



California Water and Infrastructure Report

Formerly, the “California Drought (and Flood) Update”

For March 21 , 2019

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>

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The main contribution to climate protection would however be population reduction in the developing-sector nations. This should be made possible by a development policy involving (sustainable) investments in local supply of water, food, energy and health, as well as local environmental production.

David Folkerts-Landau, chief economist of Deutsche Bank

A Note To Readers

At least one of the bastards is telling the truth about the real motivation for promoting hysteria over climate change. Of course, it is an economist from Deutsche Bank, a bank that has sucked at the tit of financial speculation and all but destroyed itself with its bad bets. But, hey, this is the system of unregulated finance, and to keep this parasitical system alive, well, let us just kill a few billion people.

In this week's report

It is official, for the first time in seven years California is drought-free. Not only that, there is lots of snow in the Sierras and the Rockies, so there may not be too much rationing of the Colorado River water next year, which has been expected.

Both the State Water Project and the federal Central Valley Project have increased the allocation of

water they will send to water contractors this year.

That is nice, but neither agency is providing the full amount requested. So, even a winter with near optimal amounts of precipitation, there is no ability for the state to provide all of the water that is required. Yes, building of more storage capacity is necessary and some is in the works, but only with a seriously big, gigantic, project like the *North American Power and Water Alliance (NAWAPA)* will securing the water supplies of much of the country (for Canada and Mexico, too) for decades into the future. Part III concluding the series on NAWAPA is in this week's Feature.

The Oroville Dam update features a follow-up letter from FEMA on why the agency will not pay \$306 million of the cost for the repair of the spillways.

Representatives of seven states finished a landmark agreement to shore up the dwindling Colorado River and signed a letter to Congress on Tuesday calling for legislation to enact the deal.

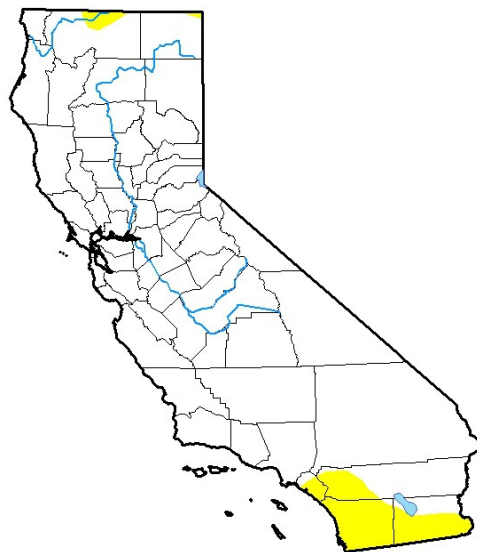
Nuclear power is the topic this week on the infrastructure front. The article that is featured demonstrates, unfortunately once again, how at least some of the advocates of the technology are cowed by the “go along to get along” mentality of climate change that dominates the discussion of energy supplies.

Two articles on the Green New Deal demonstrate once again that the real intent of the climate change mafia is population reduction. The quote that leads this report is from one of those articles. A sober and challenging report follows those two articles: “President Trump’s Committee on Climate Security: A Much-Needed, Overdue Return to Science.”

Our Feature, Part III of the series on the North American Water and Power Alliance, concludes this report.

California Is Drought-Free for First Time in over 7 Year

U.S. Drought Monitor California



March 19, 2019
(Released Thursday, Mar. 21, 2019)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	93.42	6.58	0.00	0.00	0.00	0.00
Last Week 03-12-2019	93.42	6.58	0.00	0.00	0.00	0.00
3 Months Ago 12-18-2018	7.77	92.23	75.17	16.87	2.10	0.00
Start of Calendar Year 01-01-2019	7.77	92.23	75.17	14.12	2.10	0.00
Start of Water Year 09-25-2018	12.18	87.82	47.97	22.82	4.94	0.00
One Year Ago 03-20-2018	11.08	88.92	47.68	22.31	0.43	0.00

Intensity

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

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

Author

Jessica Blunden
NCEI/NOAA



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

California Is Drought-Free for First Time in over 7 Years; Snowpack, Reservoirs in Great Shape for Summer

By Jonathan Belles

March 19, 2019

weather.com

<https://weather.com/news/climate/news/2019-03-20-california-drought-free-7-years>

- *California is drought-free for the first time since 2011.*
- *A wet pattern brought beneficial moisture to the West this winter.*
- *As a result, drought conditions have improved across the state.*
- *This trend in drought reduction is expected to continue this spring.*

Years of drought have been wiped out by an active storm track in California this winter, and drought conditions have dramatically improved across the West. Furthermore, this trend is expected to persist into the spring.

