

California Drought (and Flood) Update



For June 1, 2017

by Patrick Ruckert

Published weekly since July, 2014

<http://www.californiadroughtupdate.org>

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

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Even if the Paris Agreement were implemented in full, with total compliance from all nations it is estimated it would only produce a two tenths of one degree - think of that, this much - Celsius reduction in global temperature by the year 2100.

*President Trump's remarks on leaving the Paris climate deal
June 1, 2017*

A Note To Readers

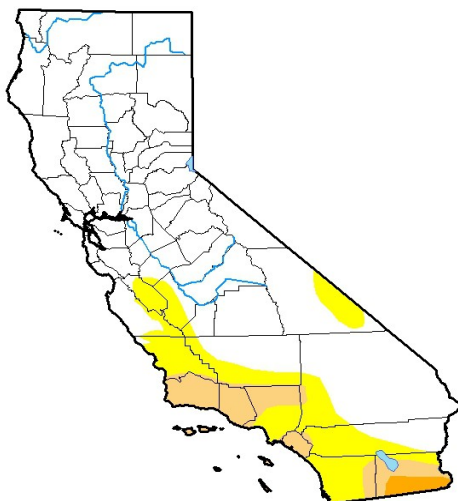
The President today announced that the United States was pulling out of the Paris Climate Accord. That is a good start, but it must be noted that the state of California (yes the state that has Jerry Brown as Governor) struck the first blow against the no-growth ideology. My report below on the how the rebuilding of the Oroville Dam spillway, by throwing in the garbage can all environmental and other project delaying requirements, a model has been established for the thousands of infrastructure projects to be launched in the U.S. as we join with China and the Belt and Road Initiative (New Silk Road).

The feature this week focuses on infrastructure, with reports on the Trump administration and the Democrats proposals; U.S. collaboration with China on building U.S. infrastructure; and a discussion with Jason Ross. As we have emphasized again and again, unless there is a complete change in thinking, not only will California's water problems not be solved, but the nation will continue to disintegrate no matter what the President attempts to do.

The meat and potatoes, so to speak, of this week's report includes our usual drought and reservoir graphics, a weather report, a construction report from Oroville Dam, and the start-up of the Santa Barbara desalination plant.

U.S. Drought Monitor

U.S. Drought Monitor California



May 30, 2017
(Released Thursday, Jun. 1, 2017)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.47	23.53	8.24	1.06	0.00	0.00
Last Week 05-23-2017	76.47	23.53	8.24	1.06	0.00	0.00
3 Months Ago 02-29-2017	74.49	25.51	8.73	4.08	0.00	0.00
Start of Calendar Year 01-01-2017	18.07	81.93	67.61	54.02	38.17	18.31
Start of Water Year 09-27-2016	0.00	100.00	83.59	62.27	42.80	21.04
One Year Ago 05-31-2016	6.08	93.92	83.91	59.02	42.99	21.04

Intensity:
■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Chris Fenimore
NCEI/NESDIS/NOAA



<http://droughtmonitor.unl.edu/>

You Want A Weather Forecast? Here Is A Weather Forecast

For what's it worth:

[Quiet early summer conditions; thoughts on the season ahead](#)

