

California Drought (and Flood) Update



For August 31, 2017
by Patrick Ruckert

Published weekly since July, 2014

<http://www.californiadroughtupdate.org>

<https://www.facebook.com/CaliforniaDroughtUpdate>

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The ongoing destruction of lives, livelihoods, economy, and productivity by the hurricane in Texas is a signal to the country: The elected officials of the United States must have refused and stalled for the last time, on rebuilding and replacing the nation's ancient and broken-down economic infrastructure.

Let the words "natural disaster" not be misused. A major city is being destroyed because it is flood-prone, floods repeatedly, and its flood-control infrastructure — designed and built 70-80 years ago — is no longer worthy of the name. Yet the plans to completely rebuild it, requiring tens of billions in investments, have been ignored and turned down.

Hurricane Katrina killed nearly 2,000 people and wreaked \$130 billion in economic losses for the same reason. Superstorm Sandy killed more than 100 people and caused \$65 billion in economic losses for that same reason. These disasters could have been averted for a fraction of their eventual cost in lost wealth, let alone in lost lives. New York area residents are going through a "Summer of Hell" as the regional transportation system breaks down, for that same reason. We don't yet know how many will lose their lives in Houston and East Texas, but the economic and human losses there are going to be staggering.

"The nation calls for action, and action now!" in President Franklin Roosevelt's words. There is no alternative to action on a Hamiltonian national credit institution that funds the necessary trillions in new infrastructure investment.

Trillions in Credit for a New Infrastructure: The Hurricane Shows Us There Is No Alternative!

A Note To Readers

The quote above sets the theme for this week's report. The full statement from which that excerpt is taken is here:

<https://larouchepac.com/20170830/trillions-credit-new-infrastructure-hurricane-shows-us-there-no-alternative#.WabTI6cMjjA.facebook>

After Katrina some infrastructure was built in New Orleans, but thousands never returned to the city; after Sandy smashed into New York and New Jersey, virtually nothing was rebuilt and the New York City subway and train system was pushed over the edge to where there are now more than 70,000 train delays per month.

While the Oroville Dam spillway disaster was and is so dangerous that it had to be repaired, with a minimum cost of \$500 million, the rest of the water management system of the state requires 10s of billions for both the water supply and flood control. And as articles this week make clear, California is at the top of the nation when it comes to the threat of devastating floods.

The plan of the Harris County Flood Control Authority for a new flood control infrastructure to “harden” the Houston area against its repeated flooding disasters, was most recently estimated to require \$26 billion in investment. Since this was not done, Houston’s people are suffering an immense “natural disaster,” whose economic costs may far surpass Katrina’s \$130 billion, and in which the loss of human life and livelihood still can’t be told.

The vulnerability of the entire Gulf Coast to storms has been studied for decades, with action taken only in a few places, and earlier in the 1900s. And over the last 60 years of the Wall Street/City of London regime, practically nothing was allowed to be done.

The proposed seawall that could have protected New York City was always “too expensive,” so damage costing ten times as much was allowed to wreck the city and peoples' lives.

Not making a concrete emergency spillway at Oroville Dam 50 years ago, which might have cost \$10 or \$20 million then, but now is costing more than an order of magnitude more.

The stupid question too often asked, “how much will it cost?” must be forever shut down. The right question is “what will it cost not to do it?”

Since the assassination of President John Kennedy, decade by decade the “masters of the universe” as the Wall Street parasites like to call themselves, have wrecked the nation. Seventy-five percent of our people live pay check to pay check. Less than 50 percent of the population have even \$1,000 in their life savings; for the first time in U.S. history, life expectancy is falling; more than 50,000 people each year die of drug overdoses; and an entire generation, again for the first time in our history, does not expect to have a life-style as good as their parents.

It is time, now, to use this catastrophe of Houston to, in the words of Franklin D. Roosevelt's inaugural of March 3, 1933, “overthrow the money changers of our civilization.”

During Franklin Roosevelt’s Presidency and through the 1940s, the new infrastructure to prevent such “natural disasters”—such as the Tennessee Valley Authority—was funded by national credit through the Reconstruction Finance Corporation and the Works Progress Authority. Hurricane Harvey could be the national alarm which ends 70 years in which the country has gone without any such national credit institutions.

The United States can no longer live in the delusional domain of soaring speculative assets and a collapsing physical economy. We can no longer act as if we can somehow survive without bothering to invest in bridges, dams, railroads, nuclear energy, canals, levees... and *people*.

The requisite policy measures were laid out by Helga Zepp-LaRouche in [her remarks to the Aug. 26 Manhattan Project meeting](#), and they are contained fully in [Lyndon LaRouche's Four Laws](#). A sea-change in national economic policy is required, and it has to happen now.

