

California Water and Infrastructure Report

Formerly, the "California Drought (and Flood) Update"

For December 20, 2018 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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"After having foolishly spent \$7 trillion in the Middle East, it is time to start rebuilding our country!"

President Donald Trump

December 22, 2017

"We spent \$7 trillion in the Middle East. And you know what we have for it? Nothing,"

President Donald Trump

March, 2018

"As of a couple of months ago, we have spent \$7 trillion in the Middle East. Seven trillion dollars. What a mistake. But it is what is.... We're trying to build roads and bridges and fix bridges that are falling down, and we have a hard time getting the money. It's crazy."

President Donald Trump

February, 2018

A Note To Readers

One way money can be redirected to building infrastructure is to, as President Trump has often said, stop spending trillions on wars in the Middle-East. Well, the President is beginning to act on that idea. And, the proper approach in dealing with the migrant problem on the southern U.S. border is to create conditions in Mexico and the Central American nations in which people are not desperate enough to risk the trek to the U.S. border. And now the President is doing just that.

But, the real and only workable way to be able to put the \$2-3 trillion per year required into building and rebuilding the nation's infrastructure remains in killing this parasitical, bankrupt, speculative financial system and returning to the American System of Alexander Hamilton. That policy is best expressed today by Lyndon LaRouche's "Four Laws for Economic Recovery and the Four Powers Agreement" between the U.S., Russia, China and India. That will be the subject of this week's **Feature** below.

First, more on the President's actions over the past 24 hours:

President Trump is beginning to find some room to act upon his actual intentions, having consolidated support in the Senate in the election, making impeachment essentially impossible, while the British Russiagate hoax is crumbling. In the past 24 hours, Trump struck two blows on the Empire, declaring that all US troops and State Department operatives are being pulled out of Syria, quickly, while also declaring that the US and Mexico will proceed with large-scale joint investment into job-creating programs in the poverty-stricken (and drug-infested) areas of southern Mexico and the Central American nations of Honduras, El Salvador, and Guatemala.

On Syria, his spokesperson confirmed that the pullout will proceed rapidly. According to the *New York Times*, some Pentagon officials have been fighting tooth and nail to stop him, or at least make it a phased withdrawal, but Trump wouldn't break.

On Mexico, Trump has found common ground with the new Mexican president, Andrés Manuel López Obrador on the necessary means to deal with the illegal migration crisis — create jobs. AMLO on Tuesday morning said: "This is a new, different way of dealing with the problem of migration, which addresses the causes. The day is going to come, very soon, in which people are not going to emigrate from Mexico — at least, that is my dream." The deal agreed to yesterday will approximately double the US planned investment into the region, perhaps exceeding \$10 billion.

And today, pulling the troops out of Afghanistan appears to be next for this President:

WASHINGTON (Sputnik) – December 20--US President Donald Trump is considering a significant reduction of US troops currently stationed in Afghanistan, according to media reports.

The Wall Street Journal reported on Thursday citing US officials that a drawdown of American troops in Afghanistan could begin in several weeks.

The President is also in no mood to take prisoners, Republican or not:

President Trump hit back Thursday at GOP Sen. Lindsey Graham, his normally reliable ally, for opposing his decision to pull U.S. troops out of Syria.

"So hard to believe that Lindsey Graham would be against saving soldier lives & billions of \$\$\$," the president said in a tweet.

In This Week's Report

We begin this week's report with items on El Nino, the California Drought Monitor and a study claiming that the Southwest is now in a mega-drought.

To quote the opening sentence of the next section, "If you thought that California water policy could not get more chaotic, confused, and completely misdirected than it was last week, well this week has proven you wrong." Among such developments is the agreement between Governor Brown and the Trump administration that has the environmentalists chewing the rug. Of course, in response to the state going with restricted use of the San Joaquin Valley rivers, the farmers are up in arms. So, no one is really happy now, and the state's water policy as is, will be paralyzed for years unless Trump

becomes a new FDR.

The Colorado River, after 19 years of drought in the region, is heading for that moment that water managers have feared for years. Most likely rationing of the river's waters to seven states and Mexico will begin within one to two years, maybe sooner. An agreement on how to delay or even prevent that requires a voluntary de facto rationing now, which the Bureau of Reclamation is insisting be agreed upon by the end of January next year.

The Wildfires, PG&E, and Enron is the title of the next section. PG&E is being sued for the Camp Fire, and so it is worth exploring a little history of PG&E and how its bankruptcy in 2001 caused by the Enron criminal enterprise played a role in especially PG&E not hardening its equipment and burying electrical lines.

Two more items round out the report this week: "Trump was right about 'raking' Finnish forests," and under 'infrastructure,' "Another Eleven U.S. Nuclear Plants May Close, Threatening New Technology and R&D."