A dominant weather pattern featuring a southward dip in the jet stream over the West has allowed a series of precipitation-rich storm systems to track through the region, especially over the last two months.

Drought Improvement

Far-above-average rain and snow over the last few months have knocked out the years-long drought in California.

This drought reduction was largely due to a very wet period that lasted from early February into early March.

As of March 14, the average snow water equivalent in the Sierra is at [159 percent to average for the date](#) – great news heading into spring.

In fact, much of the West is near- or above-average in terms of the snow water content in the snowpack, with a few areas [well above 100 percent to average](#). The far northern Rockies and northern Cascades are notable exceptions.

Just over half of the West was experiencing drought conditions on Jan. 15, but by March 5, barely 25 percent of the region was still in drought.

Much of the Four Corners region had experienced extreme and exceptional drought conditions since last spring. There, the improvement is quite noticeable. Big strides in drought improvement have been made in Nevada, Utah, Colorado, Idaho and much of Arizona, where drought has nearly been wiped out, and in Oregon, where drought conditions have lessened significantly.

Although drought conditions still remain from the Four Corners region into parts of the Great Basin and Northwest, the current wet pattern will likely lead to further improvements.

Water for Farmers and Cities

State Water Project Allocations Increase to 70 Percent Following Strong Winter Storms

March 20, 2019

From the Department of Water Resources:

Following several strong winter storms that brought snowpack and precipitation to above average levels, the California Department of Water Resources (DWR) today announced it will increase the 2019 State Water Project (SWP) allocation. Most SWP contractors will now receive 70 percent of their requests for the 2019 calendar year, an increase from the 35 percent allocation announced last month.

“Just ten weeks ago it looked like we may have been facing another dry year in California,” said DWR Director Karla Nemeth. “Fortunately, we’ve turned a corner and now it’s shaping up to be a great year for water supply. California’s hydrology varies year to year, which is why all Californians must work together to use water wisely.”

The allocation is assessed monthly and the final allocation is typically determined in May. Last year’s final allocation was 35 percent.

As of March 7, the Northern Sierra 8-station index recorded above average precipitation for water year 2019. While the state has not reached record precipitation like that seen in 2017, February was the third wettest recorded in the [Northern Sierra index](#) since 1921 and the sixth wettest in the [San Joaquin index](#) since 1913. The statewide Sierra snowpack is [156](#) percent of average for this date.

Most of the state’s major reservoirs are at or above their historical averages for this time of year. Lake Oroville, the SWP’s largest reservoir, is currently at 76 percent of capacity and 103 percent of average for this time of year. Shasta Lake, the Central Valley Project’s (CVP) largest reservoir, is at 83 percent of capacity and 106 percent of average. San Luis Reservoir, the largest off-stream reservoir in the United States where water is stored for the SWP and CVP, is at 99 percent of capacity and 112 percent of average. In Southern California, SWP’s Castaic Lake is at 81 percent of capacity and 92 percent of average.

Reclamation updates 2019 Central Valley Project water allocations

March 15, 2019

From the Bureau of Reclamation:

The Bureau of Reclamation today issued updated allocations for Central Valley Project contractors for the 2019 contract year. This update reflects the benefits of the series of storms that brought significant precipitation to California during February and early March.

“The precipitation we’ve experienced since mid-February has provided a significant boost to the projected water supply for the Central Valley Project this year,” said Mid-Pacific Regional Director Ernest Conant. “With the improved CVP storage conditions and the latest runoff forecasts, we are pleased to increase the amount of water allocated to many of our water service contractors.”

The three updated allocation areas include:

- *North of the Delta, in-Delta and American River contractors' allocations, for both agricultural water service and municipal and industrial service contractors, are increased to 100 percent.*
- *South-of-Delta agricultural water service contractors' allocations are increased to 55 percent of their contract total.*
- *South-of-Delta allocations for municipal and industrial contractors' allocations are increased to 80 percent of their historic use.*

Friant Division's allocation remains unchanged with Class 1 contractors at 100 percent. The period for uncontrolled season deliveries to Class 2 contractors has been extended to April 10, and for the time being, contractors are being encouraged to take delivery of as much water as possible for beneficial use under their respective contracts to help minimize flood control releases. (The first 800,000 acre-feet of available water supply is considered Class 1; Class 2 is considered the next amount of available water supply up to 1.4 million acre-feet).

In addition, due to the current hydrologic conditions and storage levels in San Luis Reservoir, Reclamation declared the temporary availability of Section 215 water from the Delta for south-of-Delta contractors that enter into a "Temporary Water Service Contract for Surplus Water" with Reclamation. Section 215 refers to a section in the Reclamation Reform Act of 1982 (Public Law 97-293) that defines temporary water supplies that are unusually large and not storable for project purposes, and how that non-storable water may be used. The availability period for this water delivery will depend on hydrologic conditions and water demands in the coming weeks.

