# California Water and Infrastructure Report

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



# For February 8, 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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Thus, President Trump is relatively well situated to meet the impending collapse of the financial bubble in the stock and bond markets. There is only one way to save the western economies from this inevitable break down — a process which has a precedent in the policies of Franklin Roosevelt's in the 1930s, which saved the U.S. from the depression and saved the world from fascism. The fictitious capital must be eliminated, through a Glass-Steagall reform of the banking system, so that the federal government can use the power vested in it by the U.S. Constitution to establish a national bank, to issue credit directed into the real economy, and unleash a massive scientific research and development process to shape an optimistic future for mankind.

https://larouchepac.com/20180207/british-have-shown-their-hand

# A Note To Readers

Remember last week our report that the new estimated cost for the repair of Oroville Dam is now \$870 million? And it was expected that FEMA would pick up 75% of that. Well, this week FEMA is saying that that may not happen. And with California's revenues heavily dependent upon capital gains receipts from the, at last until now, rising stock market, the budget surplus the governor likes to brag about can disappear just as quickly as 1200 points on the Dow.

Speaking of the Dow, here is a headline from today: "Dow closes more than 1,000 points down for second time this week." Is the bubble now popping? That still remains to be seen. But, as our Feature this week highlights, it is not money or markets that are the economy, but real physical production,

science and infrastructure.

It really is time for some serious changes, in addition to the ongoing ripping apart of the DOJ/FBI structure that ran the attempted coup against the President.

That change of policy is summarized in the quote that leads this week's report.

# This Week's Report

Drought is the word of the day as the Sun shines brightly, and warmly, all over the state and no precipitation is expected for the next 10 days, or more. The U.S. Drought Monitor makes clear that this new drought has an intensity that is rapidly increasing.

So, there are lots of stories on the snowpack, the drought, the temperature records being broken, and mostly the anxiety, if not felt by the population, at least the reporters express it.

The Oroville Dam update leads with noting that this week is the one year anniversary of the disintegration of the main spillway and the panicked evacuation of about 180,000 people as fear that the auxiliary spillway would collapse.

We have covered over recent weeks the findings of the special investigation by the independent committee, and this week that is elaborated on in one article.

One thing that has been consistent over the course of the year is that the cost of the near catastrophe has steadily risen. The initial estimate by the Department of Water Resources was \$200 million. Then it went to \$400 million and then to over \$500 million. Last week the new estimate hit \$870 million. But as pointed out in an editorial in the *Chico Record*, it will easily go over \$1 billion. And now, FEMA which was suppose to pay 75 percent of this cost is likely to pay nothing.

As expected, Governor Brown and his administration has succumbed to the inevitable. The Tunnel Project through the Delta has now been officially reduced from two tunnels to one, at least for now. The likelihood that even that will fly is probably something you would not want to bet on.

As mentioned above, the Feature this week provides a variety of items on the President's infrastructure plans, the state of the infrastructure in the country, the financial environment, and an interesting report on U.S. companies effectively joining China's Belt and Road Initiative, despite that officially the U.S. government is still holding back.

# "Drought, Drought, Drought"

From the media coverage over the past week or so, one would think it was something new.

# Nearly Half of California Gripped by New Drought

February 1, 2018 MATTHEW RENDA

https://www.courthousenews.com/nearly-half-of-california-gripped-by-new-drought/

(CN) – One year after record rainfall quenched California's persistent thirst and led its lawmakers to declare a devastating five-year drought over, water woes may have already returned to the Golden State.

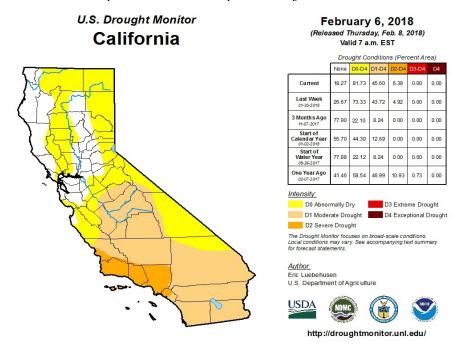
The state's monthly snow survey taken Thursday showed a skimpy snowpack throughout the state, while a federal report says about half of the state is suffering from a moderate drought and some

regions are already experiencing severe drought.

### U.S. Drought Monitor

As we can see in this week's U.S. Drought Monitor, California is rapidly sinking deeper in drought week by week. Just three weeks ago just 8 percent of the state was in "Moderate Drought." That figure is now 46%. Again, three weeks ago zero percent of the state was in "Severe Drought," and that figure is now over 6%.

