

California Water and Infrastructure Report

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

For February 28, 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

patruckert@hotmail.com

The Hubble Space Telescope found evidence that our universe consists of at least two trillion galaxies! Wow! This means that the people promoting the Green New Deal (essentially, Wall Street) are not only greedy, but also completely off their rocker! Because we are not living in a closed system of the planet Earth, but we are an integral part of this incredible universe! To venture into that great beyond, requires nuclear fusion rockets in space, and an Earth civilization of development, science, and physical productivity, not energy poverty. As Xi Jinping said to the scientists and engineers of the recent lunar mission: "Exploring the vast universe is the common dream of all of mankind!"

Let's realize that beautiful dream!

Helga Zepp-LaRouche

https://larouchepac.com/20190226/zepp-larouche-lets-realize-dream-all-mankind

A Note To Readers

The vision and the determination to bring the dream expressed by the quote above into actual existence was the character of those who built the Central Valley Project, Hoover Dam, the Tennessee Valley Authority and to put a man on the Moon. China's recent accomplishment of being the first nation to land a rover on the far side of the Moon demonstrates that that idea is alive and well today.

The universe is there for us to discover its secrets and to bring it more and more under the civilizing processes of mankind's powers.

That will definitely not be done by the Democrats "Green New Deal," which is an insult to the great and real New Deal of President Franklin D. Roosevelt. Whereas Roosevelt built that Central Valley Project and the Tennessee Valley Project and completed the building of Hoover Dam, all the "Green New Deal" will give us is de-industrialization, inadequate energy supplies to even run the country, poverty and depopulation. The Feature this week focuses on that abomination promoted by that virtual child Congresswoman Alexandra Ocasio-Cortez.

While the President has not yet put forward a serious infrastructure building policy, but he has demanded that Governor Newsom return \$3.5 billion of federal funds given to California's disaster of a high-speed rail project. Below, in this week's report, we take a look at the disaster that is the California high-speed rail project. While this specific project, I think, should just be shut-down, abandoned, and forgotten, that does not mean that the nation should neglect any longer the real need for a nation-wide high-speed rail system. My report on that topic this week includes: First, a short report contrasting China's high-speed system to the U.S. no system. Then, second, why the California project should be shut-down; and finally, what a real nation-wide project should look like.

The Rest of This Week's Report

We begin with reports on the end of the California drought, the snowpack and related developments. As always, stating that the drought is over must include the warning that this is California and the drought will return.

Oroville Dam is ready to use the new rebuilt spillway, just in time for the more precipitation expected in the next days ahead.

I include this week a link to a lecture by Dr. Brad Udall on the crisis of the Colorado River, which provides a detailed picture of the near two decades of drought that now threatens the water supply of 40 million people of the Southwest.

The Drought and More

West's Active Winter So Far Has Had a Huge Impact on Drought

By Linda Lam

February 21, 2019

weather.com

https://weather.com/news/climate/news/2019-02-22-west-california-drought-reduction-wet-pattern-spring

At a Glance

- A wet pattern has brought beneficial moisture to the West this winter.
- As a result, drought conditions have improved for much of the region.
- This trend in drought reduction is expected to continue into spring.

Drought conditions have dramatically improved this winter in the West and this trend is expected to persist into the spring.

A dominate weather pattern featuring a southward dip in the jet stream, or upper-level trough over the

western U.S., has allowed a series of precipitation-rich storm systems to track through the region, especially over the last month.

Western Drought Improvement

The most recent data from the <u>U.S. Drought Monitor</u> shows the big changes these storms have brought to the West.

Just over half of the West was experiencing drought conditions on On Jan. 15, but by Feb. 19, just under 37 percent of the region was still in drought.

Areas in exceptional drought, the highest category, have decreased from 2.82 percent to 0.16 percent. The percentage of areas in extreme drought have almost been cut in half over the past month.

Most of California has experienced <u>above-average precipitation</u> over the last 60 days.

As a result, just 4 percent of the Golden State is in drought as of Feb. 19, which is a dramatic improvement from mid-January when 75 percent of the state was experiencing drought conditions.

Los Angeles and Sacramento have seen almost double their average precipitation month-to-date for February. San Francisco, Fresno and San Diego are all also close to double their averages for the month as well.

This pattern has also brought colder-than-average temperatures to much of the West, helping to turn wet systems into snowy ones. As of Feb. 20, Seattle has seen its fourth coldest February-to-date and Great Falls, Montana, has seen its second coldest February to date. The chilly conditions have extended farther south as evidenced by the fact that San Jose is tied for its seventh coldest February to date.

The colder temperatures have caused more snow, even in lower elevations like <u>Las Vegas</u>.

Snowier systems are a big change from the 2016-17 water year. Even though it also experienced above-average precipitation, the <u>snowpack in the lower elevations</u> is <u>much higher</u> this water year than last.

