California Water and Infrastructure Report

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



For March 22, 2018 by Patrick Ruckert

Published weekly since July, 2014

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

http://www.californiadroughtupdate.org

https://www.facebook.com/CaliforniaDroughtUpdate

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What is crucial now, is that President Trump and the United States choose the offer of China, the Belt and Road Initiative, and let its paradigm of productive economic progress rub off a bit.

Tax cuts, Wall Street deregulation have not and will not revive American growth from its long stagnation, or fill its huge infrastructure deficit. The actions proposed by EIR Founder Lyndon LaRouche will, starting by breaking up Wall Street with a new Glass-Steagall Act. These actions, including the first national credit institution the United States has had since Franklin Roosevelt's RFC, are aimed at joining the United States into a global cooperation of sovereign nations for "the common aims of mankind."

https://larouchepac.com/20180320/londons-game-war-or-chinas-progress-which-choice-america

A Note To Readers

Never will either California's water future be secured nor the nation be rebuilt by piecemeal, one by one projects. The poison of ideology and partisanship, which paralyzes the imagination and will, leaves the nation not only disgusted, but cynical. Damn it! Think big, like we use to do. Now, because it has been more than two generations since the nation has had a mission that could unify the population to achieve some great task, most merely live their lives to survive. It is pathetic and disgusting that this republic has been reduced to such a state. Not to speak of the horrendous poverty more and more Americans are sinking into.

Well, let the Paul Ryans and the Nancy Pelosies play their games, we have some real work to do. In 1933, within days of his inauguration as President, Franklin D. Roosevelt not only busted Wall Street

and prevented a complete financial collapse, he also launched the great projects that you, today, depend upon for your water and electricity. And he did it by throwing partisanship in the garbage can. He used the Reconstruction Finance Corporation, created by a Republican Congress and a Republican President, and run by a Republican banker from Texas, to do so.

I have discussed what the policy today must be many times in these pages, so today I will just once again provide the link to that policy that does define such a direction for us today.

LaRouche's Four Laws: America's Future on the New Silk Road

https://larouchepac.com/sites/default/files/four-laws-pamphlet-high.pdf

Of course, examples are always useful to make clear what is possible, so this week our Great Project is China's *South-North Water Transfer Project*. An introduction to it with a link will be found in the last section of this report: "Feature."

In This Week's Report

The chatter for the past couple of weeks has been about the possibility of a "miracle March," meaning will the reliably unpredictable weather of California would bring the state all the precipitation that the middle of winter failed to do? Well, the answer to that wish is, sort of.

Following the weather and climate does make writing these reports interesting, and I hope my inclusion of usually some extensive coverage does not bore you. But, should you wish to learn a little about how climate and weather systems are among the most complex phenomenon of our planet, then you will usually find something of interest in these reports. This week is not an exception.

On the theme mentioned in the first sentence of this introduction, a piecemeal, project by project approach to building infrastructure is doomed to fail, we see that problem in spades in this state. Whether it is the Delta tunnels project or Jerry's very slow high-speed rail failure, not only do they, even if they were completed, not transform much of anything, but create even more pessimism and cynicism among the citizens.

Not quite as visible, but just as pathetic is the debate about water storage projects. This week's focus is Shasta Dam. A World War III is underway about raising the dam a few feet to store more water. You can read about it below.

There is a short construction update on the progress of repairing the spillways at Oroville Dam, and a couple of new videos.

Desalination, which will be a major element of the state's water supply, whether some like it or not, again provides a lesson on how piecemeal projects will not do. We should be building dozens of plants like the Carlsbad plant, but all we are getting is a patch-job quilt of a small plant here and there. Three reports on the topic are included this week.

A million people in the state do not have safe drinking water. As one article puts it, you have heard of Flint, Michigan's water, but there is a big problem here, mostly in the Central Valley. Damn! Another piecemeal approach is on the agenda to address this problem as you can see in a couple of reports.