It is useful to recall that during the five year drought that ended just over one year ago, in 2014, if I remember correctly, that at one point the percent of the state in the most serious drought, "Exceptional Drought," jumped from about 10 percent to over 50 percent in just a few weeks.



# The Snowpack

The February 1 measurement of the snowpack is ominous. That is, there aint much there. Here is the report from the Department of Water Resources:

February 1, 2018

Despite moderate January precipitation in the Sierra Nevada after an historically dry December, today's Department of Water Resources (DWR) manual snow survey east of Sacramento found little snowpack there, two months into what is typically California's wettest three months.

Measurements at Phillips Station revealed a snow water equivalent (SWE) of 2.6 inches, 14 percent of the early-February <u>average at Phillips</u> as measured there since 1964. SWE is the depth of water that theoretically would result if the entire snowpack melted instantaneously.

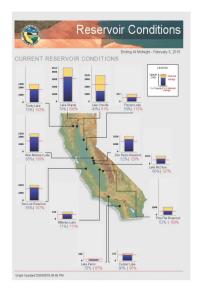
"California experiences the most variable weather in the nation," said DWR Director Karla Nemeth. "It's vital that water conservation efforts remain consistent regardless of the year's precipitation."

More telling than a survey at a single location like Phillips are DWR's electronic readings

today from 103 stations scattered throughout the Sierra. Measurements indicate the SWE of the northern Sierra snowpack is 4.6 inches, 27 percent of the multi-decade average for today's date. The central and southern Sierra readings are 5.8 inches (30 percent of average) and 3.8 inches (25 percent of average) respectively. Statewide, the snowpack's SWE is 4.9 inches, or 27 percent of the Feb. 1 average.

"The snow survey today shows water content far below average for this time of year," said Frank Gehrke, chief of the California Cooperative Snow Surveys Program who conducted today's survey at Phillips. "Today's measurements indicate an anemic

### Reservoirs



# Extraordinary winter warmth and dryness to persist as West Coast ridge dominates

by Daniel Swain

February 1, 2018

#### http://weatherwest.com/archives/6072

Despite the calendar, it sure hasn't felt much like the middle of winter across California in recent days. While well above average temperatures and below average precipitation have been widespread throughout the state, recent warmth and dryness have been especially concentrated across Southern California. Immediately following the <u>warmest autumn</u> (and before that, <u>warmest summer</u>) on record, a legitimate mid-winter heatwave baked the southern third of the state this week, <u>setting numerous high temperature records</u>. In fact, anomalous offshore flow brought daytime temperatures near 90 degrees and overnight lows above 70 degrees near the Pacific coastline–temperatures that would be well above average in these areas in June, let alone January.

While temperatures in SoCal have now moderated somewhat, they're still quite mild for this time of year (running a "cool" 10-15+ degrees above average).

Snowpack is at or near record low levels across much of the American Southwest this February.

Additionally, this highly anomalous warmth has now spread northward across the rest of the state—bringing <u>spring-like temperatures to the Sierra Nevada</u> and inducing unusual mid-winter snowmelt. The statewide snowpack has already been tracking near record-low levels for most of the winter (partly due to modestly below average precipitation but <u>mostly due to far above average temperatures</u>), but

the ongoing warm and dry spell will likely melt what little snow currently exists below about 8000 feet in elevation. The lack of snow in California so far this winter is actually part of a much broader "snow drought" that currently extends across most of the mountainous interior of the American West, from the Cascades in Oregon to the Front Range of the Rockies in Colorado. Much as in the Sierra Nevada, these largely snow-less conditions are the product of both below average precipitation and above average temperatures across a wide swath of the Southwest so far this season.

### Drought is back: 'Ridiculously resilient' ridge of high pressure parked over California

By John Lindsey

Special to The Tribune

February 03, 2018

http://www.sanluisobispo.com/news/weather/weather-watch/article198288524.html

### What's the chance for a 'normal' rain year now? Grim, if history is a gauge

By Paul Rogers

Bay Area News Group

February 6, 2018<u>https://www.mercurynews.com/2018/02/06/whats-the-chance-for-a-normal-rain-year-now-grim-if-history-is-a-gauge/</u>

Hoping for a March Miracle to bail out California's dry winter? It's not likely.

### West will be warm, dry this spring, weather expert predicts

Matthew Weaver/Capital Press

February 6, 2018

http://www.capitalpress.com/State/20180206/west-will-be-warm-dry-this-spring-weather-expert-predicts

"Whatever moisture comes, it better come pretty quick," said Art Douglas, professor emeritus of atmospheric science at Creighton University in Omaha, Neb.

