California Drought (and Flood) Update



For March 9, 2017 by Patrick Ruckert

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http://www.californiadroughtupdate.org https://www.facebook.com/CaliforniaDroughtUpdate

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The 2017 Infrastructure Report Card reveals that we have made some incremental progress toward restoring our nation's infrastructure. But it has not been enough. As in 2013, America's cumulative GPA is once again a D+.

The infrastructure is in poor to fair condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration. Condition and capacity are of serious concern with strong risk of failure.

The American Society of Civil Engineers' 2017 Infrastructure Report Card

A Note To Readers

Flash: President Trump's spokesman Sean Spicer confirmed today that the President continues to intend to implement a Glass-Steagall banking law (more details below).

Today, March 9, the American Society of Civil Engineers' 2017 Infrastructure Report Card was posted on their website: http://www.infrastructurereportcard.org/

Like their 2013 report, which I referenced in my article on the Orovilled Dam disaster in last week's report, this year's report demonstrates not only that just to bring America's infrastructure up to safety and functional levels will require \$3.7 trillion now, but that the President's proposed \$1.0 trillion plan for infrastructure over 10 years does not even come close to what the nation desperately requires. Not only that, but, it is only by investing at least \$1 trillion per year that millions of out of work, or missemployed, Americans can be brought into the productive labor force. The misdirection, for example, of the debate about replacing Obamacare ignores the most fundamental problem with the disaster called

health care: Poverty. As we shall see below, in the last section of this week's report, it is poverty that has put one-third of California's population on MediCal, costing the state and federal government tens of billions.

This week's report includes the state of the now non-existent drought, as seen in the U.S. Drought Monitor, and the Reservoir Graph. Drought and flood remains the theme of these reports, but it is only by once again asserting the truth that mankind must never be contained by the whims of nature that an honest report on these phenomenon can be presented.

Our "Weather Report" this week marks the second week in a row that we report on a new record. Last week it was the 30 atmospheric rivers that has hit the state so far this winter. This week it is that, so far this year, the amount of precipitation falling on the state has erased a 122 year record.

Following a section on the losers (those still hanging on to environmentalism), the concluding section of the report has extended excerpts from several articles that demonstrate that the "California Dream" is now a nightmare.

To conclude this introduction, here is some of the introduction of the American Society of Civil Engineers' 2017 Infrastructure Report Card, followed by a link to an article on China's infrastructure plans for the next three years (\$2.2 trillion planned investment in transport infrastructure alone), and a report from PricewaterhouseCoopers report on the Chinese economy.

China has issued a formal invitation to President Trump to participate in a Beijing conference on its New Silk Road policy to be held in mid-May. The President must attend this conference. And just in time, today, the LaRouche PAC released its new report, <u>LaRouche's Four Laws & America's Future on the New Silk Road</u>.

Now, from the American Society of Civil Engineers:

Every four years, the American Society of Civil Engineers' Report Card for America's Infrastructure depicts the condition and performance of American infrastructure in the familiar form of a school report card—assigning letter grades based on the physical condition and needed investments for improvement.

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And from China:

China to invest 2.2 trillion dollars in transport by 2020

By Wang Lei 2017-02-27

https://news.cgtn.com/news/3d516a4d7a636a4d/share p.html?t=1488206936291

China plans to invest a total of 15 trillion yuan (about 2.2 trillion US dollars) in transport during its 13th Five-Year Plan period from 2016 to 2020, according to Transport Minister Li Xiaopeng.

At a press conference on Monday, Li said that by 2020 a total of 3.5 trillion yuan (about 509 billion US dollars) will be spent on railways, 7.8 trillion yuan (about 1.1 trillion US dollars) on roads, 650 billion

yuan (about 95 billion US dollars) on civil aviation and 500 billion yuan (about 73 billion US dollars) on water transport.

