California Water and Infrastructure Report

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



For May 17, 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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Between 1861 and 1865, Abraham Lincoln implemented a series of revolutionary economic and banking measures.... It is true that much of this money went into financing the Union's war effort, but also consider that—both during the Lincoln Presidency and in the years that followed—U.S. railroad mileage went from 45,000 to 157,000, more than in all of Europe. Entire new industries were created. American steel production and modern American agriculture were unique in the world.

American Poverty and Its Solution

A Note To Readers

The quote above from the article, "American Poverty and Its Solution," highlights the necessary connection between the nation having full control over its financial and credit system in order for it to drive forward real progress in increasing the productive powers of the economy and the labor force. That word "progress" may not be popular with some these days, but it is the word that characterizes the human species, when we are not foolish or stupid. Our concluding excerpt from that article is the last item in this week's report.

Next week this report will feature excerpts from the newly revised LaRouche PAC pamphlet, "Campaign to Win the Future-- A New Paradigm for Mankind: LaRouche's Four Laws for Economic Recovery"

Here is the link, and I urge you to jump the gun and read it now. For, it is only with this comprehensive understanding presented and the policy package offered, that any significant real economic progress and repair will occur: http://media.larouchepac.com/larouche/documents/20180503-LPAC-2018-

Campaign-web.pdf

In This Week's Report

The U.S. Drought Monitor begins this week's report, followed by a report on the symptoms of climate change in California, which unlike most such reports, at least in this article, makes no claim as to the cause of climate change.

Then we focus on the Colorado River System. Articles on the river, the drought in the broader southwest and the threat of serious rationing just a couple of years ahead, are becoming more numerous. Recall that 40 million people depend on the Colorado River today.

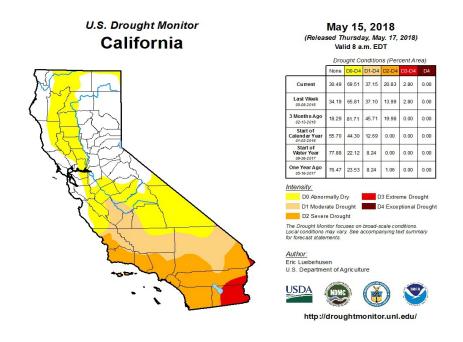
Then under the title of "Long-term Thinking? Never Heard of It," you will find a grab bag of topics that too many in the state have turned into a "tempest in a tea cup." More water storage, groundwater pumping regulations, the Delta tunnels, those topics and more are presented for your reading pleasure, or, if you would rather, to ignore.

Fire season in the state is now year-round-- it never really ends. But, of course, some parts of the year are more intense than others, and it is that time of the year once again. So, the first articles on preparations are now appearing.

Finally, under "News Items" we recall the 12,000 Chinese that helped to construct the world's first transcontinental railroad, completed in 1869. For those who are unfamiliar with it, it was built right here in the U.S. Of course, those Chinese workers were mostly laborers on the Abraham Lincoln initiated great project. Today, once again the Chinese are building railroads. This time high-speed railroads all over the world, with more than 25,000 km already completed and running inside China itself. One westerner reports on his experience on China's railroads and compares that accomplishment to what the U.S. actually has not done.

U.S. Drought Monitor

As the drought monitor indicates today, the "Severe" category took a bit of a jump over this past week, moving from 14% of the state to 21%. All other categories remained the same.



Climate Change and California

Unlike most reports on the developments and consequences of climate change, the following report's summary as reported in this article, does not scream and yell about how mankind is solely responsible for the natural climate change our Earth has undergone for about four billion years.

Report: California in Throes of Climate Change Crisis

Posted by Paul Rusnak

May 16, 2018

http://www.growingproduce.com/fruits/report-california-throes-climate-change-crisis/

Headlines reporting record temperatures, <u>debilitating drought</u>, <u>rampaging wildfires</u>, and rising seas are nothing new to Californians. However, the increasing incidence of Mother Nature-fueled wrath in recent years might not be just unfortunate coincidence. California is already feeling the significant and growing effects of climate change, according to a <u>new report</u> compiled by <u>CalEPA's Office of</u> <u>Environmental Health Hazard Assessment</u> that tracks 36 indicators of climate change and its impacts on the state.