The "Feature" this week, recalling the turmoil leading to the crash of 2007-8 is from Yogi Berra, "Its Deja Vu All Over Again."

Weather, Drought, Mega-Droughts, and More

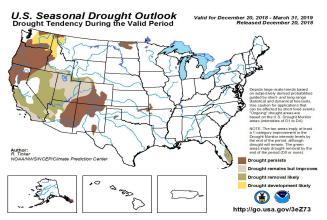
Outlook Issued by NOAA for the First Three Months of 2019

Dec 20, 2018

http://www.weathernationtv.com/news/outlook-issued-by-noaa-for-the-first-three-months-of-2019/

NOAA's Climate Prediction Center has issued their outlook for January to March 2019, which still indicates patterns of a weak El Nino. Warmer than average temperatures are predicted across the West and Northern Plains. Colder than normal weather is predicted for the Tennessee Valley. From the Southeast to the Southwest, wetter than average weather is in the forecast. In the Ohio Valley and Pacific Northwest, below normal precipitation is predicted.

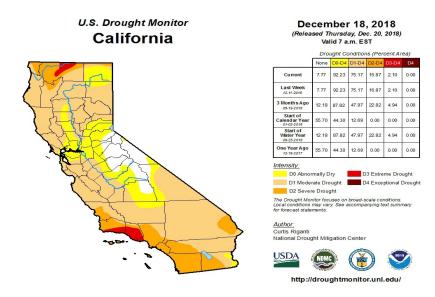
The drought forecast for the start of 2019 continues to show improvement across California and the Rockies. With the drier than normal forecast for the Northwest, drought conditions are likely to develop over that region.



The <u>extensively discussed El Nino is underway</u> in the Pacific Ocean, but the atmosphere has yet to

respond. Observed sea surface temperatures in the Pacific are warmer than normal as expected, with computer models expecting this to continue. Right now, the overall global pattern resembles neutral conditions. Based on the latest observations and model forecasts, the CPC still indicates a greater than 80 percent chance for El Nino from January to March and 70 percent that it persists through May.

U.S. Drought Monitor



Mega-Droughts

The following article stating that the 19-year drought focused on the Colorado River Basin must be classified as a mega-drought, has once again put some focus in the proper manner on the subject of climate change. Though the authors of the study succumb to the popular "man-caused climate change" theme, what is useful in their study is that it blows away all the extreme rhetoric that the Earth has never seen such dryness or "extreme temperatures" recently experienced.

For further reading on the topic, here is the book review I wrote in 2014 of *The West Without Water: What Past Floods, Droughts, and Other Climatic Clues Tell Us About Tomorrow* by B. Lynn Ingram and Frances Malamud-Roam.

Are We Controlled by the Whims of Nature, or Will We Create Our Future? by Patrick Ruckert

https://larouchepub.com/eiw/public/2014/eirv41n19-20140509/48-52 4119.pdf

Also, see the section below on the Colorado River for real world affects of the river now running at 20 percent below its long-term average flow.

The Southwest May Be Deep Into a Climate-Changed Mega-Drought

Global warming may have turned an already historic dry spell into the third-worst drought of the past 1,000 years.

<u>Robinson Meyer</u> December 18, 2018

https://www.theatlantic.com/science/archive/2018/12/us-southwest-already-mega-drought/578248/

Every so often, the American West seems to lurch into something called a "mega-drought." The rains falter, the rivers wither, and the forests become tinder boxes waiting for a spark. Mega-droughts are notoriously hard to study—the last one happened in the 16th century—but what we do know is worrisome. In the 1540s, a few wet years in the middle of a mega-drought <u>may have triggered</u> one of the worst disease epidemics ever recorded.

According to research unveiled last week, mega-droughts may no longer be history. On Thursday, a team of climate scientists argued that the American West may currently be experiencing its first mega-drought in more than 500 years. A record-breaking period of aridity set in around the year 2000 and continues to this day, they said.

"The last 19 years have been equivalent to the worst 19 years of the worst mega-droughts on record," <u>said Park Williams</u>, a professor of bioclimatology at Columbia University, at a presentation of the work. Only three recent mega-droughts—in the late 800s, the mid-1100s, and the late 1500s—were worse than the current period, he added.

"The definition of mega-drought technically is open to debate," said <u>Jonathan Overpeck</u>, a climate scientist at the University of Michigan. Two decades ago, he and the climate scientist <u>Connie Woodhouse</u> coined the term mega-drought <u>in a paper</u>, specifying that such a drought must last 20 years or more.

"The drought in the Southwest is now in its 19th year. So it's right on the cusp of technically being a mega-drought," Overpeck told me.

The current drought is "relentless," he said, with consequences that reverberate across the West. "It's reflected in the levels of <u>Lake Mead</u> and <u>Lake Powell</u>, the two largest reservoirs in our country ... You see it in the way the forests are outright dying in some places, in big insect outbreaks as [plants] are weakened by a lack of moisture in the soil, in more catastrophic wildfires. There's a lot of signs this drought is unusual."

