

# California Water and Infrastructure Report

Formerly, the “California Drought (and Flood) Update”



**For November 30, 2017**

**by Patrick Ruckert**

**Published weekly since July, 2014**

**An archive of all these weekly reports can be found at both links below:**

<http://www.californiadroughtupdate.org>

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

[patruckert@hotmail.com](mailto:patruckert@hotmail.com)

*“You’re talking about an investment by more than one generation. All of the great projects which we need now, as in the past too, are projects which require multigenerational investment. They are the incurrence of debt, a debt which spans generations. And one of the great things that we have to master in this respect, is what is the nature of human beings, or what should be the recognized nature of human beings and their adopted purpose in living?”*

*Economics As History: The Science of Physical Economy*

*by Lyndon H. Larouche, Jr.*

*July 11, 2009*

## **A Note To Readers**

Although the last two weeks has seen a drought of items and articles on California water, there is no lack of new material to fill out the other half of the title of these reports. Lots on infrastructure, in other words.

There are some California developments, none-the-less. Oroville Dam remains in the news with stories about hair-line cracks in the newly constructed spillway. Also included in this section are a couple of videos and a report from the Department of Water Resources.

Then, since the governor, and other Don Quixotes, continues the crusade against CO2, I include two

articles on the topic. The first an extreme apocalyptic vision of the future of California if global warming is not stopped; and the second is on how all the efforts in California to reduce CO2 emissions are worse than useless, as the forest fires in the state add more CO2 to the atmosphere each year than is reduced by all the programs enacted. I hope no one misses the irony.

On January 1, 2018, marijuana will become completely legal in the state. Since the President has announced a war on drugs, focused on opioids at least for now, perhaps we shall begin to reverse the degeneration of our culture even further into hedonism. And we must, for if we are going to have the qualified labor force required to build the nations infrastructure, then druggies do not qualify. I include below this article, "Marijuana Farming Boom Tearing Apart Northern California Communities," which reports on the tremendous damage the marijuana farms are already doing. Not only does legalized growing take land out of food production, but the illegal marijuana growing does more environmental damage than any other human activity. In addition, cleaning up those sites cost the tax payers more money than all the tax revenue received from the legal growing.

The quote introducing this week's report, from the article cited, is featured in the final section of this report, and provides the necessary ideas which President Trump must understand if he is going to build the nation's infrastructure.

Three weeks ago the President was in China as part of his five nation tour of Asia. Among the accomplishments of his trip was the announced \$250 billion in new Chinese investments in the industries and infrastructure of the United States. The provocative article included below, "Why America Can't Rebuild Without China," is followed by reports on how \$84 billion from China is to be invested in the West Virginia economy, and provides an example of exactly what this means.

## Oroville Dam Update

### Videos

#### [California DWR](#)

Published on Nov 15, 2017

With Phase 1 of the main Oroville spillway complete, crews focus on the emergency spillway. Drilling continues for the cut-off wall, digging to depths of 35 to 80 feet.

<https://www.youtube.com/watch?v=DN8s-0VJeJ0&index=2&list=PLeod6x87Tu6eVFnsyEtQeOVbxvSWywPlx>

#### [California DWR](#)

Published on Nov 22, 2017

Crews excavate in preparation for emergency spillway repairs. Drilling continues on the cut-off-wall..

<https://www.youtube.com/watch?v=8qAks1Zc1Y&index=1&list=PLeod6x87Tu6eVFnsyEtQeOVbxvSWywPlx>

### Reports

The report below provides an update and an overview of construction completed and the schedule for the next year for repairing the spillway of Oroville Dam

## **OROVILLE SPILLWAYS CONSTRUCTION UPDATE**

<https://mavensnotebook.com/2017/11/21/state-water-project-update-oroville-spillways-cons>

*Joel Ledesma, Deputy Director of the State Water Project, began by noting that the construction accomplished on the main Oroville spillway is an engineering and construction phenomenal feat, crediting the efforts of DWR's engineering forces, the regulatory bodies, the contracting folks, and the local community that came together to meet the November 1 deadline.*

*Phase I was completed by November 1, which included building a spillway that would be able to pass hundreds of thousands cfs for this winter in order to safely manage the reservoir; and to also have an operational plan that gave the same level of flood protection or better than what was in the original flood manual. The operational plan for the upcoming year allows them to hold the flood level at a significantly lower elevation than normal, and that, coupled with the hundred thousand cfs that they are able to pass through the spillway and the other facilities of the plant and the river outlet system, allows them to be able to provide the public safety that is needed.*

Is this much ado about nothing?