Snowmelt from that snowpack in the spring and summer is crucial to the water supply in the region, so snowpack in the mountains is very important for alleviating drought.

As of Feb. 21, the average snow water equivalent in the Sierra is at 144 percent to average for the date, which is good 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 <u>well above 100 percent to average</u>. New Mexico is one notable exception.

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.

Time-lapse map shows how winter rains have washed away California's drought

https://www.sbsun.com/2019/02/26/time-lapse-map-shows-how-winter-rains-have-washed-away-californias-drought/

By Nikie Johnson | nijohnson@scng.com |

PUBLISHED: February 26, 2019 at 3:45 pm | UPDATED: February 26, 2019 at 4:38 pm

What a difference a winter can make.

On Jan. 1, three-quarters of California was in drought. Just eight weeks later, however, a succession of

<u>storms</u> have washed drought conditions away from all but a splotch at the far north edge of the state, according to the <u>U.S. Drought Monitor</u>.

Some of Southern California is still considered abnormally dry, which means there are some lingering water deficits.

Considering what the state has been through in recent years, this is good news.

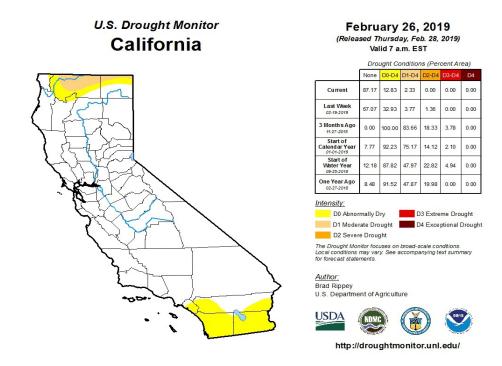
"It's certainly good as far as the water supply," said Dan Cayan, a researcher at the <u>Scripps</u> <u>Institution of Oceanography</u> at UC San Diego. He said the <u>snowpack</u> in the mountains this year is "outstanding."

For the past three years, the drought picture in California has gone through dramatic changes based on the winter weather, according to the Drought Monitor maps, which are put together by academic and federal agencies to assess conditions across the country.

This time-lapse video shows how drought has retreated, spread and retreated once more since summer 2016. (Can't see the video? <u>Click here.</u>)

U.S. Drought Monitor

Just 2 percent of the state remains in Moderate Drought and only 13 percent of the state is even Abnormally Dry. As stated last week, the drought is over, for now.



Oregon snowpack jumps to 117 percent of normal after storms dump 50 inches in Cascades

Zach Urness, Salem Statesman Journal Published *Feb. 26, 2019*

The latest storm brought eye-popping totals across the weekend and into Monday, including almost 50 new inches on Mount Bachelor and 30 new inches on Santiam Pass. Zach Urness, Statesman Journal

At the beginning of February, there was real reason to be concerned about Oregon's forests and water supply.

The state's snowpack was meager — especially on the west side — and a prolonged drought kept reservoirs and streams well below normal.

And then it happened.

A battering ram of cold storms, arriving one after the other, slammed Oregon's mountains and valleys with the type of snow rarely seen so close together.

The result is a snowpack that soared to 117 percent of normal on Wednesday morning. It's a remarkable turnaround given just three weeks ago the state was at 72 percent.

Oroville Dam Update

Oroville Dam staying low to provide room for wet weather, possible use of reconstructed spillway

https://www.chicoer.com/2019/02/27/oroville-dam-staying-low-to-provide-room-for-wet-weather-possible-use-of-reconstructed-spillway/

By <u>Robin Epley</u> | <u>repley@chicoer.com</u> | Chico Enterprise-Record February 27, 2019

OROVILLE — Oroville Dam is currently the only reservoir in the state that's below average elevation — but that's on purpose, said the state's Department of Water Resources.

"If the lake begins to rise very quickly in the coming weeks due to large storms and increased inflows, then DWR may consider using outflow mechanisms," the department said in a press release. That could include using the main spillway for the first time since it was rebuilt.

The reservoir is currently at 55 percent of total capacity, said DWR's assistant director of public communications, Erin Mellon. That's about 80 percent of average.

With heavy rains forecast for the area, that level is expected to rise, she said.

"We are monitoring it very closely, staying very vigilant," Mellon said.

Both the main spillway and the emergency spillway are reconstructed and able to handle flows, the press release said. "You may see activity on the main spillway in the coming days as crews remove equipment from the chute to prepare for potential use."

Colorado River

A lengthy lecture by Dr. Brad Udall provides an in-depth discussion of all aspects of the Colorado River's developing crisis, which will, unless something dramatically changes, force draconian rationing of the waters of the river beginning now. While Dr. Udall emphasizes "climate change" throughout the lecture, as the driver of the river's declining flow-rate, for those wishing for a deeper understanding of the subject, the lecture is well worth the time to read it.

