

California Drought Update



For November 17, 2016 by Patrick Ruckert

Published weekly since July, 2014

<http://www.californiadroughtupdate.org>

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

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A Note To Readers

President-elect Donald Trump has a big ego, so perhaps he would like to do some big things. This week we shall focus on one big thing Trump should do: Build the *North American Water and Power Alliance* (NAWAPA). NAWAPA, was the President John Kennedy era project proposed originally by the Ralph Parsons Engineering company, based in Pasadena, and promoted in the U.S. Congress for years by Utah Senator Frank “Ted” Moss, a Democrat from Utah. John Kennedy's brother, Senator Robert Kennedy, before he, like his brother, was assassinated, was a co-sponsor of the bill to build NAWAPA.

In brief, NAWAPA was, and is, a continental water management system that will divert the abundant excess water from the rivers of Alaska and northern Canada eastward and southward, delivering up to 150 million acre-feet of water to the U.S., Canada and Mexico.

But, as Ben Deniston of the LaRouche PAC Science Team recently wrote in a short memo:

From my research and work I'm convinced we need an integrated approach that includes NAWAPA (plus extensions), atmospheric moisture control with ionization, and desalination.

NAWAPA is critical to reaching the interior and high elevation regions of the continent (stretching from regions of eastern CA to the crisis in the Ogallala Aquifer, from the Canadian Prairies to Texas--

including the high elevations of the Great Basin).

Desalination should be seriously considered for coastal metropolitan areas. (For the coast, specifically, I think desalination is cheaper and requires less energy than NAWAPA per unit amount of water delivered to those particular coastal regions)

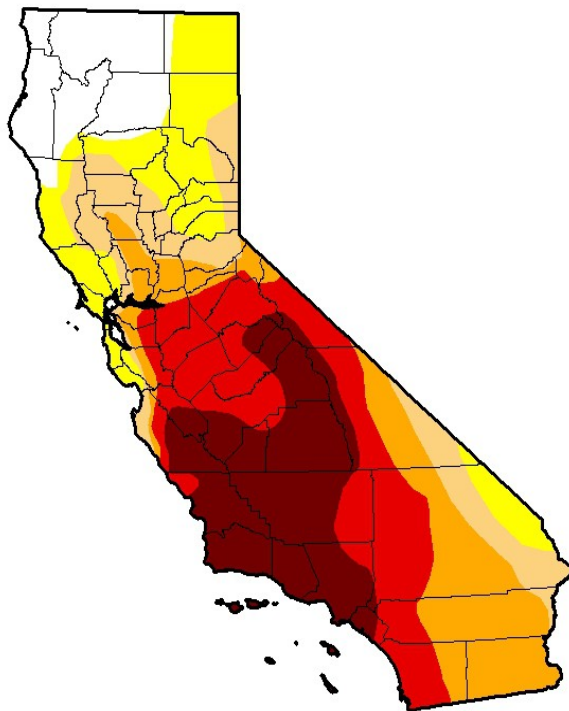
Atmospheric water management with ionization plays a unique, critical role. This can increase the net rainfall into California, bringing water where it is needed by tapping the atmospheric reservoirs over the Pacific Ocean. Per unit water delivered this is much cheaper and requires much less energy than desalination or river transfer.

My point of emphasis is that these are not separate options, they come together to create an integrated approach that is superior to any one individually.

Following some updates on the drought, we shall return to NAWAPA.

U.S. Drought Monitor

U.S. Drought Monitor California



November 15, 2016

(Released Thursday, Nov. 17, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	12.03	87.97	73.04	60.27	42.80	21.04
Last Week 11/8/2016	12.03	87.97	73.04	60.27	42.80	21.04
3 Months Ago 8/6/2016	0.00	100.00	83.59	59.02	42.80	21.04
Start of Calendar Year 12/29/2015	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year 9/27/2016	0.00	100.00	83.59	62.27	42.80	21.04
One Year Ago 11/17/2015	0.14	99.86	97.33	92.26	70.55	44.84

