California Water and Infrastructure Report

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

For January 4, 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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Increasingly, Trump's real base is concerned about only one thing — that he'd better succeed in rebuilding American industry and the crumbling infrastructure, creating thousands of jobs, or he will lose his strong support from working people. Trump is holding several meetings this week to prepare a campaign for a national infrastructure policy. Even if they come up with a competent program, it will be missing the means to finance it, which will be impossible without taking on the massive speculative bubble which has set the western banking system on a course for a near-term collapse far greater than that of 2008. The years-long fight by this organization to restore Glass- Steagall, re-establish a National Bank, and unleash the industrial and scientific potential of this nation, is increasingly reflected in discussions from every side of the political spectrum, as seen in reports below.

https://larouchepac.com/20180104/desperate-british-attack-frees-trump-populist-mythology

A Note To Readers

That President Trump recognizes the truth of the above statement was made clear by him in his comments on Steve Bannon yesterday, in which he used the Franklin D. Roosevelt 1932 campaign slogan to describe his victory last year: "Steve Bannon has nothing to do with me or my Presidency. When he was fired, he not only lost his job, he lost his mind.... Steve had very little to do with our historic victory, which was delivered by **the forgotten men and women of this country.**"

And it is only by doing exactly what President Roosevelt did on his first days in office in 1933-- putting the speculative financial system into bankruptcy reorganization-- that cleared the path for the greatest infrastructure building program in U.S. history. From great projects like the Tennessee Valley Authority (and its 29 dams on the Tennessee River and its tributaries), the Grand Coulee Dam, the Central Valley Project of California, the Rural Electrification program, and many more, to the thousands and thousands of smaller projects-- sewer systems, water supply systems, flood control systems, airports, highways, post offices, and more-- it was building the infrastructure of the nation that put millions to work and created the foundation for the nation to fight World War II.

The President must implement the only comprehensive policy that will both put the speculative system out of our misery and pave the way for a real productive economy. That policy is found in the new updated pamphlet by the LaRouche PAC: ***"LaRouche's Four Laws & America's Future On The New Silk Road.*** This week I include at the end of this report chapter 1 from that pamphlet: "**Restore Glass-Steagall To Reclaim U.S. Banking from the Wall Street Casino.**"

This Week's Report

The first measurement of the state's snowpack was on January 3, and virtually no snow was found. So the question still is being asked, "is this a new drought?" While the state water officials like to see December's almost complete lack of any moisture falling from the skies as a cup half full, others are not so optimistic. But, as we all know, California weather is less than predictable, so everyone refuses to pretend they have a crystal ball. The photo of Mount Shasta, below, by my friend Jesse Maben summarizes the present bareness of the Sierras.

President Trump's administration announced this week that he will deliver on one of his campaign promises made to the farmers in California. More water flowing to agriculture from the Central Valley Project is now under consideration.

The Colorado River, which some forget provides a significant part of the state's water supply is forecast to also have a significantly ugly forecast for the year.

The Thomas Fire in Santa Barbara and Ventura counties at over 300,000 acres now, is a fire that could not be stopped, as reported in an excerpted article below. The extraordinarily conditions that created the largest fire in state history in December are reported in the article.

If the nation is to be rebuilt and we have once again a production oriented economy, then the work force must be sober. So, the announcement today by the Justice Department that it will crack down on legal marijuana by rescinding an Obama administration policy to not challenge state laws that allow people to use pot for medical and recreational uses, is a step in the right direction. Best of all, it will scare the shit out of the millionaire investors who, like the British in China in the 19th century, seek to profit off the destruction of peoples' minds.

While California infrastructure usually is most visible in the roads, bridges and dams, the less visible elements like flood control represent a more serious danger to most in the state. The flood plains and the levee system, while often not able to handle an atmospheric river or two, the entire system can be washed away by a mega-flood, like that of 1861-62, which saw the Central Valley under 10-20 feet of water.

So, the President's call to Democrats this week to, “Bring Me Infrastructure!” should be welcome by all.

December: No Snowpack, No Rain, and No One Knows What Is To Come

Snow measures just 3 percent of average in first California mountain survey

By Dale Kasler

January 03, 2018 12:17 PM

http://www.sacbee.com/news/local/article192782004.html

The National Weather Service’s Michelle Mead, far left, Lisa Lien-Mager of the Natural Resources Agency and Department of Water Resources director Grant Davis huddle with snow survey chief Frank Gehrke at Phillips, near Echo Summit. The snow level at Phillips was 3 percent of normal. Dale Kasler

When the chief of California’s snow measurements conducts his manual surveys, he usually does it in style, skimming the snow in cross-country skis as reporters plod behind him in snowshoes.