According to the <u>California Department of Food and Agriculture (CDFA)</u>, these specific indicators of climate change draw upon monitoring data from throughout the state and a wide variety of research studies carried out by state and federal agencies, universities, and other research institutions.

Some key findings from the report include:

- Agriculture: In parts of the Central Valley, certain fruits and nuts (prunes and one walnut variety) are maturing more quickly with warming temperatures, leading to earlier harvests. Shorter maturation times generally lead to smaller fruits and nuts, potentially causing a significant loss of revenue for growers and suppliers.
- Temperature: Average air temperatures have increased throughout the state since 1895, with temperatures increasing at a faster rate since the mid-1970s. The last four years were the hottest on record, with 2014 being the warmest, followed by 2015, 2017, and 2016. Nighttime temperatures have been rising faster than daytime temperatures.
- **Drought**: California is becoming drier, with unprecedented dry years in 2014 and 2015. The recent drought from 2012 to 2016 was the most extreme since instrumental records began.
- Wildfires: The five largest fire years since 1950 occurred in 2006, 2007, 2008, 2012, and 2015. Preliminary data suggest that 2017, which included the deadliest and most destructive wildfires in state history (Sonoma and Napa counties) and the largest wildfire in state history (Thomas Fire in Ventura and Santa Barbara counties), will rank as the second largest fire year in terms of total acreage.
- Sierra Nevada Snowmelt: The fraction of snowmelt runoff into the Sacramento River between April and July relative to total year-round runoff has declined, leading to less water available during the summer to meet the state's needs.

In addition, the report also highlights a variety of "emerging climate change issues" that only appear to be influenced by climate change, but not directly linked. These include a reduction in coastal and Central Valley fog, an increase in harmful algal blooms, and a rise in invasive agricultural pests.

Along the Colorado River

Within the next two years the probability of serious rationing of the water from the Colorado River is now more than 50%. Since 40 million people depend upon the river's water, and about 30% of southern California's water is imported from the Colorado, maybe we should pay attention.

Of course, rationing does not solve a water shortage, and with the rapid population growth in the southwest states, increased demands on both the river and groundwater are locked-in. Had the John Kennedy era project of the North American Water and Power Alliance (NAWAPA) not died after that President's assassination, this discussion would not be necessary today. Here is a ten minute video on the NAWAPA project: https://www.youtube.com/watch?v=QC-tQKUAoTA

And here is a seven minute video of the "Oregon-California Extension of NAWAPA." https://www.youtube.com/watch?v=2ZTft0pJUUM

What Another Dry Winter Means for Colorado and the West

With dangerously low snowpack levels across the state, Colorado is facing a severe water shortage. We take a look at what that means for rivers, wildfires, and the future of water use in the West.

By Jay Bouchard | May 14, 2018

http://www.5280.com/2018/05/what-another-dry-winter-means-for-our-rivers-wildfires-and-future/

It wasn't just a low snow season. It was another low snow season, the latest in what is becoming an increasingly common occurrence in Colorado. As skiers across the state bemoaned the lack of fresh powder this winter, climate scientists and hydrologists recognized something more acute: The dry winter exacerbated water scarcity in the Centennial State, placing more stress on our rivers and increasing the likelihood of an active fire season.

To put things in perspective, on April 9—which is historically the peak day for snowpack in Colorado—almost the entire state was sitting at below-average levels. Southern Colorado had it worst. The Upper Rio Grande basin, for instance, boasted a meager 43 percent of its normal snowpack. The Gunnison basin sat at only 57 percent. The Arkansas basin was at 63 percent. Only the North and South Platte River basins approached normal levels.

A month later, little has improved. "We're staring down a pretty bleak water year," says Matt Rice, director of the <u>American Rivers</u>' Colorado Basin Program. And what's worse, he says, is that "This is absolutely part of a trend." According to river and conservation scientists, Colorado is in the midst of a drought that dates back to the record-dry year of 2002. Although we have had some wet winters over the past two decades, dry seasons are now becoming "the new normal." And that's a problem—not just for our ski resorts, rivers, and lakes, but also for our farmers, cities and our neighboring states.

Colorado River flow peaking early, at historically low level

by The Associated Press

Saturday, May 12th 2018

https://apnews.com/74f56aa06be641cc9d44ade3177e557b

The Daily Sentinel reports that peak flows are expected Sunday on the Colorado and Gunnison rivers, at about 8,500 cubic feet per second near the Utah line.