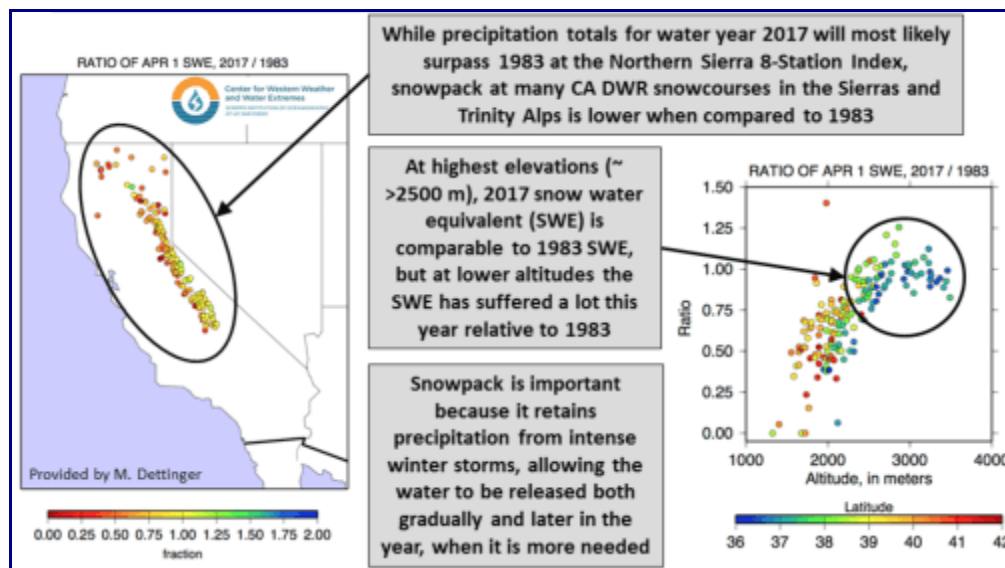
By [Daniel Swain](#) on May 29, 2017

<http://weatherwest.com/archives/5718>

Conditions have been unusually warm across most of California this spring, especially near the Pacific Ocean and in the south. (WRCC)

Conditions have been drier than average in the south and wetter than average in the Sierra Nevada this spring. (WRCC)

Weather-wise, conditions across most of California have been rather quiescent in recent weeks. Despite a record-wet Water Year to date across much of Northern California, it has been a dry (and warm) spring across Southern California. Some early season warmth (in some spots, marginally record-breaking) has allowed for an acceleration in Sierra Nevada snowmelt, and many snow-fed rivers in California and Nevada are currently running high and cold. So far, though, only minor flooding has resulted from snowpack melting in recent days. This is partly because a lot of the snow on the ground has already melted at lower elevations, despite a hefty upper-elevation snowpack—in fact, relatively warm temperatures led to lower elevation snowmelt even during the middle of winter earlier this year.



How does the 2017 snowpack compare to 1983? From Center for Western Weather and Water Extremes, via <http://cw3e.ucsd.edu/key-california-precipitation-index-hits-record-yearly-level-after-only-7-months>

The rather striking graphic above demonstrates just how strong this elevational snowpack gradient has been in 2017—with near-record snow water equivalent comparable to 1983 at the highest elevations and dramatically less accumulation further down the slopes. While not as visually dramatic as the near-total lack of snow in 2015, 2017 featured at least the fifth consecutive winter where a [below-average fraction of precipitation fell as snow](#) (as opposed to rain). [A flurry of recent research](#) strongly suggests that recent observations like these are indeed linked to California’s long-term warming trend—and that snowpack losses are expected to accelerate further over the next few decades.

Typical early-summer conditions likely to persist across California

At the moment, there is multi-model ensemble agreement that relatively quiet conditions are likely to continue across California for the next couple of weeks. This is not too surprising, as late May/early June is historically one of the most stable periods of the year across most of the state, as the winter rainy season has fully tapered off and the peak of the summer heat wave and “monsoonal surge” season has yet to begin. There is, however, a fair bit of agreement that conditions will continue to be at least somewhat warmer than average across most of the state, especially in the north (and with the exception of coastal Southern California, where persistent a “June Gloom” marine layer will keep things cool). No big heatwaves are currently on the horizon, but persistent warmth will keep snowmelt going at a fairly rapid pace.

Fire Season May Be Very Difficult, And Don't Forget the Floods

Drought Aftermath: Wildfires, Mudslides – and Fines

<https://www.newsdeeply.com/water/executive-summaries/2017/05/26>

California’s drought hangover keeps worsening as new environmental and governmental problems reveal themselves.

The biggest concern is wildfires. The wet winter spawned a bumper crop of vegetation on previously barren hills. Now it's drying fast as hot summer temperatures settle in. Numerous [small fires](#) have already lit up Los Angeles County. But the worst so far has been the [Gate Fire](#), which burned 2,000 acres in San Diego County – an unusually large blaze so early in the year.

“We have probably the worst risk of a major wildfire than we have had in a long, long time,” said San Diego County Supervisor Dianne Jacob.

Further north, on the scenic Big Sur coast, a [giant landslide](#) wiped out a large section of Highway 1. It was only the latest and largest in a series of slides that have isolated the remote region. They are caused, in part, by heavy rains falling on areas denuded by fires during the drought.