No need this time. The vast meadow around Phillips, a remote spot near Echo Summit, was mostly grass and dirt Wednesday, with pitifully small patches of snow. Frank Gehrke, the Department of Water Resources employee who runs the survey, wore simple winter boots as he walked the 200-yard course off Highway 50 to complete the first official snow survey of the season.

When the measurements were done, Gehrke reported the dismal numbers: just 1.3 inches of snow on average, and a “snow water content” of 0.4 inches. That was 3 percent of average for early January.

The survey at Phillips, a former post office and stage coach stop at an elevation of 6,800 feet, is mainly a ceremonial affair, and Wednesday’s results weren’t typical of how the state is faring. Overall, the Sierra Nevada snowpack is about 24 percent of normal, based on electronic readings from “snow pillows” scattered throughout the mountains, and Davis and Gehrke expressed hope that the rest of the winter will bring better results.

Mount Shasta nearly bare of snow:

Mount Shasta: January 3, 2018 (Photo: Jesse Maben)

Still Too Early To Draw Conclusions from Season's First Snow Survey

January 3, 20018

From the Department of Water Resources:

> *Today's Department of Water Resources (DWR) manual snow survey east of Sacramento in the Sierra Nevada found little snowpack, which was predictable after a dry December throughout California. Measurements at Phillips Station revealed a snow water equivalent (SWE) of 0.4 inches, 3 percent of the average SWE of 11.3 inches in early January at Phillips as measured there since 1964 (http://bit.ly/2CjmFiV). SWE is the depth of water that theoretically would result if the entire snowpack melted instantaneously.*
>
> *"As we're only a third of the way through California's three wettest months, it's far too early to draw any conclusions about what kind of season we'll have this year," DWR Director Grant Davis said.*
>
> *More telling than a survey at a single location, however, are DWR's electronic readings today from103 stations scattered throughout the Sierra Nevada. Measurements indicate the SWE of the northern Sierra snowpack is 2.3 inches, 21 percent of the multi-decade average for the date. The central and southern Sierra readings are 3.3 inches (29 percent of average) and 1.8 inches 20 percent of average) respectively. Statewide, the snowpack's SWE is 2.6 inches, or 24 percent of the Jan. 3 average.*
>
> *"The survey is a disappointing start of the year, but it's far too early to draw conclusions about what kind of a wet season we'll have this year," said Frank Gehrke, chief of the California Cooperative Snow Surveys Program who conducted today's survey at Phillips. "There's plenty of time left in the traditional wet season to reverse the dry trend we've been experiencing."*
>
> *California traditionally receives about half of its annual precipitation during December, January, and February, with the bulk of this precipitation coming from atmospheric rivers (ARs). So far this winter, an atmospheric high-pressure zone spanning the western United States has persistently blocked ARs from reaching the state. If that zone were to move or break up, storms could deliver considerable rainfall and snow this winter.*

Los Angeles off to Driest Start to Wet Season in Over 50 Years

Dec 27, 2017

http://www.weathernationtv.com/news/los-angeles-off-driest-start-wet-season-50-years/

At the downtown Los Angeles station, where records go all the way back to 1877, this is the fifth-driest start to west season, and the driest since 1962. Rainy season in Los Angeles starts on October 1st and runs through late April and, sometimes, into early May.

Central Valley Farmers Fight Fears of Drought as Long Dry Spell Stretches Into New Year

by John RamosJanuary 1, 2018 at 6:00 pm
http://sanfrancisco.cbslocal.com/2018/01/01/dry-december-san-joaquin-growers/

STOCKTON (KPIX) If you really want to see how dry December has been you have to leave the Bay Area and come out to the Central Valley — to farm country.

Stockton usually gets about 3 1/3 inches of rain in December. Last month, the area only saw 0.05 of an inch.

'Unimpressive' — Forecaster says this week's storms won't turn around water, snow shortage

By Laura Urseny, Chico Enterprise-Record

Posted: 01/02/18, 4:45 PM PST | Updated: 9 hrs ago

http://www.chicoer.com/general-news/20180102/unimpressive-forecaster-says-this-weeks-storms-wont-turn-around-water-snow-shortage

As much hope as a new year brings, it's not going to make much difference when it comes to weather.

Two upcoming storms will be "unimpressive" for the north valley, according to a local weather forecaster.

"I would definitely not jump up and down," said Chico-based Western Weather Group forecaster Zach Graff.

"They'll wet the roads."

"It's hard to drop the word (drought). I don't want to put it out there. It's definitely drier than normal. It's harder to recover (waterwise) when we barely have any rain in December. The wet season … is scaring some people," Graff said.

Trump considers sending more water to California farmers

ASSOCIATED PRESS Published 2:50 p.m. PT Dec. 29, 2017
http://www.visaliatimesdelta.com/story/news/local/2017/12/29/trump-considers-sending-water-california-farmers/109009492/

SAN FRANCISCO – The Trump administration said Friday it will look at revving up water deliveries to farmers from California's Central Valley Project, the largest federal water project in the United States, in what environmental groups called a threat to protections for struggling native salmon and other endangered species.

