

California Water and Infrastructure Report

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



For August 16, 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>

patruckert@hotmail.com

Wednesday, August 15, 2018, was the 47th anniversary of Richard Nixon's Aug. 15, 1971 announcement that he was taking the dollar off the gold standard, which de facto meant the destruction of the post-war Bretton Woods system. This opened the floodgates to the creation of a London-based "dollar" currency for global speculation, a cancer which ended up taking over the U.S.-based dollar itself. It also was the end of the entire fixed exchange rate system for trade between nations, which meant that, for developing sector nations, the wall between international speculation and their national currencies was demolished. Whole nations once again became colonial satraps of the City of London with a living hell of war, drugs, and poverty quickly taking over.

A Note To Readers

The quote above is from a LaRouche PAC statement, of which you will find the entirety of it on page 14 of this report. Suffice it to say, for now, that 47 years of a deregulated financial system has not only collapsed the real physical economy of the United States, but also created a population that does not even know the difference between industry, infrastructure and scientific progress on one side, and gambling casinos on the other.

In This Week's Report

There continues to be some excitement about the President's tweets regarding California fires this past week, but also some serious discussion regarding especially the necessity of a dramatic change required in forest management practices. That will be covered in the report below, beginning on page 10.

But, we shall begin this week's report, as is my usual practice with coverage of the drought conditions, the climate and the weather. Also included in this section is coverage of the fires. Wildfires, of course, are still in the headlines, but rather than just reprint what is readily available, I shall cut the articles short and mostly post here links to the more interesting ones.

Beginning on page 5 is the Oroville Dam Update, which has extended excerpts from an excellent article on the state of the construction repair by Paul Rogers of the *Bay Area News Group*.

Under the title of “Water War,” the two fields of battle: The “California WaterFix,” and the State Water Board proposal to require a 40% unimpaired flow standard for the Lower San Joaquin River and its tributaries, are featured. Both battles are both coming to a head and will largely shape for decades to come whether the California water management system shall be able to provide the people of the state with the water required for its future population.

“Fires and Forests” provides some insight into one of the topics of the President's tweets on the California fires-- the overgrown and littered forests that provide the fuel for the extreme intensity of recent years' fires.

Infrastructure news this week included just one item: “Building More Nuclear Plants Lowers Electricity Prices; Closing Them Will Raise Prices.”

Then on the topic of trade and tariffs, which the present state of near trade war with China is devastating some in the agriculture sector, we have a warning from China that the lost trade by farmers may never be recovered.

The full article from which the introductory quotation above is taken, “Financial Blowout Before the U.S. Midterm Elections in November,” comes next.

Finally, the Feature this week has the links to all eight parts of the series of classes on LaRouche's Economics.

Drought, Weather and Fires

Record heat in California is no fluke, experts warn

By RONG-GONG LIN II AND JAVIER PANZAR Los Angeles Times

August 05, 2018 01:00 AM

<https://www.fresnobee.com/news/nation-world/national/article216130110.html>

SAN FRANCISCO – At Scripps Pier in San Diego, the surface water reached the highest temperature in 102 years of records, 78.8 degrees.

Palm Springs had its warmest July on record, with an average of 97.4 degrees. Death Valley experienced its hottest month on record, with the average temperature hitting 108.1. Park rangers said the heat was too much for some typically hardy birds that died in the broiling conditions.

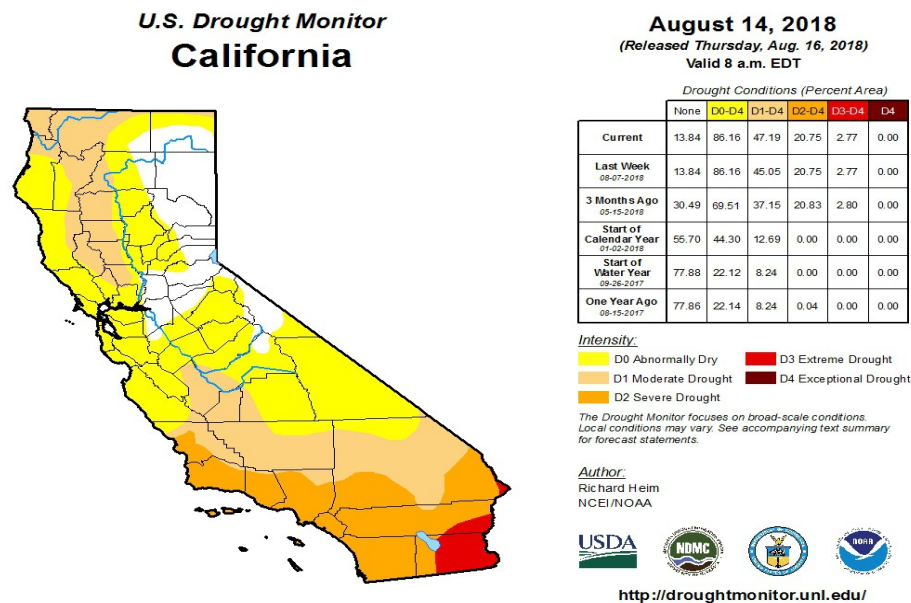
Across California, the nighttime brought little relief, recording the highest minimum temperature statewide of any month since 1895, rising to 64.9.