Model forecasts vary, indicating La Niña could last through October, continuing drought conditions in the southwestern U.S. and Southern Plains, or possibly end earlier.

# California bakes as winter temperatures set new records across the state

By Rong-Gong Lin II and Alene Tchekmedyian

Feb 04, 2018

http://www.latimes.com/local/lanow/la-me-ln-heat-trend-continues-20180204-story.html

# Low Snowpack Aggravates Water Supply Forecasts For Colorado River Basin

By Luke Runyon • Feb 5, 2018

http://www.kunc.org/post/low-snowpack-aggravates-water-supply-forecasts-colorado-river-basin

Be prepared for some of the West's biggest and most important rivers and streams to see record low

flows this spring and summer.

That's the message of the Colorado Basin River Forecast Center's latest water supply forecast released Monday.

"Below average precipitation continued to be the norm and not the exception for the month of January," the <u>forecast report</u> reads. "January marks the fourth consecutive month of the 2018 water year with widespread below average precipitation."

The center's forecasters <u>are projecting</u> the flows into Lake Powell -- one of the largest human-made lakes in the country -- to be 47 percent of average. The lake, on the Utah-Arizona border, is part of a reservoir system that supplies water to some 40 million people in the southwest. As of early February Lake Powell was at 56 percent of full capacity, while its sister reservoir, Lake Mead, was at 41 percent of full capacity.

The news is worse in the Colorado River's lower basin, which includes Arizona, and portions of New Mexico and Nevada. In those states, spring runoff from February to May is projected to be less than 30 percent of median.

# **Oroville Dam Update**

It is one year ago that the spillway at Oroville Dam began to disintegrate. It is an anniversary that all would wish not to celebrate. It is useful to recall that week-- the shock, the spectacle, and then the fear and panic as more than 180,000 people were given minutes to evacuate the area below the dam as the emergency spillway, it was feared, was about to collapse.

That moment was captured in the opening paragraph of my published report of March 3, 2017: "Oroville Dam's Near Catastrophe: A Wake-Up Call for the Nation." <a href="https://www.larouchepub.com/eiw/public/2017/eirv44n09-20170303/35-38">https://www.larouchepub.com/eiw/public/2017/eirv44n09-20170303/35-38</a> 4409.pdf

Feb. 26—Late Sunday afternoon on February 12, an emergency alarm was sounded by the Yuba County, California Sheriff:

This is an evacuation order. Immediate evacuation from the low levels of Oroville and areas downstream is ordered. A hazardous situation is developing with the Oroville Dam auxiliary spillway. Operation of the auxiliary spillway has led to severe erosion that could lead to a failure of the structure. Failure of the auxiliary spillway structure will result in an uncontrolled release of flood waters from Lake Oroville. Immediate evacuation from the low levels of Oroville and areas downstream is ordered. This is not a Drill. This is not a Drill. This is not a Drill.

In the year since that moment, the drama has shifted to watching an army of workers repair the damage and a controversy that will not end any time soon. We have documented that process weekly over the past year, and I will not review that now. A more than adequate review is provided by reporters Ryan Sabalow and Dale Kasler of the *Sacramento Bee* in the article immediately below. The article includes lots of photos. Both reporters over this past year have done a remarkable job on this story.

The controversy is summarized, or at least the latest developments of it, in the article immediately following the first article below.

Now, to add insult and more injury, FEMA, which had "pledged" to pay 75% of the more than \$870 the repairs has cost so far, has apparently decided that it will not pay any of that cost. This is covered in the third article below. And as the editorial in the *Chico Register* makes clear, the total cost will go over \$1 billion.

While I have posted links to many videos of the repair process over the past year, the latest video, below, many may find, is a very ho hum addition. But, that is what we have for this week.

### One year later: The crisis at Oroville Dam

By Ryan Sabalow And Dale Kasler February 07, 2018

### http://www.sacbee.com/news/state/california/water-and-drought/article198679674.html

One year ago, when the main flood-control spillway at Oroville Dam cracked in two on Feb. 7, 2017, the crater sent concrete chunks flying and water shooting off in all directions. The crisis at America's tallest dam peaked five days later, with the frantic evacuation of 188,000 residents of Butte, Sutter and Yuba counties.

The fractured spillway posed a huge challenge for the California Department of Water Resources. It wanted to limit the water releases on the spillway to contain the damage to the 3,000-foot-long concrete chute. But the rainy weather made a mockery of that strategy, and Lake Oroville filled up.



