



The First Bank of the United States, later Girard's Bank — in Philadelphia, Pennsylvania. Photo: Jack Boucher (1975)

(Now why is this photo the cover for a report on California Water and Infrastructure? See page 7)

California Water and Infrastructure Report

For October 19, 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>

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

A Note to Readers

This week's report takes on the ignorance, cowardliness, and insanity that has, for the past 50 years, characterizes the thinking and policy in regard to the economy, banking and the building of infrastructure among political leaders and planners, both nationally and in California especially.

Following the U.S. Drought Monitor, is an example of the policy to actually solve the North American continent for centuries. That policy was proposed during the John Kennedy presidency in the early 1960s.

For most I am sure this is the first time you have heard of the **North American Water and Power Alliance**. Four articles and videos are provided.

The next article is on the threat of a real disaster in California if a large earthquake strikes in the San Francisco Delta area is featured in this article: *“Major earthquake in the Delta could be disastrous for*

California's water supply.” The problem addressed of the need to strengthen the levies protecting hundreds of thousands of residents from flooding, and the water supply for most of the state, has been an issue for decades. While the state spends hundreds of billions on protecting the environment from mankind's “destruction,” and promoting “equity,” funding for this critical infrastructure project languishes as an afterthought.

There are two articles on the topic of the Colorado River this week. The first is on the present conditions of Lake Mead and Lake Powell.

The second is another example of how political leaders and water managers do exactly what I referred to above-- all they know is crisis management, not crisis solution. The article is from the Bureau of Reclamation, titled: **“Biden-Harris Administration Advances Long-Term Planning Efforts to Protect the Colorado River System.”** The article, being from the Biden administration, is full of praise for Biden's “Build Back Better” program of spending hundreds of billions protecting nature and promoting equity rather than doing what Americans do best: Solve the damn crisis with gigantic projects that provide something inspirational, as did Presidents Franklin Roosevelt and John Kennedy.

And if the nation is going to do that once again, then we must restore also a National Bank, wiping out the speculative insanity of the Federal Reserve and Wall Street. That is the topic of this week's Feature. The article is titled, **“How the National Bank Will Work.”** It is written by my colleague Michael Carr.

Here are the first two paragraphs of his article:

“As is the case with any power—whether fire, knowledge, dynamite, or fission—such power may be used for good or ill. This is also the case with banking. When Alexander Hamilton first proposed his National Bank, part of the opposition he faced was simply based upon the bad experiences people had had with banks in the past. On the other hand, had he proposed the same institution by another name, he would have faced the problem that people would have been even more clueless about his idea. And Hamilton’s National Bank was completely different from any bank which had ever been created before.

“Today, we have the benefit of the experience from his First National Bank, then the Second National Bank, the Lincoln Greenback and National Banking System, and the Reconstruction Finance Corporation. So let’s try to avoid words with contradictory meanings and look at what we have, and how we will use what we have to get where we are going.”

U.S. Drought Monitor California

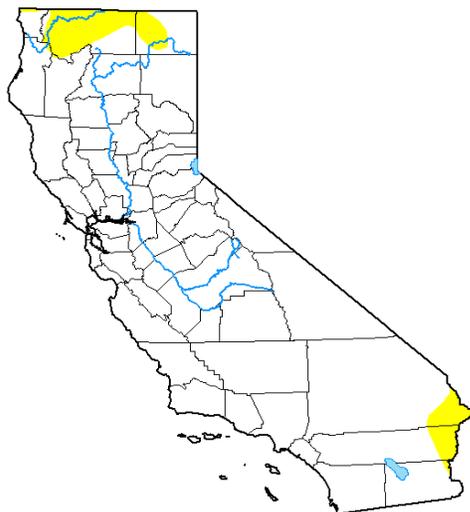
The West

Precipitation fell across much of the West with heavy precipitation along the coast from Washington to northern California, where more than 1 inch of precipitation occurred this past week. Above-normal precipitation led to improvements to severe drought (D2) in southwest Washington, along with abnormal dryness (D0) to extreme drought (D1-D3) improvements to western Oregon and D0 to moderate drought (D1) improvements in northern California.