California has been getting hotter for some time, but July was in a league of its own. The intense heat fueled fires across the state, from San Diego County to Redding, that have burned more than 1,000 homes and killed eight. It brought heat waves that overwhelmed electrical systems, leaving swaths of Los Angeles without power for days.

Of particular concern is how overnight temperatures continue to climb. The years with the top six warmest summertime minimum temperatures in California – defined as June through August – in descending order, are 2017, 2015, 2014, 2006, 2016 and 2013.

Before this July, last year's was the hottest on record at Death Valley, when the average temperature hit 107.4. That one broke a 100-year-old record.

The U.S. Drought Monitor for August 14, 2018



July 2018 warmest month in California history; unprecedented early-season wildfire activity continues

by [Daniel Swain](#) on August 9, 2018

<http://weatherwest.com/archives/6411>

July 2018 was an extraordinary weather month across most of California. Early in the month, a searing heatwave brought all-time record heat to some locations in Southern California. While the truly extreme heat receded somewhat during the rest of the month, temperatures never cooled back to anywhere near average, and the past 3-4 weeks have been punctuated by heatwaves that have broken countless daily temperature records. Interestingly, a number of more “subtle” temperature records have fallen this July, with all-time record warm overnight temperatures occurring across a majority of the state and “consecutive 100+ degree day” records falling through parts of the Central Valley. Death Valley apparently recorded the warmest single month officially recorded anywhere on Earth.

Predictions of record-setting drought, dry thunderstorms put northwestern Montana on alert

- **MADLINE BROOM** madeline.broom@missoulian.com

- Aug 14, 2018

https://helenair.com/news/state-and-regional/predictions-of-record-setting-drought-dry-thunderstorms-put-northwestern-montana/article_cbe1aa15-5c21-5681-98b0-a17edebabb8d.html

With the region on the verge of breaking a record for consecutive days with no rain and predictions of dry thunderstorms in the forecast, state officials are preparing for a new round of lightning-caused fires in northwest Montana.

California's already severe wildfire season likely to worsen as no relief is in sight

By Alex Sosnowski, AccuWeather senior meteorologist

August 10, 2018

<https://www.accuweather.com/en/weather-news/no-relief-in-sight-from-already-bad-fire-season-in-california/70005731>



Any hope of lasting relief from fire weather by way of rain and lower temperatures is months away for much of California.

The two key ingredients for fire weather in California, heat and dryness, will continue in the weeks ahead.

To Date, Wildfires Are Burning 3 Times More of California Than in 2017

By [Brian K. Sullivan](#) | August 14, 2018

<https://www.insurancejournal.com/news/west/2018/08/14/497973.htm>

California's wildfires are now burning through land at a pace more than three times faster than last year's blazes.

About 4,200 fires have charred 726,000 acres (294,000 hectares) in the state so far this year, according to figures from the California Department of Forestry and Fire Protection. That compares to about 226,000 acres at this point last year. The figures do not include blazes on U.S. Forest Service land.

The fires come as much of the western U.S. has been gripped by hot, dry air. Abnormally arid conditions persist in more than 11 western states, with more than half the region experiencing drought, according to the U.S. Drought Monitor.

There are currently nine large fires burning across California, including one north of San Francisco in Mendocino and Lake counties that's the largest in state history. By this time last year, the most deadly California fires hadn't even begun. The Tubbs, Redwood Valley and Atlas fires, which together killed 37 people, were all in October.

Three of California's Biggest Fires Ever Are Burning Right Now

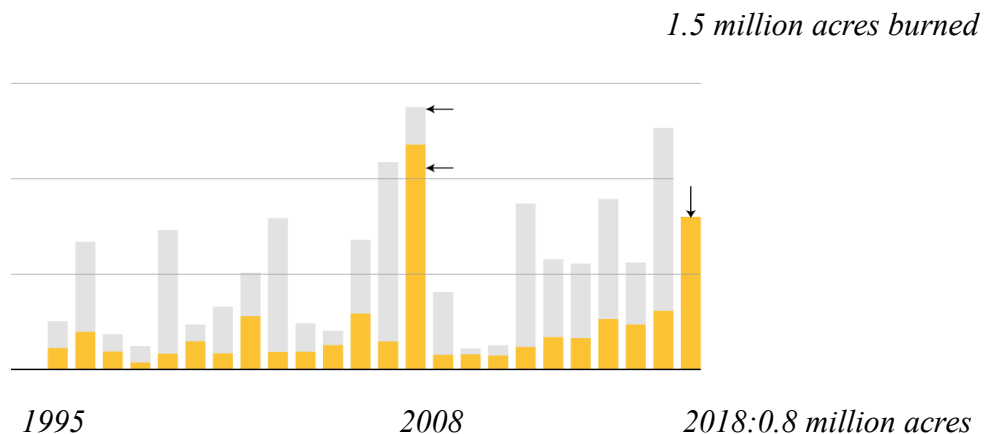
By [TIM WALLACE](#), [ASH NGU](#), [DENISE LU](#) and [MATTHEW BLOCH](#) AUG. 10, 2018

<https://www.nytimes.com/interactive/2018/08/10/us/california-fires.html>

California is in the middle of yet another record-breaking fire season with 820,000 acres across the state already burned — more than twice the area that burned by this point last year.