Concrete chunks fly in dramatic video capturing break at Oroville Dam spillway

On Feb. 11, the lake was so high that water started pouring over the adjacent emergency spillway for the first time ever. DWR officials initially said the structure was holding up fine. But one day later they noticed that the unpaved hillside below the emergency spillway was rapidly eroding, triggering fears that a "wall of water" would swamp much of Oroville and other downstream communities. Mandatory evacuations were ordered late in the afternoon of Feb. 12, clogging Highways 99 and 70 and creating havoc throughout much of the region.

To keep the emergency spillway from crumbling, DWR dramatically ramped up water releases on the battered main spillway, bringing lake levels down and effectively ending the crisis. Water continued pounding the main spillway for days afterward, carving a giant crevice in the nearby hillside.

Fixing the two spillways turned into an \$875 million job that wouldn't be finished until the fall of 2018, although DWR promised the structures would be safe enough for the 2017-18 rainy season.

State officials say the Federal Emergency Management Agency will pay for three-quarters of the \$875 million repair, although FEMA has indicated it might not pay to fix structures that were poorly maintained. A forensic investigation showed that the spillways were poorly designed and maintained



The sheer power of the water being released from Oroville Dam's fractured main spillway is evident in this Feb. 24 aerial photo. Heavy pounding on the concrete chute left the structure a shambles. Randy Pench rpench@sacbee.com

over the years. Any repair costs not covered by FEMA will be shouldered by the local water agencies that belong to the State Water Project and store water behind the dam.

### To Fix or Replace? That Is the Question.

By Glen Martin

https://alumni.berkeley.edu/california-magazine/just-in/2018-01-31/fix-or-replace-question

What to fix, and what to replace? That's the big question for Orville Dam. It has been almost a year since water brimmed to the top of Oroville reservoir and the tallest dam in the United States suddenly showed signs of possible, even imminent failure. Emergency releases eroded both the primary and secondary spillways with horrifying rapidity, and evacuations were ordered for 200 thousand downstream residents.

Catastrophe ultimately was averted, and crews have since worked furiously to repair the damage. But the problem is unlikely to be remedied by any patch job, warns UC Berkeley professor emeritus of engineering and renowned forensic engineer Robert Bea. Oroville's problems are so deep and structural that "fixing" it is not realistic. That's especially the case at the "headworks" for the primary spillway, the structure that controls releases from the reservoir.

The dam is emblematic of a larger institutional dilemma: a basic misunderstanding of the word "safe."

Indeed, says Bea, "the jury is still out" on the dam itself, the massive plug of earthen fill that backs up the Feather River. There is leakage at some places on the dam's face, suggesting that the structure itself may be unsound.

"Maybe the dam needs rebuilding, maybe not," says Bea. "We simply don't know, but we need to know. FERC [the Federal Energy Regulatory Commission] thinks there should be additional instrumentation on the dam to survey the situation, and I agree. But DWR hasn't supported that option."

Bea and his colleague Tony Johnson produced a report on the root causes of Oroville's spillway failures five months after the incident. Earlier this month, an independent team of forensic investigators released their own analysis.

"There are some differences, of course, but we both align on the fundamental conclusion that the event

was the result of a long-term history of mismanagement and poor decisions," Bea says.

The report added that DWR's commitment to dam safety, "...although maturing rapidly and on the right path, was still relatively immature at the time of the incident...." The report further characterized the agency as "somewhat overconfident and complacent...and insular, which inhibited accessing industry knowledge and developing needed technical expertise."

Bea is even more pointed in his criticism of DWR, maintaining that it's not just a matter of what the agency ignored or scamped during the decades since Oroville was built. He's worried about what the agency is doing—and not doing—now. Specifically, he cites testimony given by DWR staffers at a January 10 hearing of the California State Assembly standing committees on water, parks, and wildlife.

"They asked [DWR deputy director] Cindy Messer if DWR agreed with the forensic team's report, and it was really interesting to watch her facial expressions," says Bea. "She said she didn't agree with all of them. Then she [and deputy director Joel Ledesma] were asked how long it will take DWR to implement the recommendations, and they said four to six months. But there's no way in hell they can do that. It's clear to me that the leadership at DWR still doesn't get it. They're ignorant, not evil, but it's unfortunate that they get very, very defensive under intense scrutiny."

During the hearing, Messer maintained that DWR had repaired the main spillway, "bringing it to today's standard..." But that's not true, says Bea, especially if "today's standard" reflects any real commitment to public safety.

