-californias-rainy-season-wrapping-up-will-we-see-water-restrictions

Water is released on the main spillway at Lake Oroville on June 15, 2023 in Oroville, California when it reached 100 percent capacity. As of March 28, 2024, the reservoir was at 124 percent its historical average or 87% capacity. (Photo: Justin Sullivan)

The start of April means that California's rainy season is coming to an end. Things are looking pretty good this year, but there are some caveats.

The snowpack across the Sierra Nevada and the Colorado River Basin — both critical stores of water — is hovering slightly above average, though it's nowhere near what we saw last winter.

For comparison, in 2023, the State Water Project (SWP) was able to fulfill 100% of water requests made by municipalities across California. This year, the SWP announced a 30% allocation.

"Last year there was so much water we were looking for every place we could to store some water," said John Yarbrough, assistant deputy director for the SWP.

Groundwater supplies are still stressed, and wells could go dry in some parts of the state — particularly along the Eastern border, which hasn't seen nearly as much rain as places like Los Angeles.

One consistent message I heard when reaching out for this piece was just how bad of a position the 2020-2023 drought put us in.

"It's really hard with that magnitude of dryness to make up for it with just a few wet years," said Michael Anderson, state climatologist with the Department of Water Resources.

Landscapes covered in diseased and dead trees (the result of drought), aren't going to look like they did anytime soon.

Dead trees in the Sierra Nevada have become a wildfire issue. (U.S. Department of Agriculture)

"If you look at the soil moisture data, it does indicate that there are still some long term lingering concerns that may or may not ever go away, given the warmer planet that we live on plus the human

demands on the water supply as well," said Brad Rippey, meteorologist with the U.S. Department of Agriculture and contributing author to the U.S. Drought Monitor.

Short-term surface based drought could come back following one miserably dry year. Longer term, deeper drought impacting groundwater and reservoir storage would take a few dry years to return.

The bottom line is that we need to assume that next year will be dry, as erratic precipitation patterns and hotter temperatures are exacerbated by climate change.

The Colorado River

Five Major Proposals for Post-2026 management of the Colorado River

Posted by jfleck

April 3, 2024

https://www.inkstain.net/2024/04/five-major-proposals-for-post-2026-management-of-the-colorado-river/

With the submission of two additional proposals last week, we now have five major proposals for post-2026 Colorado River management.

The folks at the Water and Tribes Intitiative have helpfully organized them in a single place. (Click on the
"Proposed Alternatives for Post-2026 Operating Guidelines" bubble.)

Tribal Principles

A set of guiding principles proposed by 17 of the basin's sovereign indigenous communities. (click here)

Upper Basin Proposal

What the label says, you already know about this one. (click here)

Lower Basin Proposal

What the label says, you already know about this one. (press release, alternative, presentation)

Environmental NGOs

The "Big Seven" Colorado River Basin environmental groups (click here)

Lake Powell/Grand Canyon/Lake Mead Ecosystem Proposal

A proposal from Jack Schmidt, Eric Kuhn, and John Fleck suggesting ways to manage the storage and distribution of water to provide more flexibility for environmental and other non-water supply benefits. (click here)

A Case Study: Water Crises in Much of the World Is Due to Lack of Infrastructure to Deal With Drought-- The Case of South Africa

That Is the Failure of the Present Financial System Dominated by Central Banks and their Protection of a Financial System Based on "Money Making Money"

South Africa, the continent of Africa's most developed nation, has been in almost a perpetual water crisis since 2018. Most recently, the city of Johannesburg, with a population of 5.5 million, has seen entire parts of the city going without water for weeks.

While that city, and other cities in the country have political and corruption problems, the driving force of the water crisis is drought-- simply the lack of rainfall.

This brief report includes excerpts from three articles on the crisis.

The Katse dam in Lesotho is an important source of water supply for the arid Gauteng area around Johannesburg, the industrial heartland of South Africa. Water availability in South Africa varies greatly in space and time.

Water Crisis in South Africa: Causes, Effects, And Solutions

October 12, 1222
https://earth.org/water-crisis-in-south-africa/

What Led to A Water Crisis in South Africa?

As experts in the field have agreed, the water crisis in South Africa can likely be attributed to economic (a lack of investment), as well as physical (a lack of rain) water scarcity.