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

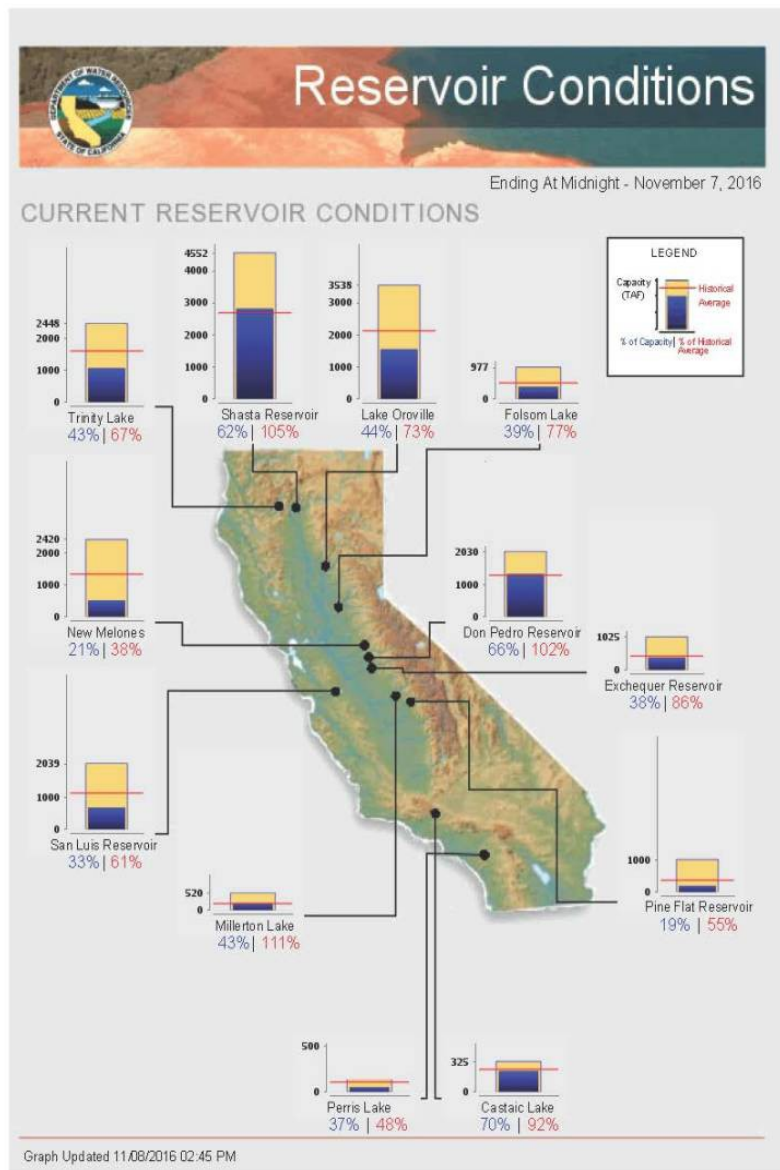
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCEI/NOAA



<http://droughtmonitor.unl.edu/>

Reservoir Conditions



La Nina, One More Time

Finally, it is official: La Nina is really here. At least as reported on November 10 by the *Los Angeles Times* and others:

La Niña has arrived, with little rain in store for Southern California

<http://www.latimes.com/local/lanow/la-me-la-nina-20161110-story.html>

Bettina Boxall

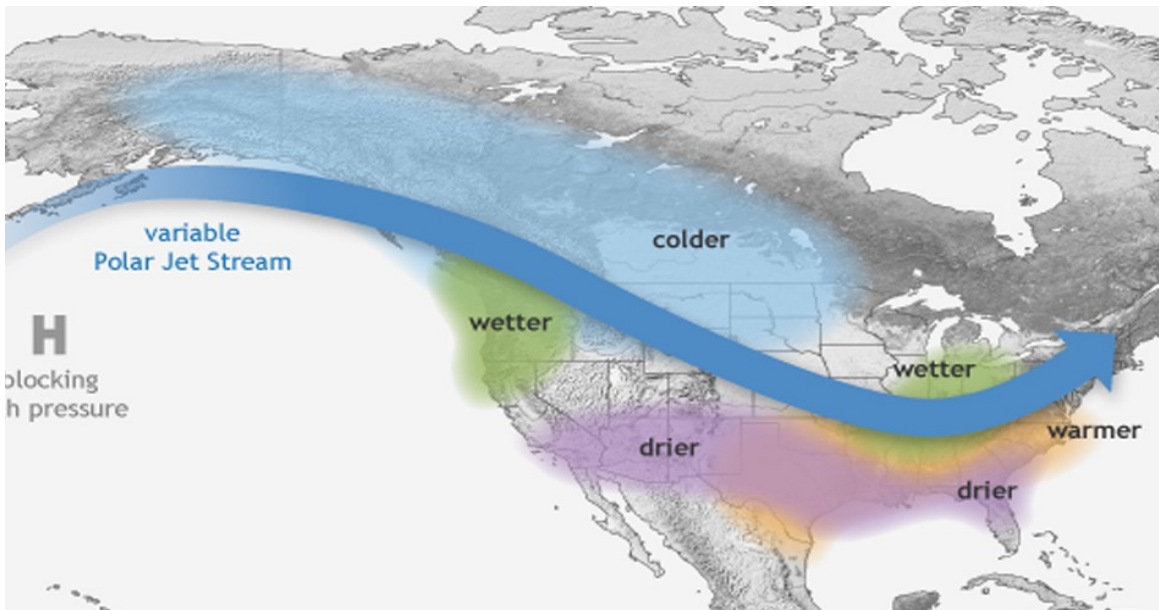
La Niña has officially arrived, with mixed messages for California.