As I have often stated in these reports, it is only big projects that bring new sources of water to the Southwest that will provide the water required for the next 100 years. That project is the North American Water and Power Alliance (NAWAPA), which will resume being discussed here next week.

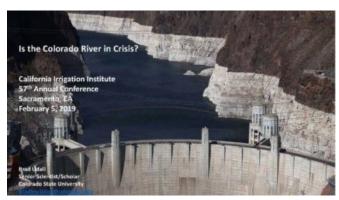
Below is just the opening paragraphs of Dr. Udall's lecture:

DR. BRAD UDALL: Is the Colorado River in Crisis?

<u>February 20, 2019 Maven Conferences and Seminars</u>
https://mavensnotebook.com/2019/02/20/dr-brad-udall-is-the-colorado-river-in-crisis/

Dr. Udall discusses the Colorado River's hydrology, climate change impacts, shortage risk, and the Drought Contingency Plan

<u>Dr. Brad Udall</u> serves as senior water and climate research scientist at the <u>Colorado Water Institute</u> at <u>Colorado State University</u>. He has extensive experience in water and climate policy issues and has authored numerous peer-reviewed publications on water management and climate change which have been published by the federal government and major journals. He has researched water problems on all major Southwestern US rivers including the Rio Grande, Colorado, Sacramento-San Joaquin and Klamath.



All eyes have been on the Colorado River recently with headlines across the west announcing the progress – or lack thereof – of the efforts of the seven basin states to reach agreement on the Drought Contingency Plan. So is the Colorado River in crisis? At the <u>2019 California Irrigation Institute</u> <u>conference</u>, Dr. Brad Udall's keynote presentation focused on answering that question.

He began with a picture of Hoover Dam and Lake Mead, pointing out the white bathtub ring that is almost 150 feet tall and represents 15 MAF of water, enough for an entire year. In the year 2000, the reservoir was absolutely full.

Mr. Udall also noted that the water problems in California are inherently joined to the Colorado River. "If you are from Northern California, it might be easy to think that this river had nothing to do with you, and I would argue that's absolutely not true," he said. "Part of it is because of Metropolitan Water District. They have the largest reach of any water system in the world which is to their credit, actually. If you're going to get water to 20+ million people, you want that reach. As I am told, the Colorado River got them through the recent drought, which is a good thing, because they would have gone looking in California for water if this river hadn't had it for them."

High Speed Rail: Do It Right

Begin by shutting down the California high-speed rail project

As the California high-speed rail project has moved from disaster to catastrophe, many in the state have ignorantly or opportunistically denounced the project as an example to demonstrate that public infrastructure projects, and high-speed rail in particular, cannot work, are boondoggles and demonstrate that government must not involve itself in such.

Both the federal government and the California state government, in the past, have initiated and built large infrastructure projects, many of which, to this day, are the foundation of what is healthy about the U.S. economy. President Abraham Lincoln initiated the Transcontinental Railroad in the 1860s, funded and built by the U.S. government. President Franklin Roosevelt's Four Corners Project— the Boulder Dam (now named the Hoover Dam), the Grand Coulee Dam, the Tennessee Valley Authority and the St. Lawrence Project— and literally hundreds of other projects big and small, not only put people to work during the Depression, but provided the foundation for the World War II mobilization, which would have been impossible without those projects providing the electricity, the industries, and the trained workforce that mobilization required.

"Did those projects pay for themselves?" is a question often asked. It is the wrong question. The right question should be, "did these projects increase the productive power of the economy and the labor force?" For a real economy is not measured by money, or whether this or that activity in the economy "makes a profit," but whether the economy as a whole is creating higher real living standards for the population, which is measured by such factors as longer life-spans, better health care, improved nutrition, expanded education, etc.-- and this for the entire population of the nation. A good example was the Rural Electrification Administration, which, beginning in 1936, electrified the entire farm sector of the nation, by providing credit to farm cooperatives that would then run the program in local areas. In 1936 only 10 percent of the nation's farms were electrified, and by 1951 that percentage was 90 percent.

On the other hand, many of the large projects actually do pay for themselves. The Grand Coulee Dam in Washington State began construction in 1933 and began delivering electricity to the Northwest in January, 1942, in time to fuel the aluminum plants providing Boeing with the material to build the war planes. The cost to the federal government to build the dam was \$150 million. As of the mid-1990s (the last figure I have seen), the dam returned to the government more than \$4 billion from the sale of electricity and providing irrigation water. But, that is not all. That irrigation water turned much of eastern Washington State into one of the most productive agricultural regions in the world.

President Eisenhower's National Interstate and Defense Highways project (the interstate freeway system) is another example of necessary and successful government infrastructure project, which is funded by the federal gasoline tax, which you pay into every time you fill your tank.