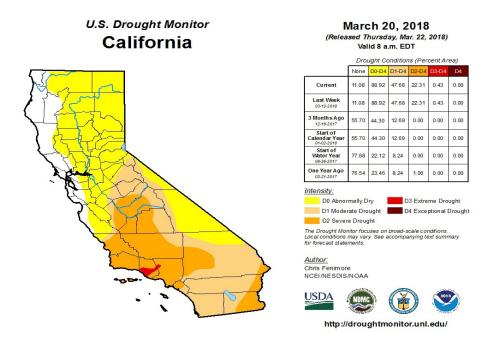
Be it Old or New, American Infrastructure is Collapsing, is the title of the first item in our Feature this week. Most have heard of the new pedestrian bridge that collapse while under construction in Florida last week. But, few know about the breakdown of one of the oldest railroad bridges in the country, the Portal Bridge in New Jersey. Not only is it old, but it is the crucial transportation route for the entire northeaster part of the country.

As mentioned above, China's great water project is covered in the Feature section, along with another

example of how some U.S. economists or professors are discovering Alexander Hamilton's great contributions to creating the American System of economics and finance.

U.S. Drought Monitor

As you can see, the percentage of the state in the various categories of drought remain unchanged from those of last week. That is the usual pattern seen over the near past half decade that I have been writing these reports. Even a week or two of deluge rarely moves the numbers, just as, sometimes, a few months of no precipitation has little impact. But, once the momentum either way reaches a critical point, then the numbers can change rapidly.



California was in for one of the driest winters on record. Then March happened

Kelly M. Grow/California Department of Water Resources <u>Jacob Margolis</u> | March 19, 2018 <u>https://www.scpr.org/news/2018/03/19/81780/california-was-in-for-one-of-the-driest-winters-on/</u>

Heavy rain and snow is in the forecast for California this week including local areas that are at risk of mudslides because of recent wildfires.

But there is an upside. All that precipitation is chipping away at a snowpack deficit in the Sierra Nevada mountains – the source of one-third of the state's drinking water supply. December, January and February were unusually hot and dry. But March has been a different story. Since the beginning of the month, the Sierra snowpack has gone from 23 percent to 48 percent of average in terms of its snow to water equivalent. And more snow is on the way.

Prospect of California Drought Persists Despite Recent Rain

March 20, 2018 MATTHEW RENDA

https://www.courthousenews.com/prospect-of-california-drought-persists-despite-recent-rain/

(CN) – March hasn't brought a miracle to California, but it has improved the state's water picture enough to at least delay any drought declarations.

"I would call it a March mitigation," said Chris Kwan, a water scientist with the California State Water Resources Control Board. "The water situation is a little bit better, but not as good as we could hope."

However, Kwan and other officials acknowledged that an atmospheric river currently dumping rain on the majority of the Golden State will improve the picture even more.

As of Monday, after a big storm trundled across California, the Northern Sierra 8-Station Index records 29.3 inches of precipitation for the water year that began last October. While the number seems slight, it represents a 7 percent increase from two weeks ago.

Before March, the water situation was dire and the state seemed poised to plunge back into drought only one year removed from one of the worse it had experienced in a century and a half of recorded data.

December, January and February — typically the wettest three months in California — all witnessed rain and snowfall significantly below average.

Almost no precipitation fell in February, with California entering March with only 18 inches, well short of the historical average.

Drought Expanding Across Southern California

Mar 15, 2018

http://www.weathernationtv.com/news/drought-expanding-across-southern-california/

Even with recent rainfall, long-term statistics show that southern California continues to experience an expansion of drought conditions. In fact parts of the region are currently under what's deemed as "extreme drought."



The drought monitor released Thursday, March 15. The data for this is valid through Tuesday, March 13.