In the northern part of the state, the Mendocino Complex Fire has grown to more than 300,000 acres, becoming the largest fire ever recorded in California. In fact, three of the largest California fires since 2000 are burning right now.

Acres Burned in California



In addition to the Mendocino Fire, firefighters are battling two more massive blazes in other rural parts of the state. The Carr Fire, near Mount Shasta, has burned more than a thousand homes and caused eight deaths, according to CalFire. And the Ferguson Fire, near Yosemite National Park, is the largest fire in Sierra National Forest history.

British Columbia burns: With 566 fires, province declares state of emergency

By [Joel Connelly](#), [SeattlePI](#)

August 15, 2018

<https://www.seattlepi.com/washington-wildfires/article/British-Columbia-wildfires-state-of-emergency-13158583.php>

The Great White North [is burning](#).



Photo: AP

The British Columbia government on Wednesday declared a province-wide state of emergency, seeking more help from Canada's federal government in fighting 566 wild fires and forest fires burning across the province.

With the hits of dry summers, record heat and beetle kills of interior forests, Canada has suffered massive fire hits of late.

More fires are burning in British Columbia now than during last year's record fire season. But the 2017 fires reached gargantuan size and covered more acres.

Oroville Dam Update

Oroville Dam: See before-and-after video of construction progress

By [Paul Rogers](#)

Bay Area News Group

August 13, 2018 at 1:49 pm

<https://www.mercurynews.com/2018/08/13/oroville-dam-see-before-and-after-video-of-construction-progress/>



More than 800 construction workers continue to rebuild the main spillway at Oroville Dam, seen here in July, 2017. Department of Water Resources

Eighteen months after the dramatic failure of the spillways at Oroville Dam in Northern California, a disaster that led to the evacuation of 188,000 people, construction is on schedule to complete the concrete work in the main spillway by Nov. 1.

In recent weeks, 805 workers from Kiewit, the Nebraska-based company that was awarded the main construction contract on the project, have continued to rebuild sections of the massive 3,000-foot-long spillway.

Earlier this month, the state Department of Water Resources released this video showing before-and-after footage of the project.

https://www.youtube.com/watch?time_continue=2&v=Hdg4gJDhrcE

Crews have methodically filled in giant canyons and crevices that were carved into the hillside at the nation's tallest dam after a section of its spillway, built in 1967, failed during heavy winter rains in 2017.

Last year, workers put a final layer of structural concrete over two of the four main sections of the

spillway. This year, they are roughly half finished with structural concrete work on the final two sections. They also are rebuilding the spillway walls and the drainage system, and have started to rebuild the huge water dissipators, known as “dragon’s teeth” at the bottom of the chute.

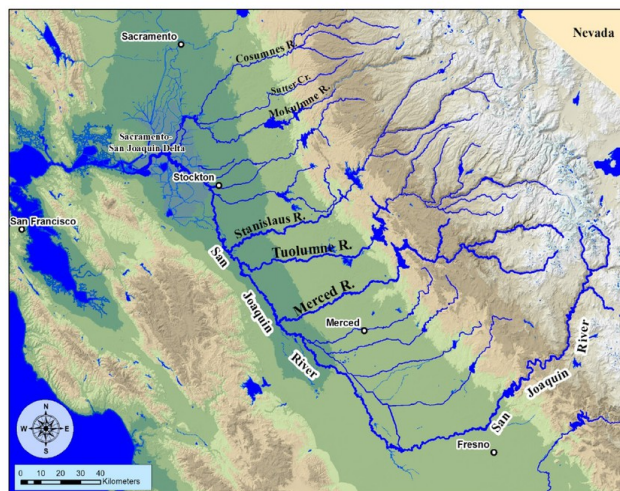
The total cost is estimated at \$870 million, according to a Department of Water Resources update from January that Mellon said has not changed. That includes \$500 million for the work from Kiewit to rebuild the spillways; \$210 million for other work, including debris and sediment removal, power line replacement, building access roads, state staff time, and technical consultants; and \$160 million for the emergency response during the crisis.

Also in January, an independent team of experts who reviewed the spillway failure concluded in a report that Department of Water Resources officials were “overconfident and complacent” and gave “inadequate priority for dam safety” for decades at Oroville.