If the weather phenomenon behaves as expected, the Pacific Northwest and far Northern California will enjoy a wetter than normal winter, while the southern swath of the state will remain dry.

Federal climate scientists on Thursday declared La Niña conditions, saying they lacked strength and would probably last only a few months.

Characterized by a cooling of sea surface temperatures in the equatorial Pacific, La Niña triggers atmospheric changes that generally favor below-average precipitation and above-average temperatures in the country's southern band.

On the bright side, NOAA's La Niña map shows the area of above-average precipitation reaching down into far Northern California, into watersheds that feed the state's largest reservoirs.



Here is what La Nina Delivers

Trump and the Drought and California Agriculture

I must emphasize once again, secondary issues must take a backseat to the fundamental paradigm shift required or Trump will fail. He must reinstate the Glass-Steagall banking law, destroying the ability of Wall Street to continue its speculative destruction of the real physical economy. He must ally with China and Russia in the construction of a real foundation of peace and cooperation among sovereign nations by joining the New Silk Road.

That said, here are some articles excerpted to illustrate what some are thinking Trump may do about agriculture, the drought, and water and environmental policy.

This first one quotes Paul Wenger of the *California Farm Bureau Federation* on the TPP. Wenger, apparently, is still hoping against hope on this one, since not only Trump and the Congress have buried it, but several other nations have done the same.

1) California Agriculture Industry Optimistic About Trump Ag Policy

By Julia Mitric

Capital Public Radio

November 14, 2016

<http://www.capradio.org/articles/2016/11/14/california-agriculture-industry-optimistic-about-trump-ag-policy/>

Paul Wenger, President of the [California Farm Bureau Federation](#), says despite the unknowns he's optimistic about how Trump will steer trade policy.

Wenger predicts Trump will consider the merits of TPP, the Trans-Pacific-Partnership, a global trade deal negotiated by the Obama administration that is stalled out in Congress.

2) Election over, California water district may get win with controversial drainage plan

By Michael Doyle

November 15, 2016

California's politically resurgent Westlands Water District is set to win House committee approval Wednesday of a big irrigation drainage plan that's opposed by Northern California's Democrats.

[Years in the making](#), the plan forgives a roughly \$375 million debt owed by the nation's largest irrigation district. The Rhode Island-sized district also locks in favorable terms on future water contracts and will retire some land. In return, the deal relieves the federal government of the multi-billion dollar obligation to construct irrigation drainage facilities for the San Joaquin Valley's West Side.

"In order to move forward with the settlement agreed to by both Westlands and the U.S. Department of Justice last year, this bill has to be passed by Congress," Rep. David Valadao, R-Hanford, said Tuesday. "Doing so will be a positive step in resolving a long-standing drainage dispute and will ultimately save taxpayers billions of dollars."

The incoming Trump administration has appointed a Westlands' lobbyist, David Bernhardt, to head the Interior Department transition team that will make recommendations on policies and personnel.

One of Bernhardt's stated priorities has been "potential legislation regarding settlement of litigation" – which means the Valadao bill – according to lobbying registration records filed by Bernhardt's firm, Brownstein Hyatt Farber Schreck. Westlands paid the firm \$245,000 last year, records show.