Beneficial precipitation led to improvements in moderate drought to extreme drought (D0-D3) in portions of northwest Montana, as shown in SPI/SPEI, streamflow and soil moisture data. Status quo was maintained across the rest of the region this week.

**U.S. Drought Monitor
California**

October 17, 2023
(Released Thursday, Oct. 19, 2023)
Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme 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 <http://droughtmonitor.unl.edu/About.aspx>

Author:

Rocky Bilotta
NCEI/NOAA



droughtmonitor.unl.edu

Statistics

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2023-10-17	94.32	5.68	0.00	0.00	0.00	0.00	
Last Week to Current	2023-10-10	93.98	6.02	0.07	0.00	0.00	0.00	
3 Months Ago to Current	2023-07-18	74.45	25.55	6.29	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	2022-10-18	0.00	100.00	99.77	91.83	40.91	16.57	

What a Real Infrastructure Policy Looks Like: The North American Water and Power Alliance

1) NAWAPA Part One

The Parsons Corporation produced this video in 1964. The North American Water and Power Alliance is an idea whose time has come.

Seven minute video:

https://www.youtube.com/watch?v=_MibzpJ54do

2) NAWAPA Part Two

The concluding part of the Parsons Corporation video produced in 1964. The North American Water and Power Alliance is an idea whose time has come.

Six minute video:

<https://www.youtube.com/watch?v=D0dsc-341O8>

3) Nuclear NAWAPA XXI, Desalination, and The New Economy

by Michael Kirsch

Executive Intelligence Review

September 27, 2013

This is the third in our series of articles from the 21st Century Science & Technology Special Report, "Nuclear NAWAPA XXI: Gateway to the Fusion Economy"

(http://21stcenturysciencetech.com/Nuclear_NAWAPA.html).

An economy is an integrated process, whose character is to constantly evolve as such. Today, that evolution must be spearheaded by a 21st-Century North American Water and Power Alliance (NAWAPA XXI), driven by fission, with a fusion economy on the horizon.

The completed NAWAPA XXI will be more than delivery corridors of freshwater: It will be the bounding infrastructure network of a more advanced economy and society, and a scientific resource management of a new kind. With the widespread application of fission for electricity, heat, and desalination, combined with a system of continental water resource management, the several crises in water, food, energy, transportation, jobs, etc., all merely symptoms of the failure to implement these measures decades ago, will be solved.

4) NAWAPA XXI - Oregon-California Extension

May 3, 2012 - A detailed overview of a western extension of NAWAPA XXI, which will manage and replenish water supplies from the Columbia river in Washington state, down through to southern California.

Seven minute video:

<https://www.youtube.com/watch?v=2ZTft0pJUUM>

Major earthquake in the Delta could be disastrous for California's water supply

By Wilson Walker

October 18, 2023

<https://www.cbsnews.com/sanfrancisco/news/major-earthquake-in-the-delta-could-be-disastrous-for-californias-water-supply/>

ISLETON -- While [the earthquake that struck near Isleton Wednesday morning](#) wasn't strong, the location did raise questions about the possible risk to an area that is critical to the state's water supply.

The Delta region in Sacramento County relies on more than 1,000 miles of aging levees to protect local farms and communities that could be vulnerable in a more powerful quake.

At the very center of California's water system, so much of what we can use comes from or through the Delta. The Delta itself depends on levees to contain the water. All of that could be compromised if the earthquake is strong enough.

"A very large earthquake, centered near the Delta, would pose a particularly significant threat to both protective systems that the levees provide, as well as the water distribution and intake systems," explained Austin Elliott with the USGS.

A large enough failure would mean massive interruptions to California water systems, with large scale repairs needed before things were working again. Wednesday morning's relatively mild Delta quake provided both an unexpected jolt and a serious reminder.

"We are fortunate that the earthquake today was just a magnitude 4.2," said Elliott. "Larger earthquakes magnitude -- five or six -- would begin to produce liquefaction and damage some of the infrastructure and geotechnical work there."