Only the dry years of 1977, 2002 and 2012 have seen lower levels in 85 years of records kept by the Colorado River Conservation District. If Sunday is the peak, it will also be the third-earliest, according to district records.

Persistent drought is affecting water levels in the river that serves about 40 million people and 6,300 square miles (16,300 square kilometers) of farmland in United States and Mexico.



The Colorado River's peak flows are arriving early this spring and at one of the lowest levels recorded. (FILE PHOTO: Colorado River / MGN)

River managers forecast Arizona's Lake Powell will receive only 42 percent of its long-term average flow from the Colorado this year.

Mexico, Arizona, Nevada Could See Colorado River Cutback By 2020

May 9, 2018 at 3:37 pm http://sacramento.cbslocal.com/2018/05/09/colorado-river-cutbacks/

DENVER (AP) – Mexico and the U.S. states of Arizona and Nevada face a better-than-even possibility of getting less water from the Colorado River in 2020 because of a persistent drought, water managers said Wednesday.

The U.S. Bureau of Reclamation, which manages the river, released <u>projections</u> showing a 52 percent chance the river's biggest reservoir, Lake Mead in Arizona and Nevada, will fall low enough in 2020 to trigger cutbacks under agreements governing the system

If that happens, those two states and Mexico would be the first see their share of water cut. Further drops in the reservoir could trigger cuts for other states.

The chances of a shortfall rise to 64 percent in 2021 and 68 percent in 2022, the bureau said.

Lake Mead has never fallen low enough to trigger cutbacks, but a nearly two-decade drought and growing demand makes a shortage more and more likely.

The river serves about 40 million people and 6,300 square miles of farmland in United States and Mexico. In the U.S., Arizona, California, Colorado, Nevada, New Mexico, Wyoming and Utah all use the river or its tributaries, along with 20 native American reservations.

The shortage projection prompted Bureau of Reclamation Chief Brenda Burman to prod the seven river states to finish long-delayed contingency plans for worsening conditions.

Long drought makes outlook for Tucson's share of CAP water grim

- By Tony Davis Arizona Daily Star
- May 9, 2018
- <u>http://tucson.com/news/local/risk-of-water-shortage-at-lake-mead-more-than-percent/article_a6880ebc-16a5-5468-944f-f2bd167de8e2.html</u>

Oroville Dam Update

Videos:

Oroville Spillways Phase 2 Update May 8th, 2018

California DWR

Published on May 11, 2018

Lake levels are at 824 feet as work commences on the main spillway. Crews remove aggregate from outside of the original sidewalls on the upper chute. Workers cut into the transitional slabs and sidewalls of the upper spillway to prepare for the permanent connection to structural concrete this summer. Excavators begin removing the temporary roller-compacted concrete (RCC) sidewalls in the middle chute in preparation for the placement of structural concrete.

<u>https://www.youtube.com/watch?v=mQ2DCxOfhrU</u>

Oroville Dam News Update May 1, 2018 is there a leak?

By Susan Wolding

April 30, 2018

Photos of Dam and the work being done there between April 1st and May 1st. Building the pyramid I call it, but you let me know what you think! today starts the RCC replacement on the spillway and that will be in the next video, But really are the gates leaking? Will the Emergency Spillway have leaks too? We will see....

https://www.youtube.com/watch?v=OUgsvPBF5ZU

And One Article This Week:

Oroville Dam emergency spillway work to extend into 2019

Posted: 05/10/18

 $\underline{http://www.chicoer.com/general-news/20180510/oroville-dam-emergency-spillway-work-to-extend-into-2019}$

While work to repair the main Oroville Dam spillway will largely be done by Nov. 1, in response to a question, the Department of Water Resources clarified that work on the emergency spillway will continue into 2019.

That part of the project includes buttressing the weir at the top of the spillway, and covering the hillside between the weir and a cut-off wall 750 feet down slope, with a "splash pad" of roller-compacted concrete.

The cutoff wall is a row of poured concrete pillars extending underground down to bedrock, designed to stop uphill erosion like what threatened the weir's collapse in February 2017, prompting evacuation orders.

The pillars were poured last year, and are being topped currently. Part of the splash pad is being poured and demolition is underway to allow for the other part.