Another Westlands ally, Rep. Devin Nunes, R-Visalia, has been appointed to the executive committee of Trump's overall transition team. Nunes and Valadao are also leading [a separate effort](#) to secure a sweeping California water bill that steers more irrigation deliveries to farmers, authorizes new reservoirs and ends an ambitious San Joaquin River restoration program. (emphasis added)

<https://www.arcamax.com/currentnews/newsheadlines/s-1894972>

3) U.S. Does Need Infrastructure; But Trump Badly Needs Hamilton

<https://larouhepac.com/20161114/us-does-need-infrastructure-trump-badly-needs-hamilton>

November 14, 2016

Far more than his few brief references to restoring the Glass-Steagall Act, Donald Trump filled entire interviews during his campaign, as well as much of his victory speech, with his intention to build "new infrastructure" for the U.S. economy. Trump repeatedly urged the need to invest at least \$1 trillion, and asked how to generate this, repeatedly said "I love leverage." He invoked the current [Wall Street] mantra that "interest rates will never be so low again," meaning that now is the time for the United

States to take on a great deal of new debt to build new "airports, bridges, highways, high-speed trains...", as he said in a September CNBC interview.

On Trump's behalf, investor and vulture capitalist Wilbur Ross, from August on, filled out a plan for a "\$1 trillion national infrastructure bank," which is extraordinarily leveraged, and violates the principles of successful national credit and banking of Treasury Secretary Alexander Hamilton.

The plan substitutes mixed-management chaos for the principles of foreseeing the advanced new infrastructure the nation needs to expand production and increase productivity. It certainly "loves leverage," and the managers of this bank would be grabbing greedily for short-term user-fee revenue to pay their massive debt service; this dooms the principle of building at the frontiers of science and technology, as President Franklin Roosevelt did.

Furthermore, the commercial banks expected to buy the bonds, unless and until reorganized under Glass-Steagall, will be in the speculative securities markets striving for high returns instead.

By contrast, Hamilton's Bank of the United States was formed with \$8 million in restructured colonial debt as equity capital; \$2 million in new U.S. Treasury debt as equity capital; and \$5 million in borrowed capital from a foreign loan. Thus it was leveraged less than 2:1, its debt was all long-term over a full production cycle; it paid a relatively high rate of interest rather than futilely trying to "borrow cheap"; and "the means for extinguishing the debt" over the long term were provided in the form of new taxes.

4) Trump's Infrastructure Fix: Let Somebody Else Spend \$1 Trillion

By Alex Davies

November 10, 2016

<https://www.wired.com/2016/11/trumps-plan-american-infrastructure-get-people-spend-trillion-dollars/>

If any issue could build a bridge between Trump, his supporters, and everyone else, this could be it. The [nation's infrastructure is crumbling](#)—literally, in some cases. The American Society of Civil Engineers gives US infrastructure a D+, and estimates the country would have to invest \$3.6 trillion to patch it all by 2020.

The question is how Trump plans to do all that great-making. His plan: Spend a trillion dollars. Or, even better: Get other people to spend a trillion dollars.

5) How Trump May Alter California's Environment and Energy Landscape

By Emily Guerin with Stephen Gregory

KPCC November 10, 2016

<https://www2.kqed.org/news/2016/11/10/how-trump-may-alter-californias-environment-and-energy-landscape/>

6) Trump appoints enemies of salmon, Delta and environment to transition team

by Dan Bacher

Sunday Nov 13th, 2016 10:24 AM

<https://www.indybay.org/newsitems/2016/11/13/18793494.php>

7) *Can Trump deliver on immense energy, climate promises?*

Robin Bravender, E&E News reporter

Greenwire: Monday, November 14, 2016

<http://www.eenews.net/stories/1060045707>

President-elect Donald Trump vowed on the campaign trail to topple just about every major energy and environment policy enacted in the past eight years.

From torpedoing the Obama administration's Clean Power Plan and international climate deal to expanding oil and gas development and overhauling the regulatory system, the incoming administration has big promises to keep.

But while massive change is expected, Trump will face limits on carrying out his plans.

The North American Water and Power Alliance (NAWAPA)

In my “A Note to Readers,” above, I included the following quotation from a memo from Ben Deniston: “From my research and work I'm convinced we need an integrated approach that includes NAWAPA (plus extensions), atmospheric moisture control with ionization, and desalination.” So here we shall discuss NAWAPA, followed by a report on China's *Move South Water North* project, the largest water management system ever constructed by mankind.