The Colorado River Crisis

Lake Mead forecast improves by 2 feet since September as new water year begins

by: [Greg Haas](#)

Posted: Oct 17, 2023 / 01:35 PM PDT

<https://www.8newsnow.com/news/local-news/lake-mead-forecast-improves-by-2-feet-since-september-as-new-water-year-begins/>

LAS VEGAS (KLAS) — New projections show Lake Mead dropping about 9 feet between now and October of 2024 — but keeping an extra 2.57 feet compared to forecasts from just a month ago.

The 24-month study for October 2023 from the U.S. Bureau of Reclamation is the first forecast of the 2023 water year, which runs from Oct. 1, 2023, to Sept. 30, 2024.

Currently, the surface of Lake Mead is at 1,066.23 feet above sea level (as of noon Tuesday). The new forecast shows the lake dropping to 1,056.94 feet in October 2024. Just last month, that number was 1,054.37 feet.

The lake is even expected to briefly rise above 1,070 feet during January, February and March. But the federal government makes its water shortage determination in August, when the lake is expected to be down to 1,055.69 feet.

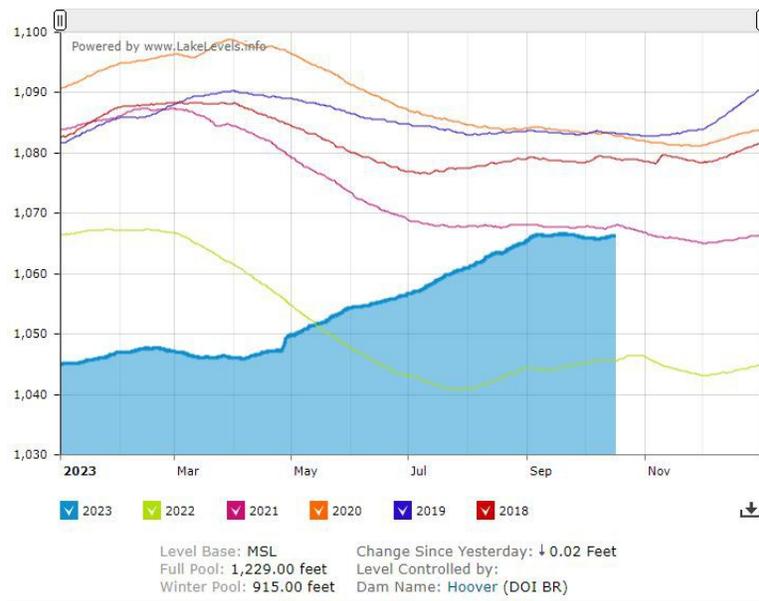
The first-ever water shortage was declared in August 2021 by the federal government. That Tier 1 shortage became a Tier 2 shortage last year during an extremely dry year. But a wet winter changed conditions this year, and operations will return to Tier 1 in 2024.

Lake Mead dropped to 1,041.71 feet on July 27, 2022 — the lowest since the reservoir was filled in the 1930s. Lake Mead is the largest reservoir in the U.S.

Why did the forecast improve?

The 40 million people who rely on Colorado River water go into the new water year with Lake Mead at 34% full, Lake Powell at 38% full, and other reservoirs upstream at 69% or higher capacity: Flaming

Gorge, 88% full; Navajo, 69% full; Blue Mesa, 74% full; Morrow Point, 89% full; and Fontenelle, 83% full.



Lake Powell



Lake Powell is an important part of the whole picture. Created by Glen Canyon Dam, which was finished in 1966, Lake Powell is the nation’s second-largest reservoir.

Today, Lake Powell is at 3,573 feet. The 24-month study shows that level climbing to 3,588.46 feet in October 2024. That’s a big change from last month’s forecast, which expected Lake Powell to be at 3,595.28. That’s a difference of almost 7 feet.