In an article, spokesman for the government committee appointed to respond to the water crisis in South Africa Luvuyo Bangazi described how dire the situation in South Africa has become.

"We haven't had good rains for more than seven years and we've had a sharp increase in water consumption from across sectors, be it residential, business, or other. So, compounding that with obviously ailing infrastructure that leads to severe water leaks … almost 25-30% of our water [is] being lost due to water leaks caused by failing infrastructure."

The water leaks are of course serious, but the consistent lack of rain, year after year, has officials far more concerned. South Africa is already a normally arid locale, with an average yearly rainfall almost

half the global average and ranked 29th driest out of 193 nations.

South Africa's multiple water crises cannot be resolved by technical solutions alone

By Chris Heymans
01 Apr 2024
https://www.dailymaverick.co.za/article/2024-04-01-sas-multiple-water-crises-cannot-be-resolved-by-technical-solutions-alone/

Sixty-four percent of the country's sewage and wastewater treatment plants are at 'high or critical' risk of dumping untreated water into rivers and the environment.

Whatever Johannesburg Mayor Kabelo Gwamanda tried to tell *Daily Maverick* on 19 March 2024, the city finds itself in the midst of a severe water and sanitation crisis. Large parts of the city have been without water in recent weeks, and even after services ostensibly had been fixed, interruptions to the water supply persevered and spread wider, and lasted longer.

And Johannesburg is not alone. Once a reference point for good practice, its regional bulk water provider, Rand Water, warned Johannesburg, Tshwane and Ekurhuleni that its system was at high risk of collapse.

More nationally, in December 2023, the Department of Water and Sanitation's (DWS) Blue and Green Drop reports showed that the declining quality and escalating losses of South Africa's urban water and sanitation infrastructure have escalated in six of the other seven metros and in half of smaller municipalities across the country.

Beyond the metros, residents of a growing number of towns, districts and rural areas lack access to reliable basic services due to dysfunctional infrastructure and management systems.

The Green Drop report found that 64% of the country's sewage and wastewater treatment plants are at "high or critical" risk of dumping untreated water into rivers and the environment. Such service deficiencies are affecting more towns and local economies.

Johannesburg's water crisis is the latest blow to South Africa's 'world-class city'

April 1, 20245:00 AM ET
Heard on Morning Edition
By Kate Bartlett

https://www.npr.org/2024/04/01/1241232636/johannesburg-south-africa-water-crisis

Johannesburg advertises itself as "a world-class African city," but a breakdown in basic services has many of its more than 5.5 million residents seething. About half of its population has been without water or suffering water shortages for weeks. With a national election set for May, South Africa's governing party could be punished for it at the polls.

The failing infrastructure does not discriminate and has affected people of all incomes and across racial lines, from the rich leafy suburbs to the bustling townships.

But experts say the problems are mainly due to unmaintained infrastructure like broken pipes, as well as electrical outages at pump stations.

"Overall ineptitude, deficiency of transparency and accountability, as well as little to no political will, has exacerbated the ever-expanding water crisis," says Anja du Plessis, an associate professor and

water expert at the University of South Africa in Pretoria.

"The continued dysfunctional and inept state of the local municipality, ongoing lack of service delivery, poor and uninformed water governance, as well as continued lack of political will of government ... are the primary factors of concern," she says.

Feature: The Francis Scott Key Bridge, Part II

Sinking the USA? Free Trade Brought Down the Francis Scott Key Bridge

By Brian Lantz
April 01, 2024

https://www.larouchepac.com/sinking_the_usa_free_trade_brought_down_the_francis_scott_key_bridge

What's grossly wrong with this picture?

The real problem exposed by the collapse of the Francis Scott Key Bridge in Baltimore was free-trade, financialization lunacy.

Consider: most U.S. bridges that cross U. S. harbor entrances were built in the 1980's or much earlier. Yet even in the 1980's, the largest container ships built were Panamax vessels with a capacity of 65,000 – 80,000 deadweight tons (DWT)*. Today, container ships are humongous, and stacked into the sky! They have a capacity of up to *240,000 DWT,* triple the size.

In 1980 the Francis Scott Key Bridge was struck by a ship without significant consequence, according to a 1983 report by the National Research Council. That was then. Shall we rebuild all major bridges to withstand the physical impact of these larger ships?