The Water Cycle

By way of introduction, the following discussion of water is taken from the special report by *Executive Intelligence Review*, published in 2014, “The New Silk Road Becomes the World Land-Bridge.” <file:///C:/Users/patru/Downloads/20141121%20The%20New%20Silk%20Road%20Becomes%20the%20World%20Land-Bridge.pdf>

But, water supplies cannot be discussed simply in terms of “use.” Water is not a “finite resource” that is only used once (such as coal or natural gas). The global water system has cyclical-type characteristics, with water constantly moving from one state to another state (e.g., liquid oceans, frozen ice caps, and atmospheric vapor) and from participating in one system to another system (e.g., oceans, living matter, and human economic processes). For this reason, any attempt to address the water needs of billions of people, both now and far into the future, must focus on the management—or creation—of cycles, not “use” per se.

Until recent generations, the freshwater resources available to mankind were limited to the management of the existing regional terrestrial water cycles, including all the rivers, lakes, groundwater, etc., created and maintained by these cycles. While the use and productivity of the existing cycles could (and can) be improved, the size and availability of this resource had largely remained outside of mankind's control—a situation vulnerable to regional climate changes, such as those associated with changing solar activity (as discussed below). Now, with new technological developments that can be employed en masse on a global scale with the energy flux density provided by a fission and fusion economy, mankind can, for the first time, look to managing entire continental cycles and even the creation of new cycles through weather modification technologies and desalination

systems.

Here is a link to a *LaRouche PAC* produced 15 minute animated video on such an integrated approach to developing the global water system.

<https://www.youtube.com/watch?v=ryBEiiKtn6E>

Why NAWAPA

The following excerpt is from, “Nuclear NAWAPA XXI: Gateway to the Fusion Economy,” a special report published by *21st Century Science & Technology* in 2014. The 1960s design for NAWAPA is proposed to be upgraded to a nuclear-power driven project.

[file:///C:/Users/patru/Downloads/NuclearNAWAPA-shrunk%20\(1\)_0.pdf](file:///C:/Users/patru/Downloads/NuclearNAWAPA-shrunk%20(1)_0.pdf)

Increasing the Productivity of the North American Water Cycle **by Benjamin Deniston**

America does not need a “recovery,” but a new economy. This means not simply rebuilding what was lost, but leapfrogging to qualitatively higher levels. Higher conceptions of economy, including understanding the true role of mankind in managing and improving the biosphere—as by the massive control and direction of water—are demanded in order to solve the continental agricultural and food crises, while improving the overall territory of the West.

To do this effectively, the original 1964 design for a North American Water and Power Alliance (NAWAPA) must be upgraded from the standpoint of a nuclear-thermonuclear economic driver, providing not only more desperately needed water, but doing so faster, with less loss, and with an international commitment to the development of a new nuclear-thermonuclear global economy.

Summary of the NAWAPA Project

From the same report is this summary of the NAWAPA project:

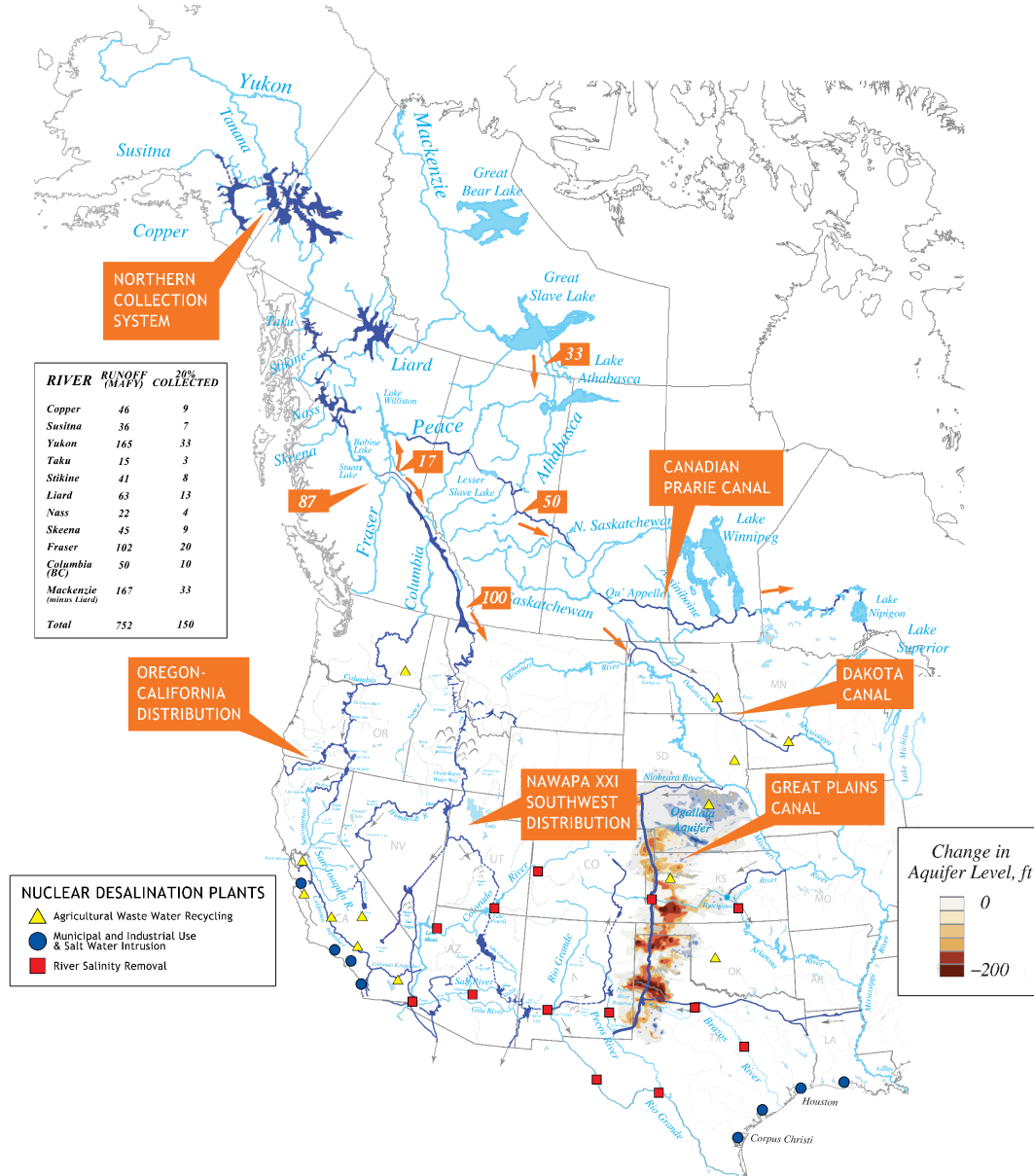
The dry western region of the United States faced a greater challenge. The larger territory of the Colorado River basin was brought under control through a series of major dams, reservoirs, and irrigation and related systems, led by the famous Hoover Dam and Lake Mead. Currently the agricultural, industrial, and domestic needs of up to 40 million people depend on the management of the Colorado River with dozens of major dams, hundreds of miles of canals, and irrigation water provided for 16,000 km².

The development of the West continued with the Central Arizona Project branching off the Colorado River, and the California Water Project regulating the flow of the Sacramento and San Joaquin rivers. This is how California’s Central Valley became a breadbasket for the nation, producing nearly one-tenth of the nation’s crops on less than 1% of the national farmland.

However, while each of these regional developments in the American southwest have been highly successful, the total water flow of the Colorado, Sacramento, and San Joaquin rivers is relatively small for the size of the land area to be supported by them. Starting in the 1950s and 1960s, it was recognized that the larger issue that needed to be addressed is the great continental discrepancy between water excess in the northwest, throughout Canada and Alaska, and the water scarcity in the

southwestern United States and northern Mexico. Measured by river flows, this northwestern quarter of the continent has about ten times the water availability of the southwestern quarter.

NAWAPA XXI: Nuclear Desalination Plants



By the 1960s, designs for the grand North American Water and Power Alliance (NAWAPA) were developed to rectify this great imbalance, by proposing a continental water management system that could bring approximately 20% of the freshwater runoff from select rivers in the northwest, down throughout the southwest.

From 2010 to 2014 the LaRouche PAC Basement research team re-examined NAWAPA and proposals to further augment and expand the project.¹⁶ (See Figure 5) When the potentials for expansion are taken into account, NAWAPA could increase the water available for entire southwestern states by between 50% and 200%, and first order estimates indicate that it could increase the photosynthetic productivity of the water cycles of the western river basins by 30%, and the photosynthetic productivity

of the entire North American continental water cycle by 10%...

Some Political Background

The following excerpts are from “**NAWAPAXXI-- LaRouchePAC Special Report**,” published in 2012. http://archive.larouchepac.com/files/20120403-nawapaxxi-forweb_0.pdf

In the Spring of 1964, a United States Senate Special Subcommittee on Western Water Development was formed to evaluate a plan that newspapers in the U.S. and Canada were soon heralding as the most ambitious public works project in history: the North American Water and Power Alliance (NAWAPA), the brainchild of Donald McCord Baker and Hillman Hansen, two engineers working out of Ralph M. Parsons’ engineering firm in California. Headed by Utah Senator Frank “Ted” Moss, the committee published a comprehensive report by October of that year, titled “A Summary of Water Resources Projects, Plans, and Studies Relating to The Western and Midwestern United States.”