Yes, the nation requires a national high-speed rail system, but it will never be done by either individual states building their stand-alone lines, and it will never be funded by private investors. The purpose of such a nation-wide system is not to make a profit, but to enhance the productive power of the nation by bringing our transportation system into the 21st Century. As the third item below makes clear, it can only be done by a top-down federal government project. And a prerequisite requires the establishment of something like a National Infrastructure Bank, as specified in "LaRouche's Four Laws."

What follows are three reports:

China builds the world's longest high-speed rail as a rail stalls in the U.S. California's High-Speed Rail Project Should be Shut Down

China builds the world's longest high-speed rail as a rail stalls in the U.S.

By <u>Krystal Hu</u> Yahoo Finance

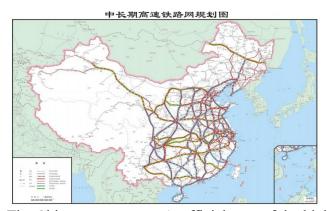
February 21, 2019

https://finance.yahoo.com/news/china-builds-the-worlds-longest-highspeed-rail-as-a-rail-stalls-in-the-us-193536831.html

As President Donald Trump feuds with California Governor Gavin Newsom over funding for the state's long-planned high-speed train, China has been further expanding its high-speed rail — the world's longest.

The U.S. and China announced ambitious plans to fund high-speed rail projects backed by government stimulus packages during the financial crisis in 2008. Since then, the length of high-speed rail lines in China has expanded to 18,000 miles, accounting for more than two-thirds of the world's total. That's five times more than what Japan has built since the 1960s.

How about the U.S.? As we know, high-speed rails haven't changed the way people travel in America as President Barack Obama once envisioned. States selected for rail project funds, including Wisconsin, Ohio and Florida, turned down the federal money as they saw little benefit to embark on such a project.



The Chinese government's official map of the high speed rail network by 2025.

There is one state that seems to be pulling it off. With a population of 40 million and a \$2.5 trillion economy, California was considered a promising state to have America's first real high-speed rail with an average speed of more than 160 miles per hour. With the support of former Governor Jerry Brown, California started to build its first high-speed rail in 2015.

But Governor Newsom's announcement to scale back the project amid ballooning costs crushed some people's hope. The Trump administration is not happy and is "exploring all available legal options" to recover \$2.5 billion in federal grants that were given to the project, leaving the previously proposed finished date of 2033 unlikely.

High-speed rails come at a cost

With higher population density and lower car ownership per person, it's no wonder that Beijing shows more enthusiasm when it comes to building a high-speed rail. To some in China, it also illustrates the institutional advantage China has over the U.S.

"The political and institutional system allow China to gather national resources to accomplish large

undertakings," said Jia Limin, a professor at Beijing Jiaotong University who heads China's high-speed rail innovation program. Under a one-party system, the Chinese government backs rail projects by investing in technology innovation and infrastructure, which could also boost GDP growth. China has also grown from a builder of high-speed rail technology to an exporter of such technology to countries like Russia and Mexico.

China spends more on infrastructure annually than North America and Western Europe combined. In 2008, China announced a RMB 4 trillion (\$586 billion) stimulus package in an attempt to minimize the impact of the financial meltdown. Funded by both central and provincial governments, more than one-third of the package was dedicated to infrastructure, including railways, roads and airports.

California's High-Speed Rail Project Should be Shut Down

by Patrick Ruckert February 26, 2019

With California's high-speed rail project years behind schedule, tens of billions over budget, and plagued by mismanagement, newly inaugurated governor Gavin Newsom in his State of the State address on February 12, declared that the project as now planned must come to an end. Virtually canceling the project, he announced that instead of the original route from Sacramento to San Diego, which had already been scaled-back to be only Los Angeles to San Francisco, all that is going to be built now is the 170 mile section between two Central Valley cities of Bakersfield and Merced. That he is even holding on to that is nothing but a pathetic attempt to avoid the truth that the project is untenable financially, operationally, and politically.

State Senator Jim Nelsen (R-Gerber) ridiculed Newsom's plan: "We're going to put more billions into a train in a place where there is no ridership and no freight will be hauled."



Source: High Speed Rail Authority

Former governor Gerry Brown promised that the entire project would cost \$33 billion and be completed by 2022. Now with the estimated cost as high as \$77 to 90 billion, and before Newsom's announcement, the project would not have been completed before 2029.

Also, President Trump's administration has jumped in, demanding that the project be canceled and that the \$2.5 billion of federal funds already allocated and spent be returned. And on February 19, the Federal Railroad Administration announced that the \$929 million of a further federal grant will be

canceled, since construction progress fails to comply with the terms of the grant.

To arrive at this disaster has been a 30-year, sometimes torturous journey. The torture should end now by the cancellation of the project.

What follows is first some background history of the project, followed by some exemplary samples of the disaster that it is, and then some excerpts of the California State Auditor's report on project dated November, 2018.