The U.S. Bureau of Reclamation formally served notice it would begin looking at changing the operation of the massive California water project to maximize water deliveries. Spokeswoman Erin Curtis called it the first step in what would likely be an 18-month analysis.

The water project is a network of 18 dams and reservoirs and 500 miles of canals and aqueducts that draw water from the delta of the Sacramento and San Joaquin rivers, which are part of the largest estuary on the West Coast of the Americas.

Launched in the 1930s, the water project has helped make California's Central Valley the United States' richest farm region.

Curtis, the Reclamation spokeswoman, called the effort a priority for the current administration.

Cutbacks of water deliveries for the project's customers during the recently ended five-year California drought — including cutbacks prompted by rules protecting endangered native species also struggling in the drought — helped prompt the decision to look at possibly redoing the rules for operating the water project, Curtis said.

Colorado River: No Short-term Problem, But An Uncertain Future For Millions

Dry start to winter prompts ugly forecast for Colorado River

By Henry Brean Las Vegas Review-Journal
January 3, 2018 - 6:37 pm
https://www.reviewjournal.com/local/local-las-vegas/dry-start-to-winter-prompts-ugly-forecast-for-colorado-river/

The first forecast for the Colorado River is in, and the outlook for the coming year is bleak.

The National Weather Service's Colorado Basin River Forecast Center predicts the river will flow at about 54 percent of its average volume during the key runoff period from April to July.

That's when the river usually swells with snowmelt from the Rockies and other ranges, but precipitation so far this winter has been well below normal across the region.

The Salt Lake City-based forecast center released a report Wednesday showing December snow totals as low as 20 percent of average in some areas.

There's still plenty of time for conditions to improve. The river basin tends to accumulate much of its snowpack in January, February and March.

River use down

The discouraging forecast comes on the heels of some welcome news for the drought-stricken and overdrawn river.

Lake Mead ended 2017 almost 2 feet higher than a year ago, as use of Colorado River water by

Nevada, Arizona and California hit its lowest level since 1992.

The lake can use all the help it can get. Its surface has dropped more than 130 feet since drought descended on the Colorado in 2000.

Who gets what

Seven western states and the nation of Mexico share water from the Colorado River. Nevada gets the smallest cut by far. Here are the annual allotments by the acre-foot (roughly enough water to supply two average Las Vegas Valley homes for a little over one year):

— California: 4.4 million acre-feet.

— Colorado: 3.9 million.

— Arizona: 2.8 million.

— Utah: 1.7 million.

— Mexico: 1.5 million.

— Wyoming: 1 million.

— New Mexico: 850,000.

--- Nevada: 300,000

A Force That Could Not Be Stopped: The Thomas Fire

California's largest ever fire was a force that could not be stopped

By Joe Mozingo

December 31, 2017

http://www.latimes.com/local/california/la-me-epic-fires-california-20171231-story.html

The Thomas fire became California's largest by size since modern recordkeeping began, standing at over 281,900 acres as of Friday. It raced from the urban edge to deep into the Los Padres National Forest like no fire before it, covering huge distances unobstructed and mostly unseen.

At the beginning of the year, following a devastating five years of drought, California was having the wettest rainy season ever recorded. The spillways of the mighty Oroville Dam were failing, part of the Central Valley had become an inland sea, and a quarter-mile stretch of Highway 1 was about to fall into the Pacific.

"We broke the drought with a sledgehammer," said Jeffrey Mount, a hydrologist and senior fellow at the Public Policy Institute of California.

A long scorching summer followed. In June, Death Valley hit 127 degrees, seven degrees shy of the hottest temperature recorded on earth. The melting snowpack caused flooding in the arid valleys below.

Under a sun that didn't relent from spring through fall, grass and brush withered.

By October, the wine country erupted in the most destructive firestorm in state history, killing 44 people and claiming over 10,000 homes. Rains stayed far to the north. A high-pressure ridge formed like the one that started the drought in 2011, making this December one of the driest on record.

And so came the Thomas fire, primed to break another record.

When a high-pressure whorl moves east across Nevada and Utah, Santa Ana winds flow from the high desert to the ocean through three main grooves: the Banning Pass from the Coachella Valley, the Cajon Pass from the Victorville area and the Santa Clara River from the Antelope Valley.

In December, that swirling high-pressure dome stalled and wobbled in place. Bill Patzert, climatologist for NASA's Jet Propulsion Laboratory, likened it to Hurricane Harvey parking over Houston, swamping the city with days of torrential rains.

In Ventura County, the Santa Clara River Valley became a katabatic wind tunnel for two weeks. The spinning blob of pressure, shifting back and forth, changed the direction of the air flow as it fought with the prevailing sea breeze, constantly pushing the fire into new territory.