Long-term Thinking? Never Heard of It

President John Kennedy during 1962-63 personally inaugurated more than half-a-dozen Western water projects. In every one of these speeches he emphasized that these projects were being built, not for us today, but for one or two generations into the future. But, it was not just dams, reservoirs and aqueducts that the Kennedy administration facilitated. The North American Water and Power Alliance (NAWAPA) project was on the administration's agenda. That project would have moved water from Alaska, down the Rocky Mountain Trench, into the Southwest and Mid-west, all the way to northern Mexico. More than 100 million acre feet added to the supply of the "lower 48" and Mexico. A continental water management system like that now being built in China. See in the introduction above links to the NAWAPA project.

And that is not all. President Kennedy established a commission to plan and build dozens of nuclear-powered desalination plants from Florida to Texas to California. And even after he had been assassinated, that commission signed the first contract to build the first plant with the Metropolitan Water District of Southern California in 1964. See the history of that here: "Nuclear-Powered Desalination in California"

http://www.californiadroughtupdate.org/2015/05/29/nuclear-powered-desalination-in-california-parts-i-iv/

Now, all that leads to the following: Whether it be the Delta Tunnels, building a couple of dams, regulating groundwater withdrawls, fixing the levees in the Delta, and more water bonds on the ballot, it is all, at best, pasting an extension on a water management system that will not longer be adequate for a state in which the population will double over the next 40 years or so.

What is required is a complete shift in the thinking as presented in the LaRouche PAC pamphlet linked in the introduction of this report. Start there and all problems are solvable.

What follows are some of the developments in the projects and battles occurring in the state-- or, our "tempest in a teacup."

First some words from Governor Brown, who, as most readers should know, is not someone held in very high respect by me. But in the speech the article reports on he does say some interesting things that people should either pay attention to, or they should be familiar with.

Governor Brown addresses ACWA conference, emphasizes that now is the time to get things done

<u>May 11, 2018 Maven Speeches and</u> <u>https://mavensnotebook.com/2018/05/11/governor-brown-addresses-acwa-conference-emphasizes-that-now-is-the-time-to-get-things-done/</u>

"Well we don't make it in the way it used to be before the Europeans got here. We have to have constant engineering and constant investment. And when you have more people it's going to cost more money. ... Where do we get the money for fixing our infrastructure? That's about a \$60 billion bill right now, \$60 billion deferred maintenance. And then you have all the maintenance that we need on dams and storage projects and conveyances."

"So if you want to have 40 million people living in a place meant for 300,000, you need a lot of creativity, you need a lot of investment, and you need a lot of cooperation. And you can't say well we did it this way before because before we had far fewer people. When I was born I think California had seven million people; when I was governor there was 24 million people, and now we're at 40 million."

"All this is telling us is that we have a very high quality, highly sophisticated and technological environment that we've created and we have to keep it going. I know when I fly over California I look at all these things that look like lakes but they're really dams and all these channels that look like rivers or creeks but they're really some kind of conveyance. It just strikes me of how engineered California is and therefore, we have to keep at it."

"We have a lot of challenges here with climate. There must be a handful of skeptics here about climate change, but only a handful I would assume. But, leaving that aside, if we look back in history in the middle ages they say there was a 150 year drought around 850 to 1000. So just in natural variability we could have far more than that little five year drought that we had. That was pretty bad. We could have a 10 year drought, 15 year drought or longer. And if we have that, wow, then we're going to be really challenged.

"The second thing that I want to mention aside within that larger plan of course is the Delta. The Delta's deteriorating and we have to invest. We have to invest in habitat. We have to invest in flood control. We have to make sure that that whole system works. It is in the decline right now, so we have to deal with that. If we don't, those levies they can break, salt water can intrude, and we have extreme storm events. So, there are a lot of things to do about that."

THIS JUST IN ... State Water Contractors Announce Formation of Joint Powers Authority for California WaterFix

May 14, 2018 Maven Breaking News

https://mavensnotebook.com/2018/05/14/this-just-in-state-water-contractors-announce-formation-of-joint-powers-authority-for-california-waterfix/

From the State Water Contractors:

Uniting Southern and Northern California in a collaborative water supply reliability vision, the Metropolitan Water District of Southern California (MWD), Santa Clara Valley Water District (SCVWD) and Zone 7 Water Agency today announced their partnership and formation of the <u>Delta Conveyance Design and Construction Joint Powers Authority</u> (<u>DCA</u>) — the public agency that will be charged with the design and construction of <u>California WaterFix</u>.