A plan for the development of a modernized and comprehensive transport system during the 13th Five-Year Plan period was ratified and released by the State Council recently, Li said in Beijing. According to the plan, from 2016 to 2020, the length of the railway network will increase by approximately 30,000 kilometers, including 11,000 kilometers of new high-speed railways; the length of roads will increase by 320,000 kilometers, including 30,000 kilometers of new expressways; the number of quay berths for 10,000 tons of cargo or above will increase by over 300; the number of airports for civil use will increase by over 50.

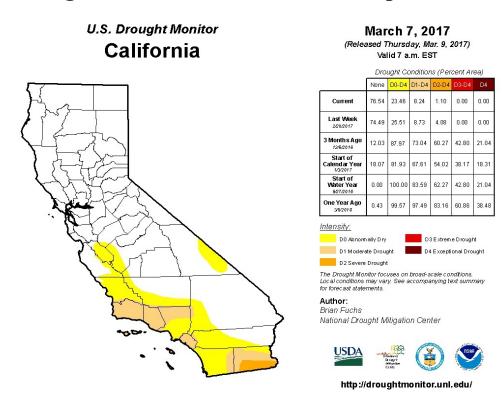
Here is the PricewaterhouseCoopers report:

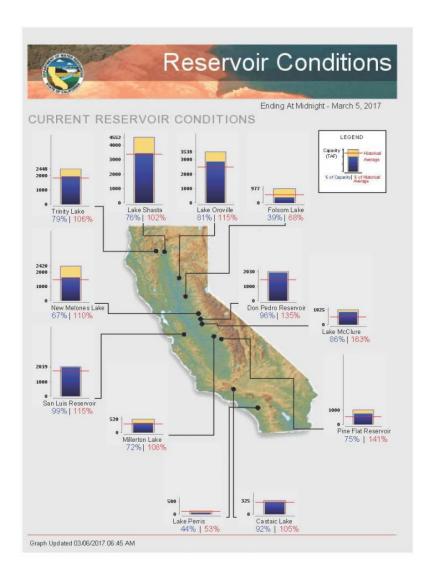
PwC Study Indicated OBOR Is the World's Only Economic Driver

EIR reported on Feb. 22 that "Real value in China's economy, and also in its investments in countries along its Belt and Road Initiative, is shifting to infrastructure projects and rising rapidly, as detailed in a report just published by the PricewaterhouseCoopers accounting and audit firm (PwC)."

A closer study of that detailed PwC report reveals its more fundamental point, the "Atlas"-like character of the "win-win" Belt and Road Initiative since 2013, in effectively holding up the world's economy after the financial crash of the trans-Atlantic banking systems. https://larouchepac.com/20170228/pwc-study-indicated-obor-worlds-only-economic-driver

The U.S. Drought Monitor and Reservoir Graph





As I Have Repeatedly Said: Step One on Infrastructure Must Be Glass-Steagall

Today, President Trump's spokesman Sean Spicer confirmed that President Trump still has Glass-Steagall on his agenda:

Bank stocks slip as White House confirms intent to revisit Glass-Steagall

https://www.ft.com/content/d4d99c1f-8ed2-3824-a1e6-1be8ca59808b

Financials don't seem too happy to hear that bringing back Glass-Steagall is still on President Donald Trump's policy to-do list.

In response to a question on Thursday about whether Mr Trump remains committed to a campaign promise to revisit the Great Depression era law — which prohibited commercial deposit-holding banks from engaging in riskier investment banking activities — White House press secretary Sean Spicer said that he was.

Oroville Dam Update

For the past two weeks the damaged main spillway has been shut down after allowing water to run down it, lowering the level of the reservoir by more than 50 feet. With the drier weather, the shut down of the spillway has not caused the reservoir level to rise significantly. While no water has been flowing down the spillway, the Department of Water Resources has been working to remove the 1.7 million tons of debris that had washed into the Feather River. As of today, about 500,000 tons had been removed. For the next few months, the department will have no choice but to once again open the damaged spillway as the reservoir fills again from both storms and the Spring melting of the snowpack.