### ***Cracks found in new Oroville Dam spillway, but officials say don't worry***

*By Dale Kasler And Ryan Sabalow*

*November 28, 2017*

<http://www.sacbee.com/news/state/california/water-and-drought/article186945568.html>

*November 28, 2017 02:30 PM*

**UPDATED 3 HOURS 1 MINUTES AGO**

*Hairline cracks have been detected in sections of the newly reconstructed flood-control spillway at Oroville Dam.*

*State and federal officials said they're confident the cracks don't pose a safety problem and don't need to be repaired. However, the state Department of Water Resources, which operates the dam, said it will monitor the concrete surface of the spillway during the rainy season and beyond.*

*"The integrity of the newly reconstructed Oroville spillway is not in question," said Erin Mellon, a DWR spokeswoman. She said the concrete will have no problem handling powerful flows should the spillway gates need to be opened this rainy season at the state's second largest reservoir.*

*The cracks were first detected more than a month ago, when the first phase was nearing completion. In a letter Oct. 2 to state officials, engineers at the Federal Energy Regulatory Commission told DWR to investigate "cracking of the erosion resistant concrete" on the new spillway. FERC regulates the dam.*

*The state responded Nov. 7, telling FERC that "the presence of hairline cracks was anticipated and is not expected to affect the integrity of the slabs."*

*FERC, in a Nov. 21 reply, said it agrees "with your assessment that the current condition of the hairline cracking does not warrant repair at this time. We understand that you will continue to monitor and evaluate the hairline cracks throughout the 2017 flood season and the 2018 construction season.*

*We also understand that you will be evaluating a number of construction measures this winter that might be implemented next construction season that might reduce the likelihood of hairline cracking."*

*Jeff Petersen, Kiewit's project manager, told The Sacramento Bee that anchoring the slabs to the*

*foundation beneath the spillway, a key design element intended to strengthen the overall structure, contributed to the cracking but doesn't harm the integrity of the chute.*

*"The surface of the concrete is in excellent shape," he said. "All concrete cures and shrinks and has cracks."*

## **Oroville Dam: State official says new spillway already has cracks**

By [The Associated Press](#) |

November 28, 2017

<http://www.mercurynews.com/2017/11/28/state-official-new-oroville-spillway-already-has-cracks/>

*In their response to federal regulators, California water officials said in November that the state's efforts to build a more durable spillway caused the cracks, which were anticipated.*

*"The hairline cracks are a result of some of the design elements included to restrain the slabs and produce a robust and durable structure," the letter read, adding that the cracking "was anticipated and is not expected to affect the integrity of the slabs."*

*The evidence for and reasoning behind DWR's statements about the cause of the cracking is not available for independent assessment, the station reported.*

*University of California civil engineering professor Robert Bea, a veteran analyst of structure failures, said cracking in high-strength reinforced concrete structures is never expected.*

*The cracking "develops paths for water to reach the steel elements embedded in the concrete and accelerate corrosion," Bea wrote in an email. "Such corrosion was responsible for the degradation and ultimate failure of the steel reinforcing in parts of the original gated spillway."*

## **Lake Oroville 2017/2018 Winter Operations Plan**

From the Department of Water Resources

[http://www.water.ca.gov/oroville-spillway/winter\\_operations\\_plan.cfm](http://www.water.ca.gov/oroville-spillway/winter_operations_plan.cfm)

*On October 16, 2017 DWR released the operations plan for Lake Oroville during the 2017-18 rainy season to protect public safety while construction continues on the reservoir's main and emergency spillways. The plan can be found [here](#).*

*The plan, which will guide reservoir operations between November 1 and April 2018, calls for DWR to maintain lower-than-average lake levels during the winter months to provide space for inflows and manage releases from the substantially reconstructed main spillway.*