Oroville Dam Update

Last week we reported that FEMA has rejected reimbursing the state of \$306 million of the cost for the repairs to the Oroville Dam spillways that occurred in February, 2017. This week, we have a follow-up letter from FEMA, explaining in more detail the reasons for that rejection. The total cost for the repairs is now over \$1.1 billion.

FEMA Details Why It Rejected State's Request for Oroville Spillway Funds

[Dan Brekke](#)

March 20, 2019

<https://www.kqed.org/news/11733874/fema-details-why-it-rejected-states-request-for-oroville-spillway-funds>

Federal emergency relief officials have provided new details on their decision to reject California's request to reimburse the state for work to rebuild and reinforce the badly damaged spillways at Oroville Dam.

The Federal Emergency Management Agency [announced earlier this month](#) that it would not reimburse the state for \$306 million in construction on the spillways, which failed in February 2017 and prompted mandatory evacuation orders for 188,000 people living downstream of the nation's tallest dam.

In a brief statement March 8, [a FEMA spokesperson said](#) the agency was refusing to reimburse the California Department of Water Resources (DWR) for work on the upper portion of the dam's main concrete spillway.

The agency said the decision was based on earlier engineering reviews that found "a variety of problems existed at the dam" before the sequence of events that led to the spillway crisis.

In [a follow-up memo](#) sent last week to the California Governor's Office of Emergency Services, FEMA said reimbursement had been denied for two separate phases of the spillway recovery work: rebuilding the upper 1,500 feet of the main concrete spillway and extensive reinforcement of the adjacent hillside that serves as the dam's emergency spillway.

FEMA said that a wide range of pre-existing problems contributed to the deterioration of both the upper and lower sections of the massive concrete spillway. The agency argues that federal law, regulations and policy restrict payments only to work needed to fix damage stemming from a declared disaster.

Federal emergency officials argued that while the nearly total disintegration of the lower half of the chute can be attributed to events in February 2017 -- events covered by a presidential disaster declaration -- that's not the case for the upper part of the spillway, which suffered no visible damage during the incident.

FEMA's memo noted that an independent forensic team [found](#) last year that poor design, construction and maintenance of the spillway made its failure "inevitable." The agency said those long-term factors explain damage to the upper spillway -- and make that part of the structure ineligible for disaster funding.

FEMA can pay 75 percent or more of qualifying expenses for disaster recovery efforts, and has reimbursed the state for \$333.4 million of its costs to date — including \$128.4 million granted last year for the initial emergency response to the disaster and \$205 million announced recently to pay for replacing the lower portion of the spillway.

"FEMA does not dispute that DWR's decision to replace the upper chute was reasonable and prudent, the memo said. "It is FEMA's position, however, that the reasons for doing so are unrelated to the disaster."

The Department of Water Resources, which had submitted \$113.2 million in costs for the upper spillway reconstruction, said Tuesday it will appeal the FEMA's decision.

Colorado River Deal, and Some Snow, Delay Some Rationing

Western states finish Colorado River drought deal, ask Congress to sign off

[Ian James and Janet Wilson](#),

Arizona Republic

March 19, 2019

<https://www.azcentral.com/story/news/local/arizona-environment/2019/03/19/finishing-colorado-river-deal-state-and-federal-officials-meet/3213888002/>

Representatives of seven states finished a landmark agreement to shore up the dwindling Colorado River and signed a letter to Congress on Tuesday calling for legislation to enact the deal.

The set of agreements would prop up water-starved reservoirs that supply cities and farms across the Southwest and would lay the groundwork for larger negotiations to address the river's chronic overallocation, which has been compounded by years of drought and the worsening effects of climate change.

The states' delegates met in Phoenix and signed their joint letter to Congress alongside federal Reclamation Commissioner Brenda Burman, who had set a Tuesday deadline for the states to complete the agreements.

"Today is a very important day in the history of the Colorado River," Burman said after the signing. "Congratulations to all for a job well done."

The first cuts in water deliveries to Arizona and Nevada could begin as soon as next year under the terms of the deal.

The signing event was held amid bitter complaints by California's Imperial Irrigation District, which was excluded from the deal even though it controls the single largest share of Colorado River water.

While the signing was underway in Phoenix, a veteran board member of the IID spoke angrily at a meeting on the shore of the Salton Sea, condemning his counterparts for writing his district out of the deal and suggesting they were sipping champagne while ignoring an urgent "environmental and public-health disaster" at the shrinking lake.