First some background

California Proposition 1A passed by the voters in 2008 was the culmination of a 20-year process to promote and build a California high-speed rail system. A paper written in December, 2008 provides the history of that process: "The Road to California Proposition 1A A History of the California High-Speed Rail Movement."

file:///C:/Users/patru/AppData/Local/Temp/CA-Prop-1A.pdf

That proposition provided \$9.95 billion initial funding to begin to plan and build the project.

The argument for a California high-speed rail project that has been made since about 1988 is summarized in the above cited paper:

"With an estimated 2007 population of over 36.5 million – more than 10% of the nation's total population – and the third largest land area of any state in the union, California faces daunting transportation challenges on both the local and statewide levels. The great distances and correspondingly lengthy travel times required for automobile travel between principal city centers, shown in Table 1, is prohibitively high for regular travel by car. This fact, in conjunction with the unbearably congested condition of many of the state's highways in urban areas, was a major impetus for the push towards high-speed rail (HSR) as an effective method of intercity transit in the state of California."

Between 1990 and 2000, steps were taken by the state government that both allocated funds to study and created a commission (the California High-Speed Rail Authority) to plan a high-speed rail project (HSR) to be built within two decades.

But 2001 the Enron energy scam and the dot-com bubble bust, created a state financial crisis and the HSR project was put on hold.

In 2002 a \$9.95 billion bond measure to finance the construction of the first elements of a HSR line was to be put on the ballot in 2004. That money would begin construction to connect Los Angeles, Bakersfield, Fresno, San Jose, and San Francisco at a projected total cost of \$13.7 billion.

The California High-Speed Rail Authority (CHSRA) released its report in January, 2004 which upped the cost of the project to \$37 billion. So in just two years the cost had risen by more than \$20 billion.

In June, 2004, the bond issue was removed from the November ballot and scheduled to be voted on in 2006. With the state still in financial difficulties, for the first time there was discussion of bringing in private investors to provide additional funding for the project. In 2005 the proposed \$9.95 billion bond issue was again postponed until the November, 2008 election.

So, finally in 2008 the bond is on the ballot and passes with a 53% yes vote. Virtually all the elected officials from the Governor on down, the cities and the press all supported the measure. In addition, as the cited report above argued:

"By 2008, interregional traffic in the state had predictably grown even worse than the conditions present during the original analyses nearly 20 years earlier. The CHSRA reported in its 2008 update of

the Business Plan that well over half a billion interregional trips were made annually in the state, with 96% of the interregional travel market still dominated by car (Figure 1). Meanwhile, in the post-9/11 world of rigorous travel security leading to insufferably long waits and delays at airports, citizens had grown highly frustrated with spending more time waiting in the terminal than actually flying for intermediate-distance flights such as San Diego to San Francisco (about 1.5 hour flight time). To worsen matters for automobile and air travel, fuel prices reached an all time high of \$4.58 per gallon on average for California in late June 2008."

Interestingly, opposition to the bond issue at the time claimed that the project will balloon in cost to \$90 billion-- a forecast that is close to what the CHSRA admits now the cost is heading to.

So, in 2008 the project is ready to go. Plans are announced that the line will be extended to Sacramento and San Diego, will cost \$33 billion and be completed by 2022.

To jump ahead a little, the Authority itself, in its 2018 business plan, now pegs the final cost of the project at \$77.3 billion. And others forecast the cost to rise to over \$90 billion.

In 2009, the Authority received \$2.6 billion from Obama's American Recovery and Reinvestment Act, and in 2011 an additional \$929 million in federal grant funding. The Authority also receives 25 percent of the revenues from the California State cap-and-trade program, which has been \$1.7 billion as of November, 2018. The Authority claims it has identified further possible future funding totaling \$15.6 billion.

Now, if we add it all up, it totals about \$15 billion already committed, plus we add on the vague \$15.6 billion the future may bring, and the total then is close to \$31 billion.

Where is the other \$45-50 billion to come from? No one has an answer to that question, though the Authority's 2018 business plan states that it will seek more federal grants (unlikely since President Trump has already demanded the project be canceled) and private sector partners (also unlikely).

What can the existing and hoped-for funding of \$31 billion actually build? Not much it seems. Before Governor Newsom essentially shit-canned it, the Authority, with the \$31 billion planned a 170 mile line in the Central Valley and a section between San Francisco and Gilroy, of approximately 85 miles. Note there is no money even in sight to even connect up those two sections. It also assumed that another \$10 billion will be found somewhere to even build those two sections.

The governor's announcement this month eliminates the Gilroy line and leaves just the Central Valley section as a stand-alone project. Of course, the governor added that some planning and environmental studies on the entire planned project from Los Angeles to San Francisco would continue, but when and if it would ever be built is left up in the air. And what happened to the extensions to Sacramento and San Diego? Somewhere along the way they were dropped.