*The plan calls for DWR to lower the lake level to an elevation of 700 feet by November 1, compared to the average 780 feet elevation maintained on that date in prior years. The lower level will provide more than 2.2 million acre-feet of flood reserve storage to accommodate inflows during the rainy season. The lower lake level, combined with operational contingencies, should allow DWR to keep releases from the mostly reconstructed main spillway at 100,000 cubic-feet per second (cfs) or less over the winter and ensure lake levels remain below 901 feet, the level that would require use of the emergency spillway, which is still undergoing construction.*

*Work to repair and reconstruct the main spillway has been underway since April. By November 1, the main spillway will be prepared to handle releases of up to 100,000 cfs. By next season, it will be fully reconstructed to handle the original design capacity of 270,000 cfs. Releases from the main spillway have never been above 160,000 cfs.*

*In the event the reservoir rises quickly during the winter months, the operations plan identifies certain elevations at which DWR will increase outflows through the Hyatt Powerplant, the river valve outlets or the main spillway to safely manage lake levels.*

*DWR consulted with the United States Army Corps of Engineers during development of the plan and has shared it with the Federal Energy Regulatory Commission and California's Division of Safety of Dams for additional input. During this consultation, DWR shared data showing that Lake Oroville operations would be able to manage storm events such as those in 1997 and 2017 without flows greater than 100,000 cfs over the main spillway and without using the emergency spillway.*

*DWR will assess the operations plan for the remainder of the year in April, when hydrologic and snowpack conditions are clearer, to guide operations through the completion of construction on Lake Oroville's main and emergency spillways. After construction is complete in early 2019, DWR, in consultation with the USACE, plans to begin working on a long-term operations plan, which will involve extensive public engagement.*

## **Wildfires Put More CO2 Into the Atmosphere Than All of Jerry's Efforts Could Ever Remove**

While the governor and his friends forecast the apocalypse if CO2 in the atmosphere is not reduced, and are spending billions in the attempt, it appears all their efforts are for naught as the wildfires add more CO2 than they could ever hope to remove. The wildfire effect first, then Jerry's apocalyptic vision

### ***Huge wildfires can wipe out California's greenhouse gas gains***

By [David R. Baker](#)

November 21, 2017

<http://www.sfchronicle.com/bayarea/article/Huge-wildfires-can-wipe-out-California-s-12376324.php>

*Most years, the amount of greenhouse gases spewed by California's cars, factories and power plants drops slightly — a hard-won result of the state's fight against global warming.*

*And in any given year, one big wildfire can wipe out that progress.*

*Over the course of just a few weeks, a major fire can pump more carbon dioxide into the atmosphere than California's many climate change programs can save in 12 months. Scientists debate whether California's vast forests are emitting more carbon dioxide through fires than they absorb through plant growth.*

*Greenhouse gas emissions across the California economy inched downward by 1.5 million metric tons that year, the most recent for which emissions data are available. And just one fire in 2015 — the Rough Fire, in the foothills of Fresno County — produced 6.8 million metric tons of greenhouse gases, [according to an estimate](#) from the U.S. Forest Service.*

*Other fires that year on federally managed land within California emitted 16 million metric tons.*

*And 2015 was not an isolated case. In 2013, for example, the state's economy cut 3.89 million metric tons of emissions, while wildfires produced as many as 22.4 million metric tons, according to the*

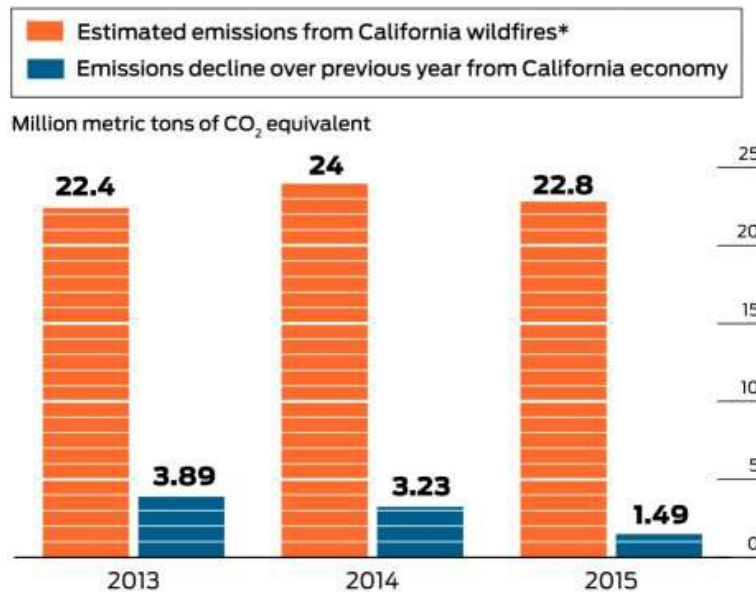
Forest Service. The Rim Fire alone, started near Yosemite National Park that August by a runaway campfire, emitted between 10 million and 15 million metric tons.