Is that not the real message and lesson of Hurricane Harvey? By getting the United States to adopt

LaRouche's Four Laws, and cooperate fully with the Belt and Road Initiative, we can catapult the nation—and with it, the world— onto an entirely different plane. Now.

In This Week's Report

We begin this week's report with excerpts from a Sacramento Bee editorial reminding the people of California that but for a roll of the dice, Houston today will be California tomorrow.

The Oroville Dam Update this week, while reporting on the construction progress, includes some complaints, but is skewed toward Houston. Read it, you will see.

Then my Houston report includes why this hurricane has done what it has done; why Houston is so susceptible to such destruction; the warnings sounded for years; and, of course, Houston is only one of many disasters that the 40 years of neglect of the nation's infrastructure lie waiting in the wings.

The final section this week includes several articles on what must be done, and what must not be done.

Houston: A Warning to California

Here is an excerpt from the *Sacramento Bee* editorial of August 30, which reminds us that not only was the entire Central Valley under 10-20 feet of water in 1861, but it will happen again.

As Hurricane Harvey hits Gulf Coast, Central Valley must prepare for the coming storm

By the Editorial Board

The Sacramento Bee

August 30, 2017 4:00 AM

<http://www.sacbee.com/opinion/editorials/article170051922.html>

A day before Hurricane Harvey inundated Houston, an obscure arm of the California Department of Water Resources delivered a report detailing the impact of the Central Valley deluge that surely will strike, and how best to prepare for it.

The Big One in the form of a superstorm may come this winter, or the next or the one after that. But it is headed this way. In the Gulf Coast, there is the Mayan Express. On the West Coast, there is the Pineapple Express. They produce atmospheric rivers.

In 2011, the [U.S. Geological Survey issued a report](#) detailing what would happen in an extreme winter storm, something they called "Atmospheric River 1000," a storm that would produce rain experienced every 500 to 1,000 years. It could strike in any given year.

One hit when the North and South fought the Civil War in the winter of 1861 and 1862. The Central Valley became impassable, and Gov. Leland Stanford needed to be rowed to his inauguration.

The hypothetical flooding would spread 300 miles, from Orange, Los Angeles and San Diego counties to the Bay Area and east into the Central Valley.

Winds could hit 125 miles per hour, and there would be hundreds of landslides. As many as 1.5 million people in the valley and Delta counties would need to evacuate. Power, water and sewer service would take weeks or months to restore.

Costs to business and property damage could be “on the order of \$725 billion,” triple the loss “deemed to be realistic” when the Big One strikes in the form of a severe Southern California earthquake, the USGS reported.

The Central Valley Flood Protection Board plan said Californians must spend as much as \$21 billion during the next three decades to prepare for floods in the Central Valley. Statewide, the number exceeds \$50 billion.

Oroville Dam Update

The people of Houston got the real thing, while below Oroville Dam on February 12, people were terrorized. To remind people of that I include below the first paragraphs of my article from six months ago.

Katrina, Oroville Dam spillway and now Houston: How many lessons are necessary? That is discussed in the article, “The unlearned lessons of Katrina.”

Then follows a couple of videos on the progress of construction at the dam.

I include excerpts from two articles next on construction progress. The first one is very thorough. The last item is the complaint that the DWR is still “mangling” its communications.

The first item in the next section, “Houston,” reminds us of the first days of Oroville as the Army Corps of Engineers attempts to limit damage from two overflowing dams in the city.

This is the article I wrote on the Oroville Dam spillway collapse, published in *Executive Intelligence Review* on March 3, 2017. It begins this way:

Oroville Dam’s Near Catastrophe: A Wake-Up Call for the Nation

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.”

Soon, 188,000 people were in their cars, jamming the roads and becoming more and more panic-stricken as authorities were warning over emergency broadcast networks that the Oroville Dam emergency spillway could collapse within the hour. Had it done so, a 30-foot wall of water would have swept down the valley of the Feather River. The casualties would have been in the thousands.

http://larouchepub.com/eiw/public/2017/eirv44n09-20170303/35-38_4409.pdf

The unlearned lessons of Katrina

Michael Powelson, Special to The Star Published 9:24 a.m. PT Aug. 26, 2017

<http://www.vcstar.com/story/opinion/columnists/2017/08/26/unlearned-lessons-katrina/604175001/>

In February, Oroville Dam in Butte County came perilously close to bursting. Over 180,000 people were evacuated, exit roads were clogged, and it was clear that officials had no real plan in the event the dam burst.

The crisis was the latest example of the United States' crumbling infrastructure, which includes California's deteriorating roads, bridges and dams. Yet despite numerous reports about this, little has been done to rectify this ticking time bomb.