Rising Kern River invading homes

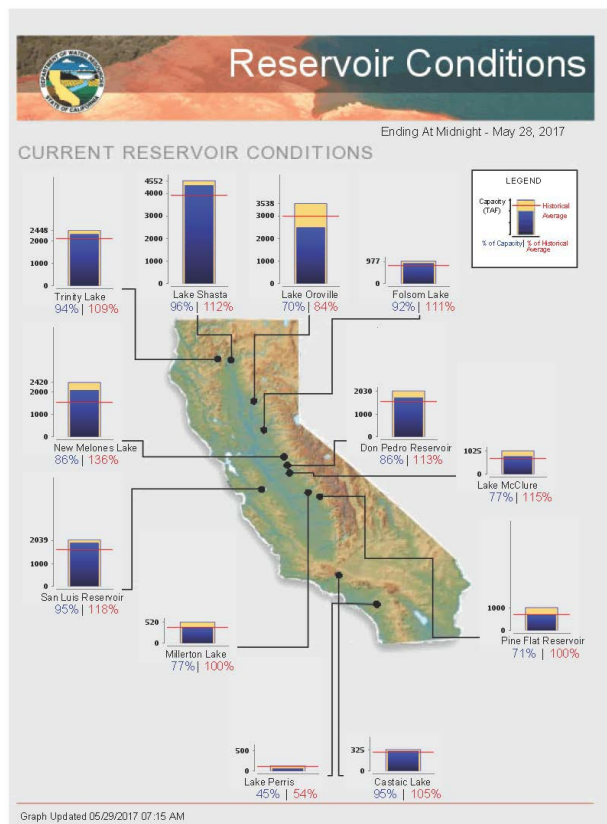
[Leah Pezzetti](#)

6:32 PM, May 31, 2017

<http://www.turnto23.com/news/local-news/rising-kern-river-invading-homes>

BAKERSFIELD, Calif. - Due to rapid snow melt after hot temperatures, the Kern River is on the rise. Three people died in the river over Memorial Day weekend, but it's not just swimmers being affected by the levels. Properties along the river are in danger of flooding.

The Reservoirs



Oroville Dam Update

There are just a couple of articles this week that are of really any interest. Most important, as I have stressed over the past couple of months is the take-no-prisoners approach to repairing the spillway. Nothing will be allowed to get in the way. In the feature section below is my report on how what is being done at Oroville Dam must become the model for rebuilding all of the infrastructural of the nation.

Crews tear into what's left of Oroville Dam's spillway

DWR sets Nov. 1 deadline for repair, replacement of damaged main spillway



Updated: 7:47 PM PDT May 31, 2017

By Max Resnik

With dynamite, drills, jackhammers and excavators, the work to remove the remaining concrete from the bottom of the primary spillway at Lake Oroville continues.

Erin Mellon, communications manager for the Oroville recovery project, said crews are now working ahead of schedule.

"What you saw yesterday isn't there today, and what you see today isn't going to be there tomorrow," she said. "I would say in the next seven to 10 days, you could expect to see most of the lower part of the chute deconstructed completely."

It's a good sign for the enormous undertaking, which aims to have an operational spillway ready for the next wet season within five months. DWR hopes to have the main spillway operational Nov. 1.

Repair Work Begins at Damaged California Spillway

Construction crews in California have begun demolishing the destroyed portion of the main spillway at Oroville Dam as they race to repair the structure in time for the next rainy season.

May 24, 2017, at 6:45 p.m.

U.S. News & World Report

<https://www.usnews.com/news/best-states/california/articles/2017-05-24/repair-work-begins-at-damaged-california-spillway>

OROVILLE, Calif. (AP) — Construction crews in California have begun demolishing the destroyed portion of the main spillway at Oroville Dam as they race to repair the structure in time for the next rainy season, state water officials and construction managers said Wednesday.

Using heavy equipment and explosives, crews were clearing away sections of concrete and rebar that have not already washed away. They hope to begin pouring fresh concrete in June, starting from the bottom of the 3,000-foot chute and working their way up.

"We're always working to accelerate faster," said Jeff Petersen, project manager from Kiewit Corp.,

said in a conference call with reporters. Kiewit, based in Omaha, Nebraska, was awarded a \$275 million contract to complete the massive project.

Officials described a Herculean operation that includes the construction of miles of access roads, two concrete plants and a maintenance facility for heavy equipment.

By August, 500 employees will be on the site, with work spanning 20 hours a day, six days a week, said Jeanne Kuttel, chief engineer for the project with the California Department of Water Resources.

Crews aim to replace the lower portion of the spillway by Nov. 1, when winter rain and snow increase the flow of water into the lake. They'll reinforce concrete near the top of the structure, which was not damaged then tear it out and replace it next year.

Plans for the emergency spillway call for drilling 30 to 50 feet into the ground and building a wall anchored to the bedrock in order to prevent erosion. Next year, crews will reinforce the hillside.

Desalination

This week the rebuild desalination plant in Santa Barbara began delivering fresh water. While this is a commendable event, it also points to the continued littleness in thinking that dominates our culture. A nation that built the Central Valley Project, the California State Water Project and put a man on the Moon should have already had on-line a dozen desalination plants the size of the Carlsbad one.