For my full report on the Oroville Dam disaster, see last week's report:

http://www.californiadroughtupdate.org/pdf/20170302-California-Drought-(and-Flood)-Update.pdf



The debris from the damaged spillway fill the Feather River

Weather Report

Not only have we had a record number of atmospheric river storms, but this is the wettest water year, so far, in more than 120 years of record keeping.

California storms: Wettest water year, so far, in 122 years of records

By Mark Gomez March 8. 2017

http://www.mercurynews.com/2017/03/08/california-storms-wettest-water-year-so-far-in-122-years-of-records/

Fueled by a parade of "Pineapple Express" storms, California is in the midst of its wettest water year in 122 years of record-keeping, according to federal scientists.

Between October 2016 and February 2017, California averaged 27.81 inches of precipitation, the highest average since such records began being kept in 1895, according to data released Wednesday by the National Centers for Environmental Information, part of the National Oceanic and Atmospheric Administration.

The water year (October through September) record for California is 1982-83, which totaled an

average of 40.41 inches, according to the NCEI data. For the current water year to threaten the record, "the storm track needs to stay active over California" through March and into April, Oakley said.

Driving California's precipitation totals this year was a parade of "Pineapple Express" storms, a type of "atmospheric river" that gets its name from the plume of moisture coming from Hawaii into California. Pineapple Express storms can be 250 miles wide, 1,000 miles long and carry 20 times as much water as the Mississippi River at its terminus with the Gulf of Mexico.

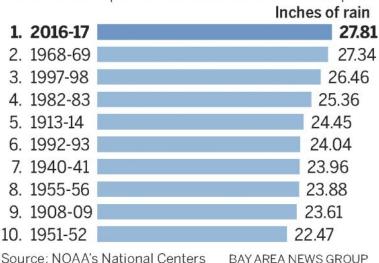
In a typical year, California has between 10 to 15 "atmospheric river" storms. Since the water season began on Oct. 1, there have been 30 in California, said Marty Ralph, the director of the Center for Western Weather and Water Extremes at UC San Diego.

So far, the conveyor belt of atmospheric rivers has created the wettest winter ever measured in the Northern Sierra, with precipitation at 180 percent of the historic average.

CALIFORNIA RAINFALL

for Environmental Information

From the start of the rainfall season in October to February, California received more rain in this time period since record-keeping began 122 years ago. Here are the top 10 seasons for the five-month period:



Kicking Against the Pricks

Despite the paradigm shift in thinking represented by the Trump White House, at least here in California, the environmentalist ideology still holds sway among the Brown administration, some of the academics and much of the press. Led by the State Water Board, it was declared this week that nothing to do with water will be decided without climate change being at the foundation of such decisions.

Then, Jay Famiglietti and Michelle Miro, in a *Los Angeles Times* article, hold on to the limited resources idea, and, importantly, state that California agriculture must be scaled back significantly. While pointing to real problems with the California water management system, our professors clearly have succumbed to the pessimism of the culture that dominates us today.

And in the third item in this section, below, it is claimed that both the drought and the flood are due to global warming.

Finally, the United Nations, all but completely captured by the Queen's army out to reduce the human population, in a new report, claims that pesticides used by agriculture are unnecessary.

All the articles are excerpted. If you wish to read them in full, the link is provided.

State Water Board Adopts Comprehensive Climate Change Response

By Pamela Martineau 03/07/2017

Association of California Water Agencies

<u>http://www.acwa.com/news/climate-change/state-water-board-adopts-comprehensive-climate-change-response</u>

The State Water Resources Control Board on March 7 adopted a <u>resolution</u> that sets the goal that climate change considerations be integrated into all State Water Board actions and that of the state's Regional Water Quality Control Boards.

The SWB report introducing the resolution notes that since the first climate change resolution, the SWB has played a leadership role in promoting water measures that "mitigate greenhouse gas emissions and contribute to adaption to the effects of climate change."

These measures include water recycling; water conservation and use efficiency; storm water capture; ecosystem protection, enhancement and restoration; drought response; and groundwater recharge," the report reads." These measures are implemented primarily though issuing permits, developing policies and regulations, and providing financing.