This year, for example, the American Society of Civil Engineers (ASCE) released its "Report Card," which gave the U.S. a grade of D+ for failing to address its deteriorating infrastructure.

As news filtered in about the Oroville crisis, the reports of clogged highways and roadside fistfights were eerily reminiscent of accounts of the chaotic evacuation of southern Louisiana during and after Hurricane Katrina in 2005.

On Aug. 29, the 12-year anniversary of Katrina, we look back and see what we learned from the devastation and the breakdowns in evacuation, cleanup and relief.

The answer is disheartening.

Despite the fact that over 1,800 lives were lost during and after Katrina, and despite the fact that it caused \$81 billion in property damage and over \$150 billion in lost revenue, the report card issued by America's civil engineers also gave Louisiana a D+, with clear instructions that said: "Louisiana's infrastructure needs immediate attention."

Given the chaos of Oroville, it is clear that local, state and federal officials have learned little from Katrina. According to the ASCE, only 68 percent of California's dams have an Emergency Action Plan, while over 1,300 of the state's bridges have been deemed "structurally deficient."

Videos

Oroville Spillway Update August 24, 2017

<https://www.youtube.com/watch?v=tRLpxNgsxgg&index=1&list=PLeod6x87Tu6eVFnSyEtQeOVbxvSWywPlx>

Published on Aug 25, 2017

Roller-compacted concrete (RCC) is placed throughout the day to fill the large void between the upper and lower chutes of the Lake Oroville flood control spillway. Several types of machines are used to compact the RCC. Crews install forms to begin pouring concrete for the spillway walls soon.

Spillway Flyover August 25, 2017

https://www.youtube.com/watch?v=_cxJO3tZ0Kw&list=PLeod6x87Tu6eVFnSyEtQeOVbxvSWywPlx&index=2

*By the Department of Water Resources
August 31, 2017*

Construction Progress Report

Spillway repair crews race to meet looming deadline at Oroville Dam

By Jake Abbott/jabbott@appealdemocrat.com

http://www.appeal-democrat.com/news/spillway-repair-crews-race-to-meet-looming-deadline-at-oroville/article_69ef5a8e-89eb-11e7-9b25-533d5f46973c.html

OROVILLE – A reconstructed spillway is starting to take shape at Lake Oroville.

And with just more than two months until the initial repairs must be completed, officials in charge are confident there will be a new structure in place by the time the next winter storm comes.

Demolition, excavation and preparation, which started on May 19, have been completed. Crews are now focused on the 2,270 feet of spillway that will be repaired this year, filling in the chasms that formed this past winter, and pouring structural concrete and roller-compacted concrete.

During a tour on Thursday, Jeff Petersen, project director for Kiewit Infrastructure Co., said over the next two weeks, crews will do a significant amount of work in the middle portion of the spillway to prepare for filling the approximately 100-foot deep scour hole in the middle of the chute, more structural concrete walls will be placed, concrete slab production will be at its peak and final foundation clean-up will be completed.

“There is a lot of stuff going on, and the secant pile wall is improving production, too, so there are a lot of good milestones we will reach,” he said.

By Nov. 1 – the start of the next flood season – the goal is to have a main spillway that has the capability to convey 100,000 cubic feet of water per second. When construction is done by 2019, the spillway will be able to convey up to 275,000 cfs.

The uppermost portion of the spillway will receive some patch and maintenance work before the Nov. 1 deadline, but no reconstruction will take place until next year. The rest of the upper chute – 870 feet – is to be rebuilt with structural concrete.



Loose material is washed from recently placed roller-compacted concrete (RCC) on the southeast side of the lower chute of the Lake Oroville flood control spillway. Photo taken July 24, 2017.

Oroville Dam: Filling the large void in the damaged spillway

By [Ray Saint Germain](#)

August 29, 2017

<http://www.mercurynews.com/2017/08/29/watch-filling-the-large-void-in-the-oroville-dam-spillway/>

Construction of the 1,050-foot middle section of the spillway chute, including filling in the two scour holes, is now about 20 percent complete, with approximately 60,000 cubic yards of roller-compacted concrete placed.

Placement of reinforced, structural concrete is 25% complete. Crews have placed 25 slabs of structural concrete so far. When it is complete, there will be 1,220 feet of spillway chute with structural concrete – 870 feet on the upper portion of the spillway and 350 in the lower portion of the spillway.



Aug. 21, 2017 A view near the bottom of the lower chute at the Lake Oroville flood control spillway.