# Two Congressmen Say It's Possible FEMA Won't Pay Full Federal Share for Oroville Dam Repair

By Bob Moffitt

February 6, 2018

http://www.capradio.org/articles/2018/02/06/two-congressmen-say-its-possible-fema-wont-pay-for-oroville-dam-repair/

Two Northern California congressmen say the Federal Emergency Management Agency might not pay its share of the \$870 million price tag to replace the spillways at Lake Oroville.

Republican Rep. Doug LaMalfa and Democrat Rep. John Garamendi issued a joint release this afternoon that says FEMA has informed Congress it's uncertain whether it will pay some \$650 million for repairs.

The release claims that FEMA determined there was a "lack of maintenance" on the spillway and may only pay for repairs that would return it to its condition before the main failure.

"It makes no sense for FEMA to reimburse the State of California for work to bring the Oroville Dam back to the same design that caused the disaster," Garamendi wrote in a statement.

LaMalfa added that "we must proceed in a manner that ensures the safety of those impacted by the spillway incident and actually improves the spillway."

The Department of Water Resources has said it expects FEMA to cover 75 percent of the cost. State water contractors would pay the rest.

# Editorial: Spillway bill nears \$1 billion, keeps growing

02/04/18

http://www.chicoer.com/opinion/20180203/editorial-spillway-bill-nears-1-billion-keeps-growing
The latest reckoning of the tab for the Oroville spillway crisis — the first update in many months —

revealed an astonishing figure and proved how much the state has been trying to downplay the preventable disaster from the start.

It almost provides a "we-told-you-so" moment.

And on Feb. 13, after being asked by reporters all week how much the incident would cost, the state Department of Water Resources gave an estimate.

It could cost \$100 million to \$200 million, the state said.

In an editorial published the next day, Feb. 14, we wrote: "Like the DWR's prediction Friday that the emergency spillway wouldn't be needed, we think the math is way off. It wouldn't surprise us if the bill for this whole chaotic episode comes to a half billion dollars."

The DWR wasn't even close to being correct. It turns out neither were we.

The latest accounting released last week estimated the tab at \$870 million when the work is finished.

Even as the bills approach \$1 billion, that's still an underestimation.

### Video

#### California DWR

Published on Feb 7, 2018

https://www.youtube.com/watch?v=o2m7CCcG5t4

Dental concrete is poured for the emergency spillway splashpad. Holes are drilled for the rebar that will anchor the splashpad to the cut-off-wall. A wire saw is used to trim the pillars for the cut-off-wall and the excess concrete is removed.

# The Delta Tunnels Is Now "the Delta Tunnel"

The big shrink is now underway, as the Department of Water Resources (DWR) announced on February 7 that the two tunnel plan is now the one tunnel plan. The official statement from the DWR follows the article below. But, you must admire the sophistry of the statement. It says that the project will not proceed in stages, without stating that only the first stage is now a single tunnel. The article below is fairly thorough, so go to the link for the full story.

# It's official: The \$16 billion Delta tunnels will be scaled back to a single tunnel-for now (excerpts)

By Alex Breitler

Record Staff Writer

Feb 7, 2018

 $\underline{http://www.recordnet.com/news/20180207/its-official-16-billion-delta-tunnels-will-be-scaled-back-to-single-tunnel---for-now}$ 

After months of speculation, Gov. Jerry Brown's administration on Wednesday <u>made it official</u>: the \$16 billion Delta tunnels will be scaled back to a single tunnel.

At least, initially. The state could add the second tunnel later if San Joaquin Valley farmers decide they want to chip in for the full cost.

The single tunnel will deliver up to 6,000 cubic feet of water per second, down from the 9,000 cfs

under the old twin tunnels plan. The project is smaller, but could still harm Delta water quality in some ways, according to the state's own analysis of an older 6,000 cfs option.

The single tunnel would cost just under \$11 billion, officials said.

While the downsizing of the project, at least initially, is driven by cost, state Department of Water Resources Director Karla Nemeth said she hopes it will also help calm concerns that the project could be a massive water grab.

#### DWR's official statement

Today, the Department of Water Resources (DWR) sent a <u>memo</u> to the local public water agencies participating in the development and construction of California WaterFix and issued the following statement from DWR Director Karla Nemeth.

"WaterFix is a long-overdue infrastructure upgrade that will maintain a reliable water supply for 25 million Californians while also protecting the Delta ecosystem. With the current stated support of the participating public water agencies, the state is proposing to pursue WaterFix as planned, but also explore an option to implement construction in stages. This prudent approach aligns the urgent statewide need for action with the project's current support. We are eager to move forward with WaterFix to protect the Delta and water supplies." View the letter here.