Our wild, wet winter doesn't change this reality — California will be short of water forever

Jay Famiglietti and Michelle Miro

March 7, 2017

http://www.latimes.com/opinion/op-ed/la-oe-famiglietti-miro-after-the-drought-20170307-story.html

Jay Famiglietti is a hydrologist and former professor of Earth system science and of Civil and Environmental Engineering at UC Irvine. Michelle Miro is a hydrologist and doctoral candidate in civil and environmental engineering at UCLA.

Over the last 18 months, California has experienced one of the driest, wettest and wildest rides in its recorded water history.

As the 2015-16 water year opened in October 2015, drought had driven the state's reservoir and groundwater levels to all-time lows. Entire towns were left without water. Reports of lakes turned to puddles, of wells running dry by the thousands, and of the cracked ground above depleted aquifers sinking several feet a year dominated state headlines.

Then came the deluge. Since last fall, a steady stream of "atmospheric river" storm systems has been battering the coast, the Sierra Nevada and almost everywhere in between, restoring reservoirs and the

snowpack to their highest points in years.

The great thirst of our highly productive agricultural sector has never been and will never be satisfied by the annual winter storms.

Which leads us to the second most frequently asked question of this unusually wet winter: What's our water future? The answer has been clear for a while: It's going to be a lot like our water past, but more so — California is, was and will be chronically water short.

The drought has underlined three important realities that aren't going to change.

First, the way municipalities use water can be sustainable, even as their population grows, as long as they embrace conservation, water recycling and reuse, and a diverse portfolio of management options. However, agricultural water use at today's scale in California is not sustainable. Agriculture is literally sucking the state dry.

Food production requires nearly unfathomable volumes of water, and has resulted in the long-term decline of the total available fresh water in California. The great thirst of our highly productive agricultural sector has never been and will never be satisfied by the annual winter storms that feed the state's rivers and reservoirs.

The shortfall is met by pumping groundwater at rates that greatly exceed those of replenishment. As a result, groundwater levels in much of the state, including the once-vast reserves beneath the Central Valley, have been declining for nearly a century.

It is essential to understand that wet winters like the current one will not reverse this long-term decline. Historically, even the wettest multiyear periods result in only a modest uptick in the otherwise steady loss of Central Valley groundwater.

Consequently, agriculture in California has to adapt to this dwindling supply. Farmers and ranchers will face more of the kinds of difficult decisions the drought has already forced, such as fallowing fields as groundwater levels drop, or worse, taking land out of production.

Global warming is slamming California. Will Trump take notice?

By Sean Cockerham

March 7, 2017

http://www.mcclatchydc.com/news/nation-world/national/economy/article136813158.html

The drought has been declared over in most of California, with heavy winter rains sending water over the Oroville dam and forcing the evacuation of nearly 200,000 people.

But climate change is still in the air, and the recent weather pattern is a harbinger of what's to come. The abrupt shift to record rainfall is the kind of extreme weather forecast for a warming planet.

UN experts denounce 'myth' pesticides are necessary to feed the world

By Damian Carrington

7 March 2017

The Guardian

https://www.theguardian.com/environment/2017/mar/07/un-experts-denounce-myth-pesticides-are-necessary-to-feed-the-world?CMP=share_btn_fb

The idea that pesticides are essential to feed a fast-growing global population is a myth, according to UN food and pollution experts.

A <u>new report</u>, being presented to the UN human rights council on Wednesday, is severely critical of the global corporations that manufacture pesticides, accusing them of the "systematic denial of harms", "aggressive, unethical marketing tactics" and heavy lobbying of governments which has "obstructed reforms and paralysed global pesticide restrictions".

The report says pesticides have "catastrophic impacts on the environment, human health and society as a whole", including an estimated 200,000 deaths a year from acute poisoning. Its authors said: "It is time to create a global process to transition toward safer and healthier food and agricultural production."