In their letter, the states' representatives asked Congress to promptly pass legislation authorizing the Interior secretary to implement the agreements. Hearings have been scheduled in the Senate and the House next week. Once the legislation is passed, the agreements still need to be signed by representatives of the states.

Snowpack helping a bit for now

Since 2000, the river has dwindled during one of the driest 19-year periods in the past 1,200 years. Scientific research has estimated that about half the trend of decreasing runoff from 2000-2014 in the Upper Colorado River Basin was the result of unprecedented warming.

The higher temperatures have shrunk the average snowpack in the mountains, reduced the flow of streams, and increased the amount of water that evaporates off the landscape.

The legal framework that allocates the river was established during much wetter times nearly a century ago, starting with the 1922 Colorado River Compact. That and subsequent agreements have handed out more water than what flows in the river in an average year, leading to what water experts call the river's "structural deficit."

The snow that has fallen during the past month has pushed the accumulated snowpack across the Upper Colorado River Basin to nearly 140 percent of average. Last week, water managers at the Bureau of Reclamation updated their estimates of reservoir levels, projecting there could be enough snow to narrowly avert a declaration of a shortage at Lake Mead next year.

They estimated that Lake Mead will probably be near elevation 1,081 by the year's end — just above the trigger point for a shortage of 1,075 feet above .

The Bureau of Reclamation is scheduled to announce in August whether a shortage will be declared in January 2020 or not.

But even without a shortage, Arizona and Nevada may face water cutbacks starting next year under the drought plan. If federal officials determine in August that Lake Mead is likely to be below 1,090 feet at the start of next year — which now looks likely — water deliveries to Arizona would be cut about 6.9 percent, and deliveries to Nevada would be cut 2.7 percent.

Larger cutbacks would occur if Lake Mead is projected to be below 1,075 feet at the start of a future year. And California would also contribute by taking cuts sooner than it would be required to under the existing rules, when the reservoir reaches 1,045 feet.

Mexico has also pledged under a separate deal to contribute by temporarily leaving more water in Lake Mead.

How the Imperial Irrigation District was left out:

Metropolitan Board Steps up to Support Drought Contingency Plan, Protects Southland's Stored Water in Lake Mead

March 12, 2019

<https://www.apnews.com/Business%20Wire/57829e94029f4797988a09f32d6fa142>

LOS ANGELES--(BUSINESS WIRE)--Mar 12, 2019--With the fate of a long-negotiated deal to protect Colorado River supplies in jeopardy, the board of directors of the Metropolitan Water District of Southern California voted unanimously today to contribute additional water to Lake Mead, if necessary, to keep the deal alive.

The decision advances the Drought Contingency Plan – an agreement negotiated among the states that rely on the Colorado River to prevent the river's two largest reservoirs, Lake Mead and Lake Powell, from reaching critically low levels.

Metropolitan's board approved the DCP in December and the plan has broad support from the federal government, other Colorado River Basin states, water agencies and the environmental community. But the plan's future became uncertain after one of the river's biggest water users, the Imperial Irrigation District, delayed its approval of the agreement. With a federal deadline looming, Metropolitan's board stepped up to fill the gap.

Nuclear Power

The first article below from *Forbes* on March 21 demonstrates the schizophrenia exhibited by those who, while being technically “competent,” will sacrifice principles to “go along to get along.” So, reading the article one must find the steak and ignore the sizzle. Attempting to kiss the ass of the “Green New Deal” dreamers (or nightmare visionaries), the author puts forward another impossible and, in the end, just as destructive a policy. What is worth posting it here is some of what he writes on nuclear power. His graph on the materials required for various power systems is also of interest:

Any Green New Deal Is Dead Without Nuclear Power

[James Conca](#)

Mar 21, 2019

https://www.forbes.com/sites/jamesconca/2019/03/21/green-new-deal-is-dead-without-nuclear-power/?fbclid=IwAR3o-sUCE_mLXQxbrWDx81Q_NqYpmLQ8D1sQPb93156RTzcOF0fjnMGK28Q#228f149a69db

Congressional members rolled out their "Green New Deal" in February that calls for a rapid shift to [carbon-free energy](#). As laid out by Representative Ocasio-Cortez (D-NY) and Senator Ed Markey (D-MA), the Deal calls for some drastic measures to cut [carbon emissions](#) across the economy, from electricity generation to transportation to agriculture to building efficiencies.

But the [roll-out hiccupped](#) a bit on the role of [nuclear energy](#).

At first, the proposal called for [phasing out all nuclear plants](#) and not building any new ones. They also released a fact sheet nixing the possibility of building new nuclear power plants. Then they backed off and referred to [future energy sources](#) as clean, renewable, and zero-emission, which allows nuclear in.