We will return to this subject of desalination in a later issue of this report.

Santa Barbara's desal plant once again turning seawater into tap water

By Greta Mart

May 30, 2017

[KCBX News](#)

<http://kcbx.org/post/santa-barbaras-desal-plant-once-again-turning-seawater-tap-water#stream/0>



*The city's recently-reactivated desalination plant.
Courtesy of the City of Santa Barbara*

Santa Barbara residents are now drinking treated seawater when they turn on their taps. City officials announced Tuesday the Santa Barbara water distribution system now includes water from the city's long-shuttered - but recently reactivated - desalination plant.

Production at the Charles E. Meyer desalination plant is in the start-up and testing phase. When fully up and running, the plant can produce up to three million gallons a day. That's about a third of the city's total demand.

Santa Barbara also gets its drinking water from the Cachuma and Gibraltar reservoirs, groundwater and state water.

The plant was originally built in 1991, but placed in standby mode for the past 25 years. In mid-2015, as a result of the drought, the city council voted to reactivate the long-shuttered plant.

"The facility uses state-of-the-art technology and design practices to reduce electrical demand and environmental impacts, while providing a critical water supply for the city," said Santa Barbara Water System Manager Cathy Taylor.

Santa Barbara Begins Delivering Desalinated Water to Customers

Submitted by Pamela Martineau on Wed, 05/31/2017 - 1:45pm

<http://www.acwa.com/news/water-supply-challenges/santa-barbara-begins-delivering-desalinated-water-customers>

The desalination plant will produce nearly three million gallons of water per day, which is about 30% of the city's demand.

Feature #1: Infrastructure

In this section:

The White House initiative

The Democrats have a plan

Infrastructure for Western Irrigation

China's Belt and Road Investments Are Extraordinary

A Profound Discussion on Infrastructure

White House Releases Infrastructure Initiative 'Fact Sheet'; Proposed \$200 Billion U.S. Outlay

May 29 (EIRNS)—The White House on May 23 released a document, "[Fact Sheet—2018 Budget: Infrastructure Initiative](#)," the same day as the Trump Administration's budget proposal was released,

containing a \$200 billion outlay for infrastructure. Administration spokesmen have previously stated that they will issue a full infrastructure proposal later this year.

The six-page fact sheet begins with a short, “Importance of Infrastructure” introduction, restating that, “The President has consistently emphasized that the Nation’s infrastructure needs to be rebuilt.... [The] under-performance is evident from our congested highways, which costs the country \$160 billion annually in lost productivity, to our deteriorating water systems, which experience 240,000 water main breaks annually.”

On the money side, the Fact Sheet explains that the \$200 billion Federal funding, should be leveraged in ways to activate private funding of infrastructure, “such that the end result is at least \$1 trillion in total infrastructure spending.” We “will structure that [Federal \$200 billion] to incentivize additional non-Federal funding.”

(Such an approach that leans on “private” investment is doomed to failure, as Helga Zepp-LaRouche explains in her article “[An Only Bystander?—Once the United States Joins the Belt and Road Initiative, A New Paradigm for Mankind Can Begin](#)” published in English and Chinese in the May 2017 issue of China Investment magazine.)

The “Key Principles” section presents four points: 1) Federal funds use must be targeted for the most “transformative” projects; 2) “Self-help” is to be encouraged, the way some “states, localities and tribes” have shown; 3) certain government assets will be divested, that can be better run by private entities; 4) the government will use “public-private partnerships” when possible.

The remainder of the document lists indicative proposals in the realm of financial, mechanistic responses to the crisis which, if implemented, will also fail. Many examples are given. E.g. “corporatizing” (privatizing) functions such as the national air traffic control; selling off government assets, for example, the real estate, unused by the Veterans Administration hospital system; selling off electric transmission assets of the Power Marketing Administration.

Progressives In Congress Call For \$2 Trillion In Infrastructure Spending

By Igor Bobic

http://www.huffingtonpost.com/entry/infrastructure-trump-progressives_us_5926ddfee4b061d8f81fb9dc?ncid=engmodushpimg00000003

WASHINGTON — Progressive members of Congress on Thursday unveiled their own plan to overhaul the nation’s crumbling roads, bridges and waterways — an ambitious proposal that dwarfs plans offered both by President Donald Trump and [Senate Democrats](#).