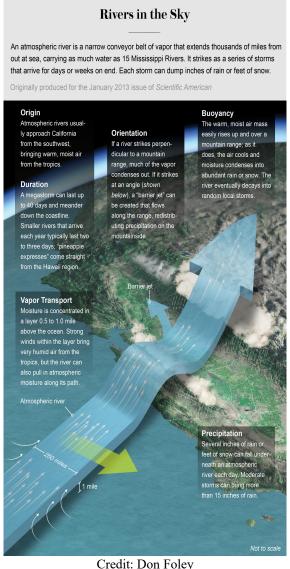
Atmospheric River Could Trigger Big California Mudslides

- By <u>Mark Fischetti</u> on March 20, 2018
- <u>https://www.scientificamerican.com/article/atmospheric-river-could-trigger-big-california-</u>

mudslides/

Southern California is about to get flooded with relentless rain, and fears of mudslides are becoming serious. Major news stations, weather channels, Web outlets and social media are all suddenly talking about the "atmospheric river" that will bring deluge after deluge to California. What is this thing? How rare is it? And how big of a threat could it be? Here are some answers. And see our graphics, below, taken from a brilliant and prescient feature article written by Michael Dettinger and Lynn Ingram in Scientific American in January 2013.

An atmospheric river is a conveyor belt of vapor that extends thousands of miles from out at sea, carrying as much water as 15 Mississippi rivers. It strikes as a series of storms that arrive for days or weeks on end. Each storm can dump inches of rain or feet of snow. Meteorologists sometimes call small occurrences "pineapple expresses," because they tend to flow in a straight line from around Hawaii toward the U.S. west coast. The graphic below explains the details.

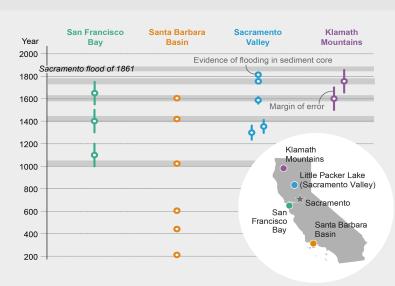


Several regions of central California have been frequent targets in the past two millennia. Here's the record from core samples showing that every 200 years or so a catastrophic atmospheric river many times greater than any pineapple express occurs.

California Megafloods, Every Two Centuries

Massive floods have struck California every 200 years or so, according to analysis of sediment deposits left by the torrents in four widely separated locations. Different dating methods used at the sediment sites have varying margins of error, but the midpoints align fairly well. If the pattern holds, the state could be due for another catastrophe; the most recent megaflood was in 1861, and it left Sacramento underwater for six months.

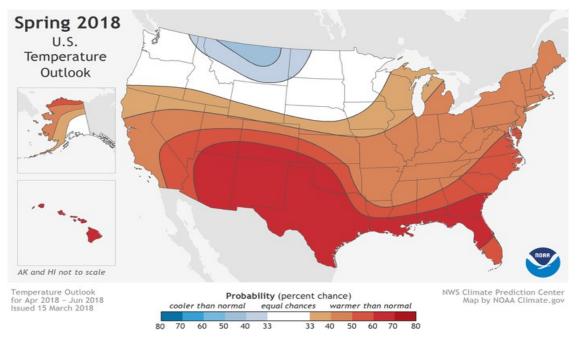
Originally produced for the January 2013 issue of *Scientific American*



Credit: Jen Christiansen (graphic); XNR Productions (map)

NOAA report: Warmer-than-average spring, worsening drought across West

http://wildfiretoday.com/2018/03/16/noaa-report-warmer-average-spring-worsening-drought-across-west/



Above: Areas of the United States where the average temperature for April-June 2018 is favored to be in the upper (reddish

colors) or lower (blue colors) third of the 1981-2010 seasonal temperature record. Within a given area, the intensity of the colors indicates higher or lower chances for a warm or a cool outcome, not bigger or smaller anomalies. For example, both Texas and Tennessee face better than even chances of experiencing well above average spring temperatures, but the chances are higher in Texas (60-70%) than in Tennessee (40-50%). NOAA Climate.gov map, based on data from NOAA CPC. Photo credit: NOAA

Spring is likely to be warmer than the historical normal this year in much of the country with a worsening drought situation across swaths of the West, according to the latest report from the National Oceanic and Atmospheric Administration.

The report, issued Thursday, encompasses April-June.

The Northern Rockies is the only region leaning toward below-average temperatures this spring, forecasters said.

In addition to increased probabilities of warmer temperatures across much of the U.S. — and especially the Southwest — the outlook suggests drought is likely to develop or worsen in Southern California, Arizona, New Mexico and part of Utah, Colorado and Kansas.