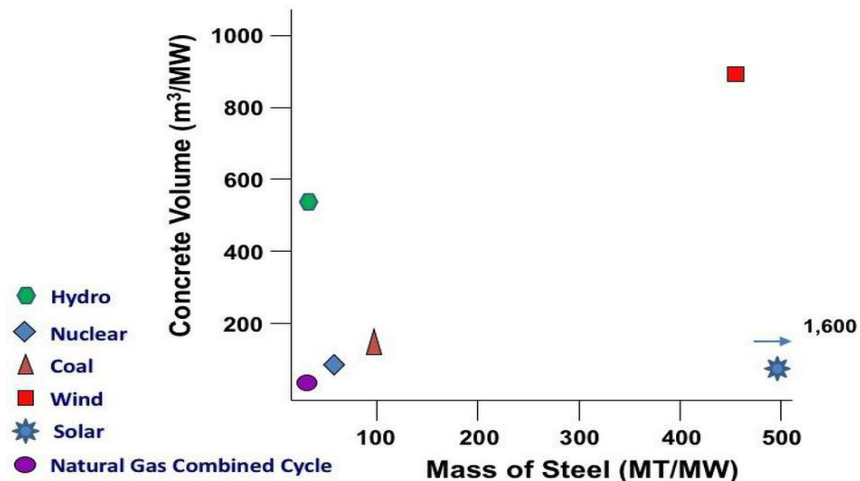
But every true expert on this subject knows we need all non-fossil fuel energy sources, including nuclear, in order to reduce our carbon emissions in time to reign in the worst effects of [global warming](#).

The [Intergovernmental Panel on Climate Change](#), the International Energy Agency, the UN Sustainable Solutions Network and the Global Commission on the Economy and Climate argue for a tripling of nuclear energy, requiring over 1,000 new reactors (10,000 SMRs) to stabilize global carbon emissions.

Even more persuasive, four of the world's top climate scientists, Dr. James Hansen, Dr. Tom Wigley, Dr. Ken Caldeira and Dr. Kerry Emanuel, have shown that renewables alone [cannot meet the goal](#) of decarbonizing the world economy.

The four scientists outlined how only a combined strategy of employing all the major sustainable clean energy options, including renewables and nuclear, and efficiency and conservation, can prevent the worst effects of climate change by the end of this century.

In America, this plan will require over 200 new nuclear reactors (or 2,000 small modular reactors that are especially [ideal for load-following renewables](#)), 500,000 additional MW wind turbines, 800 billion kWhs from new solar, and 600 billion kWhs from hydro.



Materials needed to install various energy systems

Materials needed to install energy systems are highly variable. Renewables require many times the amount of steel and concrete than thermal sources. Data from DOE and UC Berkeley normalized to capacity (factor.Conca)

Are these tiny, ‘inherently safe’ nuclear reactors the path to a carbon-free future?

by Andrew Maykuth, Updated: March 16, 2019- 7:30 AM

<https://www.philly.com/news/nuclear-industry-bets-future-small-modular-reactors-nuscale-holtec-20190316.html>

In the six decades since the Shippingport Atomic Power Station near Pittsburgh began operating as the nation’s first commercial nuclear reactor, the industry has built ever larger plants to improve the economies of scale. A typical commercial reactor now produces about 20 times as much electricity as the first Shippingport unit in 1958.

So it may seem counterintuitive that the industry sees the future not in building gargantuan plants, but in small modular reactors, or SMRs — factory-built units with fewer parts, designed to be installed underground with passive cooling systems that the industry says are “inherently safe.”

Unlike large nuclear units, which are designed to operate full-tilt all year, SMR designers say the small units are flexible enough to be cranked up as needed to fill gaps in production from wind and solar-powered plants — a critical role as some see nuclear power as a carbon-free bridge between fossil fuels and renewable energy. The worldwide market for such reactors is expected to reach \$100 billion by 2035, according to the Nuclear Energy Agency, an intergovernmental organization based in Paris.

U.S. Agrees To Supply and Set Up Six Nuclear Reactors in India

March 14 (EIRNS)—The United States and India on March 13 agreed to strengthen security and civil nuclear cooperation, including building six U.S. nuclear power plants in India, the two countries said in a joint statement. The agreement came after two days of talks in Washington.

The United States under President Donald Trump has been looking to sell more energy products to India, the world’s third-biggest buyer of oil. The talks involved Indian Foreign Secretary Vijay Gokhale and Andrea Thompson, the U.S. Undersecretary of State for Arms Control and International Security.

“They committed to strengthen bilateral security and civil nuclear cooperation, including the establishment of six U.S. nuclear power plants in India,” the joint statement said, according to the New York Times report.