The so-called “21st Century New Deal for Jobs” invests \$2 trillion over the next 10 years to make badly needed repairs to the nation’s transportation, water, energy and information systems. It contains several progressive priorities, including the use of Davis-Bacon prevailing wage standards, maintenance of racial and gender equity in hiring, focus on low-income communities and carbon-free energy production.

Rep. Ted Lieu (D-Calif.), who spearheaded the effort, said the plan would employ 2.5 million Americans in its first year.

Unlike Trump’s \$1 trillion infrastructure plan, which prioritizes tax incentives to fund infrastructure

projects by a 5-1 margin, the progressive initiative relies directly on public investment. The CPC says it would be paid by the closing of unspecified corporate tax loopholes, a new tax on Wall Street transactions, and by repatriating funds held by U.S. companies overseas.

While Trump has yet to release his promised infrastructure plan, its broad outlines look very different from the wish list offered by progressives. The president's proposal is said to include only \$200 billion in public spending. The remainder of the initiative is said to rely on private tax incentives meant to spur investment in infrastructure projects. Such funding mechanisms, known as public-private partnerships, often involve privately financed toll roads.

Why a National Infrastructure Bill Needs Money for Western Irrigation

By Laura Ziemer, Dan Keppen

May 25, 2017

Farmers and conservationists have already demonstrated that collaborative water projects work, but more funding is needed, say representatives from Trout Unlimited and the Family Farm Alliance.

<https://www.newsdeeply.com/water/community/2017/05/25/why-a-national-infrastructure-bill-needs-money-for-western-irrigation>

The Trump administration and Congress shouldn't overlook a prime opportunity to invest in infrastructure: Western water and irrigation systems. Here in the West, our dams, irrigation systems, canals and other infrastructure – much of it more than a century old – are past due for modernization.

This is low-hanging fruit for infrastructure repair – and it's a bipartisan political winner, too.

Since 2010, some \$135 million in WaterSMART grants have been used to leverage more than \$395 million in water delivery improvements across 15 Western states. This is real progress in meeting the serious challenge of water security in the West. But more could be done with ramped up investment. There are as many as five times more applications for the Bureau of Reclamation's WaterSMART funding as there are awards for projects. A bipartisan national infrastructure package that invests in western irrigation infrastructure through Reclamation's WaterSMART program would deliver a win for everyone.

China's Belt and Road Investments Are Extraordinary

May 31 (EIRNS)—China's issuance of credit to build up other, particularly Asian and African, economies through new infrastructure platforms, continues to amaze U.S. and European econometric groups trying to map it—like PricewaterhouseCoopers (PwC), London School of Economics, Boston Consulting Group, and lately Wharton Business School. In a Wharton School newsletter published May 30, under the envious title “[The U.S. Needs a Proactive Asia Play—or Risks Losing Ground to China,](#)” the magnitude of this credit issuance is measured in one way.

The author writes that funds already invested in, or firmly committed to, the growing number of Belt and Road projects outside China, by China's credit institutions, have come to total \$292 billion as of the end of March 2017. This is in a period of less than three years since President Xi Jinping's announced Belt and Road Initiative took shape; and only involves investments outside China's own economy. Moreover, international lenders including those initiated by China—World Bank, AIIB, Silk

Road Fund, New Development Bank (just launched by the BRICS nations), have together accounted for merely \$8 billion of this.

It has all been national credit issued by China's major institutions of that purpose: Exim Bank, China Development Bank, China state banks. And that—though Wharton doesn't discuss this as such—on top of many trillions of dollars-equivalent in national credit issued to grow China's economy since the financial crash, and to drive growth in other parts of the world and in years prior to the Belt and Road Initiative.

China is virtually the only nation in the world following this national credit policy over the period of trans-Atlantic collapse; the only nation doing so on such a scale; and of course, this is supposed to violate the monetarist rules of economy set out by those institutions “studying it.” Thus the constant cries that the “China debt bubble” *must* collapse, and/or will collapse the entire world economy.

A Profound Discussion on Infrastructure

Jason Ross presents the deeper ideas than is usually found in discussing infrastructure. The synthetic environment that mankind has created in which we live begins with systems of energy, water, and resource supply. With each discovery and its application, the productive power of mankind is enhanced. Those nations that understand that and practice that are nations in which the population looks to the future with optimism. The entire discussion is worth watching.

LaRouche PAC Friday Webcast, May 26, 2017

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

Matt Ogden:

One thing about that. First of all, infrastructure goes far beyond just transport infrastructure. Obviously there's the power production and what you can provide in terms of energy density towards manufacturing and all of the agricultural technology that is involved in a modern infrastructure platform for a nation. But one question I think is interesting, and we discussed it a little bit. We take for granted that the idea of faster transport is just a modern idea and that we should have faster transport between cities. That sort of stands on its own, it is true. But what role does that play in terms of the science of economics? Productivity and what does that allow us to do economically that we couldn't do before without this kind of high-speed transport?