On a parallel path, the California Department of Water Resources (DWR) has now created the <u>Delta Conveyance Office</u> (DCO), which will oversee the work of the DCA. More information is available <u>here.</u>

Congressman would ban California water tunnel lawsuits

May 15, 2018

https://www.sfgate.com/news/article/Ken-Calvert-WaterFix-water-tunnel-Jerry-Brown-12917326.php

SACRAMENTO, Calif. (AP) — A California congressman wants to ban environmental lawsuits challenging a plan to build two gigantic tunnels to divert water from the north to the thirsty south.

Rep. Ken Calvert, a Riverside County Republican, inserted the ban in a 142-page draft of an Interior Department spending bill for fiscal 2019 that he released Tuesday, the Sacramento Bee reported.

Calvert chairs the House Appropriations subcommittee on the Interior, Environment and Related Agencies.

Page 141 of the draft includes language prohibiting state or federal lawsuits against the final environmental impact report for the so-called California WaterFix project "and any resulting decision, record of decision or similar determination."

If that provision makes it through Congress, it would gut many existing legal challenges that are based on environmental findings and bar future similar lawsuits.

Garamendi set to "brawl" over tunnels appropriation bill

By Matthew Keys

https://www.wintersexpress.com/local-news/garamendi-delta-tunnels-bill-interview/

A Republican lawmaker's proposal to ban legal challenges to the controversial Delta twin tunnels project would prevent citizens from having their voices heard in court on important environmental issues, Rep. John Garamendi, D-Solano, told the Winters Express in a telephone interview on Monday.

On Monday, Rep. Ken Calvert, R-Corona, <u>introduced a 142-page appropriations bill</u> that would establish the budget for the Department of Interior and other agencies within the federal government. Buried in the bill on the second-to-last page was a proposal that would prevent agency decisions regarding the Delta twin tunnels project from being challenged in court.

"It would be a crime if these things were built," Garamendi said. "Here, we see raw political power exerted from Southern California in a way that would deny opponents to the tunnels one of the most-basic American rights, and that is the right to go to court."

Garamendi said Calvert's move to ban court challenges on the topic is entirely legal because any challenge brought in court would be based on current environmental laws, including the Endangered Species Act, the Clean Water Act and the Clean Air Act. "Another law can take away that ability to seek justice in court," he said.

A ban on Delta tunnels lawsuits slips into federal spending plan

By Emily Cadei And Ryan Sabalow

http://www.sacbee.com/latest-news/article211161939.html

At least 58 parties, including Sacramento-area local governments, have filed more than a dozen lawsuits <u>challenging various aspects of the project</u> in recent years. If it becomes law, Calvert's provision would make moot many existing legal challenges to the project. And it would prevent future lawsuits challenging environmental determinations.

Legal challenges can certainly <u>slow the project's advance</u> in the meantime. But the tunnels' foes face an uphill climb as they pursue lawsuits on environmental grounds. California judges rarely issue injunctions outright blocking projects from moving forward. Instead, judges tend to order revisions to environmental documents as building continues. State and federal environmental agencies have already approved the project.

The bigger threat to WaterFix is likely to be political. With Brown retiring at the end of 2018, the project <u>loses its major champion</u>. None of the leading candidates for governor this year support building both tunnels. (emphasis added)

November Water Bond Promises \$8.7 Billion Towards Securing California's Future May 11, 2018 - From the May, 2018 issue

https://www.planningreport.com/2018/05/11/november-water-bond-promises-87-billion-towards-securing-california-s-future

California voters are being presented with two upcoming water bond propositions in the June and November elections. In June, Prop 68 will present voters with a \$4 billion Parks and Water Bond, and in November the Water Supply and Water Quality bond will present voters with an \$8.7 billion bond. Recently, **TPR** sat down with Jerry Meral, official proponent of the November Water Bond and director of the California Water Program at the Natural Heritage Institute. Meral, who has previously directed the Planning and Conservation League and served as a Deputy Secretary of the California Natural Resources Agency, provided an overview of the types of drinking water, ecosystem restoration, and sustainable groundwater projects the November bond would fund.