Well, Maybe the Grass Won't Be So Green For Some Parasites

Justice Department cracks down on legal marijuana with rollback of Obama policy

Kevin Johnson and Trevor Hughes
USA TODAY
Jan. 4, 2018
https://www.usatoday.com/story/news/politics/2018/01/04/justice-department-crack-down-legal-marijuana-roll-back-obama-policy/1003183001/

WASHINGTON – The Justice Department cracked down on legal marijuana Thursday by rescinding an Obama administration policy to not challenge state laws that allow people to use pot for medical and recreational uses.

But federal officials could not answer whether the dramatic policy shift meant that people selling or using marijuana – in certain states where it's considered legal – would now be at risk of prosecution.

Senior Justice officials said the previous administration's position had provided a "de-facto safe haven" for a now thriving weed industry.

Attorney General Jeff Sessions, who has long signaled his disagreement with the previous administration's stance on pot, is sending a one-page memo federal prosecutors across the country outlining the change, they said.

"This memo has no de-facto safe haven in it," said the officials, who briefed reporters under condition of anonymity because the memo had not yet been circulated to U.S. attorneys across the country.

The lack of detail in the administration's new policy seemed to aimed at putting the entire industry on notice that federal authorities would not be restricted the Obama-era guidance.

Sessions's decision should be a warning sign to institutional investors, said Kevin Sabet, director of the anti-legalization group Smart Approaches to Marijuana and a former federal drug-control expert who served in the Clinton, Bush and Obama administrations.

“It signals the end of safe harbor for major pot investors,” Sabet said. “This throws up everything in the air one thought they knew about the federal government‘s position on marijuana, which up to this date was more of a ‘see no evil, hear no evil’ policy.”

California Infrastructure: Waiting For a Catastrophe

I include just a few excerpts from the following article; an article that, while it has an apocalyptic content and tone, does provide the numbers and background demonstrating that the state's water and flood infrastructure is a catastrophe waiting to happen. Ten of billions alone are required to just bring up the flood-control capability to prevent disaster in most parts of the state. Printed, the article is 22 pages long.

The Flood That Could Change Everything

Written by Eric Zerkel

http://features.weather.com/us-climate-change/california/#top

And atmospheric rivers (ARs) are the protagonist for this tale.

An AR isn’t really a singular storm per se, it’s more like opening a narrow, long superhighway from the atmosphere to an indiscriminate point on the map on which extreme amounts of water travel.

Most of that is carried in the form of water vapor, but there’s so much water — on average 25 Mississippi Rivers’ worth in each AR — that when a storm system taps into one and makes landfall under the right conditions, the results can be devastating.

Researchers found that just a handful of the wettest days in a year were responsible for 85 percent of all changes to the year-to-year precipitation totals in Northern California.

For more than 40 days in 1861-62 the rain and snow fell on California, forming California’s 300-mile-long, 20-mile-wide so-called inland sea, flooding Sacramento in feet of water, killing thousands of people and 800,000 livestock.

So deep and widespread were the floodwaters in Sacramento, that the state’s capital had to be temporarily relocated to San Francisco to keep the government operational.

“The unsettling bottom line is that megafloods as large or larger than the 1861-62 flood are a normal occurrence every two centuries or so. It has now been 150 years since that calamity, so it appears that California may be due for another episode soon,” the authors write.

At least 45 atmospheric rivers hit the state from October 2016 through March 2017, 15 of which were considered strong or extreme.

Those ARs produced the second-most water runoff in state history, eviscerating California’s worst drought in 200 years, but produced a flood disaster.

By the time the drought was gone, floods had caused an estimated $1.5 billion in damage. There were deaths and mass evacuations. Levees failed and a spillway at a major dam’s reservoir was damaged.

Many of the state’s levees, for example, were constructed from 1850 to 1920 with outdated engineering criteria and only sporadic improvements/fixes implemented from 1920 to 2000.

Most, if not all of the levees, the state admits, aren't at an adequate level to protect [the more than 7 million people and $580 billion worth of resources] at risk of worst case scenario flooding in the state.

Flood control managers have known about the threat of a California megaflood for decades.

President Trump to Democrats: Bring Me Infrastructure!

Dec. 29, 2017 (EIRNS)--In a lengthy, wide-ranging Dec. 28 interview at the President's Mar-a-Lago Club in Florida by New York Times reporter Michael S. Schmidt, the President stated emphatically that Congressional Democrats should bring him legislative infrastructure proposals.

The President mentioned Sen. Joe Manchin (D-WV), saying, "He's a nice guy, but he doesn't do anything. He is really not a centrist; I'm the one what saved coal [in West Virginia]. I'm the one that created jobs. You know West Virginia is doing fantastically now. I think we have four or five Senators [who want to do infrastructure].