Jason Ross:

You opened up the show discussing Helga LaRouche's visit to the Nanjing, following her participation in the Belt and Road Forum in Beijing two weeks ago. This Belt and Road Initiative outlook, the types of financing that are involved in this, the funding, the way that this infrastructure is being conceived and put together; this is something that's absolutely essential in the United States. Infrastructure isn't little bits and pieces that get put together to make individual commuters or the movement of goods easier. What it is, is a platform as a whole, required for a certain level of productivity. So, we require both an increase in the productivity of the United States, productivity in the sense of producing things. Producing something for the future, as exemplified by scientific research or high-technology manufacturing, by the space program. These are things that are incredibly productive in achieving a greater potential for the future. When you say what is the platform on which a higher level of productivity can exist, then the answer to that question is things like national rail upgrades; very high-speed rail, for example, along the eastern coast of the United States, throughout the country. A large investment in revamping in the New York City metro system, for example; but far beyond that.

Nationally, rail; power plants. Upgrading our very old power plants to new, higher technology, more efficient and safer nuclear power plants; fourth generation nuclear power plants.

The kinds of upgrades that are needed are on a scale that is so large, that it requires a commitment from the nation. This, I think, gets to the Four Laws of Lyndon LaRouche, the proposal that he's made for what's necessary for real economic recovery in the United States. With Glass-Steagall in place and the potential to actually direct the economy in a productive direction, you're going to need a national banking approach. We're going to need the ability to finance large investments in infrastructure in projects that will not bring a return. This is the biggest problem people have in understanding this. You're thinking about value in terms of money. Does the New York subway pay for itself? Do people pay enough in fares to pay for the system? These kinds of things really miss the point, because they ignore the qualitative incommensurable change in productivity that's made possible by an infrastructure platform as a platform.

As Mr. LaRouche considers it, in creating a synthetic environment, an artificial environment, a manmade, nurturing, improved, better environment around us; where our surroundings, the world that we live in, is, to an increasing degree, one of our own creation. The resources that are resources to us in our daily life, or on a national economic scale, are not those of 2000 years ago. They're not the resources of good land for agriculture -- although of course, we use that; or of resources that are sitting around. Fish in the ocean or the river that you can catch. They're resources that are underground; they're resources that are very hard to separate from each other. Separating out rare Earth elements for their use; mining aluminum ore and creating aluminum with a process that requires a great deal of electricity. The ability to use the resources of the future to increase our power as a species; that's the real key direction that infrastructure must be approached from.

The way to avoid the bit by bit, piece by piece, piecemeal user fee approach to infrastructure financing, is to acknowledge its unique role in the economy as something that's of governmental responsibility and something whose returns are inherently indirect and should not be looked for in terms of direct money made by them via user fees. It's just a completely wrong way to look at these things.

The way to make this possible is going to go far beyond Donald Trump's proposals for investing \$1 trillion in infrastructure over the next decade via a process that pulls in private money via PPPs (public-private partnerships) and the like. What's required is not annual appropriations, not private financing, but an ability to have national credit over a longer term loans via a national banking approach to make it possible to build these 5-, 10-, 25-year programs at rates that are affordable. So we can put in place this necessary physical environment; create the platform that we would want to live in, where we're able to move efficiently. Where new areas for, for example, affordable housing open up, when you've got a better transportation system. You don't have to live quite so close to an expensive city center to be able to get a job there. You can enjoy more of your time when you have an efficient and productive infrastructure platform.

Well, let's also take it on the level of the Belt and Road, where some of these areas, it's not just going from moderate to high speed transit; it's going from a two-week voyage through the mountains by road to one that only takes a few days in the location I'm thinking of right now. But think of the value of land in a certain area. What is the value of a piece of land? It depends on what the surroundings are, what is the environment; including, very importantly, probably most important these days, the created environment -- the constructed environment. That nurturing, synthetic, artificial, manmade human environment that we've created. If you've got an area, and now you've got access to high-speed rail,

you've built several fourth-generation, a very highly efficient nuclear power supply. You know it'll be on 24 hours a day; the rates are reasonable. You've got a water supply system backed up by desalination to ensure that it's always available; and you've got an efficient to get people, employees, and goods around. The value of that area has now just dramatically increased; not just in financial terms, like the rent would be higher on a piece of land there, if you owned a building. But it actually is more productive. You can move things around more quickly; you can go from a prototype design to creating goods more rapidly. You're able to waste less time having whatever it is that you're producing or working on just being in transit going from place to place.