You referenced earlier that implementing California's Sustainable Groundwater Management Act is new to local governance. How is SGMA changing water management, and how might the water bond facilitate such change?

SGMA was a landmark bill for California; really, we are just catching up to other Western states. The goal is to preserve groundwater at a relatively stable level, and to not let it degrade in quality. This is a big challenge for California, as we have a state overdraft of more than 2 million acre-feet a year. That's huge. We need to do much better about recharging groundwater.

Southern California is a leader in this, but a lot of the state needs to catch up. Facilities and pipelines need to be built to move floodwater to places where it can percolate into the ground. Quality

remediation needs to be done to make groundwater more usable.

To some extent, we're also going to have to take land out of production. Of course, our goal is to minimize that impact by doing everything else we can first. But even if we do everything we need to, still, it won't be possible over the long term to irrigate as much land as we do today. (emphasis added)

Day Zero...for California?

Posted: Thursday, April 12, 2018 12:40 pm

By Rep. Jeff Denham

http://www.goldenstatenewspapers.com/patterson_irrigator/opinion/your_voice/day-zero-for-california/article 65e7985e-3e89-11e8-9dab-1b34d776d84b.html

Our current water infrastructure system was designed in the 1950s to serve 20 million people but now serves around 40 million. This is unsustainable and will only cause further harm to our economy and livelihood. California is number one in the nation in agricultural revenue and produces nearly half of all U.S.-grown fruit, nuts and vegetables. Without a reliable source of water, our farms — and the jobs they support — will disappear, and the country as a whole would be faced with a shortage of domestically-grown foods.

It's time we address California's water storage issues not for just decades to come, but for generations to come. Big ideas often require bold solutions, and with major infrastructure reforms on the horizon, I am pushing some big ideas to my colleagues in the House of Representatives and to the White House. Enlargement of Shasta Dam, construction of Sites Reservoir and Temperance Flat Dam, and expanding Los Vaqueros Reservoir are immediate steps that can be taken. Together, these projects would add nearly 4 million acre-feet of available water for our state; help with flood control, ecosystem restoration and water quality; and generate more hydropower.

In addition to a one-time federal investment for these projects, I proposed H.R. 434, the "New Water Available to Every Reclamation State Act" (New WATER Act). The bill offers low-cost financing for a variety of water infrastructure projects, including water storage, groundwater recharge, recycling and other water management projects aimed at stretching our supplies. The bill encourages private investment in systems that serve the public interest by providing loans with a longer repayment period and gives us the means to continue planning ahead for a sustainable and prosperous future.

Fire Season Once Again; Actually It Never Went Away

Gathered in Santa Rosa, officials proclaim new level of wildfire danger

by KEVIN MCCALLUM

THE PRESS DEMOCRAT

May 9, 2018, 7:23PM

http://www.pressdemocrat.com/news/8310132-181/gathered-in-santa-rosa-california

Standing in Rincon Ridge Park with scorched home sites and vegetation in every direction, Pimlott

used the backdrop left by the historic Tubbs fire to drive home the need for continued vigilance.

"It's ironic that we're standing here today talking about ramping up into fire season, but everybody here in the North Bay feels like they've never left it," Pimlott said.

Fire officials gathered in Santa Rosa's devastated Fountaingrove neighborhood Wednesday to implore residents of the entire state to prepare for what they fear will be another long, dangerous wildfire season.

Some 950 wildfires have burned more than 5,800 acres of California so far this year, and residents need to recognize that fire, as a result of a host of factors including climate change, is now a year-round threat, Cal Fire Director Ken Pimlott said.

"Throughout California, we are experiencing more fires, more acres burned, more homes destroyed, and just in general more intense fires," Pimlott said.

With spring rains prompting robust vegetation growth that is already drying out — it's expected to be 84 by Friday and windy — Pimlott said residents need to take steps to help firefighters and protect themselves.

Even as the press conference was underway, Cal Fire and local crews were battling a grass fire at the Sonoma Coast. The blaze reported about 2 p.m. between Highway 1 and Fisk Mill Cove in Salt Point State Park took nearly three hours to contain.

Earlier in the day, legislators gathered at the Capitol calling for an \$184 million budget allocation to strengthen and modernize the state's mutual aid system for large wildfires and to support Cal Fire, including more money for prepositioning firefighters in areas of high fire danger.