"Now, in my opinion, they should come to me on infrastructure. They should come to me, as they have come to me on DACA (Deferred Action on Childhood Arrivals)... and they definitely should come to me on health care."

NYT Interviewer: What are you willing to do on infrastructure? How much money?

Trump: I actually think we can get as many Democrat votes as we have Republicans. We have spent $7 trillion on the Mideast, and it's worse than it was 17 years ago. And if you want $12 to fix a road, you can't get it. I want to do a trillion dollar infrastructure bill, at least. We need to fix our roads, our highways, our bridges, which are in bad shape. Some of them are `x-ed' out: they have possibilities of collapse under bad circumstances. And in 10 years, they will collapse. I want a trillion-dollar infrastructure plan, and I think it can be bipartisan...."

More From the "If China Can Do It, So Can We" File:

China Will Have 38,000 km of High-Speed Rail by 2025

Jan. 3 (EIRNS)—Xinhua reports this increase, up from the 25,000 km registered by the end of 2017. China's high-speed rail tracks accounted for 66.3% of the world's total by the end of 2017, said Lu Dongfu, general manager of China Railway Corp. Its fixed asset investment on railways in 2018 will be 732 billion yuan (about $112 billion), less than the annual average during 2013-2017, according to Lu. Of the 4,000 km of new rail lines to be constructed this year, 3,500 km will be high-speed rail tracks.

China's total railway network will hit 175,000 km by 2025, compared with 127,000 km of operating tracks by the end of last year. In 2017, a total of 3.04 billion passenger trips were made on railways, up 9.6% year on year. More than 56% of those trips were made on high-speed railways.

The maximum speed of China's bullet trains rose to 350 kmh when Fuxing (Rejuvenation) bullet trains *started operation between Beijing and Shanghai on Sept. 21, 2017.*

Last year, there were 3,600 cargo train trips made between China and European cities, surpassing all the previous six years combined, Lu said.

Feature: The American Credit System

As President Trump increasingly focuses on the rebuilding of America's infrastructure, with meetings on the topic occurring in and around the White House this week, and the expectation that he will focus the January 30 State of the Union address on it, it is crucial that it be done right. The new LaRouche PAC pamphlet presents how to do it right. https://larouchepac.com/20170225/four-laws-pamphlet

Last week this report presented the introduction to the newly updated LaRouche PAC report "LaRouche's Four Laws & America's Future On The New Silk Road."

This week we feature "Chapter 1. Restore Glass-Steagall To Reclaim U.S. Banking from the Wall Street Casino"

1. Restore Glass-Steagall To Reclaim U.S. Banking from the Wall Street Casino

"[We must] immediately re-enact the Glass-Steagall law instituted by U.S. President Franklin D. Roosevelt, without modification, as to principle of action."—Lyndon LaRouche, ***Four Laws***

President Franklin D. Roosevelt's Glass-Steagall Act was in force from 1933 to ca. 1995, and was repealed in 1999 after being deliberately unenforced by regulators for several years. It must be restored now: as a matter of justice for the terrific damages wreaked on American households and businesses by the 2008 financial crash; in order to prevent another, oncoming banking crash; and in order to restore the U.S. commercial banking system as an engine of bank credit through lending, which will contribute to a national recovery of industry, productivity and productive employment.

Restoration of the Glass-Steagall Act now by the Trump Administration and Congress will almost certainly cause Glass-Steagall laws to be enacted in European countries, and thus contribute to recovery of the whole trans-Atlantic region, which has been condemned to near zero-growth and mass unemployment of younger generations. It will make possible bringing the "New Silk Road" dynamic rapidly into Europe and the United States.

Is the Wall Street Casino Hurting the Economy?

The American people need a banking system which lends into the economy, and participates along with national credit institutions in national rebuilding of infrastructure, industry and science: in Alexander Hamilton's words, "concentrating the savings of the citizens and placing them in the hands of those who can use them most productively."

But over the more than eight years following the bank panic and financial crash of late 2008, the American banking system has only barely increased its lending to households and businesses, despite receiving a very large increase in deposits, and having some $14 trillion in liquidity from taxpayer institutions poured in by bailouts, more than $4 trillion of it permanently. Deposits have risen from $7.5 trillion in 2008 to $11 trillion in 2015, while the Federal Reserve put $4.5 trillion into the biggest banks by buying their securities; but loans and leases from the banks rose only from $7.3 trillion in 2008 to $8.3 trillion at the end of 2015, according to Federal Reserve data.