The plan now in place guarantees it would not be a true high-speed rail system

Since 2012 the Authority has adopted a policy of "blending" in order to speed up the project and to cut costs. Blending simply means that the trains will run on the existing tracks of other systems wherever possible. While that may save time and money, it obviously imposes a lower speed and a longer transit time, probably putting the average speed well below the 200 mph that defines an actual high-speed rail system. In addition, blending will mean that fewer trains can be run on the tracks.

In addition, state law requires that the system be designed to achieve a nonstop travel time from San Francisco to Los Angeles Union Station of two hours and 40 minutes. Now with a crude estimate only possible, that requirement incorporating the current level of blending is expected to be two hours, 36 minutes, and 56 seconds. That is really pushing it.

The disaster created by beginning construction in 2013

Construction in the Central Valley began in 2013 because the early start was necessary to comply with the requirements for the system's federal grant funding. Thus construction work began before the land for building had been acquired, before how utilities would be relocated, and before agreements with cities, railroad operators and others had been negotiated. The result was more than \$600 million in change orders to pay for work that had not been foreseen. And the Authority has already calculated that at least another \$1.6 billion in extra costs for change orders are guaranteed just for the Central Valley section.

Yet, the work on the Central Valley section is going so slow that completion of this section, originally scheduled for 2018, is not now expected until 2022, and that will be met only by doubling the rate of completed work, which is unlikely to be possible. Should the Central Valley section not be completed by December, 2022 then all the \$3.5 billion of federal funds are liable to be returned to the federal government.

Excerpts from the California State Auditors Report

California High-Speed Rail Authority: Its Flawed Decision Making and Poor Contract Management Have Contributed to Billions in Cost Overruns and Delays in the System's Construction

November, 2018

https://www.auditor.ca.gov/pdfs/reports/2018-108.pdf

This report concludes that the Authority's flawed decision making regarding the start of high-speed rail system construction in the Central Valley and its ongoing poor contract management for a wide range of high-value contracts have contributed to billions of dollars in cost overruns for completing the system.

After years of planning for a fully dedicated high-speed rail system, mounting costs led the Authority to decide instead to use existing infrastructure wherever possible—a cost control technique known as blending. Blending requires lower train speeds and imposes other service limitations, but the Authority will not know the full effect of these limitations until service planning and operations begin. Although blending has resulted in significant projected savings, those savings have only partially offset cost overruns. Further, potential time savings from reduced construction needs will be at least partially offset by the years that the Authority spent studying the dedicated options rather than pursuing blended options. The Authority has now exhausted every major opportunity available to share infrastructure with existing rail systems; thus, sharing infrastructure no longer represents a source of future cost savings.

The Authority's spending to date and future projections suggest that the risk of such additional cost increases is high. Costs for the three current construction projects in the Central Valley have been significantly greater than the Authority originally projected, in large part because the Authority did not complete many critical planning tasks before moving forward with construction.

The risks associated with beginning construction early—the fact that the Authority had not acquired sufficient land for building, had not determined how it would relocate utility systems, and had not obtained agreements with external stakeholders, including impacted local governments and other railroad operators—developed into costly problems. These risks have contributed to more than \$600 million in changes to construction contracts to pay for work for which the Authority had not sufficiently planned or budgeted.

In addition, the Authority will need to do more to control the soaring costs of its contracts by improving its contract management. Moreover, the Authority has in essence placed portions of its oversight of large contracts into the hands of outside consultants, for whom the State's best interests may not be the highest priority. In addition, CMSU—which is staffed by consultants rather than Authority employees—has performed only weak and inconsistent oversight.

A Plan To Revolutionize America's Transport (excerpts) by Hal Cooper

42,000 MILES OF ELECTRIC RAIL AND MAGLEV

21st CENTURY

Summer 2005

http://21sci-tech.com/Articles%202005/ElectricRail.pdf

The United States, and indeed the world, is now at a critical juncture, with two starkly different pathways for its economic and energy future. One is to continue to degenerate into fiscal austerity, as the result of 40 years of world financial deterioration, which began with the introduction of free-market, free-trade policies in the 1960s. The other option is to rise to a new height of growth and prosperity by returning to the American system of economics, as advocated by economist Lyndon LaRouche.

It is proposed here to construct a 42,000-mile-long route network conventional speed electrified intercity railroad lines for the transport of freight and passengers, which will be largely built on the trackage or rights-of-way of the already existing railroad network (Figure 1). There are also smaller route networks of 10,000 and 26,000 route-miles proposed as partial alternatives. In addition, there will be a 42,000-mile-long magnetic levitation network constructed generally along the existing interstate highway network, which will operate at very high speeds (Figure 2). There will also be 10,000- and 25,000-mile-long magnetic levitation networks.