Another Big Argument About Another Little Thing

Water Wars: Democrats block GOP bid to speed Shasta Dam enlargement

By Emily Cadei And Dale Kasler

March 19, 2018 04:42 PM

http://www.sacbee.com/news/politics-government/capitol-alert/article205939189.html

Democrats in Congress have stalled an attempt to jump start an expansion of Shasta Dam, California's largest reservoir and a major water source for the Central Valley.

Their objections blocked a Republican gambit to allow the \$1.3 billion project to move forward without full up-front funding and despite objections from Gov. Jerry Brown's administration.

A Democratic leadership aide in the House confirmed to the Sacramento Bee on Monday that House Democrats rejected a GOP proposal to speed preparations for the project, by eliminating a requirement on the amount of upfront funding needed for pre-construction.

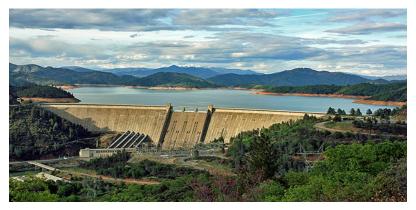
With the Trump administration in their corner, GOP lawmakers from California are making a renewed push to raise the height of the dam, which would increase storage in Shasta Lake by 634,000 acre-feet, or 14 percent.

Shasta Dam is the linchpin of the federal Central Valley Project (CVP), which brings water to agricultural and urban water agencies as far south as Kings County in the San Joaquin Valley. Increasing its storage capacity is a priority for the state's <u>water-intensive agricultural interests</u>.

Under the administration's proposal, the Shasta Dam enlargement requires a 50 percent non-federal share be paid upfront, prior to construction.

Brown's administration isn't inclined to provide that funding. It opposes raising the height of the dam citing environmental impacts as well as the risk of flooding sacred grounds belonging to the <u>Winnemum Wintu Indian tribe</u>.

That conflict prompted proponents of the dam enlargement to seek a workaround.



Shasta Dam in Northern California. Wikipedia

Last week, the <u>Los Angeles Times reported</u> that House Majority Leader Kevin McCarthy of Bakersfield was working to slip a provision into the must-pass spending bill Congress is considering this week to eliminate the upfront funding requirement, allowing the dam enlargement project to begin preconstruction work without all the necessary non-federal funding lined up.

In a ltter sent to California congressional leaders last week, California Natural Resources Secretary John Laird warned that the dam enlargement would violate a provision in state law prohibiting any project that would "have an adverse effect on the free-flowing condition of the McCloud River," which flows into Lake Shasta and is protected under state law.

Tom Birmingham, general manager of Westlands Water District, the single largest customer of the Central Valley Project, disagrees. Birmingham believes the expansion of Shasta's capacity "makes eminently good sense" for both environmental and water-supply needs, and he said he was disappointed with California's efforts to thwart the project.

Oroville Dam Update

Videos

Oroville Spillways Phase 2 Update-- Mid-March, 2018

California DWR

Published on Mar 21, 2018

Crews work on the cut-off wall, installing the final rebar cages into the 80-foot holes and filling with concrete. Roller-compacted concrete (RCC) continues to be laid for the splashpad between the emergency spillway concrete weir and cut-off wall. Dental concrete is poured below the dentates of the main spillway for a new construction road.

https://www.youtube.com/watch?v=J6EXG3JMdds

Oroville Dam Repair - RCC laid at Emergency Spillway march 5 - 10, 2018

Susan Wolding

Published on Mar 10, 2018

Photos of the work that is going on up at Oroville Dam. The RCC is being laid from the Secant Wall to the Weir at the Emergency Spillway and the toe end of the Main Spillway is being repaired. Rocks around the area are being turned into RCC.

https://www.youtube.com/watch?v=gghgT76tU_s

Oroville Dam: Construction of secant pile wall wraps up

By Risa Johnson

03/21/18

http://www.orovillemr.com/general-news/20180321/oroville-dam-construction-of-secant-pile-wallwraps-up

Oroville >> Kiewit Infrastructure West Co. said on Wednesday that construction of the underground wall below the Oroville Dam emergency spillway completed in early March.