The proportion of deposits going back out in loans and leases, shrank dramatically. And even that very small recovery in lending since the crash, has been due largely to the more than 6,000 community banks and major credit unions across the country. But the "Big 12" banks? "Trading" has been their watchword for profits, including with the bailout liquidity they got. "Trading" means the stock and bond markets, junk bonds and commodities trading, foreign exchange trading, "securitizing" everything from subprime mortgages to auto loans to home rents, repo markets, and of course creating "financial derivatives" bets on all of it. And the Wells Fargo account-fraud scandal showed something bigger. Right down to the retail level where branch bankers talk to customers, all the biggest banks are driving to put customers' deposits directly into "financial products" including derivatives, rather than turning those deposits into loans to the U.S. economy.

Some 28% of all U.S. bank assets reported by the Federal Reserve now are securities, although all the banks in this report are commercial banks, and the vast majority of community banks still hold very few securities. The average for the "Big 12" banks is about 35% securities, and that definitely does not include their financial derivatives "assets."

Glass-Steagall was passed in 1933 to stop this; and stop it, it did for more than 60 years, in which no major financial failure threatened to bring down other banks, or the whole banking system. Just a decade after Glass-Steagall was done away with in 1999, the collapse of Lehman Brothers spread through the whole financial system like a bomb. Already in 1998, the collapse of one large hedge fund, LTCM, nearly triggered a bank crash, because many big banks had lent that hedge fund $100 billion for derivatives speculations.

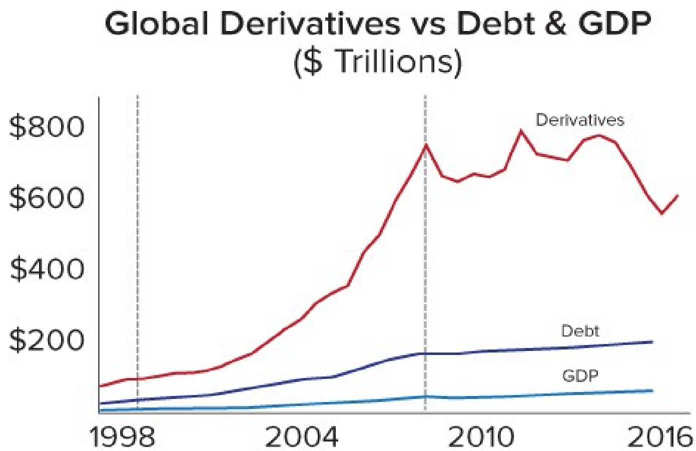
The U.S. Supreme Court, in a landmark 1971 decision on Glass-Steagall (Camp vs. Investment Company Institute), upheld the Congressional intent in Glass-Steagall to "protect commercial banks from the temptation" to throw deposits into high-risk, high-profit securities bets which, the Court said, could endanger the banks, their depositors and shareholders, and the economy.

The conditions are now set for another financial crash, with even greater devastation of Americans' livelihoods than that of September 2008—unless Glass-Steagall is re-enacted now, and enforced.

How Dangerous Are the Too-Big-To-Fail Banks?

Until Glass-Steagall was abandoned in the mid-1990s, there also were no U.S.-based "megabanks"; none held more than 6% of total assets in the banking system as a whole. From the late 1990s the largest Wall Street banks exploded in size, and this has continued since the 2008 crash, so that now just six banks hold two-thirds of the deposits and two-thirds of the assets in the entire banking system. So did their complexity: A New York Federal Reserve study in 2012 showed that whereas in 1995 the largest bank holding companies typically had 100 to at most 300 subsidiaries, by 2011 they each had

2,500-4,000 subsidiaries, vehicles for every manner of securities and derivatives speculation.



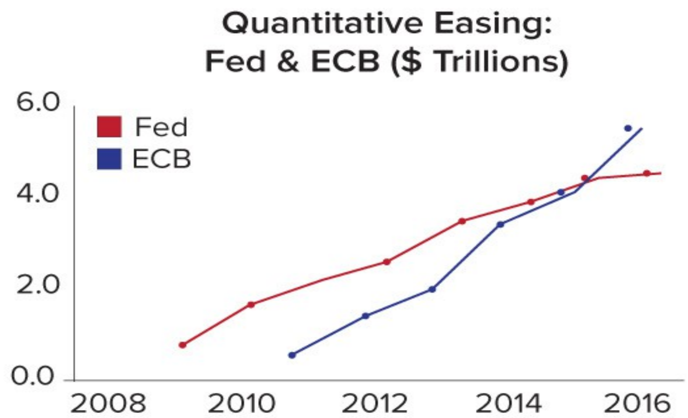
The explosion of derivatives in the 1990s signaled the beginning of a doomed, self-feeding frenzy based not on investments and growth of the real economy, but purely speculative bets on its "performance." Derivatives are essentially legalized gambling instruments which have hijacked the flow of investments into the real economy for short-term, private profit.