### A Tale of Two Tunnels: California WaterFix

By Kate Mailliard

January 31, 2018

http://duwaterlawreview.com/tale-two-tunnels-california-waterfix/

In the world of California water, nothing is a sure thing. But when you're Governor Jerry Brown, even one step forward can seem like two steps back.

The seventeen billion-dollar plan to build two tunnels under the Sacramento-San Joaquin Delta ("Delta") in California, currently known as California WaterFix ("CA WaterFix"), has been a concern for environmentalists and Central Valley landowners since the plan was initiated in 2005. But in the past two years, the Delta plan has experienced a rollercoaster ride of successes and setbacks. Formerly known as the Bay Delta Conservation Plan, CA WaterFix made headway this summer when, after an extensive ten-year environmental study and scientific inquiry, the Delta plan received the "go ahead" from both federal agencies responsible for the protection of species under the Endangered Species Act ("ESA") and from the state's Department of Fish and Wildlife. The U.S. Bureau of Reclamation and the California Department of Water Resources also completed their final Environmental Impact Statement and Environmental Impact Report last year in compliance with federal and state law. Despite overcoming these legal hurdles, construction of the thirty five-mile long tunnels is unlikely to start anytime soon. Experts anticipated the project could begin construction as early as next year, but concerns over cost distribution—in conjunction with current claims alleging that the plan violates the California Environmental Quality Act ("CEQA")—are likely to slow, if not kill, CA WaterFix's momentum.

# **Feature: The American Credit System**

A new class series over the internet shall begin this Saturday, February 10. To understand the dramatic and historic moment of human history that we now live in, the background and ideas to be presented are crucial.

# The End of Geopolitics: What is the Global New Paradigm?

# REGISTER FOR OUR ONLINE CLASS SERIES, INCLUDING EXCLUSIVE REGISTRATION-ONLY CLASSES

Helga Zepp-LaRouche will kick things off Saturday, February 10th at 12:00 EST (continuing on Saturdays through April 28)

### https://screenshots.firefox.com/Gs9J56bPAX8yCh43/discover.larouchepac.com

The American people are faced with a historic choice: join China's revolutionary New Silk Road program and secure a new paradigm of win-win global development, or continue the suicidal geopolitical policies of Obama and Bush, guaranteeing confrontation with Russia and China and threatening world war. While President Trump is inclined to move in the direction of cooperation with China and Russia, he is being threatened with a palace coup by those desperately clinging to the old geopolitical view of unchallenged Anglo-American global dominance.

### You can play a role in this decisive point in history. Help secure the New Paradigm.

LaRouchePAC is launching a new class series, "What is the New Paradigm?" to prepare you to lead the population at this critical time. 2018 must be the year we end geopolitics.

2/10/18 – Introduction: What is the New Paradigm?

2/17/18 – What is Geopolitics, Part I—History

2/24/18 – Follow up discussion, registered participants only

3/3/18 – What is Geopolitics, Part II—Philosophy

3/10/18 – Follow up discussion, registered participants only

3/17/18 – Culture—Beauty & Freedom vs. the CCF

3/24/18 – Follow up discussion, registered participants only

3/31/18 – Confucian and Western Philosophy

4/7/18 – Follow up discussion, registered participants only

4/14/18 – Science: Man's Relation to the Universe

4/21/18 – Follow up discussion, registered participants only

4/28/18 – Wrap-up and Mobilization—End Geopolitics

Register for access to the syllabus, homework, reading assignments, and special live discussion sessions only for registered participants.

Email questions to classes@larouchepac.com

### The President and Infrastructure

What can be said now about the President's proposed rebuilding of America's infrastructure at this time

is that no one knows where this is going to go.

### Infrastructure Investment Barely Meeting Depreciation in U.S.

Feb. 2 (EIRNS)—Investopedia on Jan. 31 posted a comparison of the G7 so-called leading industrial nations' spending on infrastructure during the 20 years from 1996-2015, as a proportion of GDP. It found the United States the most negligent of the seven; the U.S. averaged investing 0.59% of GDP annually over the two decades, and never invested more than 0.68% of GDP. "The other notable trend," Investopedia noted, "is massive spending by China."

The U.S. infrastructure investment rate is now something over \$100 billion/year, with 65-70% of that provided by states, counties, and cities. And \$100 billion is what one of PricewaterhouseCoopers' (PwC) infrastructure studies, dealing with North America, estimated as the annual depreciation rate of that share of infrastructure across the country which is still depreciating—i.e., not so old and unimproved as to be worth zero.