The Rim Fire burned 257,314 acres of forest. For comparison, this year's Wine Country fires together burned about 210,000 acres of forest, grassland, vineyards and urban neighborhoods.

The huge scale of the fire emissions calls into question the ability of California to meet its climate change goal of slashing greenhouse gas emissions 40 percent by 2030.

### Small cuts, big fires

California wildfires produce so much carbon dioxide that in any given year, they can wipe out the global warming emissions cuts that the state is trying hard to achieve. From 2013 through 2015, California's estimated emissions from fires on federal land alone were greater than cuts achieved across the state's economy.



\* Includes wildfires on federal lands only

Sources: California Air Resources Board, U.S. Forest Service

Todd Trumbull / The Chronicle

The sky is falling, according to some:

### ***Will we be 'wiped out?' How climate change is affecting California***

*By Christopher Cadelago*

*November 13, 2017 12:01 AM*

<http://www.sacbee.com/news/politics-government/capitol-alert/article184244098.html>

*California could one day be uninhabitable. Fire. Heat. Floods. Infestation. Disease. Suffering.*

*Scientists have for years warned about the ravaging consequences of a warming planet. Decamping for the 23rd session of the Conference of the Parties to the U.N. Convention on Climate Change, California academics and political leaders were mulling how to better deploy the distressing projections to give unwary citizens a better understanding of what's at stake and compel them to see the wisdom of embracing sustainability.*

*“This is bad stuff. It doesn’t get any worse,” Gov. Jerry Brown lamented to scientists, religious and political leaders in Europe ahead of the conference. “The threat is profound. It will alter human civilization. It’s not decades away. It’s closer than you think,” the Democratic governor added later.*

*Experts believe the health impacts of climate change will continue to be a focus across the Central Valley of California, where by the end of the century, annual summer temperature averages in the Sacramento region are projected to increase between nearly 4 degrees and 7 degrees Fahrenheit.*

*The area also is expected to experience an intense urban heat-island effect – which could make it seem 10 degrees hotter in urban areas than rural locales.*

*The number of extreme heat days, in which temperatures reach 101 degrees or more, is expected to increase from four days per year to 17 days by the middle of the century to 45 days by the end of the century, said Kathleen Ave, who heads up a local climate readiness collaborative. She believes that disseminating more information as it becomes available will give people a better sense of the various costs.*

*Precipitation is coming more frequently as rain rather than snow, experts say. The snow that does fall is melting sooner, and will continue to shrink dramatically by the end of the century. This will have major implications for a state that relies on snowpack for water.*

*When the snow disappears, California will lose what for decades has acted as a natural storage system. Alex Hall, a UCLA professor whose research focuses on reducing uncertainties associated with climate change, said there is mounting evidence that the pattern of long droughts followed by big wet years will become more exaggerated.*

*“The past few years are a harbinger of what is to come,” he said. “We had a blockbuster last year, by some measures the most precipitation in the historical record. And we had before that this very deep drought with unprecedented tree mortality.”*

## **A Nation High On Drugs Will Never Rebuild Itself**

### ***Marijuana Farming Boom Tearing Apart Northern California Communities***

November 25, 2017 41 Views by [paul@aetalkradio.com](mailto:paul@aetalkradio.com)

#### **AGENDA 21 RADIO**

BY CHRISS STREET

<http://www.sacbee.com/news/state/california/california-weed/article186280278.html>

*Booming marijuana cultivation that is tearing apart many Northern California communities is expected to go ballistic once the state legalizes recreational marijuana on January 1.*

*The University of the Pacific’s latest “[Economic Impact Assessment of the Cannabis Cultivation Industry in Calaveras County](#),” estimated that for the small county with just [16,248 employed and a household income of \\$53,233](#), 2016 Cannabis Cultivation was the community’s largest industry. The total impact economic impact cannabis cultivation was \$251.5 million, providing about 2,605 jobs and \$148.4 million of labor income.*

*But marijuana’s tsunami of cash rolling into Calaveras County has come at a huge cost, according to*

County Supervisor Dennis Millis. He commissioned a [study](#) in cooperation with The Communications Institute and local government to measure “The Effect of Cannabis Cultivation on the Environment of Calaveras County.”