The derivatives markets exploded in size, from nominal values totaling about $70 trillion in 1998, to more than $700 trillion in 2008. The size of this derivatives market threatened to bring down all of the biggest banks at once, had the government not bailed most of them out. And after the crash, the six biggest Wall Street banks accumulated, on average, 30% more derivatives exposure, according to FDIC vice chairman Thomas Hoenig in 2014. That derivatives exposure was $232 trillion then; it is $265 trillion now.

The Derivatives Danger

Most of the financial paper on Wall Street has no real value. For example, a derivative is a bet on the increase or decrease in the value of an asset, such as a commodity or bond, or on the change in value of a market index or currency. The current nominal value of global derivative over-the-counter "investments" is estimated by the Bank of International Settlements to be $544 trillion. The six largest U.S. banks hold a combined $265 trillion in financial derivatives, while the U.S. GDP is in the range of $21 trillion. That means the derivative debt is about 12 times the nominal value of the entire U.S. economy! If the entire economic output of the U.S. were enlisted to pay up on those bets it would not succeed. However, since a derivative debt is nothing but a gambling bet, that enormous amount of financial paper doesn't need to be protected. It can be cancelled, by simply reinstating the Glass-Steagall separation of federally-insured and regulated banks, which would provide the basis to take those gambling bets off of any federal insurance. The nominal "value" of the risky investments of the investment banks—now separated from the deposits of the commercial banking system, from government insurance, and from an implied government guarantee of a bailout—would rapidly evaporate. These institutions could then safely be allowed to declare bankruptcy, under which debts could be written off as part of reorganization.

Since 2008, the indebtedness of the systemically important financial institutions has only grown, while the measures taken to address the collapse have made the system even more bankrupt, creating a situation where the rest of the economy collapses at an increasing rate to keep up. The $14 trillion *"eased" into the system to keep the "globally systemic" banks afloat went to purchase toxic assets of the financial institutions and create stock market and other financial bubbles. Much of the money loaned went straight into these bubbles. Much of the $4.5 trillion created by the Fed to buy banks' securities, was put back into the Federal Reserve by those banks as interest-earning "excess bank reserves," never touching the real economy.*



When the derivatives bubble burst in 2007, the Fed and ECB stepped in to bail the speculators out. After seven years of QE, at the point the Fed could no longer continue its frenetic 2013 pace of $1 trillion in a single year, the ECB stepped in and has continued to pump trillions of dollars of QE into the bankrupt trans-Atlantic banking system.

Today, those same biggest banks are still wildly over leveraged. The twelve biggest U.S.-based banks have an average "leverage ratio"—the ratio of their capital to the assets they claim—of about 20:1, a big "improvement" from 2007, when it was 30:1! But the rest of the banking system—all the community banks and regional banks—have a leverage ratio of only 6:1. And the big banks calculate the "value" of their assets by their own internal computer models, since so many of their securities assets don't have a market sale value. This is particularly true of derivatives: For example, the Supervisory Committee of the Europe an Central Bank has just admitted to the European Parliament, that it cannot assess the risk, nor the value, of the derivatives held by the biggest European banks, with the largest being Deutsche Bank.

The interconnectedness of financial institutions over various national borders and sectors of the economy means that a crash in one region, will ignite a meltdown in the whole system. A recent report from the Office of Financial Research, a unit of the U.S. Treasury, showed that the largest U.S. banks are tied to the gambling exposure of European banks with $2 trillion in mutual investments, and are also liable to cover $2 trillion in derivatives purchased by U.S. life insurance companies. This is just one example of how a crisis anywhere in the trans-Atlantic system, whether in the quaking big banks of Europe, in the United States, or any financial sector, will cause a chain-reaction collapse in the whole.

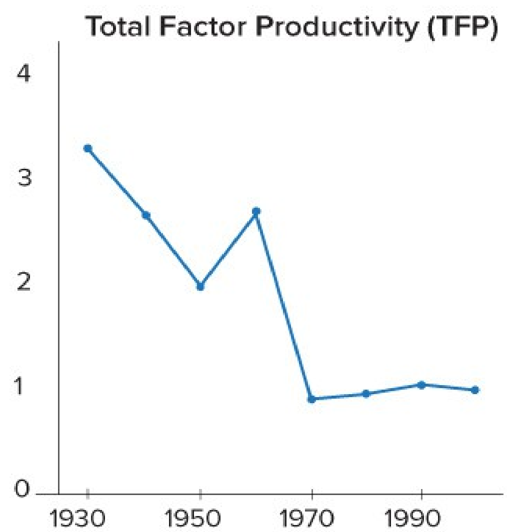
After receiving "financial assistance" in the form of quantitative easing or "asset purchases" by central banks, these gigantic, "systemically important" financial institutions offload investments of all qualities back to their central banks as collateral to borrow liquidity, allowing them to hide their losses. Despite this, many banks, like Morgan Stanley, Deutsche Bank and Santander, have not passed the "stress tests" performed in the United States or Europe. The supposed "value" of these assets cannot be maintained; it is systemically important to put them through the bankruptcy organization made possible by Glass-Steagall.