Think about it. When you're shipping things, say you've got a type of production facility and you're shipping things by ocean and you're counting on a certain number of car parts arriving every week. Well, there's always a certain number that are just sitting out in the ocean in transit; it's just wasted inventory basically. So physically, those are maybe a small type of improvement to look at, but the type of economy that's made possible as a whole. You could do the best urban planning you want, you could have a wonderful system in some area; but if that area didn't have electricity, it doesn't matter how well things are laid out. It doesn't matter how clean the water is around it, how perfect the weather; you're simply going to be limited in terms of what processes you can engage in. Transportation, energy, access to resources. I think the real way to look at it right now is we have to keep in mind, whenever we're talking about infrastructure or platforms, we have to talk about nuclear fusion. Because that's really the thing you've got to keep in mind. How will our relationship to other people, land area, resources, how is that going to change with the development of commercial nuclear fusion? Where the price of energy will come down dramatically; where our ability to process resources will be dramatically eased. How is that going to change the productivity, the value of every person, the value of the platform of constructed environment that we've got? You have to always keep that in mind. What's the next level going to be?

I'll say one more thing. You brought up agriculture. Think about the important role of space infrastructure in agriculture today. The ability of GPS positioning; the ability to get a very good sense of conditions on the ground of agricultural conditions, of weather, of location; and the way that changes the way you approach to fertilizing, taking care, harvesting of the field. So, the space program, where our space infrastructure is playing a major role here.

So, what are the next levels of infrastructure going to be? Let's keep that in mind.

I don't know how different it is from other places, but overall, people are getting really sick about hearing about Trump-gate and Russia. People are really sick of it. Either that, or they're going along with it and they kind of listen to it. But what really gets through to people is when you're discussing thinking about the future. This is what people really do respond to. They say, "OK, what are we going to do? The election happened. What's our future going to be?" If your favorite historical figure ever were the President of the United States right now, what would be the policies you'd want to get implemented? OK, let's start making those things happen.

The potential to do this in a very new way, both shocks some people or seems impossible to others; but I attended a forum about US-China economic relations the other day, and one of the things that came up was one of the presenters was going through various studies about the economy in China. About how the middle class is exploding, how poverty is diminishing very rapidly; the percentage of the population that's actually poor is going down very quickly; and about the level of optimism. There was a chart of optimism among different nations; it measured as survey questions. "I think my children will have a better future than I do." And in all segments of China, this was very positive in all segments of

China. For the middle segments of China it's 60-70%; even a majority in the lower income segments as well. There's just this tremendous sense that things are getting better, things are moving forward; the next generation will have it better.

Then on this chart, you have the United States, way down here almost at the very bottom, along with the Western European nations. So, I just think -- I know this gets away from asking how people respond here, but it's a very important point, I think. In keeping with the shift of the center of gravity in the world, the importance economically and politically, away from the trans-Atlantic and towards Asia where everyone is expecting the majority of the growth in the world economy in the next decades. Along with that, you have this sense of happiness and optimism in that part of the world. ...but in the trans-Atlantic, the government leaders can say whatever they want, but if you actually ask people what they think about what their future looks like, it's very grim. The contrast between these two outlooks -- you had asked earlier about New York versus China -- as a personal anecdote, that was one of the huge differences that I saw; was this overwhelming sense of optimism from people in China. It's getting better. We can absolutely have that sense here as well, by making it a reality; by throwing off the stupid ideas that are holding us back. By throwing off this slavish adherence to Wall Street and London; by tolerating the avowed supremacy of finance over actual human contributions. It's a choice we have to make.

Feature #2:

Oroville Dam Catastrophe: Once Again, A Wake-Up Call For the Nation

By Patrick Ruckert

May 30, 2017

Diane Sare at the May 27 Manhattan Project meeting (<https://larouchepac.com/20170529/manhattan-town-hall-event-diane-sare-and-hal-cooper>) said, “ I wanted to ask, because I think part of people not actually thinking about what needs to be in terms of the solutions, is because of the insanity of budgets and accounting, but also, since they're terrified to think of the solution, they're also terrified to think of the potential worst case scenario which might impel us to move more quickly. And one of the things Mr. LaRouche was interested in is getting a projection, that is: What happens if we do nothing? What happens if we don't do these repairs? We don't repair the tunnels?”