The study found that guerilla cannabis growers at 1,200 Calaveras County sites have caused enormous environmental damage through the illegal use of chemicals including Carbofuran (banned in the USA), Tripicote, Ammonium sulfate, Diamond Nector Humic Acids/Phosphates, Snow Story Ultra Potassium Supplement, Sonic Bloom with vitamin B1, Butane, Romeo Fertilizer, Mighty Growth Enhancer, PH Down Phosphoric Acid, Ammoniacal Nitrogen, Emerald Goddess, Liquid Insect Killing Soap, Bio Root and miscellaneous bulk fertilizer.

The hazardous materials clean-up mitigation cost was estimated at \$200,000 per private site, or about \$240 million. But “another expert working with the US Forest Service believes costs could be as much as \$2 billion to clean up all of the sites following USFS protocols.”

Calaveras County Sheriff Rick DiBasilio [told](#) the Associated Press that he has busted numerous illegal marijuana farms this year and destroyed about 30,000 plants, worth about [\\$90 million](#). DiBasillio said he could bust 1,000 more farms if he had the manpower. Only at 2 of the sites have butane tanks been removed, and none have been cleaned-up.

## **Feature: The American Credit System**

### **The LaRouche PAC economic class series:**

#### ***Class No. 8: Making it Happen: Money vs. Credit***

<https://larouchepac.com/20171129/class-no-8-making-it-happen-money-vs-credit>

Welcome to the eighth class in our 2017 Economic Class series! Register for archive classes, homework and access to teachers [here](#). Now that we have covered scientific and technological breakthroughs as specific advancements, making jumps in the economy, and how a system of infrastructure is best understood as providing a platform for a level of economic activity, we take up the question: “How do we organize social structures to make this happen?” How do national banking and federal credit differ from money?

#### ***And here are the links to the first seven classes:***

*Class No. 1: LaRouche's Science of Economics is the Basis for US Joining the New Paradigm*

<https://www.youtube.com/watch?v=WTXCAPwfSAw>

*Class No. 2: LaRouche's Physical Economic Metrics: Productive Powers of Labor*

<https://www.youtube.com/watch?v=sWcFDt3yfiA>

*Class No. 3: Physical Chemistry: Stages of Development*

[https://www.youtube.com/watch?time\\_continue=4&v=A\\_XCGAfNa2U](https://www.youtube.com/watch?time_continue=4&v=A_XCGAfNa2U)

*Class No.4: Qualitative Change: What Number Cannot Measure* [https://www.youtube.com/watch?time\\_continue=1&v=MHh8Ht5qShU](https://www.youtube.com/watch?time_continue=1&v=MHh8Ht5qShU)



*Class No. 5 Bernhard Riemann and the Shape of Economic Space*  
<https://www.youtube.com/watch?v=r2mQuAze838>

*Class No. 6: LaRouche's Physical Economic Metrics, Part II: How to Define Value*  
<https://action.larouchepac.com/2017-econ-class-series-sixth>

*Class No. 7: The True Meaning of Infrastructure: Physical Economic Platforms*  
<https://www.youtube.com/watch?v=cWjGr62d9HQ>

## **Commentary: Why America Can't Rebuild Without China**

<http://fortune.com/2017/11/15/america-infrastructure-china-investment-donald-trump/>

By [David J. Firestein](#)

November 15, 2017

(Excerpts)

President Donald Trump has pledged to create new, good-paying jobs for millions of American blue-collar workers, principally through a still largely undefined plan to inject \$1 trillion in both public and private funding into America's infrastructure. He has promised a program of "[national rebuilding](#)" to be carried out "[with American hands and American labor](#)."

It's a great idea, but there's a major problem. There is not enough ready American capital to hire all the American hands and American labor that would be required to realize this vision. That capital may have to come from somewhere unexpected: the Chinese private sector.