What Is Glass-Steagall?

As the introduction to the original Glass-Steagall bill stated, the intention was "to provide for the safer and more effective use of the assets of banks, to regulate interbank control, and to prevent undue diversions of funds into speculative operations, and for other purposes." Investment banks were forced to completely separate their activities from commercial banks, and since only commercial banks were federally insured, the speculative holdings made by non-banks were not, and their fictitious "assets" could now be written off.

More importantly though, was the greater conception encompassing Glass-Steagall known to Franklin Roosevelt, that the physical productivity of the nation, in food production, transportation, and technology levels, per person and per unit of land, was the absolute primary concern, and had to remain free from all aspects of financial manipulations by Wall Street entities that could endanger them.

Any financial system requires a constant source of new monetary input derived from the real economy, as the creation of new financial wealth without a corresponding increase of physical productivity would be fictitious. With the rate of collapse of physical production in western countries over recent decades, while the physical profits of the people have been looted and no reinvestment into the national platform of physical production made, the effect has been a multi-layered crisis of unemployment, moral decay, increased death rates and lower life expectancy.



Total factor productivity (TFP) measures the rate of growth of an economy due to technological advance, rather than the simple application of more labor and / or capital. The highest rate of growth of TFP in U.S. history, was its 3.30% annual rate of growth in the 30s, under FDR's New Deal & Four Corners infrastructure programs.

The financial system, as a result of this policy, has become the largest financial bubble in human history. This bubble is endangering the lives of our children, elderly, sick, and poor, yet still the political leadership needed to stand up to Wall Street and protect the real economy from the financial meltdown has not been taken. Every American has personally witnessed heartbreaking examples of this.

Why Hasn't Glass-Steagall Been Implemented?

The restoration of Glass-Steagall has ample public support, as indicated by the bills introduced into

Congress calling for its reinstatement, state assembly resolutions introduced or passed in over 30 states, support in both the Democratic and Republican Party platforms in 2016, voter petitions signed by at least 400,000 Americans, and public statements of support by leading financial figures. So why hasn't it been implemented?

Glass-Steagall regulation is the stake through the heart of Wall Street, and the big banks and their institutes have spent massively to get it repealed, and to corrupt and threaten those at both the Federal and state government level in order to prevent it from being restored.

But the lack of scientific thought has crippled the general public and institutional comprehension of the principles of physical economics. Viewed from a monetarist standpoint, speculation is not perceived as evil, but as a necessary tool, as indicated when financial spokespersons defend derivatives or other speculation as necessary, to "hedge" their investments and provide "investment security." In actuality, derivatives almost invariably damage the financial security of most of the cities, states, businesses, and even banks which enter into them; and just as often, they have been used by the megabanks to rig markets, interest rates, foreign exchange values, prices, and contracts.

These financial "experts" are likely as ignorant of the principles of physical economics as are most Congressmen. In truth, the security of an investment is determined by the science of the investment: whether, by being made, it creates a greater means for increased physical productivity to occur. This was clearly developed in the policy papers of Alexander Hamilton presented to Congress as first Treasury Secretary of the United States, over the years 1790-1791, and brought to the current in LaRouche's Four Economic Laws.

Shut Down Wall Street's Casino

Some hundreds of billions in fines by U.S. authorities alone since 2010, prove that the too-big-to-fail Wall Street banks—despite the crash, and despite the Dodd-Frank Act—have continued to rely on illegal and/or immoral actions, rigging of markets, mortgage securities fraud, deceitful cross-selling of financial products to customers.

The Federal Reserve itself recently (in October 2016) issued a letter to the financial committees recommending that Congress forbid commercial banks from owning commodities, managing commodities infrastructure, and merchant banking—all prohibitions which restoring Glass-Steagall would accomplish.

There is no substitute for prosecuting the top executives of the major Wall Street banks for the endless catalog of criminal actions they've been exposed as engaging in—fines, even large fines, do not reduce these banks' political power.

But restoring Glass-Steagall would definitely reduce their power. It would lead to the removal of the managements of many of the biggest bank holding companies, whose holdings would be broken up under Glass-Steagall. Secondly, many of the speculative units of these huge banks will go under, once the commercial banking units, holding $12 trillion in savings deposits, can no longer be used to support them because of Glass-Steagall separation.

Many people believe today that Wall Street itself is something necessary. What has Wall Street ever produced for the real economy?

Now, what if we shut down Wall Street, which is what we have to do? And if we don't shut down Wall Street, we'll be dragging along for a long time, and we can't take that. Pull down Wall Street in the United States. Don't give them a nickel of payment! They stole that money, it's not theirs! It belongs to the people of the United States.