The White House infrastructure proposal, at least as very recently leaked, at best would double this rate of spending, assuming that existing Federal infrastructure lending programs were not "folded in" to the proposed \$200 billion in a decade, or cut. The United States would still remain well below Japan, China and France. It would maintain roughly the same proportions of Federal versus local funding, with private investment ("PPPs") the unknown quantity. PPP contracts totaled just \$2.4 billion in the United States in 2015, rose to about \$16 billion in 2016 and \$14 billion in 2017.

One way or another, PPPs are local spending—whether the locals pay in increased tolls, taxes, water charges, parking fees, etc. They clearly have also not amounted to much relative to the investment needed.

### **Regarding New Infrastructure Investment**

Feb. 1 (EIRNS) Investopedia on Jan. 31 posted a comparison of the seven leading industrial nations' spending on infrastructure from 1996-2015, finding the United States the lowest; it averaged 0.59% of GDP, and never invested more than 0.68% of GDP. "The other notable trend is massive spending by China." The U.S. rate is now something over \$100 billion/year, with 65-70% by states, counties, and cities. \$100 billion is what the PriceWaterhousecoopers estimated as the annual depreciation rate of the share of infrastructure across the country which is still depreciating (i.e., not worth zero).

Thus the White House infrastructure proposal, at least as leaked, at best would double this rate of spending -- still remaining well below Japan, China and France -- maintaining roughly the same shares of Federal and local funding, with private investment the unknown quantity. PPP contracts totaled just \$2.4 billion in the United States in 2015, rose to about \$16 billion in 2016 and \$14 billion in 2017. One way or another, PPPs are local spending -- whether the locals pay in increased tolls, taxes, water charges, parking fees, etc. -- and have also not amounted to much relative to the investment needed.

# How Trump has already scored a win on infrastructure (excerpts)

The cuts passed last year will allow utilities to tap money set aside in deferred taxes, and will set off a scramble over how to spend it.

By **DARIUS DIXON** 

02/06/2018

 $\underline{https://www.politico.com/story/2018/02/06/trump-taxes-infrastructure-energy-395932}$ 

The Republican tax cut could spark the multibillion-dollar infrastructure program that almost nobody

expected.

Electric and gas utilities are finding themselves with vast amounts of excess cash as a side effect of last year's tax code rewrite — money that could easily total tens of billions of dollars, based on initial corporate filings. Those funds could become available for a massive buildout of energy infrastructure, for projects such as modernizing the electric grid, installing pipelines or putting up wind farms.

### Big U.S. Firms Are 'Taking Stock' of Tax Reform

Feb. 7 (EIRNS)—Since the GOP's tax cut bill was passed in December, they and President Trump have been delighted to report the announcements of bonuses or wage increases coming from companies big and small, totaling some \$2.5 billion just in January—as well as domestic capital investments.

Today, however, Democratic Senators Ron Wyden, Sheldon Whitehouse and Bob Casey released a report which documents announcements by major companies of roughly \$97 billion in buybacks of their own stock since January 1! Another such report, according to CNBC, by the research firm Birinyi Associates, put the stock buybacks completed in January at about \$89 billion. Taking either figure, this January is the second-biggest month—slightly behind only January 2016—of the last eight years' massive buyback wave with central bank-printed money.

It should be said that major companies have also announced, in January and the first week of February, some \$180 billion in new capital investments. But these are actually promised to be made at various paces over the coming several years. The stock buybacks—at least the \$89 billion in Birinyi Associates' list—have all already been done. And the largest of them all, \$22 billion, was by the criminally suspect bank Wells Fargo on Jan. 23, shortly before it was put under close supervision by the Federal Reserve.

So the tax reform legislation is, indeed, living up to the name JPMorgan Chase CEO Jamie Dimon gave it—"QE4."

# Non-Electric, Freight-Bound 'Passenger Rail' Is Killing Americans

Feb. 4 (EIRNS) -- The opening days of another month saw another fatal Amtrak crash caused by intercity passenger rail routes running on old freight-line tracks being used by freight trains at the same time. This crash, in South Carolina Sunday morning, killed two people and injured nearly 100 more, some seriously. An Amtrak train travelling at 59 mph struck a stopped and unmanned freight train, engine to engine, killing the two Amtrak drivers and injuring the majority of passengers on the train.

Exactly why or how the two trains on immediately adjacent tracks made contact is not yet established. But what is completely clear is that inter-city passenger train travel cannot be relegated to dodging and weaving around freight trains using the same, 100-year-old, low-speed and curvy tracks. Such passenger rail travel has proven fatal in three major accidents in four years -- two in three months -- not including others at rail crossings.