California: A State That No Longer Functions

What follows are excerpts from several articles that demonstrate that not only are the requirements for fixing the state's infrastructure enormous, but that the destroyed economy of the nation has hit California harder than any of the other states. With one-third of the population on MediCal (13 million of the state's total of 39 million people), and the highest poverty rate in the country, for most of us here, the "California Dream" is now a nightmare.

These articles provide a sobering look at the state of the state, but also point to not only what a policy driven by environmentalist ideology has done, but also how the nation, seized by Wall Street criminals since the death of President John Kennedy, ensured that such an environmentalist policy was the only option.

Last week's report on the Oroville Dam near catastrophe provides more details of the costs in the hundreds of billions required to just fix the infrastructure.

http://www.californiadroughtupdate.org/pdf/20170302-California-Drought-(and-Flood)-Update.pdf

Official: Calif. faces \$50B price tag for flood control

By matthew daly, associated press WASHINGTON — Mar 1. 2017

http://abcnews.go.com/Politics/wireStory/officials-calif-faces-50b-price-tag-flood-control-45833425

California faces an estimated \$50 billion price tag for roads, dams and other infrastructure threatened by floods such as the one that severely damaged Oroville Dam last month, the state's natural resources secretary said Wednesday.

California, please stop resisting Trump long enough to get help for our water infrastructure

The Times Editorial Board Los Angeles Times March 3, 2017

http://www.latimes.com/opinion/editorials/la-ed-water-infrastructure-20170302-story.html

Two things ought to come to mind in California when President Trump says he plans to spend \$1 trillion on infrastructure. And no, they're not "Oroville" and "San Jose," although those are good clues.

The first is that if the federal government is going to prioritize vast new infrastructure spending, California's water projects should be near the top of the list. Bring it on.

Much of the Sacramento Valley was threatened last month when high water levels at the massive Oroville Dam caused torrents to flow down damaged or poorly built spillways. And the recent San Jose flooding apparently was caused not by infrastructure that failed, but by infrastructure that was insufficient to protect a rapidly expanding city from a once-a-century disaster.

Federal water spending shaped California and the rest of the West with dams, flood-control projects and other public works that allowed millions of people to inhabit a landscape that otherwise could support only a fraction of its current population. In retrospect, the idea that an area with such poorly understood (at the time) hydrological characteristics and climate patterns could be developed the same way as areas east of the Rockies seems simultaneously quaint and tragic, but it's done.

Just as the population must adapt to the land and the weather, so must the human-built infrastructure, or this dry region will not be able to sustain the people, agriculture, industry, intellect and innovation that in turn sustains so much of the rest of the country and the world. The state once tried to go it alone but ran out of money and turned to the federal government to complete the Central Valley Project. Later projects built largely by and for Californians had federal help, and such help remains necessary if the state is to maintain and update its water storage and delivery systems to keep pace with an increasingly volatile climate.

Once a national and global leader in infrastructure, according to a report last year by the Center for Budget and Policy Priorities, California now spends the least percentage of its state budget on infrastructure of any state.

In terms of preparing for the future, California's current penchant for endless studies and environmental hand-wringing is fostering pre-Katrina Louisiana conditions, rather than the forward-looking capital investments previously the state's hallmark.

Remarkably, this year's water system fiasco could have been prevented if Brown had actually heeded his own climate change rhetoric, which anticipates that more rain and less snow will fall in the state. But his climate change obsession failed to spark any rush to modernize or expand water storage to capture the potentially increased rainfall. There has not been a major new dam or reservoir constructed since the first "Moonbeam" era — in large part, due to environmental opposition and Sacramento's disinterest in basic state services

Nor is the water infrastructure alone in terms of neglect. California's roads are among the worst maintained in the country. The Los Angeles area has the worst road conditions of all major metropolitan areas, followed closely by the Bay Area.

Brown's recent pronunciamentos suggest we will have ever more extreme climate policies, including virtual bans on all greenfield housing, and regulations covering everything from how houses are built to cow farts. Sadly, all this will have no real effect on the global climate, given California's relatively small footprint; the shift of people, jobs and productive industries to other, less temperate states like Texas all but wipes out whatever might be gained from the state's increasingly extreme greenhouse gas limitations.