Time for smoke

By Kathe Malouf Special to the Sun

By Kern Valley Sun / May 2, 201

<u>https://kernvalleysun.com/time-for-smoke/</u>

Smoke from wildfires and the impacts that drifting smoke creates in the Kern River Valley was one of several topics of discussion during a public meeting held in Kernville last Thursday, April 26.

Hosted by the Sequoia National Forest, the meeting brought an assembly of forest managers to discuss preparation for the upcoming wildfire season, the projected fire outlook as well as the forest's wildfire and smoke strategies.

Brent Skaggs, Forest Fire Management Officer presented a somewhat daunting outlook for this year's season. He cited several indicators, including the fact that this year's rainfall has been below average, the news that drought conditions have once again returned to California and that fuel monitors indicate that the brush and grass is drier than last year at this time.

"Scrap the term 'fire season'," Skaggs said. "We have 'fire year' and there is no break for our fire fighters."

The Forest Service Pacific Southwest Region Wildfire summary shows how busy fire crews were in 2017. There were 1,526 fires on National Forest System (NFS) lands in California. While the 10-year average for the number of acres burned on NFS lands in California is 320,673, that number skyrocketed in 2017 to 644,640 acres burned. Tragically, three firefighters from the Pacific Southwest

Governor Brown Issues Executive Order to Protect Communities from Wildfire, Climate Impacts

May 10, 2018 Maven

https://mavensnotebook.com/2018/05/10/this-just-in-governor-brown-issues-executive-order-to-protect-communities-from-wildfire-climate-impacts/

From the Office of the Governor:

In the face of the worst wildfires in California's history, Governor Edmund G. Brown Jr. today issued an executive order to combat dangerous tree mortality, increase the ability of our forests to capture carbon and systematically improve forest management.

"Devastating forest fires are a profound challenge to California," said Governor Brown. "I intend to mobilize the resources of the state to protect our forests and ensure they absorb carbon to the maximum degree."

Key elements of the order include:

- Doubling the land actively managed through vegetation thinning, controlled fires and reforestation from 250,000 acres to 500,000 acres.
- Launching new training and certification programs to help promote forest health through prescribed burning.
- Boosting education and outreach to landowners on the most effective ways to reduce vegetation and other forest-fire fuel sources on private lands.
- Streamlining permitting for landowner-initiated projects that improve forest health and reduce forest-fire fuels on their properties.
- Supporting the innovative use of forest products by the building industry.
- Expanding grants, training and other incentives to improve watersheds.

Some News Items

I rode China's superfast bullet train that could go from New York to Chicago in 4.5 hours — and it shows how far behind the US really is

Harrison Jacobs May. 11, 2018

https://newsstand.google.com/articles/CAIiEHhfWuJsaKJPc-

<u>hWigbkDrcqLggEKiUIACIbd3d3LmJ1c2luZXNzaW5zaWRlci5jb20vc2FpKgQICjAMMMzw5wE</u>



China's bullet train is a startling example of how far behind US infrastructure has become. Shutterstock

- China has the largest high-speed railway in the world, with 15,500 miles of track and most major cities covered by the network.
- I recently took China's fastest "G" train from Beijing to the northwestern city of Xi'an, which cuts an 11-hour journey roughly the distance between New York and Chicago to 4.5 hours.
- I found the experience delightful, with relatively cheap tickets, painless security, comfortable seats, air-conditioned cabins, and plenty of legroom.
- It left me thinking about how far behind US infrastructure has become, when most comparable journeys still require expensive and tiring air travel.

Honoring Chinese Workers Who Built the Transcontinental Railroad

May 11, 2018 (EIRNS)--{China Daily} today reports in great detail on a project by a Chinese artist and California Assemblyman Kansen Chu, to honor the Chinese workers, many of them highly-skilled, who helped build the Transcontinental Railroad in the 19th Century.

After a trip across three states visiting the historical sites where the Chinese worked, artist Zhao Zhuwang produced for a special exhibit more than 60 sketches which, in his words, depict "not only the beauty of the landscape but also the arduous condition for Chinese workers." Among the sites he sketched was that of the "China Wall of the Sierra," a massive retaining wall built in 1869 at the crest of the Donner Pass in the northern Sierra Nevada, which held up part of the rail line.