Commuters crowd onto a New York City subway platform (Dan Phiffer | flickr)

She described during her presentation at that meeting, if not a terrifying picture of the present state of New York City, as least a catastrophic one. Major sections of the subway system and the tunnels into

the city, all over 100 years old, will be partially shut down this summer for months so major repair work can be done. As many as 250,000 people who commute into New York City will have to find alternative means of doing so.

My article in the March 3, 2017 issue of EIR, “Oroville Dam’s near catastrophe: A wake up call for the nation,” http://www.larouchepub.com/eiw/public/2017/eirv44n09-20170303/35-38_4409.pdf began with this:

"February 26, 2017—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 lead 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 in NOT A Drill. This in NOT A Drill. This in NOT A Drill.'

"Soon, 188,000 people were in their cars, jamming the roads and becoming more and panic stricken as authorities over emergency broadcast networks were warning 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."

For those 188,000 people that day was terrifying.

While the Oroville Dam spillway collapse has been that wake-up call for the nation, what has happened since at the dam provides us with another wake-up call, this one demonstrating how the rebuilding of the nation must be done.

My weekly “California Drought (and Flood) Update” has had an Oroville Dam update section beginning early March, and one can find there extensive reportage and photos, for those interested in knowing more. <http://www.californiadroughtupdate.org/>



Oroville Dam and spillways

Aerial photo taken Sunday morning, February 12, shows water running over the emergency spillway, at the left, and down the hill into the diversion pool. The broken main spillway flows at center and the dam is at the far right.

Hal Cooper said at that Manhattan Project meeting May 27, “I understand that the Trump

administration has proposed making the waiting periods for decisions on major construction projects to be reduced from 10 years to 3 years, and a lot of that has to do with rules and regulations and policies.”

What has been done in the four months since the dam's spillway busted goes far beyond the streamlining of regulations cited by Hal. The entire regulatory structure of the state and federal governments have been thrown in the garbage can, including the normally required environmental impact statement. The announcement, bidding and awarding of contracts process, which normally takes years, has been done in less than two weeks. The actual construction work to repair the spillway began in early May, after more than two million tons of rock and dirt washed into the Feather River had been removed. That job was done on a 24 per-day, seven days a week schedule.



Excavators remove debris from the Diversion Pool below the main Oroville Dam spillway in this photo from March 29. Bill Husa — Mercury-Register

The construction contract to rebuild both the broken spillway and the emergency spillway was awarded to the Kiewit Corp., an internationally renowned contractor for big jobs. Work is now proceeding on a six-day per week and 20 hours per day schedule.

Earlier, on April 12, as reported by the Chico Enterprise-Record, Bill Croyle, state Department of Water Resources Acting Director said that normally, a project of this size would take years just for the planning. “We need hours and days for approval vs. weeks, months and years,” he said. Rather than have paperwork shuffle back and forth, staff from agencies will meet together, Croyle said.



Heavy equipment works Wednesday to break up remaining concrete on the lower part of the damaged main Oroville Dam spillway so a replacement can be constructed. (Bill Husa — Mercury-Register)

Having already spent over one-quarter of a billion dollars in removing the debris, the repair job

contract adds another \$275 million, putting the total over \$500 million. That does not include the costs to repair other damages resulting from the emergency not directly related to the dam. Over the two to three years expected to complete the project, the total cost will probably verge on \$1 billion.

The California State Natural Resources Secretary said on March 1, that the state requires \$50 billion to repair roads, dams and other infrastructure threatened by floods, such as the extensive levee system on the state's rivers.

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

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

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

And for those in California, especially Governor Jerry Brown, they might think twice about leading "the resistance" to President Trump. On April 2, the Trump administration announced that the President had approved federal aid to California of \$274 million for Oroville Dam repair and other damage done in the state by winter storms. That money will come from FEMA.

Now all that, if it were done, would do nothing to deal with the state's chronic water supply crisis as was seen in its most extreme form in the just ended six-year drought. Both new water storage facilities and desalination plants are required, both of which, if put on the same work schedule now being seen at Oroville Dam, could be completed in three or four years.



The Carlsbad CA desalination plant

After over 15 years of the permitting process and 14 legal challenges, the plant took three years to build and began delivering 50 million gallons of freshwater daily in December, 2015

As we have seen in the Oroville Dam case, when something must be done, neither money, nor the EPA, nor the permitting and bidding process will be allowed to hold back getting the job done.

That is the spirit required to rebuild the nation. That is the new wake-up call for the nation from the Oroville Dam catastrophe.