The United States and India have discussed cooperating on nuclear reactor technology for more than a decade, but liability rules of the Indian government have slowed those talks. Most international nuclear projects require the costs of any accident to be borne by the operator of the plant, rather than the maker of the reactor technology. India, though, places liability on the shoulders of those behind the technology.

Westinghouse has been negotiating to build reactors in India for years, but progress has been slow. Last April, Westinghouse received strong support from U.S. Energy Secretary Rick Perry for its India project, which envisaged the building of six AP1000 Pressurized Water Reactors in the southern state of Andhra Pradesh.

Yes, Population Reduction Is the Intent of the Green New Deal

First, from the bank that has reduced itself from its once leading role in creating Germany as a major global player in industrializing and uplifting the lives of millions, now its chief economist wishes to kill millions. Then we have a new book that claims, “*A child is the worst thing that can be done to the*

environment.” Those item is followed by a short excerpt from the article by Jason Ross on President Trump's proposed Committee on Climate Security to return science to some rationality. Ross's article should be read in full.

Population Reduction Will Help Protect Climate, Deutsche Bank Chief Economist Insists

March 20 (EIRNS)—David Folkerts-Landau, chief economist of Deutsche Bank, who is already on record with quite a number of weird proposals, now assesses that the climate protection policies of the German and other governments have so far failed, because they avoided a sober cost-benefit approach. A combination of market-based trade with emissions certificates and a carbon dioxide tax were definitely better, he claims.

The main contribution to climate protection would however be population reduction in the developing-sector nations. This should be made possible by a development policy involving (sustainable) investments in local supply of water, food, energy and health, as well as local environmental production.

As for the enhancement of development and implementation of sustainable technologies, Folkerts-Landau proposes a global research project in the range of \$100 billion annually. To have that, political decisions would have to be made, though, to reassign other budget posts, he says.

New German Book Insists a Child Is the Worst Thing You Can Do to the Environment

*March 7 (EIRNS)—German author Verena Brunschweiler, in her new book *Kinderfrei statt Kinderlos: Ein Manifesto (Child Free, Instead of Childless: A Manifesto)*, released yesterday by Büchner Verlag and is getting prominent coverage, as in today's *Bildzeitung*. The paper reports Brunschweiler's recommendation that if woman has no children on behalf of the environment, she should get a €50,000 reward when she becomes 50 years old.*

*Austria's daily *Die Presse* reports that, “The 38-year-old feminist researches the view that women who oppose children are courageous pioneers. Brunschweiler is quoted on the book's cover blurb: ‘To live without children means to rebel against social expectations—and is therefore also a feminist decision.’ ”*

*In an interview with the Austrian *Kurier*, Brunschweiler substantiates her point of view. She holds that the decision to not put children into the world is also an ecological one: “A child is the worst thing that can be done to the environment. Every child not born into the world has a CO2 saving of around 58.6 tons per year,” she told the *Kurier*.*

The newspaper continues, that “at the same time, the 38-year-old also criticizes some mothers. ‘There are often selfish or narcissistic motives behind the desire to have a baby. The entire culture is currently geared towards bringing children into the world.’ With her book, the German wants to help break this taboo.”

*The *Kurier* article concludes, “Brunschweiler is also politically active. Since 2002 she has been involved in the SPD [Germany's Social Democratic Party], especially in women's politics.”*

President Trump's Committee on Climate Security: A Much-Needed, Overdue Return to Science

by Jason Ross

https://larouche.pub.com/other/2019/4610-trump_committee_on_climate.html

This article appears in the [March 15, 2019 issue](#) of **Executive Intelligence Review**

President Donald Trump plans to appoint a panel to find out if man-made climate change is actually causing an imminent, irreversible, insurmountable, inescapable crisis that threatens not only the entire human species, but planet Earth as a whole. Shouldn't we find out whether there truly is an impending catastrophe before allocating literally trillions of dollars for prevention and remediation, putting at risk the well-being of billions of people who will be adversely affected by expensive and unavailable energy? The president's committee requires urgent support!

March 11—The Washington Post ran a story on February 20, centered on leaked National Security Council planning documents regarding an executive order to establish a committee “to advise the President on scientific understanding of today's climate, how the climate might change in the future under natural and human influences, and how a changing climate could affect the security of the United States.”

President Trump has asked Dr. William Happer, a distinguished and well-known Professor of Physics at Princeton, to head the presidential committee on climate science.

In an effort to prevent the formation of this committee, a vicious defamation campaign has been launched against Dr. William Happer, a distinguished scientist and Princeton Professor of Physics, who has been asked to head the committee. Happer is also a deputy assistant to the president and the National Security Council's senior director for emerging technologies.