On September 1965, Moss introduced Senate Concurrent Resolution 55, calling for NAWAPA to be referred to the International Joint Commission, a U.S.-Canadian organization with a mandate to resolve boundary water issues. A similar resolution was introduced six days later in the House by Rep. David King as House Con. Res. 488.

The measure received wide publicity, and judging from Moss’ correspondences, it enjoyed broad bipartisan support in Congress, as well as from citizens in the U.S. and Canada who wrote to Moss volunteering their efforts to help organize for it. Among the co-sponsors of the NAWAPA resolution was Senator Robert F. Kennedy, who wrote to Moss, “I am glad to join you as a co-sponsor of S. Con Res. 55 expressing the sense of Congress that the President refer to the International Joint Commission the subject of the North American Water and Power Alliance... This proposal deserves careful study and consideration by both the United States and Canada and has applications to the East as well as the West.”

Moss actively organized for joint action between the U.S. and Canada, and participated in several high profile debates with Canadian officials on the project. Despite vocal opposition from some quarters, favorable opinions on NAWAPA from Canadian legislators reached as high as Prime Minister Lester Pearson, who stated publicly that water diversion from the Arctic could be “one of the most important developments in our history.”

However, official government action on NAWAPA stalled, especially as the U.S. was sucked into heavy combat in Vietnam beginning in November 1965.

This coincided with a retreat from the pro-development programs of the Kennedy era, including the beginning of massive cuts to NASA’s budget, and a halt to new starts on dam projects. Therefore, while the Canadian government became increasingly favorable to the idea of NAWAPA in 1966-1967, the context surrounding NAWAPA was transforming; this new context became the determining factor in its outcome, regardless of any actions taken by its proponents.

Any hope of a return to Kennedy’s “New Frontier” outlook, was effectively dashed with the June 6, 1968 assassination of his brother Robert following his victory in the California Democratic Presidential primary election, which followed on the heels of the assassination of Martin Luther King, Jr. only two months earlier.

A new cultural pessimism began to set in, typified by the “Limits to Growth ideology of the environmentalist movement and its oligarchical sponsors. The truth of man’s inherent ability to improve upon nature was replaced with cries of overpopulation and demands to “leave nature alone,” codified in legislation that specifically banned the kinds of water transfer measures outlined in NAWAPA.

NAWAPA XXI seeks to create a continental system of water regulation that can redistribute wasted runoff waters of northern Canada and Alaska to make the Great American Desert bloom, and turn would-be flood waters in one area into the means for fighting drought in another, all through the construction of a massive infrastructural network which can direct these flows and provide a scientific analysis of their best use.

NAWAPA'S Oregon-California Extension

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. This seven minute video presents the exciting possibility that a critical part of NAWAPA could be completed in a few short years, diverting a very small part of the Columbia River to northern California.

<http://archive.larouchepac.com/node/22581>

The Naysayers

“Cadillac Desert” by Marc Reisner, published in 1986, is a virtual bible for those environmentalists and others who believe that the development of the western states' water management systems has been a big mistake. The threat that NAWAPA could create a continental-wide water management system has always been their worst nightmare.

Reisner, beginning on page 489 of “Cadillac Desert” attacks NAWAPA, and on the next page raises the alarm that NAWAPA has been given a new life by the Lyndon LaRouche political movement. Here is just a short excerpt from that section:

Suddenly, the monster project that had been given up for dead began to twitch again. In October, 1980, at a California conference on “A High-Technology Policy for U.S. Reindustrialization” sponsored by the Fusion Energy Foundation (created by Lyndon LaRouche in 1974—editor)... Dr. Nathan W. Snyder of the Parsons Company reintroduced NAWAPA to a large and enthusiastic audience.

Reisner's book was 30 years ago. More recently, on September 17, 2015, *Buzzfeed* published a lengthy history of NAWAPA, which is very thorough, though, of course, it expresses happiness that it was never built. Here is the link:

The Forgotten Project That Could Have Saved America From Drought

The North American Water and Power Alliance was an audacious proposal to divert water to parched western states that would have cost hundreds of billions of dollars and pissed off Canada. But what if it had worked?