They noted that main concrete spillway at the 770-foot tall dam north of Sacramento, in Butte County, was built in the late 1960s on poor quality rock. The spillway, only seven inches thick in some areas and not adequately anchored, cracked in multiple places in the following years, allowing water to flow underneath. On Feb. 7, 2017, water from powerful winter storms rushed under the massive spillway, which forced up its giant slabs and ripped a huge hole in the structure causing one of the most serious dam emergencies in California history.

The Water War

That is the title that shall summarize the two areas of conflict between the environmentalists of the Brown administration and, really, the entire population of the state. While the conflict may focus on the Brown administration policies versus the agricultural sector of the population, any further hit to the water supply for agriculture means less food produced. And, of course, most people are eaters, you know. In addition, since none of the incompetent and downright criminal polices of especially the Department of Water Resources will add even one drop of new water to the California water management system, the future much larger population of the state is to be faced with draconian rationing, at best.



https://www.researchgate.net/figure/The-San-Joaquin-River-watershed_fig1_283712538

The two fields of battle are the “California WaterFix,” or as most commonly know as the two tunnels under the Delta, and, secondly, the State Water Board proposal to require a 40% unimpaired flow

standard for the Lower San Joaquin River and its tributaries (to be followed by a 55% requirement in the Sacramento Valley) for “improving water quality” in the Sacramento-San Joaquin river delta.

Both fields of battle are coming to a head now, though it will play out over some months to come. What follows are some of the current developments in both.

California WaterFix

California WaterFix start dates raise red flags

- [Tony Kukulich](#)
- Aug 15, 2018 Updated 16 hrs ago

https://www.thepress.net/news/california-waterfix-start-dates-raise-red-flags/article_b7cdfd58-a0ee-11e8-a964-c7b5d81d664b.html?utm_medium=social&utm_source=twitter&utm_campaign=user-share

An application submitted by the Delta Conveyance Finance Authority (DCFA) seeking \$1.6 billion in federal funding to support the California WaterFix project has raised some eyebrows.

The application indicates dates for the issuance of construction permits and the start of tunnel construction.

“They emphatically state that they’re going to have the permit in their hand on Dec. 14 and construction begins Dec. 15,” said Barbara Barrigan-Parrilla, executive director of Restore the Delta. “So either the permit in front of the State Water Resources Control Board (SWRCB) is a fait accompli or these guys are just straight out lying to the federal government and marching in with a lot of hubris.”

The DCFA is one of two joint powers agencies (JPA) established to advance the implementation of WaterFix. DCFA’s express responsibility is to secure financing for the project.

Brian Thomas, named the interim executive director of the DCFA on July 19, submitted a letter of interest (LOI) to the Environmental Protection Agency (EPA) on July 27, the first step toward obtaining \$1.6 billion in funding from the Water Infrastructure Finance and Innovation Act (WIFIA) program. The loan would support the project’s transition from permitting to design and construction. The LOI states that the permits for WaterFix will be complete Dec. 14 of this year and construction of the tunnels will begin the following day. However, hearings with the SWRCB regarding construction permits for the project are still underway.

The LOI covers a broad range of topics related to WaterFix including an overview of the project, progress made to date, the readiness of the project to move forward and credit worthiness of the requesting agencies. It also revealed that the DCFA is framing WaterFix’s expected cost differently. To date, the price tag has been pegged at \$16.7 billion while the LOI indicates an expected cost of \$19.9 billion – nearly a 20 percent increase. Thomas stated the revised number accounts for the impact of inflation.

“The \$16.7 billion is an appropriate cost estimate, but future year costs will be different as inflation impacts future costs,” said Thomas. “The \$16.7 billion is an accurate portrayal of the construction cost as we know them today.”

Barrigan-Parrilla agreed that the new cost figure does account for inflation but expressed concern that the public has not been made aware of the impact on the project’s total cost.

“The project costs have jumped to \$19.9 billion,” said Barrigan-Parrilla. “This is due to inflation – not overruns – and is baked into their previous cost discussions. However, the public is not being made

aware of the inflationary costs. And the project is only 10 percent designed. Costs will increase as design advances.”

Unimpaired flow for the Lower San Joaquin River

State water board won't vote next week on controversial river flow plan

By Ken Carlson

August 15, 2018 06:47 PM

<https://www.modbee.com/news/article216775485.html>

The State Water Board is making it clear that it won't vote next week on a much-disputed proposal to require higher river flows for improving water quality in the Sacramento-San Joaquin river delta.

Felicia Marcus, who chairs the water board, said in a letter Wednesday to the California Natural Resources Agency that final action will be taken at a board meeting later.

Vito Chiesa, a Stanislaus County supervisor, said the state board has ignored the findings of scientific studies commissioned by Modesto and Turlock irrigation districts on salmon migration in the Tuolumne River. Those studies arrive at conclusions that differ from biological studies supporting greater river flows as the primary solution. The districts have recommended steps to reduce nonnative fish that feed on young salmon.