The Post snidely noted that several studies have already been performed by various U.S. agencies, but that the NSC document had the audacity to assert that, “These scientific and national security judgments have not undergone a rigorous independent and adversarial scientific peer review to examine the certainties and uncertainties of climate science, as well as implications for national security.”

Happer, the former director of the Department of Energy's Office of Science (the Nation's largest supporter of basic research in the physical sciences, with an annual budget of \$6 billion), has been accused of lacking expertise in the subject matter and of being in the pocket of the fossil fuel industry. This last charge is both untrue in Happer's case, and is selectively applied: how often are proponents of impending climate doom attacked for being part of the multi-trillion-dollar Climate, Inc.?

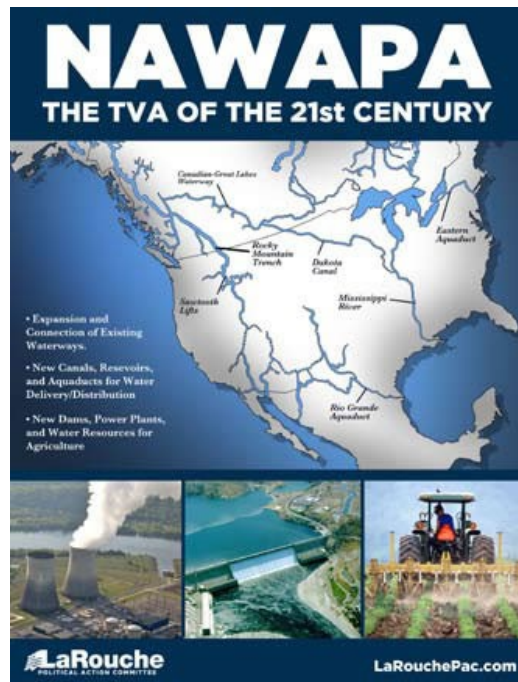
Two questions are being prominently raised: is the science settled, and what are the actual costs of the Green New Deal?

NAWAPA XXI - Feature

The long-term solution for the crisis of the Colorado River, and more, must be solved by thinking big. The “big think” is NAWAPA.

It Shall be NAWAPA That Will Provide Water to the Southwest
March 21, 2019

Build NAWAPA XXI-- Part III-- Conclusion



This is Part III, concluding our series of excerpts from the pamphlet, *“Platform for a New Presidency: The Full Recovery Program for the United States.”*

Originally Published by Executive Intelligence Review

June 7, 2013

“Build NAWAPA XXI”

https://larouchepub.com/eiw/public/2013/eirv40n23-20130607/20-30_4023.pdf

Part I appeared in the March 7, 2019 issue of this report:

<http://www.californiadroughtupdate.org/pdf/20190307-California-Water-and-Infrastructure-Report.pdf?t=1552011446>

Part II appeared in the March 14, 2019 issue of this report:

<http://www.californiadroughtupdate.org/pdf/20190314-California-Water-and-Infrastructure-Report.pdf?t=1552669647>

An introductory video:

<https://www.youtube.com/watch?v=TpX8SG03shU>

July 27, 2012 - This is the executive in-depth 30 minute tour of NAWAPA XXI, produced for water specialists, farmers, policy makers, and others who will be able to put their weight behind this life-like vision of the future.

Part III

Oregon-California Distribution System

By releasing a portion of the water collected in the Rocky Mountain Trench and adding it to the upper Columbia River, into the reservoir formed by Mica Dam, near Revelstoke, British Columbia, additional water will be available to be pumped out of the Columbia River further south, at the Dalles Dam into a reservoir and aqueduct system, beginning with a series of reservoirs on the Deschutes River, before continuing downhill through Central Oregon and Northern California, connecting with the Klamath and Sacramento rivers.

Connecting with Goose Lake and the Pitts River, increased water supply will flow into Shasta Lake, one of the key storage reservoirs of the Central Valley Project. An additional canal could be added to supply Eagle Lake, and link into Oroville reservoir. These connections will secure the nation's vital agricultural production of the Central Valley, making unnecessary the unsustainable pipe-line proposals to bring water from the Sacramento Valley to Southern California, and instead delivering a renewable supply from excess northern precipitation.

A 7-MAF storage reservoir will be created between Murdoch and Bald Eagle mountains, 50 miles east of Elko, Nevada. By connecting this reservoir with a 30-mile canal to the Humboldt River, water can be distributed across the state, ending at the Humboldt Sink, and from there, can be linked to Lake Lahontan, of the Truckee Carson Irrigation District, serving Northern Nevada, before continuing south and connecting with the Owens River, re-filling Owens Lake over time, reviving farmland.