Editorial: California still mangles communication about Lake Oroville mess

By [Mercury News Editorial Board](#) | Mercury News

August 24, 2017

<http://www.mercurynews.com/2017/08/24/editorial-dwr-still-mangles-communication-about-lake-oroville-mess/>

It took a few months, but the state Department of Water Resources finally admitted to poor communication in the wake of the Lake Oroville spillway disaster last February.

DWR's ham-handed approach to communication with the public and even other government agencies was bothersome early on, but not surprising to anyone who knows the agency and its history.

This is a public agency prone to telling other public agencies not to talk to the public. From slapping a gag order on participants in a relicensing agreement 11 years ago to ordering workers not to talk to anyone about an accident at the Hyatt Powerplant under the dam eight years ago, DWR established a pattern that didn't change with this crisis.

Beginning before the evacuation, DWR wasn't forthright with information, and its acting director made comments that upset many. In public meetings much later, DWR officials apologized for a lack of transparency and poor communication and vowed to do better.

But four incidents in the past two weeks belie that vow.

Houston

Houston is the nation's fourth largest city. Twenty percent of the refining capacity of the U.S. is located

there. Up to 40% of many major industrial chemicals are produced there. It is a critical hub for the nation's economy and transportation system. It will take years to fix the damage.

20 trillion gallons of rain fell on Houston. The record snowfall in the Sierras last winter measured about six trillion gallons. That took all winter. Houston got the 20 trillion in just a few days.

1,800 people lost their lives in Katrina. Houston may match that. We hope not.



Joe Raedle/Getty Images

Estimates of the damage in money terms range from \$100 billion to \$300 billion. Tens of thousands of homes have been destroyed. At least 500,000 cars must be junked.

President Trump must throw away the rule book. He should do what President Lincoln did when the Wall Street banks told him that they would fund the Civil War and charge him 25% interest to do so. Lincoln told them to go to Hell, he was going to issue Greenbacks-- Federal credit.

Below, in the excerpted articles, is coverage of dams flowing over, why Harvey is so extreme, the warnings of past years that what happened would happen, and why Houston was so vulnerable.

I want to especially call your attention to this study of which I only present excerpts: *“It is not if, but when Houston’s perfect storm will hit....”* Published 15 months ago it forecasts what a big hurricane would do to the city, and as we see now, exactly what was forecast is the reality. The lengthy study also details all the projects endlessly discussed but never get off the drawing boards to prevent and minimize damage from a head-on hurricane hit.

Toward the end of the study is this statement: ***“Most think the best hope of getting something done may be a devastating storm, bringing national attention to the issue and galvanizing politicians at every level of government.”***

Houston dam spills over for the first time in history, overwhelmed by Harvey rainfall

By [Emily Wax-Thibodeaux](#), [Alex Horton](#) and [Amy B Wang](#) August 29 at 2:20

https://www.washingtonpost.com/news/post-nation/wp/2017/08/28/houston-releases-water-from-two-dams-in-attempt-to-prevent-uncontrolled-overflow/?utm_term=.c5cb5adbdd0e

HOUSTON — One of two major flood-control reservoirs in the Houston area began spilling over for the first time in history, despite efforts to prevent such “uncontrolled” overflow the day before, officials said.

The U.S. Army Corps of Engineers confirmed Tuesday morning that water was spilling from the north

end of the Addicks Reservoir, which has been overwhelmed by [extreme rainfall from Hurricane Harvey](#). Officials said they expect the Barker Reservoir, to the south of Addicks, to begin overflowing similarly at some point Wednesday.

A Harris County Flood Control District meteorologist [said](#) the overflow from the reservoirs would eventually flow into downtown Houston.

Harvey has unloaded 24.5 trillion gallons of water on Texas and Louisiana

By [Angela Fritz](#) and [Jason Samenow](#)

August 30

https://www.washingtonpost.com/news/capital-weather-gang/wp/2017/08/30/harvey-has-unloaded-24-5-trillion-gallons-of-water-on-texas-and-louisiana/?utm_term=.4c78baf0ba69

The latest storm totals are in, and by our estimates, about 24.5 trillion gallons of water has fallen on Southeast Texas and southern Louisiana because of Harvey.

Breaking it down, Texas has totaled 19 trillion gallons, and Louisiana has already seen 5.5 trillion gallons. More is on the way for Louisiana, but the rain is expected to taper off Thursday.

The amount of rain that fell in Texas and Louisiana would have ended the historic California drought, twice over. ([Paul Deanno](#))

It's enough to cover the entire state of Arizona in more than a foot of water.

Hurricane Harvey: Why Is It So Extreme?