Even with a major infusion of capital from the U.S. private sector—and even assuming our dysfunctional permitting system is greatly streamlined—America will not be able to marshal sufficient resources over the next several years to put a perceptible dent in the estimated \$4.5 trillion in needed investment for our infrastructure.

That's where China comes in.

Some may justifiably wonder whether Chinese investment is feasible on security, economic, and political grounds.

The security bar is easily cleared. The Committee on Foreign Investment in the United States, the principal government interagency body charged with vetting foreign investments into the U.S., governs only those investments in which the foreign investor seeks an ownership stake (and, specifically, a majority ownership stake) of the entity in question. Structuring private Chinese investment in U.S. infrastructure as loans nullifies this set of concerns.

But is there is a business case for Chinese private investors to finance our infrastructure projects? Yes. While it is true that infrastructure projects tend to generate returns in the low single digits, there are reasons that such projects and returns are attractive to potential Chinese investors. The infrastructure market offers both diversification and stability relative to the existing portfolios of these potential investors. Moreover, Chinese investors view this kind of investment as having a double bottom line: It can help create a more politically sustainable economic partnership between China and the U.S., and it can transform China from being perceived in the U.S. as a job killer to a job creator.

In terms of the politics, the obvious criticism of this type of initiative would be that it would sell out America to China. The only problem with that criticism is that under the vision laid out here, nothing is being sold. Rather, Chinese private loans, along with other financing, would put American hands and American labor back to work rebuilding our roads, railways, and ports. Political leaders—at all levels

and on both sides of the partisan aisle—would come away from this type of arrangement winners.

Welcoming major Chinese investment in U.S. infrastructure would go a long way toward advancing a top presidential policy priority. It could put millions of American blue-collar workers back to work in solid jobs and deepen and stabilize U.S.-China relations in ways that are consistent with our law and policy. The jobs need to be American; the capital that creates them does not.

*David J. Firestein is the founding executive director of the China Public Policy Center in the LBJ School of Public Affairs at The University of Texas at Austin.*

## **West Virginia Joins China's Win-Win Cooperation- Video**

November 27, 2017

<https://larouchepac.com/20171127/west-virginia-joins-chinas-win-win-cooperation>

When you think of the state of West Virginia, what first comes to mind? Appalachia? Coal country? The capitol of the US heroin epidemic? But did you also know West Virginia just landed an \$83.7 billion dollar deal with a Chinese energy giant during President Trump's visit to Asia? \$83.7 billion dollars is more than the state's entire GDP. This is a huge deal and has implications well beyond West Virginia. So why haven't you heard about this? Why hasn't the mainstream media brought you this story? Not only are these deals a great example of the potential for US-China win-win cooperation, but their being buried by the mainstream media betrays which paradigm they wish to keep you, the viewer in.

## **China's '20-Year Plan To Develop West Virginia Petrochemical Industry'**

Nov. 26 (EIRNS)—West Virginia Commerce Secretary Woody Thrasher says that China Energy Investment Corp.'s \$83 billion planned investment into the state is likely to have two new gas-fired electric power plants under construction by next Fall. But in a Nov. 12 interview with the *Clarksburg State Journal*, Thrasher spoke of long-term intended developments from the investment which are likely to have a greater impact on productivity and economic progress in this economically depressed state.

The result, according to Thrasher, may be as many as 100,000 new jobs—the state's workforce is currently 775,000. Alaska expects 12,000 new jobs to be created by its new LNG deal with Sinopec and China Investment Corp. (CIC); although also a large investment (\$43 billion), its aim is export rather than industrial development.

Thrasher said that the agreement he signed in Beijing with China Energy President Ling Wen, actually under discussion for nearly two years, “is a methodical, 20-year plan to develop the gas and petrochemical industry in West Virginia.... It's a sequential plan, with one step and a second step and so on.”

West Virginia University (WVU) entered into a memorandum of understanding with China Energy in 2016, on taking advantage of the state's Marcellus Shale gas reserves, for which it has not had the infrastructure. WVU Energy Institute Director Brian Anderson told the paper that China Energy's idea of a regional ethane hub is not just extraction and export, but spin-off industries in the state, centering on petrochemicals production. “This is all downstream,” meaning beyond extraction and in industrial processing.