Felicia's fish are just red herrings; we know the real objective

By Adam Gray

August 15, 2018 12:26 PM

<https://www.modbee.com/opinion/state-issues/article216750525.html>

(Adam Gray represents the 21st Assembly District, which includes Merced and part of Stanislaus counties. He wrote this for the Merced Sun-Star.)

In a recent letter to [The Sacramento Bee](#), Felicia Marcus, Chair of the State Water Resources Control Board, wrote “hundreds of thousands of Californians lack access to clean water for drinking, bathing, and cooking.” She goes on to say that it is her “job to champion the concerns of ordinary Californians and deliver life's basic necessities.”

She has failed.

As chair of the state's primary water regulatory body, Marcus oversees a staff of thousands and a budget of over \$1 billion each year. Despite her promises to the contrary, she and her board have used their immense authority to jeopardize – not protect – the economy and drinking water supplies of the Northern San Joaquin Valley

Marcus and the State Water Resources Control Board are finalizing plans to double the amount of water they take from communities in Merced, Stanislaus and San Joaquin counties. Instead of being used for drinking water and farmland irrigation, the board wants the water to flow out into the Pacific Ocean.

Why?

Because without our water Gov. Jerry Brown's twin tunnels project – designed to ship billions of gallons of water south each year – is dead on arrival. It is no coincidence that the amount of water the

board want from us happens to match the amount expected to be diverted south through the tunnels. It is also no surprise that despite initially rejecting financial agreements to fund the construction of the twin tunnels, Los Angeles and Bay Area water agencies finally agreed to pay up – but only after their favorite water storage projects were 100 percent funded through the Prop 1 Water Bonds. A project to create additional storage, Temperance Flat, got almost no bond funding.

The State Water Board claims it needs the water to help restore fish populations, but an earlier version of their own report suggested their plan would result in little more than an additional 1,000 fish per year.

After significant public criticism, the latest version of the report openly questions the validity of its own findings and suggests the benefits to fish are much greater while offering no evidence to support that claim.

The truth is, the board will never be happy until it gets our water – no matter the consequence to our economy or our drinking water supplies.

State Water Board Must Reconsider Unimpaired Flows Approach

- *by Timothy Quinn*
- *Aug 14, 2018*
- *Voices on Water*

<https://www.acwa.com/news/state-water-board-must-reconsider-unimpaired-flows-approach/>

Years of hard work behind the Brown Administration's California Water Action Plan could be at considerable risk if the State Water Resources Control Board persists on its path to implement a Bay-Delta flow regime based on "unimpaired flows." Next week, the State Water Board should convert its proposed hearing on this topic to a workshop and commit to the collaborative path being pursued by the Brown Administration and stakeholders.

When the State Water Board released its proposed amendments to the Bay-Delta Plan update last month, the revised plan was essentially the same as the initial plan calling for 40% unimpaired flows in the San Joaquin River watershed, largely ignoring the comments of local public agency water suppliers and others. This persistence to establish a 40% unimpaired flow standard for the Lower San Joaquin River and its tributaries (to be followed by a 55% requirement in the Sacramento Valley) could set the stage for one of California's longest and most fierce conflicts over water policy ever. The California Water Action Plan could be the first casualty of this conflict. It calls for a comprehensive statewide approach to achieve the coequal goals of providing a more reliable water supply for California while protecting, restoring and enhancing the Delta ecosystem. In contrast, the State Water Board's current approach will almost certainly undermine the groundwater sustainability, safe drinking water, storage, Delta conveyance, and other key elements within the California Water Action Plan.

Overall, the State Water Board is pursuing a strategy that is difficult, if not impossible, to reconcile with the central policy of coequal goals. So what does the water community want? First and foremost, we want the State Water Board to evolve from being the regulator of flows as a single variable to becoming a robust partner with stakeholders, state and federal agencies in developing integrated resources plans for ecosystem management.

Mike Dunbar: Counting casualties as state weaponizes 'combat science'

By Mike Dunbar

August 04, 2018 07:00 PM

<https://www.modbee.com/opinion/opn-columns-blogs/mike-dunbar/article216097615.html>

Up in Sacramento, they call it “combat science.” Most forms of combat leave casualties behind. If the State Water Resources Control Board gets its way, we are those casualties.

The water board is making some wrongheaded demands for increased flows on the Stanislaus, Tuolumne and Merced rivers. In what the board insists is an effort to save salmon and flush the Sacramento-San Joaquin Delta, it is demanding 40 to 50 percent of our rivers flow unimpeded to the ocean. That’s more than double what flows away now.

We’ve already written about how the water board [cherry-picks data](#) to justify its demands.

We’ve written about the [economic peril](#) to the 1 million people living here. How it could cost us hundreds of millions each year in ag losses, [thousands of jobs](#) and vastly [diminish land values](#). We’ve noted how the dams we built have little worth without water.

We’ve even written about the state’s apparent [lack of concern](#) for the hardship its demands will cause. The state offered ridiculously low figures on our losses, at one point even saying losing a few thousand acres of crops would result in greater income, [not less](#).