How did the storm rapidly blow up from Category 1 to 4, why is it so stuck over Houston, how can it possibly produce so much rain? And more

By [Mark Fischetti](#) on August 28, 2017

<https://www.scientificamerican.com/article/hurricane-harvey-why-is-it-so-extreme/>

Hurricane Harvey is drowning southeastern Texas for the fourth day, putting a vast area under feet of water. Experts say Harvey has been stuck longer in one place than any tropical storm in memory. That is just one of the hurricane's extremes; the storm is off the charts by many measures. Scientific American wanted to learn why, and we asked meteorologist Jeff Masters for help. Masters is the co-founder of [Weather Underground](#), a web site that meteorologists nationwide go to for their own inside information about severe weather. Masters also wrote a [fascinating article](#) on why the jet stream is getting weird.

(Here are the questions Masters answers in the interview. You will have to go to the link to read the answers)

Why did Hurricane Harvey so quickly explode from a Category 1 hurricane to Category 4?

Why is Harvey so stuck in place over Texas?

How can Harvey reverse direction, now, heading back out over the Gulf of Mexico from where it came?

How can Harvey produce such extreme rainfall even though it is no longer over the ocean?

Could Harvey exist as a self-perpetuating rain machine over land?

Why did Harvey's rain bands intensify at night rather than during the day?

Why has Harvey caused such deep coastal flooding even though the ocean storm surge was not so high?

Houston drainage grid 'so obsolete it's just unbelievable'

By Seth Borenstein and Frank Bajak/Associated

Press <http://www.chicagotribune.com/news/nationworld/ct-houston-drainage-grid-obsolete-20170829-story.html>

Houston's system of bayous and reservoirs was built to drain a tabletop-flat city prone to heavy rains. But its Depression-era design is no match for the stresses brought by explosive development and ever-wetter storms.

Nearly any city would be overwhelmed by the more than 4 feet of rain that [Hurricane Harvey](#) has dumped since Friday, but Houston is unique in its regular massive floods and inability to cope with them. This is the third 100-year-or-more type of flood in three years.

Experts blame too many people, too much concrete, insufficient upstream storage, not enough green space for water drainage and, especially, too little regulation.

"Houston is the most flood-prone city in the United States," said Rice University environmental engineering professor Phil Bedient. "No one is even a close second — not even New Orleans, because at least they have pumps there."

For years, engineers have warned that Houston was a flood disaster in the making. Why didn't somebody do something?

[Ralph Vartabedian](#)

<http://www.latimes.com/nation/la-na-harvey-engineering-20170828-story.html>

Hell and High Water

It is not if, but when Houston's perfect storm will hit...

Houston is a sitting duck for the next big hurricane. Why isn't Texas ready?

Houston is the fourth-largest city in the country. It's home to the nation's largest refining and petrochemical complex, where billions of gallons of oil and dangerous chemicals are stored. And it's a sitting duck for the next big hurricane. Learn why Texas isn't ready.

By [Neena Satija](#), [Kiah Collier](#), [Al Shaw](#), and [Jeff Larson](#) on Mar 12, 2016

Cross-posted from [ProPublica](#)

<http://grist.org/climate-energy/houston-is-a-sitting-duck-for-the-next-big-hurricane-why-isnt-texas-ready/>

<https://www.texastribune.org/hell-and-high-water/>

If a storm hits the region in the right spot, "it's going to kill America's economy," said [Pete Olson](#), a Republican Congress member from Sugar Land, a Houston suburb.

Such a storm would devastate the Houston Ship Channel, shuttering one of the world's busiest shipping lanes. Flanked by 10 major refineries — including the nation's largest — and dozens of chemical manufacturing plants, the Ship Channel is a crucial transportation route for crude oil and other key products, such as plastics and pesticides. A shutdown could lead to a spike in gasoline prices and many consumer goods — everything from car tires to cellphone parts to prescription pills.

“We're sitting ducks. We've done nothing.” said Phil Bedient, an engineering professor at Rice University and codirector of the Storm Surge Prediction, Education, and Evacuation from Disasters (SSPEED) Center. “We've done nothing to shore up the coastline, to add resiliency ... to do anything.”

The Houston Ship Channel and the energy-related businesses that line it are widely described as irreplaceable. The 52-mile waterway connects Houston's massive refining and petrochemical complex to the Gulf of Mexico.

For all its economic importance, though, the Ship Channel also is the perfect conduit to transport massive storm surge into an industrial area that also is densely populated.

“We're all at risk, and we're seriously at risk,” said Craig Beskid, executive director of the East Harris County Manufacturers Association, which represents Exxon Mobil, Chevron, Shell, and other major companies that operate 130 facilities in the area. “Not only are the people here in this region at risk, but significant statewide economic assets and national assets are also at risk.”