The 1,450 feet long wall, drilled 35-65 feet into bedrock, is one preventative measure against the type of erosion that occurred there last year, should the emergency spillway ever be used again.

As erosion intensified during the Oroville Dam crisis, water headed upward toward the emergency spillway's concrete lip holding back the reservoir, leading to evacuation orders for 188,000 residents downstream.

Ted Craddock, assistant deputy director of the State Water Project, said this marked the "first major milestone of the 2018 construction season."

The other preventative component in progress is a concrete splash pad which runs 730 feet down from the emergency spillway weir to the secant pile wall. Crews began laying roller-compacted concrete to "armor the existing hillside" on Feb. 28, Craddock said. So far, 25,000 cubic yards have been placed for the splash pad.

The state Department of Water Resources also plans to construct a roller-compacted concrete buttress later this year that will be next to the emergency spillway on top of the splash pad for added reinforcement.

Weather permitting, phase two of work on the main spillway is expected to begin around May 1. The exact start date will be determined after the State Water Project operations team updates the 2017-2018 winter operations plan next month, Craddock said.



Bill Husa — Mercury-Register

The update from the Department of Water Resources below gives all the details mentioned in the article above. So here is just the link.

March 21 Lake Oroville Spillways Construction Update

Published: Mar 21, 2018

<u>https://www.water.ca.gov/News/News-Releases/All-News-Articles/March-21-Lake-Oroville-Spillways-Construction-Update</u>



The splashpad at Lake Oroville will armor the hillside between the emergency spillway and the secant pile wall to prevent erosion if the emergency spillway is ever used again. DWR/March 2018

SACRAMENTO – Today the Department of Water Resources (DWR) provided an update on construction activities for the Lake Oroville Spillways Emergency Recovery Project.

Desalination

Desalinated Water in California Doesn't Have to Come From the Ocean

By Ian Evans

March 20, 2018

<u>https://www.newsdeeply.com/water/community/2018/03/20/desalinated-water-in-california-doesnt-have-to-come-from-the-ocean</u>

The California Department of Water Resources has awarded \$34 million in <u>grants</u> to eight desalination projects throughout the state. The money is part of a round of awards for desalination projects, as designated by <u>Proposition 1</u>.

While ocean desalination has often caught most of the public attention, two of those construction projects, in Antioch and Camarillo, focused specifically on inland brackish desalination, as did several of the other projects that received grant money. California has plenty of salty inland water, such as the water in the upstream Delta or in underground aquifers that have absorbed soil salts. As local agencies look for more potable water sources, desalinating that local water may become an important part of the equation, says Richard Mills, the Department of Water Resources' recycling and desalination chief.

But it's not cheap. Mills says that brackish desalination can run from about \$800 for an acre-foot of water to about \$3,000. While these projects are generally cheaper than ocean desalination, costs vary

significantly by location. Still, the proposed projects show that, despite the cost, there is still a lot of interest in brackish desalination. "That may mean that we're running out of cheap water sources," he said.

Water Deeply spoke with Mills about the projects and the role of brackish desalination, especially groundwater desalination, throughout California.

Water Deeply: How much do you think that brackish desalination will be a part of how California deals with water issues in the future?

Mills: In the California Water Plan 2013, we had kind of an inventory of projects that were in place at the time, and also what seemed to be in planning. In 2013, there were 23 brackish groundwater desalination plants, and three ocean desalination plants. The ocean plants, at that time, were very minuscule in size, so the annual production and capacity was only 560 acre-feet a year, whereas with the brackish groundwater, the annual capacity was 139,000 acre-feet a year.

City To Create Desalination Plant With \$10M Grant

Bay City News Service

March 15, 2018

<u>https://www.sfgate.com/news/bayarea/article/City-To-Create-Desalination-Plant-With-10M-Grant-12756388.php</u>

Antioch will create a desalination plant with a \$10 million grant from the state of California, the city announced on Wednesday.

Antioch is among only three cities or water agencies to receive the large grant, according to the Antioch city manager's office.