Fires and the Forests

In the President's tweets about the California fires last week, and all the hysterics from the usual suspects, some very useful discussion has emerged on the relationship of especially the intensity of the fires and the forest management practices that have created both a density of trees and “forest trash” that provides so damn much fuel for the fires. Here are a couple of the articles, excerpted of course.

Report: Poor Management of Forests, Not Global Warming, To Blame for Widespread Wildfires

By [Michael Bastasch](#)

August 8, 2018

https://www.westernjournal.com/report-poor-management-forests-global-warming-blame-widespread-wildfires/?utm_source=facebook&utm_medium=conservativetribune&utm_content=2018-08-08&utm_campaign=manualpost

- *Wildfire experts say poor management, not global warming, is the major reason behind worsening wildfires.*
- *Forester Bob Zybach warned decades ago that environmental regulations and less logging would make fires worse.*
- *The Trump administration is doing more active management of lands, but is it enough?*

Bob Zybach feels like a broken record. Decades ago he warned government officials allowing Oregon’s forests to grow unchecked by proper management would result in catastrophic wildfires.

While some want to blame global warming for the uptick in catastrophic wildfires, Zybach said a change in forest management policies is the main reason Americans are seeing a return to more intense fires, particularly in the Pacific Northwest and California where millions of acres of protected forests stand.

“We knew exactly what would happen if we just walked away,” Zybach, an experienced forester with a Ph.D. in environmental science, told The Daily Caller News Foundation.

Zybach spent two decades as a reforestation contractor before heading to graduate school in the 1990s. Then the Clinton administration in 1994 introduced its plan to protect old growth trees and spotted owls by strictly limiting logging.

Less logging also meant government foresters weren't doing as much active management of forests — thinnings, prescribed burns and other activities to reduce wildfire risk.

Zybach told Evergreen magazine that year the Clinton administration's plan for “naturally functioning ecosystems” free of human interference ignored history and would fuel “wildfires reminiscent of the Tillamook burn, the 1910 fires and the Yellowstone fire.”

Between 1952 and 1987, western Oregon had only one major fire above 10,000 acres. The region's relatively fire-free streak ended with the Silver Complex Fire of 1987 that burned more than 100,000 acres in the Kalmiopsis Wilderness area, torching rare plants and trees the federal government set aside to protect from human activities. The area has burned several more times since the 1980s.

“Mostly fuels were removed through logging, active management — which they stopped — and grazing,” Zybach said in an interview. “You take away logging, grazing and maintenance, and you get firebombs.”

California has enough water to fight fires. The problem is overgrown forests, McClintock says.

By Emily Cadei

August 10, 2018

<https://www.mercedsunstar.com/news/state/california/article216458870.html>

California has enough water to fight the fires raging in the state, according to Republican Rep. Tom McClintock.

It's overgrown forests that are the problem.

McClintock, whose district stretches from Lake Tahoe to Kings Canyon National Park, spoke to The Sacramento Bee after meeting with officials battling the Donnell Fire in Stanislaus National Forest on Thursday. “It's the same old story. I asked them what the tree density was in the forests where the fire is,” McClintock said. “It's about 300 trees per acre.”

“A healthy density in the Sierra is about 80 to 100 trees,” McClintock continued.

Asked about President Trump's [Tweets earlier this week](#) complaining that California water policies were hurting efforts to fight more than a dozen major fires burning across the state, McClintock responded, “I think the president confused two issues that are separate,” referring to water policy and forest policy.

But he added, “Once you separate them he's right on both.”

McClintock has long been critical of both the state's water policies and its forest management practices. California's leaders are now seeking to ramp up efforts to do some of the forest management that the Republican congressman and others have been advocating for — things like clearing dead brush and trees and thinning the number of trees in the forest. Much of California's forests are on national forest land, however, which requires federal action.

Infrastructure News

Building More Nuclear Plants Lowers Electricity Prices; Closing Them Will Raise Prices

Aug. 13 (EIRNS)—A week ago, the Sierra Club and the Environmental Defense Fund sued the Department of Energy for failure to turn over documents they requested under the Freedom of Information Act. These concern the “reported” Trump Administration plan, they say, “to force taxpayers and electricity customers to pay billions of dollars to bail out uneconomic coal and nuclear plants.” This “secretive plan” would “upend America’s electricity markets, and spike electricity prices,” they claim, all to “prop up failing coal and nuclear plants that are ready to be replaced with newer, cheaper competitors like solar, wind, and energy efficiency resources.” Common sense, right?

Forbes printed an article on July 31 by Michael Shellenberger, head of Environmental Progress, and climate-change promoter James Hansen, reporting on a letter they sent to President Trump and Iowa politicians, who are considering what to do about the threatened closure of the Duane Arnold nuclear plant. The authors analyzed the issue and found: The amount of “clean” non-carbon-producing electricity that would be lost by closing the 10 most vulnerable nuclear plants in the country would be 23% more than all the electricity generated by solar in 2017—a big net loss for the Sierra Club’s campaign for cutting carbon emissions.