As for follow-through on the memorandum, state Gov. Jim Justice, was quoted today by associated daily *Exponent Telegram*, said “Donald (Trump) is not going to let West Virginia get shafted.... Do I

know its going to be \$83 billion? No. But I know it's going to be a lot of money that's invested here."

American coverage of this extraordinary agreement gained by President Trump in China continues to be sparse. Other recent items include only an article in OilPrice.com and a column in West Virginia's *Weirton Daily Times*—not household names.

## **Infrastructure Plan Coming? Not without National Credit, Belt and Road**

Nov. 18 (EIRNS) -- The Trump administration has begun, after much delay, to exchange memos with Republican Members of Congress about infrastructure legislation, with the primary discussions and feedback being with members and Highway/Transit sub-committee chairmen of the House Transportation and Infrastructure Committee. Congress is expecting a long infrastructure outline memo before the end of November.

On Nov. 17 Bloomberg News interviewed Scott Rechler, CEO of RXR Realty Corp. in New York and board member of the Metropolitan Transportation Authority, on the subject. Rechler said infrastructure in the New York area is "in a dire state, from decades of neglect." Thinking within the confines of simple "funding" in a Congressional operating budget, rather than national credit. He called it wrong for the Congressional Republicans to have tried to enact tax reform rather than legislation to create new infrastructure.

"That really is an investment in our future," Rechler said. "That \$1.5 trillion in deficit space given to lower tax rates for corporations, could have been invested in infrastructure. That's something that's going to help us drive our economy." Rechler went further: "If tax reform is passed, it's very unlikely that there will be infrastructure legislation, because of the \$1.5 trillion being used [for tax cuts], and that money overseas which was going to come back and go into infrastructure, that won't happen."

Thinking more broadly, David Firestein of the China Public Policy Center at the Lyndon B. Johnson School of Government at the University of Texas in Austin put out yet another article, this one in *Fortune* Nov. 16, "Why America Can't Rebuild Without China." China capital, in the form of loans -- not ownership of corporations -- has to put American labor to work building the new infrastructure that Trump promised, Firestein says. He focuses particularly on Texas infrastructure needs exposed by Hurricane Harvey. {Fortune} includes a video clip from Trump's Address to Congress in January, in which the President said: "I will be asking Congress to pass legislation that will create a \$1 trillion infrastructure bank."

Industrial and Commercial Bank of China has opened in Houston as the first Chinese bank providing lending in the South of the United States, the *Houston Chronicle* reported Nov. 17. On the occasion, Chinese Consul-General Li Qiangmin, according to Xinhua, said "I hope China will work with the U.S. side to jointly promote greater progress in China-U.S. economic and trade relations and open up greater prospects for cooperation between the two countries." Houston's Mayor Sylvester Turner is leading a delegation to China at the beginning of December.

## **Hurricane Costs of Neglecting General Welfare at \$95 Billion of Wealth, 300 Lives and Counting**

Nov. 18 (EIRNS) -- The White House on Nov. 17 asked Congress for another \$44 billion in

supplemental disaster assistance to help those hurt by recent hurricanes that hit Puerto Rico, Texas, Florida, and the U.S. Virgin Islands, bringing the total appropriated and requested to \$95 billion for the August-September hurricanes.

A number of members of Congress including Sen. Ron Wyden (D-OR), Rep. Frank Pallone (D-NJ), Sen. John Cornyn (R-TX), and others immediately attacked the request as "wholly inadequate," "a dereliction of duty," etc. Leaving aside that there is some partisan posing and state pleading involved in these attacks, the fact is that there are \$182 billion in formal requests outstanding to the White House and Congress from the affected states and territories, and these will not exhaust the needed investments in new storm-protection, power, and transportation infrastructure. The requests include \$61 billion by Texas, \$27 billion by Florida, and \$94 billion by Puerto Rico.

So the cost of decades of neglect by elected officials of the general welfare, in the form of denial and indefinite postponement of needed protective and productive infrastructure, is \$95 billion and rising fast from those hurricanes alone, as well as nearly 300 lives unnecessarily lost.

"The White House said it expected to seek additional funds after a fuller analysis," {The Hill} reported Nov. 17. "White House budget director Mick Mulvaney said in a letter to House Speaker Paul Ryan that the \$44 billion `does not represent the final request.'"