He said that two different events seem to be driving the crisis. First, the region is receiving less rain than normal. Second, the Southwest as a whole is systematically warming up and drying out. It's becoming a more desertlike place, a process that scientists call <u>aridification</u>. "Most of the work points to aridification being dominant" in driving the modern drought, Overpeck said.

The California Water Wars: Chaos and Confusion Now Reigns

If you thought that California water policy could not get more chaotic, confused, and completely misdirected than it was last week, well this week has proven you wrong. And I am not going to attempt to explain it. Make what you can of the following excerpted articles. Just one comment from me: Some people, especially farmers are really getting pissed off. Nothing but a revival of the Franklin Roosevelt, John Kennedy and Pat Brown approach to big, huge, gigantic projects and the necessary issuance of federal government credit to do that is even worth discussing.

California cedes water to feds in Delta deal with Trump

By Dale Kasler and Ryan Sabalow

December 15, 2018

https://www.sacbee.com/latest-news/article223114775.html? fbclid=IwAR1qYBSR5U0EJstMnqOvbtH2f4iUFu4L6me8DaIJhaGteXFWoyRMW3JvDgI Southern Californians could lose billions of gallons of water a year to Central Valley farmers under a deal Gov. Jerry Brown's administration has struck with water officials working for President Donald Trump.

There's no guarantee the agreement with Trump will accomplish what Brown's team is seeking: a lasting compromise on environmental regulations that could stave off significant water shortfalls for farms and cities across California. A powerful state agency, the State Water Resources Control Board, hasn't yet signed off on Brown's compromise environmental proposal. Environmental groups have called the governor's idea woefully insufficient to save ailing fish populations.

Brown's administration also made a separate concession to the Trump administration on the governor's <u>controversial Delta tunnels</u> project, to the dismay of environmental groups that oppose the tunnels.

The various deals began to come to light Wednesday, as the state water board, made up of Brown appointees, was about to vote on a plan that would take substantial amounts of water from cities and farms and leave it in the state's rivers to assist struggling fish species such as salmon and steelhead.

Hoping the board would back down, Brown's administration rolled out a <u>bold but tentative water-sharing agreement</u> supported by irrigation districts and urban water suppliers. Under the proposed settlements, farms and cities that rely on the State Water Project and the federal government's Central Valley Project agreed to surrender a smaller volume of water. They also pledged to kick in hundreds of millions of dollars in cash for habitat improvement projects, to boost the ailing fish.

Brown's compromise also got support from water agencies that don't take water from either the state or federal project, but stood to lose supplies to the state board's plan. They include the city of San Francisco, which relies heavily on water from the Tuolumne River.

For state officials, forging this grand compromise appears to have come at a price to the State Water Project and its biggest customer, the Metropolitan Water District of Southern California.

Jeff Kightlinger, general manager of Metropolitan, said federal officials signaled they wouldn't participate in Brown's compromise plan unless the state gave up some water through the new rules governing the Delta pumping.

Agreement reached on Coordinated Operation Agreement for the State Water Project and the Central Valley Project, cost sharing

December 14, 2018

From the Department of Water Resources:

Yesterday, the Department of Water Resources (DWR) and the Bureau of Reclamation reached agreement on updating how the State Water Project (SWP) and Central Valley Water Project (CVP) are operated to meet environmental regulations.

"The state and federal projects are intertwined, and we have a joint interest and responsibility to ensure our water system meets California's needs especially as conditions change," said DWR Director Karla Nemeth.

The Coordinated Operation Agreement (COA) was originally signed in 1986 and defines how the state and federal water projects share water quality and environmental flow obligations imposed by regulatory agencies. The agreement calls for periodic review to determine whether updates are needed in light of changed conditions. After completing a

joint review process, DWR and Reclamation agreed to an addendum to the COA to reflect water quality regulations, biological opinions and hydrology updated since the agreement was signed. The original Agreement can be found <u>here</u> and the 2018 addendum is <u>here</u>.

DWR and the Bureau also signed an agreement to formalize the cost sharing formula for projects needed to meet joint responsibilities under the Endangered Species Act (ESA). The new agreement calls for costs to be shared equitably between the state and federal projects for work to meet joint responsibilities under the ESA, including monitoring and habitat restoration. The cost sharing agreement can be found here.

'This plan is illegal.' Merced Irrigation District challenging state's water decision

By Ken Carlson

December 19, 2018 05:22 PM

https://www.modbee.com/news/article223341385.html

The Merced Irrigation District board gave direction Wednesday to take legal action challenging the state's Bay-Delta water quality control plan, which is strongly opposed by communities in the Northern San Joaquin Valley.