The proposed national railroad electrification network will be designed to move large quantities of freight between cities, plus the passenger traffic which now goes by rail, as well as the traffic that will go by rail in the future. The proposed national electrified railroad network would be expanded from a starting point at almost zero today, to 10,000 route-miles by2015, to 26,000 miles by 2020, and to 42,000 route-miles by2030.

The operating characteristics of this intercity electrified railroad system would be as follows: The freight trains operating on these tracks would be designed to run at speeds of 90 to 110 miles per hour, carrying trucks and containers, and from 70 to 90 miles per hour for most other freight trains. The large, heavily loaded unit trains carrying coal would be the exception, as they would generally operate at speeds of 35 to 45 miles per hour, for safety reasons. Passenger trains would be designed to operate at maximum speeds of 125 to 150 miles per hour. The track configuration would be one of double tracks throughout, with crossover tracks and passing sidings at periodic intervals. There would be triple tracks or even four tracks along certain very heavily travelled railroad lines.

The construction of this national magnetic levitation net-work would be planned so that 5,000 route-miles would be in operation by 2020, with 10,000 route-miles by 2025,25,000 route-miles by 2030, and 42,000 route-miles in operation at full capacity by 2040. The magnetic levitation system would be built as an elevated, double-guideway track system throughout, using some crossovers at periodic intervals. The system would be built primarily along the existing interstate highway medians, for ease of right-of-way acquisition as well as for safety and operational reasons. It would be designed to operate at speeds

of 350 miles per hour, or even higher, in some locations between the major end-point cities.

Feature: The New Green Deal

The scenes of children hysterically crying to lawmakers that unless they make the "New Green Deal" the law of the land then their lives will be very short should outrage everyone. That is nothing less than child abuse by those Democrats and environmentalists who have instigated this circus that now fills the media.

At least some understand that the "New Green Deal" is not just a fraud, but a dangerous one at that.

Two items follow: A statement by the General President of the Laborers' International Union of North America, and an article from LaRouche PAC: "The Green New Deal: Just More Austerity & Population Control."

LIUNA on the Green New Deal

Statement of Terry O'Sullivan, General President of the Laborers' International Union of North America, On the "Green New Deal"

Washington, D.C. (Feb. 7, 2019) – The "Green New Deal" resolution released today is filled with lessons. It is exactly how not to successfully enact desperately needed infrastructure investment. It is exactly how not to enact a progressive agenda to address our nation's dangerous income inequality. And it is exactly how not to win support for critical measures to curb climate change.

Attaching a laundry list of laudable proposals unrelated to climate change – proposals which LIUNA and other progressive organizations have long fought for – to the sails of fantasy ensures that they all go down on a sinking ship. Infrastructure issues must be addressed in infrastructure legislation, while climate issues must be addressed through climate legislation.

We enthusiastically support real measures to move toward a carbon-free energy future. We also believe in science, which dictates that we will never reach that goal without lower-carbon bridge fuels such as natural gas and carbon-free fuels such as nuclear power.

According to the resolution, a "Green New Deal" would require every car to be electric-powered and ban all fossil fuels, among other proposals. It is difficult to take this unrealistic manifesto seriously, but the economic and social devastation it would cause if it moves forward is serious and real.

While rhetorically mimicking one of the most successful government initiatives in our country's history, there is a significant difference between the real New Deal and the "Green New Deal." The real New Deal put green in working people's pockets, won massive public support and lifted our nation out of despair. The latter threatens to destroy workers' livelihoods, increase divisions and inequality, and undermine the very goals it seeks to reach. In short, it is a bad deal.

The Green New Deal: Just More Austerity & Population Control

February 25, 20196

https://larouchepac.com/20190225/green-new-deal-just-more-austerity-population-control

"In the event that I am reincarnated, I would like to return as a deadly virus, to contribute something to solving overpopulation."

—Prince Philip, Consort to Queen Elizabeth II and Co-Founder of the World Wildlife Fund

The "Green New Deal" recently called for by a few unstable members of the U.S. Congress is a farce. It is neither "green," nor is it new. It has nothing to do with concern for the environment or with so-called social justice. It is not, as some claim, an overly-inflated version of an otherwise worthy goal.

It is an attempt to cause chaos in U.S. policy; to further poison relations between President Trump and potentially collaborative members of Congress; and most of all, to lock the U.S. into an anti-growth, anti-development policy at a moment when the Chinese-initiated Belt and Road Initiative is opening up a new paradigm of anti-colonial progress and development around the world—something the U.S. with its decaying infrastructure and industry desperately needs.

Though the Green New Deal is vague and laughable enough to be denounced even by prominent members of the Democratic Party, it yet retains its prominent place in the daily news cycle, even covered by one news source as a policy rooted in the legacy of Alexander Hamilton. Hundreds of young people have suddenly appeared out of nowhere to call for its implementation, traveling by bus to Washington DC to corner lawmakers and demand "action."