## **Long-Mothballed U.S. Nuclear Test Reactor To Be Restarted, for Fission R&D**

[http://www.larouchepub.com/pr/2017/171128\\_restart\\_reactor.html](http://www.larouchepub.com/pr/2017/171128_restart_reactor.html)

Nov. 28, 2017 (EIRNS)—Idaho National Laboratory's (INL) Transient Reactor Test Facility (TREAT), which has been in standby status/shutdown since 1994, has been restarted by the Department of Energy. The facility, which can produce short bursts of energy more than five times that of commercial reactors, is designed to allow scientists to test and evaluate the performance of different nuclear fuels.

"The Department of Energy's decision to restore transient testing capability at INL is part of our efforts to revitalize the nation's nuclear capacity,"

said Ed McGinnis, Principal Deputy Assistant Secretary for Nuclear Energy at the U.S. Department of Energy.

"By investing in innovative fuel cycle infrastructure, we can advance nuclear as a key source of clean, resilient power, and maintain U.S. leadership in developing advanced nuclear technologies."

The test reactor, which was built in 1959, at the dawn of the civilian nuclear industry, will resume testing fuels next year.

This is one of a number of policy initiatives that the Trump Administration is promoting to preserve and advance the dying U.S. nuclear industry. Others have included the extension of tax credits and loan guarantees for new nuclear plants under construction, and instructions to the Federal Energy Regulatory Commission to change the "market-based" rules of the sale of power, which now support renewables, and exclude nuclear from programs promoting the use of "clean" power sources.

While these initiatives may bring some temporary relief to the utilities that are trying to build nuclear power plants, a complete overhaul of energy policy, with energy flux density as the criterion for federal support, is what is needed, and will be possible under a new economic policy framework, as it was when the "free market" was replaced by the regulation of the electric utility industry under President

Franklin Delano Roosevelt's administration.

## **Economics As History: The Science of Physical Economy**

**by Lyndon H. Larouche, Jr.**

July 11, 2009

[https://www.larouche.org/eiw/public/2009/2009\\_30-39/2009-36/pdf/04-128\\_3636.pdf](https://www.larouche.org/eiw/public/2009/2009_30-39/2009-36/pdf/04-128_3636.pdf)

(Some excerpts from the report)

“You’re talking about an investment by more than one generation. All of the great projects which we need now, as in the past too, are projects which require multigenerational investment. They are the incurrence of debt, a debt which spans generations. And one of the great things that we have to master in this respect, is what is the nature of human beings, or what should be the recognized nature of human beings and their adopted purpose in living?”

... Mankind, after all, is not simply another animal, which dies in its time as every animal does. Mankind is something different. Mankind has something that no animal has: the power of creativity, the power of introducing a higher state of organization by the human will, and no species on this planet otherwise, has ever been able to do that.

Therefore, we do not simply die! ... The point is to have a purpose in life which transcends death. And this is only possible through the creative powers of mind of the human individual.

And therefore, this leads to what? It leads to something that no animal knows: credit. Credit! Because the things we invest in are the things we create, things which transcend the death of people, of individuals, the investment of a life in a transition to a new life which is a continuation of the old, even though the persons who were succeeding one another have died.

So therefore, the idea of credit is not a physical or financial conception. The idea of credit, first of all, is human. And no species known to us, other than human beings, knows what credit is! It doesn't exist for anything except for human beings, to our knowledge.

Therefore, we design a monetary system, or a financial system, based on a system of credit, which means the development of one individual, who transmits something which is of use to a second generation. And this is not a process of continuation; it's a process of development. And the unit of development is what we should call "credit."

... And the system of credit is not a monetary system; it's not a cash collection! The system of credit is the transition, and the continuation, of the activity of a life, through the transmission of a continuation of an effort, an intended effort, to a second life, and a life beyond that! Credit is history: Credit is human history.

And what we're going to require now, in order to get out of this mess, which has been created for us in the United States and other places, we're going to have to cancel this idea of money the way it's conceived now. It's conceived as animals, who eat, or whatever they do, and then die. But human activity, a human economic system, is not animals dying! A human credit system is the advancement of mankind, the powers of mankind, the accomplishments of mankind, from generation to generation. And the connection among the living, and the living that follow them, and the living that follow them, is credit. That's the true meaning of credit: that we pledge something to the future. We praise and protect something which was given to us, from the past, for the future.