A series of lawsuits against the state's "water grab" are expected from affected irrigation districts, following last week's decision by the State Water Resources Control board approving the regulatory plan and a supplemental environmental study.

The Merced district vowed to aggressively fight the plan calling for increased river flows in the lower San Joaquin River tributaries, including the Merced, Tuolumne and Stanislaus rivers.

Officials in Stanislaus and Merced counties predict the resulting cuts to agriculture and city customers will damage the economy and lead to groundwater overdrafting.

"This plan is illegal and it is not scientifically sound," said John Sweigard, Merced Irrigation District general manager, in a news release. Sweigard's statement said the state water board requirements will create unnecessary harm to domestic and agricultural water supplies and the local economy, while providing "almost nothing to improve conditions or habitat for fish."

The state can't be trusted on water. The courts are our last resort

By The Merced Sun-Star Editorial Board

December 13, 2018 01:23 PM,

Andrew Kuhn akuhn@mercedsun-star.com

https://www.mercedsunstar.com/opinion/editorials/article223066285.html

No matter how many state bureaucrats, well-heeled environmentalists and even a few odd poets vilify those who depend on the Merced River, John Sweigard says he won't stop trying to save the salmon that depend on it.

"MID is not going to quit pursuing comprehensive salmon restoration on the Merced River," said Sweigard. "Because if (salmon survival) is not addressed, it's always going to be an issue used to come after our water rights."

Sweigard spoke as the State Water Resources Control Board met Wednesday in Sacramento. Like many

others form the Northern San Joaquin Valley who attended, he feared the worst. And that's what the state water board delivered.

Through a regulatory mechanism called the Substitute Environmental Document, the board voted 4-1 to double or triple the amount of water left in the Merced and Tuolumne rivers presumably to help salmon. On the Stanislaus River, the state would increase unimpaired flows by a third to two thirds.

The three rivers provide virtually all the flows for the San Joaquin River as it enters the Sacramento-San Joaquin Delta. The state insists more water is needed from our rivers to save the Delta, which gets 80 percent of its water (and 90 percent of its salmon) from the Sacramento River.

The dramatic reductions in irrigation water will cause tens of thousands of acres to be fallowed, and force many farmers to remove permanent tree crops for annual crops that can be abandoned during drought.

'This is an assault on farm workers' Farmers react to state 'water grab' approval

Lena Howland

December 13, 2018

https://www.abc10.com/article/news/this-is-an-assault-on-farm-workers-farmers-react-to-state-water-grab-approval/103-623433309

Farmers worry the controversial Bay-Delta plan will harm the future of California's farming industry.

The Colorado River

Forty million people in California, six other states and Mexico depend upon the waters of the Colorado River. Maybe some in the northern part of California do not recognize that the Imperial Valley agriculture and much of Southern California are at risk when the river and its reservoirs reach mandatory rationing levels. The item in the first section above on mega-droughts in the southwest should also be read in conjunction with the following reports.

Federal official threatens takeover of key Colorado River decisions from states

- By Tony Davis Arizona Daily Star
- Dec 13, 2018

<u>https://tucson.com/news/local/federal-official-threatens-takeover-of-key-colorado-river-decisions-from/article_643e0c7f-bdac-5acf-8c33-14bfc8bee576.html</u>

A drought contingency play has been approved by the Arizona Department of Water Resources, CAP and Gov. Doug Ducey. But a committee representing the state's key water interest groups and the Legislature must adopt the plan.

The federal Bureau of Reclamation commissioner threatened Thursday to take over some crucial Colorado River management decisions if Arizona and California don't quickly approve drought plans.

Commissioner Brenda Burman said she would take unspecified actions to protect Lakes Mead and Powell and the river itself if the states don't approve drought contingency plans by the end of January. Acknowledging that both states are close to approving plans, she emphasized, "almost is not done."

While it's unclear what she would ultimately do, officials of the basin states have long speculated that

Reclamation would order specific cuts in river supplies to individual states to keep the reservoirs from crashing.

Burman noted that Colorado, New Mexico, Utah, Wyoming and Nevada have all adopted drought contingency plans although Arizona and California have not.

Given "sobering" hydrology on the river, with Lakes Mead and Powell 46 percent full, "the risk to the basin is too great to wait any longer," Burman said at the Colorado River Water Users Association conference.

She said 2018 turned out to be the Colorado River's fourth-driest year on record.

Now, "anyone who is hoping that a wet year would bring us around needs to step back and realize that's not the thing that's going to help us here," Burman said.

The forecast is for Lake Mead to be below 1,050 feet by September 2020, Burman said.

The bureau has already predicted a 57 percent chance of the river's first shortage in 2020. That would cut river deliveries to Arizona by 320,000 acre-feet without a drought plan and 512,000 acre-feet with a drought plan. That shortage will occur if Mead, now at about 1,079 feet, drops below 1,075 feet at the end of 2019. (One acre-foot is enough water to serve four Tucson households for a year.)