Brown's actions seem rooted in a desire to present himself as the savior of the planet. Yet, while he

postures, Brown is leaving a legacy not of salvation, but rather of devastation — at least for everyone but a handful of tech oligarchs and the state's pensioners.

The True Legacy of Gov. Jerry Brown

By Joel Kotkin

Editor of NewGeography.com and Presidential fellow in urban futures at Chapman University Tuesday, February 28th, 2017

http://www.foxandhoundsdaily.com/2017/02/true-legacy-gov-jerry-brown/

The cracks in the 50-year-old Oroville Dam, and the massive spillage and massive evacuations that followed, shed light on the true legacy of Jerry Brown. The governor, most recently in Newsweek, has cast himself as both the Subcomandante Zero of the anti-Trump resistance and savior of the planet. But when Brown finally departs Sacramento next year, he will be leaving behind a state that is in danger of falling apart both physically and socially.

Jerry Brown's California suffers the nation's highest housing prices, largest percentage of people in or near poverty of any state and an exodus of middle-income, middle-aged people. Job growth is increasingly concentrated in low-wage sectors. By contrast, Brown's father, Pat, notes his biographer, Ethan Rarick, helped make the 20th century "The California Century," with our state providing "the template of American life." There was then an "American Dream" across the nation, but here we called it the "California Dream." His son is driving a stake through the heart of that very California Dream.

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Nor is the water infrastructure alone in terms of neglect. California's roads are among the worst maintained in the country. The Los Angeles area has the worst road conditions of all major metropolitan areas, followed closely by the Bay Area.

Originally published in the Orange County Register. For the rest of the article please go <u>here</u>.

Money, politics and the twin tunnels

by CHUCK MCFADDEN
posted 03.06.2017
http://capitolweekly.net/money-politics-twin-tunnels-delta/

California's water infrastructure of dams, aqueducts, levees and more is big. The California Aqueduct alone is more than 400 miles long, pushing Northern California water south; California has 1,400 dams, some 6,000 miles of levees in the Central Valley — and nearly 39 million people.

No one believes California can manage water infrastructure improvement and repair without federal help.

But state political leaders have not been shy in their contempt for all things Trump.

But the American Society of Civil Engineers says it will cost \$65 billion a year over the next 10 years to fix California's overall infrastructure — roads, bridges, dams, etc. And that's from a report that is now more than four years old. (The engineers will issue a new report on March 9.)

The engineers said this in their 2012 "Report Card" on California's overall infrastructure needs:

"In 2012, the 10-year total unfunded infrastructure investment required has increased to \$650 billion In 2006, California voters passed almost \$42 billion worth of infrastructure measures on the ballots, and although that was a good start and it has certainly helped at least maintain or in some cases improve the grades, the 2006 ballot measures represent only a drop in the bucket compared to the \$650 billion needed to move California in the right direction."

In a brand-new analysis of the Central Valley's water situation, the Public Policy Institute of California was cautiously optimistic about the Twin Tunnels idea:

"The proposal to improve Delta conveyance by building tunnels underneath the Delta to move water from the Sacramento River to the pumps in the southern Delta—known as California WaterFix—is not currently projected to greatly increase imports beyond current levels, but it would improve their reliability. And by increasing the flexibility of water operations in the Delta, new conveyance also could make it easier for water users to benefit from water trading and new storage in the Sacramento Valley."

No one believes the state can manage water infrastructure improvement and repair without federal help

In a prescient 2011 look at California's water situation, the PPIC declared:

"Crises are brewing, waiting for the next drought, flood, or lawsuit to bring widespread or local catastrophe. In some ways, California is already in a crisis, but the crisis is moving so slowly that the state's leaders and residents often fail to recognize it. Given anticipated changes in demographic, economic, climatic, and ecosystem conditions, today's conflicts are likely to worsen unless California can quickly develop significant, forward-looking changes in water policy."