On the accusation that nuclear energy has garnered unconscionable federal subsidies, the authors write that the most recent study by the Congressional Budget Office found that so-called renewables received 94 times more in federal subsidies in 2016 than nuclear, per unit of electricity generated.

Since producing reliable baseload power to replace the lost nuclear generation will require mostly natural gas with perhaps some clean coal, closing the Duane Arnold plant would actually raise electricity prices, depending upon what replaces it. And if consumers would like to see what the future could look like, they just need to go to Germany, which is shutting down its nuclear plants. As Reuters described it last fall: “The runaway expansion of wind turbines and solar panels has made German prices the highest in Europe since 2013, not just because of [government] surcharges but because more volatile green power capacity also necessitates new transmission grids and higher costs to manage them.” They also require reliable duplicated backup generating stations for times when nature doesn’t cooperate.

Historically, Hansen and Shellenberger report, adding a new nuclear reactor to a site with an existing reactor is “often the lowest cost way of replacing fossil fuels.” Seven of the ten plants potentially slated for shutdown, are single-unit plants, which power can cost one-third more than those at multi-unit sites, which can share infrastructure. With few exceptions, utilities had planned to build clusters of plants at sites, until the sabotage of nuclear power starting in the mid-1970s.

In the early 2000s, when a “nuclear renaissance” was on the table, EIR printed a map of 17 sites in the U.S. with single nuclear plants, that were originally designed for multiple units (see EIR, June 17, 2005 “Start Now Building 28 U.S. Nuclear Plants!”). In addition to “saving” the operating plants under threat of “free market” closure, these “brownfield” sites should see the immediate construction of the “missing” 28 nuclear reactors.

Trade and Tariffs

China says U.S. farmers may never regain market share lost in trade war

By HE HUIFENG | SOUTH CHINA MORNING POST

08/11/2018

<https://www.politico.com/story/2018/08/11/farmers-china-soy-bean-market-share-734773>

(This story is being published by POLITICO as part of a content partnership with the South China Morning Post. It originally appeared on scmp.com on Aug. 11, 2018)

China can easily find other countries to buy agricultural goods from instead of the U.S., its vice agriculture minister said, warning that American farmers could permanently lose their share of the Chinese market as a result of the trade war.

“Many countries have the willingness and they totally have the capacity to take over the market share the U.S. is enjoying in China. If other countries become reliable suppliers for China, it will be very difficult for the U.S. to regain the market,” Han Jun told official Xinhua news agency in an interview on Friday.

He also warned that American farmers could lose the position in the Chinese market they have spent several decades building up. Han said they may not be able to make up the losses brought by retaliatory tariffs, even with the White House’s planned \$12 billion aid package for farmers caught in the dispute.

He said Beijing had imposed duties on 90 percent of the agricultural goods the country imports from the United States since the trade war kicked off at the start of last month, with limited impact on China.

“Levying additional tariffs will cause a great decrease in exports of U.S. agricultural products to China,” Han said. “But the impact on China is very limited, due to the diversified import sources.”

Financial Blowout Ahead

Financial Blowout Before the U.S. Midterm Elections in November? Time For a Four Powers Agreement and a New Bretton Woods

<https://larouhepac.com/20180816/financial-blowout-us-midterm-elections-november-time-four-powers-agreement-and-new-bretton>

August 16, 2018



On August 15, 1971, President Richard Nixon addressed the nation on the topic of a new economic policy.

Wednesday, August 15, 2018, was the 47th anniversary of Richard Nixon's Aug. 15, 1971 announcement that he was taking the dollar off the gold standard, which de facto meant the destruction of the post-war Bretton Woods system. This opened the floodgates to the creation of a London-based "dollar" currency for global speculation, a cancer which ended up taking over the U.S.-based dollar itself. It also was the end of the entire fixed exchange rate system for trade between nations, which meant that, for developing sector nations, the wall between international speculation and their

national currencies was demolished. Whole nations once again became colonial satrapies of the City of London with a living hell of war, drugs, and poverty quickly taking over.

This was, in fact, the first step towards wiping out the international Glass-Steagall regime of separation between productive and speculative banking—between monetarized credit lent for productive uses by sovereign nation states and money whose value was determined by a private entity, the City of London, for purposes of sheer accumulation of wealth by speculators. Then that was done officially in the U.S. in 1999, by the formal repeal of Glass-Steagall—with the consequence that Wall Street and the City of London created mounds of speculative derivative and corporate debt amounting now to some \$1.5 quadrillion. Under the floating exchange rate system, governments are expected to cover demands for repayment of this debt by imposing austerity regimes on their citizens characterized by primitive living conditions and decadent mind-killing popular entertainments.