But if Mead drops to between 1,050 and 1,045 feet at the end of a year, the river will hit the second level of shortage, cutting deliveries to Arizona by much more: 400,000 acre-feet without a drought plan and 592,000 acre-feet with a plan. The latter figure is nearly 40 percent of CAP's annual supply.

"It is time for us to pay attention. We are quickly running out of time," Burman said. "Today's risk is unacceptable and the chance for crisis is far too high."

How best to share the disappearing Colorado River

Seven Western states must rewrite the rules of the river and cut water use — before they bleed the critical artery dry.

<u>Paige Blankenbuehler</u> Analysis Dec. 20, 2018 <u>https://www.hcn.org/articles/water-how-best-to-share-the-drought-plagued-colorado-river</u>

The agreement to keep Lake Powell above the critical levels aims to prevent smaller releases to Lake Mead that would affect Lower Basin States.

As early as 2020, hydrologists forecast that the level of Lake Mead, the largest reservoir on the Colorado River, could drop low enough to trigger the first water shortages in its downstream states of Arizona, Nevada and California.

The three states in the river's Lower Basin have long feared shortages. But the continued decline of Lake Mead reflects a reality they can no longer ignore: Demand for the river's water, which supports 40 million people from Wyoming to California, has long outpaced the supply. On top of that, the supply is shrinking, as the spring snowmelt that once filled reservoirs becomes less reliable, and historically high temperatures evaporate the water that remains. Booming populations, drought and climate change will continue to compound the imbalance. The river's flow has declined by nearly 20 percent in the last 15 years alone, and it could plummet another 55 percent before 2100, according to climate scientist Brad Udall at the Colorado Water Institute.

Now, to stave off catastrophic shortages and win-or-die legal battles that could leave some communities high and dry, the seven states in the river's Upper and Lower basins are close to finalizing a deal to prepare for a much drier future. The so-called Drought Contingency Plans would

distribute the pain of the coming cutbacks between the Upper Basin states, where most of the water originates, and the Lower Basin ones, which use more than half of the river's water, sustaining cities and agriculture in the nation's most arid landscapes.

At the moment, scarcity isn't as much of an issue in the Upper Basin, which still has plenty of water but lacks an adequate system for storing it. That has historically encouraged Upper Basin water users to use as much of their share as possible and send as little water as necessary on to Lake Powell.

Lake Powell sits just upstream of Lake Mead. Its main function is to ensure that the Upper Basin can meet its annual obligation to deliver water to the Lower Basin. Just how much the Upper Basin states have to send to Lake Mead, though, depends on Lake Powell's water level. That matters because if the Upper Basin keeps using its entire allotment, and the overall supply keeps shrinking, Lake Powell could drop to levels that will deliver yet another hit to the Lower Basin's already fragile supply.

For the Lower Basin states, then, the drought-planning process is an exercise in self-protection. It's intended to show that they're starting to address their overuse — and convince the Upper Basin states to help protect them from catastrophic loss.



The Colorado River Basin watershed spreads across seven Western states. The Colorado River supplies water to more than 44 million people. U.S. Bureau of Reclamation

The Lower Basin has been trying to hash out a plan to reduce water use for a few years now. Arizona and California have yet to fully resolve major internal conflicts over how much water to conserve and where to do it. But once they do, the three Lower Basin states will sign a joint agreement to begin leaving more water in Lake Mead. The long-term goal here is to correct the reservoir's so-called "structural deficit." To halt its decline, in other words, the Lower Basin states need to stop taking out more water than flows in each year. For their part, the Upper Basin states — Wyoming, Colorado, New Mexico and Utah — have already finalized a collective agreement to keep Lake Powell above the critical levels that would trigger smaller annual releases to Lake Mead.

Once both basins' agreements are final, all seven states need to ratify the entire package. They have until Jan. 31 to iron out the final details and bring the package to the U.S. Congress for a final vote. Should they fail, the federal government has threatened to step in and impose its own plan.

As negotiations enter their final stages, here's an overview of the dynamics in each state — and the questions that still need to be resolved.

The Wildfires, PG&E, and Enron

The last article in this section below reports on one of the many, perhaps hundreds of lawsuits being filed against PG&E for the Camp Fire that destroyed the town of Paradise in November. It is true that state legislation limits the liability of PG&E and other private utilities in the state for damage they may be responsible for because of failed equipment or other causes.

But one topic that no one is touching in discussions of both that and what the utilities are doing to harden their equipment and facilities and to bury electrical lines, is that PG&E was driven into bankruptcy in 2001 directly by Enron criminal manipulation of California electricity markets, following the deregulation of electricity in the state. Pacific Gas and Electric Co. filed for Chapter 11 bankruptcy protection after amassing \$9 billion in debt buying electricity during California's Enron created electricity shortages.