The desalination plant will eventually be able to convert up to 6 million gallons of salt water into clean drinking water every day, according to city officials.

The grant is funded by a water bond, Proposition 1, which was approved in November 2014. It authorized over \$7 billion in general bonds for state and municipal water projects.

Deepwater Desal has long been out of the public eye, but expect that to change in 2018

By David Schmalz

March 15, 2018

<u>http://www.montereycountyweekly.com/news/local_news/deepwater-desal-has-long-been-out-of-the-public-eye/article_b1f98846-27e2-11e8-8694-17b0d3688ebf.html</u>

On March 5, Deepwater Desal – a proposed desal project in Moss Landing that would utilize an openocean intake 130 feet deep in the Monterey Canyon – announced the completion of part of a key study. It shows both the proposed point of intake for source water and the location for brine discharge do not support a rich marine habitat, a key concern for regulators.

To date, 33 of 35 studies have been completed for the project's environmental review, Deepwater spokesman David Armanasco says. He says nearly \$12 million has been spent on the project, and a draft environmental impact report is expected to be released this year.

Deepwater's proposed desal plant, which would be located north of Dolan Road and south of Moon

Glow Dairy, is also far bigger than Cal Am's. It would produce 25,000 acre-feet of water annually, most of which is already locked up in contracts.

Its Not Just Flint Anymore

Water and the public health crisis

by **BILL MONNING** posted 03.13.2018 <u>http://capitolweekly.net/water-public-health-crisis/</u>

Ed's Note: State Sen. Bill Monning, D-Carmel, a member of the Natural Resources and Water Committee, represents the 17th Senate District.

Many Californians know of the lead poisoning in the public water system in Detroit. Very few know of the contaminated water crisis impacting more than 1 million Californians.

After years of trying to resolve the failure of the State of California to address this public health challenge, advocates have reached a historic negotiated agreement.

The breakthrough came last year when leading public health organizations, agricultural associations, and environmental justice advocates reached a consensus on legislation.

Given its breadth of support and the urgency of the problem it addresses, creation of the Safe and Affordable Drinking Water Fund should be at the top of the 2018 agenda for the Legislature and Gov. Jerry Brown.

The simple, sustainable solution is to create an ongoing source of revenue to support the operation of water treatment facilities and other investments necessary to secure permanent drinking water solutions

The importance of this issue is clear. Drinking water sources for hundreds of drinking water systems and tens of thousands of domestic wells are contaminated and unsafe to drink. Arsenic, Hexavalent Chromium and other, often naturally occurring contaminants, put residents at risk of cancer and reproductive complications. Nitrates that seep through soils and into groundwater from fertilizer use, manure, and outdated septic systems can cause potentially fatal blue baby syndrome – a blood disorder that impedes the ability of blood to carry oxygen – and other dangerous conditions.

The simple, sustainable solution is to create an ongoing source of revenue to support the operation of water treatment facilities and other investments necessary to secure permanent drinking water solutions. SB 623 creates such a fund, and does so equitably.

It establishes a small fee of less than 1 a month per household that most water users would pay – in much the same way that Californian households have long paid a small monthly surcharge on other utility bills to ensure that low-income residents have access to basics such as affordable electrical power.

In addition, with the support of such influential farming groups as the Western Growers Association, SB 623 establishes a small fee for agricultural users to address nitrate contamination. They would pay the fee even as they continue to work to reduce the impacts of nitrates on groundwater from their farming operations.

Infrastructure could improve unsafe drinking water in San Joaquin Valley

By Karen Nikos-Rose

https://www.davisenterprise.com/local-news/ucd/infrastructure-could-improve-unsafe-drinking-waterin-san-joaquin-valley/

Tens of thousands of people living in the San Joaquin Valley's unincorporated, rural, low-income communities have unsafe drinking water pouring from their taps. That water is delivered from a patchwork of community water systems that often don't meet state or federal standards for drinking water or from private wells that are not tested.

However, a UC Davis study that assessed water systems throughout the valley found that safe water is often close at hand. Most people without safe water, or about 99,000 residents, live near a public water system with clean water. They could access that water if service extensions, piping and other infrastructure were implemented, the report found.