Each monster hurricane model that scientists provided to The Texas Tribune and ProPublica is slightly different.

Each model projects nothing short of catastrophe. Total damage could easily top \$100 billion, scientists say. That is [about](#) how much damage Katrina inflicted on Louisiana, Florida, and Mississippi a decade ago.

Still, the Houston region's 150 or so chemical plants are even more central to U.S. and global manufacturing than its refineries are to fuel production. They make up about 40 percent of the nation's capacity to produce basic chemicals and are major makers of plastics, specialty chemicals, and agrochemicals, including fertilizers and pesticides.

They export tens of billions of dollars' worth of materials every year to countries such as China, which turn them into consumer goods — toys, tires, Tupperware, pharmaceuticals, iPhone parts, carpet, plumbing pipe, polyester fabric, and all manners of car parts.

A lot of those products are shipped back to U.S. ports, including the Port of Houston, the busiest container port on the Gulf and the sixth-busiest in the United States.

Industry officials say building a system to guard against these types of events would be cost prohibitive, especially given their comparatively low likelihood. They say it's up to government to fund and execute such plans.

“That's really a political question and a question for the federal government and the state government to decide upon,” said Beskid of the East Harris County Manufacturers Association.

Most think the best hope of getting something done may be a devastating storm, bringing national attention to the issue and galvanizing politicians at every level of government.

“We will have a project six years after the next disaster,” Waterworth predicted.

That is how long it took to rebuild the levees near New Orleans after Katrina. The devastation prompted Congress to abandon the normal rules and fast-track the project, with the federal government picking up the entire \$14 billion tab.

Merrell, too, predicted something will be built four years after the next hurricane.

“People who lose their relatives, [their] property, and they’re going to say, ‘why did that have to happen?’”



Reuters / Richard Carson

And California

California is ranked the number one state for the threat of devastating floods. Hard to believe after Harvey, maybe, but read on and find out why.

If the nation is a wreck, there too California leads the way. And it is not just potholes, a failing water management system and broken dams. With nearly 45% of the adults in Los Angeles country functionally illiterate and 13 million people so poor they qualify for MediCal, only a massive FDR-style CCC program can begin to repair such damage.

California Needs To Invest Billions For Flood Protection

By Amy Quinton

August 29, 2017

<http://www.cpradio.org/articles/2017/08/29/california-needs-to-invest-billions-for-flood-protection/>

Tropical Storm Harvey has dumped 15 trillion gallons of water on southeastern Texas. Scientists warn that with climate change, future storms will be wetter and more intense - that includes in California. The state will see more rain than snow, straining an aging Central Valley flood protection system.

“From a cost perspective, we’re talking about having more water move through our systems earlier in the season, and in a shorter time period, which has really significant fiscal impacts on how we would manage the system and what we would design to handle those flows,” says Mike Mierzwa, lead flood management planner with the California Department of Water Resources.

A new plan, approved last week by the Central Valley Flood Protection Board, recommends the state invest more than \$20 billion over the next 30 years to protect people from flooding.

The plan looks at the state’s two largest river systems, an area that covers a swath of land from Mount Shasta to Bakersfield. It looks at the need for new projects as well as costs of operating and

maintaining the current flood control system.

Think Harvey-like flooding couldn't happen to Sacramento? Think again.

By Ryan Sabalow

August 30, 2017 11:31 AM

<http://www.sacbee.com/news/state/california/water-and-drought/article170234577.html>

Taxpayers have spent billions of dollars on dams, levees and bypasses to keep Sacramento and other Central Valley towns and cities from flooding, but experts say the infrastructure would prove no match for a megastorm like the one that pummeled Houston this week.

“It’s still going to flood some day,” said Jeffrey Mount, a watershed expert with the Public Policy Institute of California. “There’s still going to be that rare large event, which will overwhelm us. Houston is the reminder that you cannot engineer your way out of flooding.”

Much of the Central Valley still lacks 100-year-flood protection, and many of the rural areas have levees that are only rated for 50-year floods, said Joe Countryman, a retired U.S. Army Corps engineer who sits on the Central Valley Flood Protection Board.

Prior to Houston’s floods, the Sacramento region was often described as the U.S. metropolitan area at second-greatest risk of a devastating flood, [after New Orleans](#).

A 2015 federal study declared California’s risk of catastrophic flooding worse than any other region in the country – even the southern hurricane states.

The reason? The huge storms called atmospheric rivers that often strike California in the winter.

Sometimes called “horizontal hurricanes,” atmospheric rivers can bring as much water as a major tropical storm. An atmospheric river forms as high-powered winds drag a fire hose of tropical moisture across the Pacific Ocean, pointing directly at California for days on end. The state got a potent taste of the phenomenon this winter as storm after storm battered the region in what became the wettest winter on record in Northern California.