Here is excerpted one article on the Enron manipulation, following links to two videos on the Enron criminal enterprise that cost not only PG&E \$9 billion, but cost the state of California \$30 billion and the rate payers of California \$80 billion.

The political crisis created by the chaos resulted in the recall of Governor Gray Davis and the election of the disaster named Arnold Schwarzenegger.

Videos:

The first one is a pay for video documentary. Well worth the \$3.00

Enron: The Smartest Guys In the Room

https://www.youtube.com/watch?v=BIwFO4 SWQQ

The Enron Scandal - A Simple Overview

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

Tapes reveal Enron's secret role in California's power blackouts

Julian Borger in Washington

Fri 4 Feb 2005

https://www.theguardian.com/business/2005/feb/05/enron.usnews

Newly discovered tapes have revealed how the energy corporation <u>Enron</u> shut down at least one power plant on false pretences, deliberately aggravating California's crippling 2001 blackouts with the aim of raising prices.

The tapes also show that Enron, whose bankruptcy three years ago was the biggest corporate scandal of recent times, manipulated energy markets in Canada and was planning to rig the Californian market even before deregulation in 1998, for which the Texan corporation actively campaigned.

The most damning revelations concern Enron's secret role in creating artificial power shortages in California, helping to trigger an energy crisis in 2000 and 2001 which cost residents billions of dollars in surcharges.

Enron's former chief executive, Kenneth Lay, an enthusiastic financial backer and friend of President Bush (to whom he was "Kenny Boy"), has been charged with fraud and is facing trial, along with two

other company officials, in Houston in September.

Those charges mainly involve allegedly cooking Enron's books to make the energy brokerage appear more profitable and boost its stock price. The new evidence suggests the company may also have promoted deregulation so enthusiastically because it knew it could fix the system to its own advantage.

"Enron, more than any company in California came in with consultants and presentations to all the legislators and policymakers to explain how deregulation would work, to explain how Enron was just trying to help," Eric Saltmarsh, executive director of California's Electricity Oversight Board, told the Guardian. "It later turned out to be part of their scheme. From the earliest days of deregulation, Enron was arguing for market structures that from the beginning it took advantage of."

On one tape, an Enron official named Bill tells an employee called Rich at a Las Vegas power plant to take the plant offline on a confected excuse. The conversation took place on January 17 2001, in the last days of the Clinton administration, as blackouts were rolling across California, cutting off electricity to more than one million people, and after the energy secretary, Bill Richardson, had ordered generators across the west to direct their output to the troubled state.

"Ah, we want you guys to get a little creative, and come up with a reason to go down," Bill says on the tape. "Anything you want to do over there? Any cleaning, anything like that?"

"OK, so we're just comin' down for some maintenance, like a forced outage type thing?" Rich replies, according to transcripts published yesterday. "I think that's a good plan, Rich," Bill says. "... I knew I could count on you."

Lawsuit: Poorly maintained PG&E transmission tower started Camp Fire

<u>J.D. Morris</u> Dec. 7, 2018 Updated: Dec. 7, 2018 6:27 p.m. <u>https://www.sfchronicle.com/california-wildfires/article/Lawsuit-Poorly-maintained-PG-E-transmission-13450713.php</u>

A group of Camp Fire survivors claim in a new lawsuit against Pacific Gas and Electric Co. to have pinned down how the deadly fire started, blaming the ignition of the blaze on a specific part of one of the utility's transmission towers in Butte County.

The suit filed Thursday in San Francisco Superior Court says the unprecedented fire began last month east of Paradise because of a poorly maintained "jumper" extension, which leads wires from one side of a transmission tower to another.



Photo published in the complaint of a lawsuit shows the Concow origin site after Cal Fire had removed the distribution pole (marked by the red cone) near where the ignition occurred. The lawsuit alleges the fire was triggered when a charged power line fell to the ground. Photo: Corey, Luzaich, De Ghetaldi & Riddle LLP

As intense winds blew through the area Nov. 8, an uninsulated jumper cable made contact with the PG&E tower in question, sending "blazing hot molten materials" into dry vegetation and sparking what became California's deadliest and most destructive wildfire, according to the lawsuit.

Attorneys place blame directly on "PG&E's failure to properly inspect and maintain the tower," according to the lawsuit, which was filed on behalf of 34 people who said they lost homes or property in the fire.

"PG&E's entire system is old and decrepit, and instead of inspecting and maintaining it in a prudent fashion, they simply let it run until it fails and then fix it," said Mike Danko, one of the attorneys involved in the suit. "Most of the time, you get away with that. ... But you don't get away with it in the situation that we have with the drought and the dry conditions."