When this blew up in 2008, Lyndon LaRouche posed the solution: bankruptcy reorganization of the world's economies by four countries, the United States, Russia, China, and India. These economies hold potential productive power to create a new world-wide human renaissance out of the collapse of the dead system, to move humanity to the next advanced stage of human development. Lyndon LaRouche said, in 2008, you either undertook this reorganization and launched a new Bretton Woods system, or the planet itself would die as physical economies suffocated under mounds of unpayable debt. Needless to say, his warning went unheeded in 2008 and the monster bubble has emerged anew in ever greater scope. Citizens here witness, helplessly, endless floods and failure of infrastructure, whole states, like California, being ravaged by homelessness, drugs, and fires.

One of the ruses used by the British Empire since the 2008 financial blowout, to try to keep that bubble afloat, has been the so-called "carry trade" fueled by zero-cost liquidity pumped into the system by Quantitative Easing, which was then shipped to high-interest emerging markets such as Brazil, Turkey, and other countries—where those economies were looted. The beginning of the Fed's "tapering" of QE and rising interest rates beginning in 2015, was a contributing factor in triggering waves of "reverse carry trade" financial flows out of emerging markets back to supposedly safer havens, such as the dollar. This, in large measure, is what we are seeing in the various manifestations of the financial crisis in Turkey, Argentina, Russia, Brazil, etc. Bloomberg has reported a 6% loss across the carry trade in the first quarter of 2018 alone.

When and how the entire bubble collapses, is unknown, but such a collapse is inevitable, as LaRouche warned repeatedly and accurately. Now, so-called experts across the world are warning that such a collapse is imminent. Faced with a deadly disease, sane people act and act immediately. The LaRouche political movement world-wide, is launching a new and urgent campaign for a LaRouche's Four Powers agreement to cancel and/or reorganize world's unpayable debt and to form a New Bretton Woods fixed exchange rate system. This is the means to defeat the British led coup which has engulfed the United States. This is the means to ensure that the world not only survives the coming collapse of London's bubble; but steps boldly into a new paradigm.

Feature: LaRouche's Economics in an 8-Week Course

<https://discover.larouchepac.com/>

Here are links to the entire series of eight classes:

Class #1: On LaRouche's Discovery (June 22/23)

https://discover.larouchepac.com/1_on_larouche_s_discovery_june_22_23

Class #2: Potential Relative Population Density and Energy Flux Density (June 29/30)

https://discover.larouchepac.com/2_potential_relative_population_density_and_energy_flux_density_june_29_30

Class #3: Thermodynamics of Political Economy (July 6/7)

https://discover.larouchepac.com/3_thermodynamics_of_political_economy_july_6_7?utm_campaign=2018_econ_3_a&utm_medium=email&utm_source=larouchepac

Class #4: The Definition of Economic Value (July 13/14)

<https://larouchepac.com/20180715/definition-economic-value>

Class #5: How Technology is Produced (July 20/21)

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

Class #6: Dispensing with Monetary Theory (July 27/28)

https://discover.larouchepac.com/6_dispensing_with_monetary_theory_july_27_28

Class #7: Wages and Population (August 3/4)

https://www.youtube.com/watch?time_continue=11&v=NWKKJMxmPcY

If the economy is not expanding anti-entropically, the reduction in wages leads necessarily to cuts in the quality of life of pre-school leaving age and retirement-age segments of the population including cutbacks in quantity and quality of medical services. One critical cutback is a reduction in the fecundity of households. What begins as a cut in the birth rate leads towards euthanasia. Thus, acceptance of post-industrialism and limits to growth, the invisible hand of the market place, usury, etc., all of which are based on the acceptance of entropy, leads to a culture of death. To reverse this trend in the trans-Atlantic region, LaRouche proposes that we must prevent overhead expenses from growing, increase the ratio of workers employed in capital goods production to at least 50%, reduce the percentage of the labor force employed in raw materials production, increase the absolute size of the labor force, tax the gains of usury to the point of extinction, increase the tax deduction for dependents by taking into account the required birth rate, and increase the number of scientists and specialists in research and development to 5%. In short, we must increase the species of singularities in an anti-entropic self-development of the productive process. This class will be given by Will Wertz.

Class #8: Basic Infrastructure (August 10/11)

https://www.youtube.com/watch?v=Jj_QQMAT8cg

Since 1969 the maintenance of U.S. infrastructure has been below break-even. To restore our infrastructure to the 1970 level would require trillions of dollars. In contrast to those who advocate the privatization of our infrastructure, LaRouche argues that infrastructure is the responsibility of the government. This responsibility can be met in four ways: 1) direct expenditure; 2) Federal and other government corporations like the TVA; 3) regulated public utilities; and 4) regulated private facilities of interstate or intra-state commerce. As necessary as it is to repair existing infrastructure, LaRouche emphasizes that we must always proceed from the top down, that is, from the future. What is the next higher economic platform required to achieve mankind's continuing anti-entropic growth? From this standpoint LaRouche advocates that we build new cities from scratch based on the vantage point of developing urban centers on the Moon as advocated by Krafft Ehrlicke. These cities should then be linked by high speed rail. This class will be given by Dennis Speed.