"There are solutions," said Jonathan London, associate professor, director of the UCD Center for Regional Change and lead author of the report.

"We are confident that these communities, local water systems, and the state can work together to fund and encourage infrastructure improvement to ensure that no one in the San Joaquin Valley need worry about what is coming out of their faucets," London said.

The report, "The Struggle for Water Justice in the San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities," looked at access to safe drinking water in low-income communities without city governments in the eight counties of the San Joaquin Valley.

The study's purpose is to inform state policy and local planning in order to improve access to safe drinking water for these communities.

Feature: Infrastructure and Great Projects

"Wisdom is merely the science of happiness, or that science which teaches us to achieve happiness. Happiness is a state of permanent joy.... Nothing serves our happiness better than the illumination of our understanding and the exercise of our will to act always according to our understanding.... Helping each other in the search for truth, the knowledge of nature, the multiplication of human powers, and the advancement of the common good.... For only so much of our life is to be valued as truly living as the good we do in it."

Wilhelm Gottfried Leibniz, whose elaboration of the concept of technology Lyndon LaRouche identified as central to bringing about a durable peace, spoke to the nature of this better system in his brief essay "On Wisdom," about 1700 AD.

Thus, now you know from whence the phrase, "Life, Liberty and the Pursuit of Happiness" in our Declaration of Independence derives.

Alexander Hamilton, the founder of the U.S. financial and economic system repeats Leibniz's phrase "the multiplication of human powers" in his 1791 report to Congress, "On the Subject of *Manufactures*." Thus began, with Hamilton, the beginnings of industry and infrastructure in the United States.

Now look where we are:

Be it Old or New, American Infrastructure is Collapsing

Mar. 16, 2018 (EIRNS)--Within 24 hours, the newest bridge in America and one of the oldest bridges in America broke down. In the case of the oldest, the Portal Bridge in New Jersey, over 100 years old, which breaks down about 15% of the time when it swings open for boats on the Hackensack River, was down at the morning rush hour, causing havoc once again for the NJ-NYC commute and all Amtrack trains. The bridge is the number one target of the Gateway Project, which is the subject of near fisticuffs between NY/NJ political leaders and the Trump cabinet.

The Miami case -- a new style, all concrete pedestrian bridge over a highway which was installed a few days ago and not even opened as yet, collapsed onto the highway, killing six and injuring others. Investigations will almost certainly find that there was "successful" cost cutting, with the usual result.

Oh, my, could we learn a thing or two from the Chinese.

A Prefabricated Tragedy

The collapse of a superbridge in Florida shows how an entire philosophy of building can go wrong.

By Matthew N. Eisler

March 18, 2018

https://slate.com/business/2018/03/the-florida-bridge-collapse-shows-how-accelerated-bridgeconstruction-can-go-wrong.html

It was to be a showcase of advanced bridge technology, a centerpiece of urban development in Miami-Dade County. It was equipped with titanium dioxide–impregnated self-cleaning concrete that would always sparkle white in the Florida sun. It was designed to withstand a Category 5 hurricane. And it was supposed to last 100 years.

But last week, the FIU-Sweetwater UniversityCity Bridge <u>failed catastrophically</u> during construction, crushing rows of cars stopped at a red light on a busy thoroughfare. Six people were killed and 10 injured.

The bridge was a product of something called "accelerated bridge construction," or ABC, a technique of fast-tracked prefabricated building that has strong political backing at both the state and federal levels. More than 1,000 bridges have been built with it, and Florida International University is one of the leading research centers in this kind of engineering, an irony not lost on <u>some commentators</u>.

First, let's discuss what probably didn't cause the collapse. If a design flaw was responsible, it would be a relatively rare failure of a highly reliable technology.

Prefab assumes that all the complexities of construction can be front-loaded into component manufacturing, so that final assembly can take place all at once, quickly and efficiently. It has been marketed as the scientific management of building, a triumph of logistics over craft knowledge. Naturally, unions tend to <u>hate prefab</u>, seeing componentization as a means of destroying their ability to control the pace of construction. Managers and boosters love it for precisely those reasons.