As Paul Harvey Used To Say: "And Now the Rest of the Story"

Trump was right about "raking" Finnish forests

By Mikko Paunio

December 12, 2018

https://wattsupwiththat.com/2018/12/12/trump-was-right-about-raking-finnish-forests/? fbclid=IwAR2oK1JR9gN9rA_f2dywT-QhasL7r0xZKtnp84Tnxvp34kH2AYgoe6dqk3E

Mikko Paunio of Helsinki, Finland is a science and policy adviser of the American Council on Science and Health. He has served with numerous national and international climate adaptation working groups.



President Donald Trump was recently ridiculed for telling California Governor Jerry Brown that the Golden State should do as my country does. Trump critics laughed at what some called his "bizarre" claim that foresters in Finland "rake" areas that have been thinned or clear-cut, to remove leaves and other debris that could otherwise start conflagrations like the recent tragic fires in California.

Ironically, all this happened at just about the time that Finland's own forest specialists declared that Mr. Trump was correct about what he told Governor Brown. The foresters disseminated that information widely to the Finnish media and public.

One of the most pressing ecological problems today is preservationist forestry principles. This ideological approach prevents harvesting mature (or even any) trees, thinning out dense stands of timber to remove excess biomass (and thus allowing remaining trees to grow better, faster, thicker and taller), or even removing dense underbrush. This leads to an over-accumulation of biomass in trees and on forest floors. It makes forests vulnerable to raging and fast moving forest fires, especially

during dry seasons, even more so when winds are blowing.

If these policies are accompanied by active suppression of forest fires over long periods of time – or by policies of not dousing "natural" fires until they become really big and dangerous – any ignition can lead to catastrophic events that cause tragic loss of property and human lives.

The "confusion" over what President Trump said unfortunately came initially from the Finnish side, as even our media thought "raking" meant only light removal of leaves, pine cones and other debris from forest floors. Even Finnish president Sauli Niinistö did not understand that the practice really involves "raking" with heavy machinery that removes extensive amounts of combustible material. Mr. Niinistö simply told Mr. Trump he could rely on advice from Finland to prevent catastrophic wildfires.

In Finland, after clear-cutting a forest area, crews use heavy machinery (similar to what is used in this video) to "rake" or gather tree harvesting residues, tree roots and other material into huge piles. The biomass is then chipped onsite after it has dried up sufficiently, and chips are hauled to local heat-producing plants to generate warmth for local residents.

Infrastructure

Another Eleven U.S. Nuclear Plants May Close, Threatening New Technology and R&D

Dec. 19 (EIRNS)—The crisis in the U.S. nuclear electric utility industry continues, with another 11 operating nuclear power plants under threat of closure by 2025. According to data from the U.S. Energy Information Administration, the peak for operating reactors, at 112, was in 1990. As of August this year, there were 98.

An article published in U.A.E. daily The National on Dec. 17, begins by comparing the imminent shutdown of Three Mile Island, with a loss of 700 jobs, to the growing orders for nuclear plants in the Middle East and North Africa. By 2030, the region is set to add more than 15 GW of nuclear capacity, a "quantum leap" from zero currently.

It goes on to describe a July paper on the role of nuclear power in as a "low-carbon wedge" in the Proceedings of the National Academy of Sciences. The authors studying the future of the U.S. nuclear power industry are not optimistic, even about the new generation of smaller reactors. While these SMRs are more efficient than the current generation, their capital cost is made significantly higher than comparable natural gas plants, and the siting, safety and licensing procedures are more complex and time consuming.

None of these cost factors, however, is a fact of nature, no matter the plant size. From the higher interest rates charged by Wall Street to allegedly "high-risk" nuclear, to the regulatory over-kill and hysteria about safety, they are all political, not physical or technical factors, which artificially make nuclear "too expensive." As a result, only one new nuclear plant has come online in the U.S. in this century, and the country has an industry that is in decline.

As the fleet of operating nuclear power plants shrinks, so, too, does the pool of experienced, skilled engineers and operators, along with the capacity of the manufacturing industry, and the investment in R&D. And the industry is quickly reaching that of a poor-nation status.

John Quelch, the dean of the Miami Business School, is quoted by The National: "Innovation lags when you don't have the opportunity to bring your ideas to commercial reality. If you need a nuclear power station today, you'd buy it from China, France, Korea, or Russia."

Feature

"Its Deja Vu All Over Again" (thank you, Yogi Berra)

As the financial markets freeze up, visions of 2007-8 may be dancing in your heads; and not visions of sugar-plums this Christmas Eve.

Alan Greenspan, the former head of the Federal Reserve put it this way on Tuesday: "Run, run for cover."

Bloomberg reports today, "Besieged by investor withdrawals, mutual funds that invest in risky corporate loans have been unloading big chunks of loans in recent days. The selling is driving down prices to levels not seen in more than two years and forcing banks to keep some of the unwanted debt on their balance sheets. In just the past four trading days, investors have pulled \$2.2 billion from all loan mutual funds and exchange-traded funds. That brings withdrawals from the asset class to almost \$9 billion since mid-November."