The Great Basin and the Colorado Basin

NAWAPA XXI will tunnel into the Great Basin and the Colorado Basin, creating reservoirs on the tributaries of the Colorado River, feeding water into the main stem of the Colorado. A large distribution reservoir, up to four times the size of Hoover Dam's Lake Mead, will be formed in the Little Colorado River valley. Out of this central reservoir, tunnels and canals will form three reservoirs on the tributaries of the Salt River, three reservoirs on the tributaries of the Gila River, and a large reservoir on the headwaters of the Gila. A tunnel will connect a reservoir formed on the Gila River to the Rio Grande Basin, crossing and supplying water to the Rio Grande River, and forming a large reservoir on the Pecos River, which will supply West Texas and Mexico, and connect to eastern Colorado.

Throughout the Colorado and Rio Grande basins, pumping costs will be eliminated, farmland restored, and with the water added to Utah, Arizona, New Mexico, and West Texas alone, 14 million acres of farmland could be opened up. The average 11 MAFY currently flowing through the Colorado River will be increased up to 100% through these added reservoirs; the Pecos and Rio Grande rivers will become full and flow year round.

Approximately 30 new reservoirs will be formed in New Mexico, Arizona, Nevada, Utah, and Colorado, changing local climates, and expanding recreation. The storage capacity of the Rio Grande Basin will be doubled, from 20 MAF to 54 MAF, a 170% increase. The Colorado Basin will be increased by up to 230%, from 61 MAF largely from Lake Mead and Lake Powell, up to 230 MAF. A 7-MAF reservoir will be formed 50 miles north of Las Vegas, just north of Hayford Peak, in the Sheep Mountain range, distributing water to Southern Nevada and paralleling the Colorado River, supplying water to farms before continuing south to Mexico, and the Imperial Valley NAWAPA XXI will tunnel into the Great Basin and the Colorado Basin, creating reservoirs on the tributaries of the Colorado River, feeding water into the main stem of the Colorado.

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Mississippi-Missouri-Great Plains System

Water in the Canadian Prairie Canal will link up with the Missouri River at Lake Sakewea, as well as running along the Laurentian Continental Divide through the Dakotas, before connecting with the Mississippi River. These inputs into the Missouri and Mississippi systems will make feasible the following flood diversion projects. 1. Missouri River flood water will be diverted just downstream of the Fort Randall Dam, and pumped up a series of reservoirs on the Niobrara River. From there, water will run through a canal engineered to intersect key locations of the Ogallala Aquifer, supplying the Great Plains with water.

Missouri River flood water will be back-pumped from the north side of Kansas City, Kan., along the Kansas River before being piped to Hutchinson, Kan., where a world-class water purification plant could be built to purify water to the degree needed to discharge water into the Ogallala Aquifer. Water could also be added to the Arkansas River, along with any other programmed flow of water into the river from other elements of the system. 3. Mississippi River flood water could be diverted according to specific elements of the Texas Water plan, intersecting other plans.

Conclusion: NAWAPA XXI Imperative

Such a system must be begun to be constructed in the next few years. Government negotiations must begin with Canada and Mexico, with the goal of a joint credit and cooperation agreement by the United States for the building of NAWAPA XXI over a period of 15-20 years.

NAWAPA XXI will make it possible for the nations of North America to increase their agricultural and industrial power into the foreseeable future, rather than undergo self-cannibalization and allow whole sections of the United States to be shut down and depopulated.

Studies on the negative impacts of dam-building should be thrown aside. The failure to build the project has had the worst effects of all: the collapse of food production, abandonment of land, decreasing production and industry, and the threatened shutdown of whole cities throughout the West.

The dam-building process must continue. Mankind must build the higher process which takes mastery of the biosphere's cycles. That is real scientific development, not a stagnant process of watching our cities die and our farms close, and our population shrink, by submission to an ideology.

The historical development of the biosphere shows the stunning error of the over-population ideology. Increasing consumption of re-sources and energy in each evolutionary step of the bio-sphere has been the rule, made possible not by simply increasing consumption, but by increasing the supply through additions of new principles and new complexity to the system. Mankind's own technological advancement has mirrored this evolutionary process, something impossible for other animal species: Scientific discoveries and their application create new organizations, accessibility, and coordination of resources, as well as wholly new resources.

A society that willfully imposes an ideology that collapses its own growth process—an ideology at odds with the scientific history of the energy-flow of the biosphere and mankind's role in it—is unfit to survive. Only a fundamental break with the irrational ideology of over-population and conservation of re-sources, will lead to the sustainable development of mankind over the coming decades. Let us reverse the four decades of cultural and economic decay that we suffer from today, pick up where Kennedy left off, and turn our generation of youth and young adults from being a wasted generation into the generation that built NAWAPA XXI.