It looks as if a giant concrete Lego set was misassembled, with fatal results.

Yet in wheeling out the UniversityCity Bridge deck well in advance of other components, the basic concept of prefabricated construction was undermined. If accelerated construction were premised as means of simplifying project management, prefab was surely never intended to be a complete substitute

for it, as those in charge seem to have assumed. It looks as if a giant concrete Lego set was misassembled, with fatal results.

China's Great Water Project

Moving Water: By Land and by Air by Mike Billington Executive Intelligence Review March 9, 2018

http://www.larouchepub.com/eiw/public/2018/2018_10-19/2018-10/pdf/20-24_4510.pdf

The article linked here, <u>China Report: Moving Water by Land and by Air</u>, is in the March 9, 2018 issue of EIR.

(Here are the opening paragraphs of the article)

March 5—China's water problem is in one sense the opposite of that in the United States. In North America, the northwest regions of Alaska and Canada's far west receive an abundance of precipitation, while the U.S. southwest and northern Mexico are water-starved. It is the opposite in China—the southeast region in the Yangtze River basin has abundant fresh water resources, while the northeast, which holds a large portion of the nation's population, industry, and arable land, is desperately short of water.

But the big difference is that China is dealing with this imbalance, by moving water from the south to



the north, while the United States has done nothing to resolve its problem, and thus suffers periodic droughts, resulting in recurring economic and social disasters.

The North American Water and Power Alliance (NAWAPA), promoted by President Kennedy, would have moved Alaskan water south to the West and Southwest of the United States, and into northern Mexico—it would have been the largest infrastructure program ever undertaken by mankind. But like most large-scale scientific and infrastructural projects in the United States, NAWAPA died with JFK and his brother.

China, on the other hand, has unleashed the most massive water-moving program in human history, which is already partially in service and doing its job on behalf of current and future generations. The

South-North Water Transfer Project (SNWTP) is China's multi-pronged Great Project to move water from the Yangtze River in the South to the Yellow River region in the North. Mao Zedong set in motion a feasibility study for such a project during a tour of the Yellow River region in 1952. It took 50 years until the plan was launched in 2002.



Another Professor Discovers Alexander Hamilton:

Cornell Professor Cites Alexander Hamilton, 'Nation's Most Visionary Founder' on Trade

March 19 (EIRNS)—Forbes on March 13 published a column by Cornell University Law Prof. Robert Hockett, an active public supporter of reinstatement of the Glass-Steagall Act, on the subject "Make Trade Policy Strategic, Not Dogmatic." The column generally argues for a "mixed" trade policy, in which tariffs or subsidies support long-term productivity, employment or military objectives, not the extremes of British free trade or autarchy.

But the really useful aspect of the observations of Professor Hockett, who is a professor of both Law and Public Policy, involves Alexander Hamilton's American policy. "Our nation's most visionary founder, Alexander Hamilton, undertook a deliberate strategy of guiding the development of the new United States toward becoming a great manufacturing and commercial, not just agricultural, republic. And so he pushed for both direct involvement in infrastructure and technological development, and for temporary protective tariffs to aid American 'infant industry.' The strategy worked so well that American became the world's largest economy within a few generations. Germany then followed the American example, and shortly thereafter became a great industrial power in its own right. Later Japan, then South Korea, and now China have followed the same path—in each case, expressly citing the example of Hamilton—becoming 'tiger economies' in the process.'' Anti-Hamiltonian Britain, he writes, declined steadily through the late 19th and 20th centuries.

On trade, Hockett cautiously concludes that "now that Gary Cohn has left the White House ... the White House's 'economic nationalists' might—might—prove to be one team in this White House that we can all celebrate in the end."

Here Hockett means trade advisor Peter Navarro, Commerce Secretary Wilbur Ross, and Trade Representative Robert Lighthizer. But Hamilton, in recommending tariffs or subsidies in the Report on Manufactures and elsewhere, did not base policy on defining other trading countries as "the enemy" whose surplus had to be wiped out, as Navarro, in particular, and President Trump have done. Rather he concentrated on what was necessary to develop the productive powers of the United States.