They come to this point: "The plunging debt prices are making it difficult for banks... It's all added up to a tough time for banks trying to sell risky loans used to fund buyouts ahead of the transactions closing."

This is just another report on a march of events, and many financial officials have made clear they know what is waiting, soon, at the end of it, if hard Brexit and derivatives failures don't blow it out sooner. Their reassurances -- this time the big banks will have enough capital to survive it -- are fools' wishes. The only way to survive it is to preempt with Glass-Steagall and let these Wall Street operations go bankrupt, preventing them from "offloading" on everyone else.

And today:

The Dow dropped 464 points, or 2%, on Thursday. The index closed below 23,000 for the first time since October 2017. The Nasdaq lost 1.6% and only narrowly avoided closing in its first bear market since the Great Recession. The S&P 500 declined 1.6%.

And US oil prices are in free fall, ending below \$46 a barrel for the first time since August 2017.

Who Benefits from the Chaos of the Global Financial System?

https://larouchepac.com/20181205/who-benefits-chaos-global-financial-system

A nine minute video.

Ever wonder what happened to the stable system of fixed exchange rates FDR created after the war? Who dismantled it, and why? What would it take to rebuild a system of stable monetary agreements that would foster economic growth worldwide?

Zepp-LaRouche argued in her weekly Schiller Institute webcast December 20, contrasted the two systems before the world:

"The American System of economy and that system which has been promoted by Gottfried Wilhelm Leibniz, who was the first one to develop this notion of physical economy, and which was subsequently promoted by Alexander Hamilton, by Friedrich List, by Henry C. Carey, and which was for sure developed very much further by my husband Lyndon LaRouche—that system assumes that the only source of wealth is the creativity of the individual, because it's the ability of human beings to again and again discovery universal, physical principles, which are otherwise called scientific progress. And

when you apply that scientific progress in the production process as technology, it leads to an increase in productivity and therefore, an increase in the living standard, longevity and the wellbeing of the population. And that is essentially what the Chinese model is approximating today.

"This is in stark contrast with the neo-liberal monetarist model, the so-called 'British model,' which looks not at the creativity of the individual, but at money—money, money, money. And therefore, this monetarist view is quite satisfied if the stock value increases, if the profit increases, if all these things lead to a temporary illusion of an increase in money, which for the most part is virtual. And obviously, we have seen the spread of this neo-liberal system, especially after the collapse of the Soviet Union, where all gaps and stops were taken out and the deregulation of the markets was just going haywire, and that led to the 2008 crash. The remedy was to print more money, they did not correct the causes of the 2008 crash, but went for 'quantitative easing,' money printing, defense of the speculators and the banks, and that has resulted in the fact that we are now on the verge of an even bigger blowout."

https://larouchepac.com/20181220/lies-about-china-russia-trump-come-neo-liberals-who-have-bankrupted-their-own-system

LaRouche's Four Laws for Economic Recovery and the Four Powers Agreement

Lyndon LaRouche has provided us with the Four Laws which can produce the economic recovery of the United States:

- 1. Re-enactment of the Glass Steagall Act separating commercial from speculative banking and ending public bailouts of Wall Street gambling debts;
- 2. A new national bank or other credit-issuing mechanism, such as Lincoln's Greenbacks, capable of producing massive amounts of credit for long-term economic projects;
- 3. Use of this national banking mechanism to fund only such projects as will raise national productivity and create high-paying jobs in productive sectors of the economy; and
- 4. A crash program to develop fusion power, the energy source of the future, the energy flux density and power of which allows us to transform raw materials, power entire continents, and power space exploration and colonization.

The most obvious place to invest the financing available through this long-term credit mechanism and participating private banks is in building a modern infrastructure platform for the U.S. economy, while also creating crash programs to develop fusion and explore near space and the Moon. Since we have damaged our physical economy, and savaged our labor force in the last decades, a crash effort in this respect is urgent if we are to raise productivity and ensure long term growth. New programs in classical education and the sciences and programs drawing our youth into rebuilding the country, akin to the CCC, are necessary elements of this economic thrust. The optimism generated by such a national mission is the best antidote to the drug epidemic and mental instability presently haunting our country, although major rehabilitative and interdiction efforts must also be urgently and ruthlessly undertaken in this regard.

None of this is possible, however, if the present financial system is allowed to continue and suffers its inevitable crash. An uncontrolled collapse will mean the certain unnecessary death and suffering of millions throughout the world. Just like we know how to prevent the fires in California, we know what type of stable financial system will allow for a world-wide economic renaissance, namely, a revived Bretton Woods system among sovereign nation states trading between themselves to massively advance each and every economy and human being in the world.