That doesn’t bode well for Sacramento, which, like Houston, was built in a naturally swampy area that Mother Nature wants to flood during powerful storms.

The American and Sacramento rivers that converge in Sacramento were once part of a massive Central Valley river system that dramatically shrank and swelled with the seasons.

Prior to European settlement, much of the Central Valley would flood and become swampland during the winter, forming what historians describe as a vast inland sea. These marshes would recede or outright dry up during the valley’s blast-furnace summers.

Infrastructure and How To Do It; Restore the American Credit System; Join China's New Silk Road

Adapting to catastrophes must never be accepted. We have had enough of that for especially the past two administrations. From hurricanes to regime change wars to trillions for bailing out Wall Street banks, the American people have adapted to living a little deeper in Hell. The following two items are a call to arms to end such subservience.

Trillions in Credit for a New Infrastructure: The Hurricane Shows Us There Is No Alternative! (Excerpt)

<https://larouhepac.com/sites/default/files/20170830-trillions-credit.pdf>

August 30, 2017

The ongoing destruction of lives, livelihoods, economy, and productivity by the hurricane in Texas is a signal to the country: The elected officials of the United States must have refused and stalled for the last time, on rebuilding and replacing the nation's ancient and broken-down economic infrastructure.

Let the words "natural disaster" not be misused. A major city is being destroyed because it is flood-prone, floods repeatedly, and its flood-control infrastructure — designed and built 70-80 years ago — is no longer worthy of the name. Yet the plans to completely rebuild it, requiring tens of billions in investments, have been ignored and turned down.

"The nation calls for action, and action now!" in President Franklin Roosevelt's words. There is no alternative to action on a Hamiltonian national credit institution that funds the necessary trillions in new infrastructure investment.

In thinking about the terrible costs of inaction, it should not be forgotten, that allowing Wall Street to eliminate the Glass-Steagall Act in the 1990s led to a crash that caused \$10 trillion in lost wealth, mass unemployment, and untold loss of life.

There must be action on reinstating Glass-Steagall as well, and on the entirety of what Lyndon LaRouche has called his four economic laws to save the nation, including large "science driver" investments in fusion power technology breakthroughs and revived NASA space exploration.

China's Belt and Road Initiative, an international program of new rail "land-bridges" and infrastructure great projects, offers immediate cooperation for the credit and the building of a new infrastructure in the United States. Promoted for decades by Lyndon and Helga LaRouche, this initiative is now moving on great projects they have long identified as absolutely essential, such as the Kra Canal in Southeast Asia and the revival of Lake Chad in sub-Saharan Africa.

Action in the United States is just as urgent, immediately. Watching what is happening to Houston, there is no alternative.

The Hamiltonian

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The Voice of the LaRouche Political Movement

Harvey Disaster Made by Wall Street: LaRouche Issues Emergency Plan of Action

The catastrophe in Texas is a man-made disaster accomplished by the criminal negligence of this nation's elected officials who have continued to support Wall Street's speculative economy and imperial ambitions while arguing that the nation cannot afford to rebuild and replace its ancient and broken-down economic infrastructure. For the third time since 2005, major American cities have been flooded and their people devastated, because the plans for new infrastructure to protect the people, requiring tens of billions in investments, have been ignored and turned down. Hurricane Harvey now

looms as the worst national disaster in our nation's history and it is a disaster which did not have to happen.

In 2005, Hurricane Katrina killed nearly 2,000 people and wreaked \$130 billion in economic losses. Only then, slowly, new flood-control and seagate infrastructure was built—at last—for New Orleans, at a fraction of the human and monetary costs of the damage inflicted by the storm. How many unnecessary deaths and suffering could this project have averted?

Four years later, the American Society of Civil Engineers met in Manhattan to discuss several storm surge barrier options for the New York City region. The estimate for the largest of these was \$9 billion. The government decided to do nothing. Then, in 2012 Superstorm Sandy killed more than 100 people and caused \$65 billion in economic losses. New York area residents now are going through a “Summer of Hell” as the 100-year-old regional transportation system, flooded and damaged five years ago, also was not repaired or replaced at the necessary pace.

The staggering economic and human suffering caused by Hurricane Harvey in the Texas and Louisiana Gulf region are not yet known, and will grow in magnitude as the water recedes; but, what has been known for many years, is that Texas Gulf cities are flood-prone, and have repeatedly flooded. Yet, no flood control or storm protection infrastructure has been built since the end of World War II. Plans for a new system for the Houston area had been drafted, but their \$25 billion cost was deemed “too high” a price tag for our Wall Street-dominated agencies and elected officials. Now, hundreds of billions of dollars, and priceless human lives, are lost.