NEWS RELEASE: Biden-Harris Administration Advances Long-Term Planning Efforts to Protect the Colorado River System

[Bureau of Reclamation News](#)

October 19, 2023

<https://mavensnotebook.com/2023/10/19/news-release-biden-harris-administration-advances-long->

[term-planning-efforts-to-protect-the-colorado-river-system/](#)

Process to develop future guidelines and strategies leverages historic investments from President's Investing in America agenda

From the Bureau of Reclamation:

The Biden-Harris administration today announced next steps in the formal process to develop future operating guidelines and strategies to protect the stability and sustainability of the Colorado River system and strengthen water security in the West. The guidelines under development would be implemented in 2027, replacing the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead, which are set to expire at the end of 2026.

The Department of the Interior's Bureau of Reclamation published the [Proposed Federal Action](#) and a [Scoping Summary Report](#) related to Colorado River Basin operations post-2026. The Scoping Report, which was supported by a 60-day public scoping period, will inform the post-2026 operating guidelines. This planning process is separate from [ongoing efforts](#) to protect the Colorado River Basin through the end of 2026.

These steps to protect the Colorado River Basin now and into the future will leverage the historic investments being deployed through President Biden's [Investing in America agenda](#) to help increase water conservation, improve water efficiency, protect critical environmental resources, and prevent the Colorado River system's reservoirs from falling to critically low elevations that would threaten water deliveries and power production.

The Colorado River Basin provides essential water supplies to approximately 40 million people and 30 Tribal Nations, nearly 5.5 million acres of agricultural lands, and habitat for ecological resources across parts of several Western states (including Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming) and Mexico. But prolonged drought, driven by climate change and coupled with low runoff conditions in the last several years, resulted in historically low reservoir levels at Lake Powell and Lake Mead.

How the National Bank Will Work

By [Michael Carr](#)

October 17, 2023

https://www.larouchepac.com/how_the_national_bank_will_work



The First Bank of the United States, later Girard's Bank — in Philadelphia, Pennsylvania. Photo: Jack Boucher (1975)

As is the case with any power—whether fire, knowledge, dynamite, or fission—such power may be used for good or ill. This is also the case with banking. When Alexander Hamilton first proposed his National Bank, part of the opposition he faced was simply based upon the bad experiences people had had with banks in the past. On the other hand, had he proposed the same institution by another name, he would have faced the problem that people would have been even more clueless about his idea. And Hamilton's National Bank was completely different from any bank which had ever been created before. Today, we have the benefit of the experience from his First National Bank, then the Second National Bank, the Lincoln Greenback and National Banking System, and the Reconstruction Finance Corporation. So let's try to avoid words with contradictory meanings and look at what we have, and how we will use what we have to get where we are going.

What We Have

First, despite the poor reflection of this in Washington, we have incredible people with incredible knowledge, creativity, and work ethics. Most of our people are not able to apply their talents to solving our national problems because the long arm of the British Empire has so infiltrated our governing, cultural, and financial institutions that the good that people do (or would do if allowed) is suppressed, and the evil that some do is promoted and facilitated.

Second, we have unmatched natural resources, from fresh water, to fuels, to minerals, to suitable agricultural lands.

Third, we have demand. We aim to spread the American Dream not only to all Americans, but around the world and out to the Moon, Mars, and beyond.

The function of the National Bank is to facilitate bringing these three assets together in a smooth process of industrial progress. We start with our goals and work backwards to the present.

The World in 2123

Our view of 2123 is quite hazy. We cannot forecast clearly, but we should aim for minimally a fusion-based economy in which power has become too cheap to meter (the way long distance calling became too cheap to meter), and we have productive industries, agriculture, and cities on the Moon and Mars. The technologies used to terraform portions of the Moon and Mars are applied on Earth to turn vast regions of wasteland into beautiful and productive areas. Robots do most types of repetitive work, while people are able to apply themselves to research, solving problems, and efforts aimed at societal contributions and improvements.

The World of 2073

The world of 2073 is a little easier to foresee. It is the world founded on the implementation of President Trump's Agenda 47. We'll see new mines, nuclear power plants, cities, NAWAPA, initial bases on the Moon and Mars, etc. Robotics, AI, and automation will be make much more of a contribution to our productivity and overall prosperity. The United States will again become a large exporter of fission and now fusion power plants and all kinds of electrical and heavy equipment.