It also will never be high-speed travel, such as hundreds of millions of Chinese are using this week alone as Spring Festival/New Year home visits begin, and as many millions are enjoying in other countries. Diesel-electric traction has no capacity for high-speed travel, and the private freight railroads will never make the large investments to electrify their tracks.

Two responses are possible. One, urged now by many techno-writers and "Musk-rats," is to abandon passenger rail travel on the premise that soon our billion or so cars and trucks will be self-driving and this will, somehow, eliminate traffic jams! The other alternative, is the national government implementing a planned national system of 25,000 miles or more of high-speed rail routes, for starters.

### This is the fourth fatal crash involving an Amtrak train in two months

By Darran Simon, CNN

Updated 11:55 AM ET, Mon February 5, 2018

https://www.cnn.com/2018/02/04/us/collisions-involving-amtrak-trains-recent-weeks/index.html

Sunday's train collision in South Carolina was the fourth fatal incident involving an Amtrak train since the start of December.

The circumstances surrounding each crash vary; in two cases, vehicles appear to have driven around the lowered arm at a train crossing. The National Transportation Safety Board is investigating three of the collisions, including Sunday's.

**South Carolina** Two Amtrak employees were killed when the train they were working on collided with a CSX freight train around 2:35 a.m. Sunday in Cayce, South Carolina, Amtrak officials said. The passenger train had been diverted off the main track onto a rail siding, where it crashed into a stationary freight train, a National Transportation Safety Board official said.

**Virginia** An Amtrak train carrying Congressional members, including House Speaker Paul Ryan, to a Republican retreat in West Virginia struck a garbage truck near Charlottesville, Virginia on Wednesday, killing at least one person.

**North Carolina** Eugene Lyons, a pastor, and his wife, Dorothy, were killed in Nash County, North Carolina, when an Amtrak train hit their SUV on January 14.

**Washington State** The Amtrak Cascades Train 501 derailed near DuPont in Washington on December 18 and hurtled over an overpass onto Interstate 5, <u>killing three people</u> on its inaugural journey from Seattle, Washington to Portland, Oregon.

### A Contrast

Here is the headline of an article in the Wall Street Journal this week. Only the headline since you must be a subscriber to read the article. But, it is an appropriate idea to introduce what follows. While some U.S. firms are joining with China or have begun to emulate what China is doing in Africa and other areas of the world, the U.S. now is way behind.

China Builds Bridges and Highways While the U.S. Mouths Slogans: The Marshall Plan birthed a U.S.-led global order—now China is building a new world

https://www.wsj.com/articles/china-builds-bridges-and-highways-while-the-u-s-mouths-slogans-1517308205

### US firm to work on Nairobi-Mombasa expressway

Feb. 8 (EIRNS) – From The Star (Kenya) The construction of the much anticipated Nairobi-Mombasa expressway will begin towards the end of the year, KeNHA announced on Thursday. Communication director Charles Njogu said feasibility studies and designs were complete. Njogu told The Star Kenya National Highways Authority has also finalised deals with the largest US construction firm, Bechtel International. The project for the motorway with controlled access is expected to cost Sh230 billion (about \$ 2.2 billion). Bechtel will employ about 4,000 people and provide training and capacity building. The road will have four lanes with provisions for future expansion and will become a toll road and provide faster transit to support growth and industry.

The 473 km express highway will allow uninterrupted speeds of 120 km/h, cutting travel time from 10 to four hours, Njogu said by phone. "This is a completely new road away that will take up a lot of money because farmers whose land will be used will be compensated." US Export Credit Agencies, including the US Export-Import Bank and the Overseas Private Investment Corporation, are expected to finance the project.

# China in Kenya

### Kenya now has a high-speed rail line, with modern terminals

These two videos are documentaries on the building of the Mombasa-Nairobi Railway, which opened in May, 2017.

### Bridges: My Railway, My Story - Documentary about Mombasa-Nairobi Railway

https://www.youtube.com/watch?v=p9Z0eYHWFCI

Kenya's largest infrastructure project since independence, the Mombasa-Nairobi Railway, will be inaugurated Wednesday. The China-built SGR will shorten the journey between the two cities from 12 hours to four hours. In this documentary, Kenyans share their stories of change the mega-project has brought to the east African nation.

### Stations: My Railway, My Story - Documentary about Mombasa-Nairobi Railway

https://www.youtube.com/watch?v=O9 m20MCuGw

A new era for railway transport in Kenya. The country's largest infrastructure project since independence, the Mombasa-Nairobi railway, linking its largest port with the capital city. The Chinese-built railway is seen as a flagship project of China-Kenya cooperation, as well as a fulfillment of shared dreams for many locals.