All of these disasters, and others in the recent period, could have been averted for a fraction of their eventual cost in lost wealth, let alone in lost lives. The media insist to Americans that each city's disaster is caused by its particular economic habits, its choice of location, its squabbling jurisdictions, its ignoring of climate change, or its being close to water! This is nonsense. Wall Street, which has been bailed out repeatedly to the tune of trillions of dollars, with nothing but increased impoverishment of the American people to show for it, must no longer be allowed to dictate the economic policy of the United States of America.

“The nation calls for action, and action now!” in President Franklin Roosevelt's words. During his presidency, and through the 1940s, the new infrastructure to prevent such “natural disasters”—such as the Tennessee Valley Authority—was funded by national credit, as through the Reconstruction Finance Corporation and the Works Progress Authority.

Hurricane Harvey drowning cities in East Texas should be the national alarm which ends 70 years in which the country has been without any such national credit institutions.

A Sea-Change is Required

Lyndon LaRouche on August 30 called for a “sea change” in policy “right now.” He called for the immediate creation of a national credit institution for new, high-technology infrastructure, like that employed by Franklin Roosevelt when the vast majority of our current infrastructure was built. There is no alternative to creating a national credit institution, like that employed by Alexander Hamilton and in accord with our Constitution, to fund the necessary trillions in new infrastructure investment.

There must also be action on reinstating Glass-Steagall banking separation right now, as a new financial crisis looms and Wall Street speculation continues to prevent actual productive investment. Allowing Wall Street to eliminate the Glass-Steagall Act in the 1990s led to a crash that caused \$10 trillion in lost wealth, mass unemployment, and untold loss and shortening of human lives.

LaRouche insists that his “Four Economic Laws to Save the Nation” must be implemented right now if this country is to recover from Hurricane Harvey and prevent similar disasters stemming from our

rotting physical economy now ticking like a time bomb:

- *Re-institute Glass-Steagall: break up Wall Street and its power;*
- *Create national credit institutions based on FDR's Reconstruction Finance Corporation and Alexander Hamilton's national banks;*
- *Invest the credit in new infrastructure with frontier technologies, including high-speed rail, fourth-generation fission and fusion power technologies, and modern storm protection and water management systems;*
- *Adopt a fusion-driver "crash program": let a great expansion of NASA space exploration provide a driver for productivity and productive employment.*

A New Paradigm Takes Hold

China's Belt and Road Initiative, an international program of new rail "land-bridges" and great projects of infrastructural development, offers immediate cooperation for the credit and the building of a new infrastructure in the United States. This initiative is now moving on great projects they have long identified as absolutely essential, such as the Kra Canal in Southeast Asia and the revival of Lake Chad in sub-Saharan Africa, projects long championed by Lyndon LaRouche and his wife, Helga Zepp-LaRouche.

Helga and Lyndon LaRouche are leading a national mobilization focused on moving President Trump to immediately bring America into the China-initiated Belt and Road Initiative of worldwide building of new infrastructure. That "win-win" initiative, and the United States joining in its worldwide projects and also building its own new infrastructure, means the revival of the United States as an industrial power.

On Aug. 26, Helga Zepp-LaRouche addressed a Manhattan conference on the infrastructure emergency in the United States, making the following proposal:

"Just think what enormous potential is opening up if the United States would cooperate with the Belt and Road Initiative," Zepp-LaRouche told the conference. "I think it is really important to imagine a completely different system. If the United States would now do what Franklin D. Roosevelt did—a New Deal, Glass-Steagall, cooperate with China—the United States could experience an industrial revolution bigger than any time in its own history. People just have to imagine that we are right now at the end of a system, a system which cannot be saved. We need to replace it with a completely new system, and most people have just a hard time to imagine that, but there are examples of such changes. For example, the Marshall Plan in Europe was such an example, and the Meiji Restoration in Japan was such an example—what Roosevelt did with the New Deal; so people have to just think that such a dramatic change is absolutely possible today."

LaRouchePAC has taken the responsibility to drive President Trump and the Congress into this action. But this is also the responsibility of all Americans that think of themselves as citizens: those who have been actively supporting the President, or supporting Sen. Bernie Sanders; those who supported no one, out of disgust at the manipulation, and continued manipulation of the election, but who have wanted a drastic change in the deindustrialization and Wall Street speculation policy ruling the country; those who know people killed, or made homeless and impoverished by Wall Street's induced "natural disasters." All must now act and make their voices heard.

Because, watching what is happening, again, to great American cities, leads anyone sane to the same conclusion: there is no alternative.