The obvious question for any thinking person is: Where did this come from, and why now?

The timing and intentions of this attempted hijacking of U.S. policy are no mystery. In December 2018, the British House of Lords released a report on the implications of a "shifting world order" for UK foreign policy, which revealingly named the potential of a second term of a Trump presidency as an existential threat which the British Empire agenda simply could not survive.

As the post-war world order of geopolitics and speculative finance collapses, President Trump's instincts have been to end US involvement in regime change wars; to resolve decades-long conflicts, such as that with North Korea; to form cooperative rather than antagonistic relationships with other world powers like Russia and China; and to pull the U.S. out of the Paris Climate Accord. In short: to pull the rug out from under the strategic control over nations which the Anglo-American elites have exercised for nearly a century. All of this, a desperate and dying empire cannot abide.

Green Death and Neo-Colonialism

The modern environmentalist movement, to which so many deluded people in the West today pay obeisance, was never a grassroots movement of concerned youth, and never had anything to do with saving the Earth. It was created and promoted from the beginning by the British Empire to stop development: as a depopulation policy.

Emerging out of the eugenics movement, which became somewhat unpopular in the wake of Hitler's genocide, the re-branded "ecology" or "conservation" movement continued the goal of maintaining the pre-war colonial system in the post-WWII world.

In 1960, Julian "Master Race" Huxley, co-founder of the World Wildlife Fund and once-head of the British Eugenics Society, made very clear the "conservation" movement's colonial intentions: "These newly independent African nations cannot be trusted with the protection of natural spaces and endangered species. Therefore, we must have an international body which can take stewardship of these lands." Huxley's stewardship meant that by the mid-1990s, Britain, through the WWF, regained control over roughly 8% of the African continent, preventing the development of its resources for the people of Africa.

In 1968, money from some of the biggest oligarchical families in the West was deployed to found the Club of Rome, which declared, "In searching for a new enemy to unite us, we came up with the idea that pollution, the threat of global warming, water shortages, famine, and the like would fit the bill....But in designating them as the enemy, we fall into the trap of mistaking symptoms for causes.... The real enemy, then, is humanity itself." In parallel the United Nations sponsored a series of conferences on population in the mid-1970s to promote the idea that human population growth is a cancer on the planet, and launched the hoax of "sustainable development."

Concurrently, under U.S. Secretary of State Henry Kissinger (who famously declared that he felt more British than American), NSSM-200 was authored, defining the economic development of other nations, especially in the so-called "Third World," as a threat to U.S. national security interests, stating, "Wherever a lessening of population pressures through reduced birth rates can increase the prospects for such stability, population policy becomes relevant to resource supplies and to the economic interests of the United States."

Out of this process—not honest scientific work—came the formation of the UN Intergovernmental Panel on Climate Change (IPCC) in 1988, with a goal of inducing nations into signing binding agreements to limit their own development and industrialization based on lies of the dangers of CO2 and a coming climate apocalypse. Should we be surprised, then, that the resolution for a Green New Deal cites the October 2018 report of the IPCC, "Special Report on Global Warming of 1.5°C" in its first sentence as the urgent basis for action?

Youth Need a Future, Not a Suicide Pact

The public face of support for the Green New Deal is "the future": school-aged children and young people. Is it the case that these youth are rising up on their own accord? Hardly.

Take the Sunrise Movement, which claims to be a grassroots "army of young people" to stop climate change and create jobs. Members of the Sunrise Movement traveled to Washington, DC for the launch of the Green New Deal, and have been bused to congressional offices around the country to confront leadership about "our future." The Sunrise Movement, and its partners such as 350.org, People's Action, and CPD Action, have received millions of dollars in funding from oligarchical, establishment funding mechanisms, such as George Soros's Open Society Foundation, the Rockefeller Family Fund, and the Sierra Club.

These are not only the same channels of funding of the original green genocide policies, but they are many of the same sources which are funding the coup operation against President Trump!

Instead of being used as pawns in an anti-development, anti-growth policy—a virtual suicide pact—our young people must be given opportunity to become geniuses in a society which is committed to human progress. The basis for making this shift was outlined by Lyndon LaRouche in his "Four New Laws to Save the U.S.A. Now!" which calls for shutting down the Wall Street—City of London speculative financial system, and its replacement with a science-driver oriented policy for the development of fusion power and a full revival of the space program. Youth who are engaged in contributing to humanity by making new leaps of discovery will have a very hard time believing, as many of their degenerate parents did, that resources are limited and mankind must stop progressing.

The Green New Deal is nothing but part of a rotting and desperate attempt to stop a new, pro-growth paradigm from taking hold across the planet. It is part and parcel of the coup against the Trump presidency, and was launched by the same British Empire apparatus. As the souls of the victims of British Empire-initiated genocide in 1930s Germany will cry out in warning to us: Been there, done that.