By Michelle Nijhuis

BuzzFeed Contributor

Sept. 17, 2015

https://www.buzzfeed.com/nijhuis/pipe-dreams-the-forgotten-project-that-could-have-saved-amer?utm_term=.elerNEqNL#.he0L5Qv5M

More videos and references

Drought: The Time for NAWAPA has Come

March 3, 2014

10 minutes

<http://archive.larouchepac.com/node/30047>

NAWAPA 1964 -- Feature Film

<https://www.youtube.com/watch?v=c0QS9AaMfvY>

The true story of the fight for NAWAPA, the North American Water and Power Alliance, spanning the 60s and early 70s, as told through the words of Utah's Senator Frank Moss.

Water & Agriculture

May 12, 2012

15 minutes

<http://archive.larouchepac.com/node/22675>

Nuclear-Powered Desalination in California-- Parts I-IV

<http://www.californiadroughtupdate.org/2015/05/29/nuclear-powered-desalination-in-california-parts-i-iv/>

Water for the Future

April 18, 2015

This eight minute video, presented by LPAC, demonstrates that the water to solve California's drought crisis IS there, it just needs to be developed. The "solutions" which Governor Jerry Brown and President Obama are imposing on the the state of California, being done in the name of "conservation" and "environmental sustainability" are a lying fraud. They don't want a solution to this crisis, if they did they would launch a crash program for desalination and atmospheric ionization and wouldn't have crushed earlier proposals for continental water management and a nuclear powered California economy. <https://www.youtube.com/watch?v=xpv6v7o8aFo&feature=youtu.be>

New Perspectives on the Western Water Crisis <https://larouchepac.com/20150401/new-perspectives-western-water-crisis>

President John Kennedy and California Water-- San Luis Reservoir

<https://www.youtube.com/watch?v=oOd4m0fCJ0s>

JFK Speeches Inaugurating Water Projects <https://www.youtube.com/watch?v=TP8xpevILNE>

China's South-North Diversion Project

From the same EIR report cited above “The New Silk Road Becomes the World Land-Bridge,” the following excerpt reports on the largest water-engineering project ever undertaken by mankind. With two of the three major routes for moving water from the south of the country to the drier north already delivering water, China demonstrates today what the U.S. used to do. NAWAPA will deliver three times the amount of water the South-North Diversion Project is projected to deliver.

In dramatic contrast, China's grand inter-basin South-North Water Diversion (SNWD) project now stands as the near solitary, but exemplary, model of large-scale surface water organization. The three-route SNWD complex, shown in Figure 6 (below), is now partially complete. The concept is to convey a portion of the abundant water supplies in the monsoonal southern Yangtze system, to the arid north.

First proposed in the 1950s, designs were debated for decades; then in late 2002, construction began, and since 2009 the project has been accelerated.

The Eastern Route Project (ERP) became operational in December 2013, delivering water to the eastern provinces of Jiangsu, Anhui, and Shandong. By 2015, water in the Middle Route Project (MRP) will flow to Beijing, Tianjin, and environs. In September 2014, testing of water quality began on the MRP, preparatory to activating the full flow. The Western Route, which would capture and divert water from three tributaries of the upper Yangtze River, is still in the planning stages; it involves demanding engineering and construction work.

The SNWD dimensions are significant. The Eastern Route uses upgrades on the 1,500-year-old Grand Canal, a waterway likewise linking the south to north. Today, the ERP transports some 14.8 billion m³ of water a year. The Middle Route will carry 9-13 billion m³. This channel required 1,400 km of new construction, with its starting point at the Danjiangkou Reservoir.

The concept of the Western Route is to transfer flows from the headwaters of the Yangtze into the headwaters of the Yellow River, to augment its flow. The hydro-engineering involves major dams and tunnels to move the water across the Qinghai-Tibetan Plateaus and Western Yunnan Plateaus, and to cross the Bayankala Mountains. These watersheds are all within China's borders; initial feasibility studies are in hand.

When complete, the three-route SNWD would transfer 20 to 40 billion m³ from the Yangtze Basin to the dry north. In addition, there is the idea of diverting northward, some of the flow of the transboundary rivers—the Brahmaputra, Salween, and Mekong, which would vastly increase overall SNWD volume.

FIGURE 6
South-North Water Diversion Project



Sources: Chinese Ministry of Water Resources; futuristimeline.net; Wil Fox

Here is a five minute video of the project produced in 2014:

China Century Project South-North Water Transfer Project HD 2400KM
<https://www.youtube.com/watch?v=7s5UungzXhw>