The *Dali* can carry the equivalent of almost 10,000 standard-sized metal shipping containers (TEUs), and at the time of the accident on March 26th, was carrying some 4,700 TEU containers. But while those figures might be impressive, the Dali pales in comparison to the world's largest container ships, which are built to carry more than *24,000 TEU's each.*

Gaining our wits, we recognize a deeper problem: why are we importing these *humongous* quantities of goods, when we should produce much of this here?!? We have a trillion dollar per year U.S. deficit in foreign trade, on top of gazillions of dollars in national debt and climbing. (By the way, the trade

deficit is with virtually *the whole world*, not just with China, which currently accounts for about 14% of our current trade deficit.)

Ironically, the north entrance to the Key Bridge skirts around Sparrows Point, once home to the nation's largest steel producing facility and the related shipyards which produced many of the Navy's ships for World War II. Both Bethlehem Steel and Pittsburgh Des Moines Steel Company which won the contract to build the Francis Scott Key Bridge back in 1972, are long gone, sacrificed to Wall Street vultures, like Wilbur Ross, who stripped them of component parts, refused to invest in any new technology, and sold them off repeatedly until they were formally bankrupt. Now the Port of Baltimore is just one center of the vast import network which has substituted for U.S. production.

Today, supply chains are overall just nuts. Today, our exports are not high value capital goods, which is what our economy should be profitably exporting. Yet the "flea market/free trade" Kool-Aid is still imbibed by fools, peddled in Economics 101 classes around the world.

Here is a recent paean to free trade from the precincts of the University of Chicago's School of Business:

"A country that innovates less benefits more from trade liberalization since it is now easier for the country to 'import' ideas ... lower tariffs promote the introduction and eventual dominance of better-quality products on both sides of a border, which can be a catalyst for economic growth."

Has anyone noticed that the U.S. economy is awash with imported, innovative "ideas"?

Here is another doozy from the oh-so-conservative Heritage Foundation, written in 2000:

"Societies that enact free trade policies create their own economic dynamism -- fostering a wellspring of freedom opportunity and prosperity that benefits every citizen. In recent years the United States has demonstrated the power of this principle. Nor are American citizens alone in benefiting from those free trade policies that the U.S. enacts..."

Let's now read from "The City" of London's very own mouth piece, *The Economist* of London in 2018, attacking President Trump's tariffs on steel and aluminum.:

The Economist said, with respect to Trump's steel tariffs: *"This is a question close to the heart of The Economist. It was founded as a newspaper in 1843 to campaign for free trade. The issue of the day was the Corn Laws... tariffs on steel will impose a real cost on those who consume it."*

Of course, our Founding Fathers & patriots warned us.

Here is just a bit of what Alexander Hamilton wrote. This is from *The Continentalist*, No. 5, dated April 18, 1782:

"To preserve the balance of trade in favor of a nation ought to be a leading aim of its policy," Hamilton declared. "The avarice of individuals may frequently find its account in pursuing channels of traffic prejudicial to that balance, to which the government may be able to oppose effectual impediments."

Such insights would be at the heart of Hamilton's *Report on Manufacturers,* presented to the Congress in 1791.

Here is what Henry C. Carey, Lincoln's close advisor, famously wrote:

"Two systems are before the world; ... One looks to increasing the necessity for commerce; the other to increasing the power to maintain it. One looks to underworking the Hindoo, and sinking the rest of the world to his level; the other to raising the standard of man throughout the world to our level. One looks to pauperism, ignorance, depopulation, and barbarism; the other to increasing wealth, comfort,

intelligence, combination of action, and civilization. One looks towards universal war; the other towards universal peace. One is the English system; the other we may be proud to call the American system, for it is the only one ever devised the tendency of which was that of elevating while equalizing the condition of man throughout the world."

The Harmony of Interests (1851)

In Baltimore, it was not only the lack of 'Dolphin' barriers & protective islands around the bridge support structures, a lack of tugboats, or "dirty fuel" -- or the often-cited meme that the captain of the *Dali* was Ukrainian. Before the National Transportation Safety Board (NTBS) investigation is even completed, we can identify the root of the problem: free trade economics.

***** Deadweight tons (DWT) - the weight of cargo, fuel, freshwater, provision, ballast water, crew, and passengers.