The Role of the National Bank

This is where the National Bank comes in. You look at where we are going and ask, "How do we get there?" We lack mines, we lack machines, we lack electrical capacity, our railroads are in a sorry state, etc. In the Civil War we had to create a steel industry from nothing. In World War II we had to create a

synthetic rubber industry without even having a very good idea about what chemical process could create synthetic rubber to replace the natural rubber sources taken over by the Japanese. But national credit was applied in each case to create those industries from scratch.

The function of the National Bank is to provide the credit to bring potentials to realization. Every productive process requires massive outlays of capital for land, plant, equipment, R&D, and training long before any revenue comes back from customers. In the case of public-infrastructure-building there might never be a direct return revenue—only an indirect increase in tax revenues. And with any project or business, there is always the possibility that future revenues returned will not be enough to meet obligations—resulting in bankruptcy.

So the primary function of the National Bank is to bring the entrepreneur (or government body) together with the resources, plant, equipment, and the workforce capable of turning a good and necessary idea into a profitable product or project. Here we must make a couple of clarifications. The word “profitable,” like the word “bank,” has many meanings. Of course, when we use the term “profit” we mean it in the LaRouchean sense—the physical remainder left from a productive cycle after all of the input costs are deducted. We are not talking about money profit attained by any of the various types of price manipulations we associate with the Federal Reserve and the British Empire/Wall Street.

So the National Bank will use the funds allocated to it by the U.S. Congress under Article I Section 8 of the U.S. Constitution to loan money to the entities which will realize the future we seek. It will not just throw money around as Biden likes to do. Instead, local banks, savings and loans, and credit unions will take vetted loan applications to the National Bank. If the local bank has performed its proper work to evaluate the proposal and finds that the borrower meets the general requirements of the National Bank and has a reasonable chance of paying back the loan to the point that the local bank will agree to lend 5% of the total, the National Bank will lend the other 95%. However, the borrower does not receive a pile of money, but a credit line. Project costs—i.e. land, plant, equipment, payroll, etc.—are drawn against the credit line provided by the National Bank through the local bank. No credit will be made available for such things as stock buybacks or “entertainment.”

The main constraint is the shortages which would occur if every good idea were attempted all at once. It would be a bit like the “supply chain” disruptions we experienced in 2021-2022, or the inflation which the Biden administration fostered by throwing huge sums at its insane Green schemes. So, even though the National Bank will be a very apolitical institution, it will be guided by the policies worked out by the Secretary of the Treasury of the new Trump administration. The first priority is to invest in those areas on which the further growth of the physical economy will depend—i.e. research and development, power plants, electrical equipment, steel and other metals, mining, water supplies and flood control, engineering and construction schools, etc. This will create what LaRouche called a “two tier credit system.” Investments in the favored areas will get long-term, low-interest loans from the National Bank (2% to 4% simple interest with perhaps an additional 1% added for the local bank to cover its loan administration costs) while investments in movie studios, fast food franchises, etc. will have to pay the going rate.

As the work of the National Bank begins to draw more and more workers and private investments into the foundations of the physical economy to create more of a surplus of capabilities, the National Bank will then be able to expand its participation into other areas of manufacturing and production.

It is important to note that the Federal Reserve will cease to exist. There will be no institution able to bail out the arms of Empire and loot the general citizenry. However, as the National Bank takes over the facilities of the Federal Reserve, the routine functions currently performed by the Federal Reserve, such as check clearing, will be continued by the same people and facilities now doing such work. And Federal Reserve notes will continue in circulation until they are gradually replaced by United States

dollars.

It is also important to remember that the successful establishment of the National Bank and associated prosperity will minimally require implementation of the other items stipulated by [Lyndon LaRouche in his Four Laws](#). And successful return of markets for American exports will require implementation of a New Bretton Woods agreement for fixed exchange rates internationally, as long advocated by LaRouche.

So we have reviewed the operation of the National Bank with the clearest possible language. In the main we simply speak of facilitating the growth of the Good, and the withering away of Evil.