Today, a commemorative plaque located at the site, states that the retaining wall and fill, "built of Sierra Granite stand silently above on the pass as a lasting monument to these Asian `master builders' who left an indelible mark on the history of California and the West." The fact that the Wall of the Sierra was built by highly-skilled Chinese workers debunks the stereotype that the railroad was built by an army of "coolies." Zhao said that "the wall reminds me of the Great Wall in China. It represents the hardworking spirit and perseverance of the Chinese people."

Zhao's sketches will be the basis for a large-scale painting depicting the railroad landscape from Sacramento to Salt Lake City, for next year's 150th anniversary of the completion of the Transcontinental Railroad.

"Not until recent years did people begin learning about the Chinese railroad workers. I hope the exhibition can remind people, both in China and the U.S., of the friendship between the two countries as early as 150 years ago," Zhao said.



In the 1860s, Central Pacific Railroad employed over 12,000 Chinese laborers, more than 90 percent of its workforce.

"The Chinese railroad workers played a key role in the Transcontinental Railroad, which was in operation for more than 100 years and paved the way for economic growth," Assemblyman Chu said. "However, their role was largely neglected for many years." Nearly 12,000 Chinese railroad workers worked on building the rail line, 1,200 of whom died from work accidents, avalanches, and explosions while working in the Sierra Nevada Mountains. **China Daily** notes that in 2014, the U.S. Department of Labor inducted the Chinese railroad workers into the Labor Hall of Honor for their fight for better working conditions. Last year, the California Assembly unanimously passed a resolution to declare May 10 California Chinese Railroad Workers Memorial Day in honor of the Chinese workers.

American Poverty and Its Solution by Robert Ingraham

The following is the conclusion of *Part II* of an extended excerpt from the article in the April 27, 2018 issue of *Executive Intelligence Review. Part I, The Poverty* ran in this report on April 19. The first part of *Part II, The Solution*, ran in last week's report and focuses on a competent and necessary infrastructure policy. *Part III*, below, will conclude *The Solution*.

Part I presented the actual state of the U.S. economy and the conditions of life for almost half of the nation's people. It is a picture seldom presented in the media, nor is it addressed effectively by any member of Congress.

Part II (Conclusion): The Solution

Abraham Lincoln

Between 1861 and 1865, Abraham Lincoln implemented a series of revolutionary economic and banking measures. First, he used the sovereign power of the United States to issue more than \$400 million in paper currency (legal tender "Greenbacks") directly from the U.S. Treasury. Additionally, through his ally, Jay Cooke, the Treasury sold \$1.3 billion of so-called 5:20 government bonds (redeemable in 5 years, reaching maturity in 20 years)—not to foreign bankers, but directly to the American public. Other bonds were sold as well, bringing the total issuance of new federal credit to

well over \$2 billion, about 50 percent of the GDP of the Union states.

At the same time, large amounts of the new Greenbacks were loaned to the member banks of the newly created National Banking System. Held on deposit by those banks, these Greenbacks served as the security for the banks to begin issuing loans for the many and varied economic projects carried out under the Lincoln Presidency. A conveyor belt of Credit—essentially a U.S. Treasury-led National Credit System—was created.

It is true that much of this money went into financing the Union's war effort, but also consider that—both during the Lincoln Presidency and in the years that followed—U.S. railroad mileage went from 45,000 to 157,000, more than in all of Europe. Entire new industries were created. American steel production and modern American agriculture were unique in the world.

In considering the magnitude of what was accomplished under both Lincoln and FDR, it must also be recognized that their breakthroughs took place under very adverse conditions. The entirety of the Lincoln Presidency took place during wartime, in which the defeat of the South took precedence over all other considerations. FDR suffered from not having a National Bank and having to operate within a hostile world financial system controlled from London. Today, were the United States to revisit the approach of Lincoln and FDR, while simultaneously joining with China, Russia and other nations in the cooperative Belt and Road Initiative, accomplishments of wonderment, barely imaginable, become possible.

There are No Limits to Growth

It comes down to people thinking through what the proper roles for the U.S. Treasury, our banking system, and our National Credit System should be. What is their purpose? Why do they exist? And, most important, how can the full mighty resources of this potential Credit System be mobilized to the full extent of its power—straining all bounds, as we did during World War II—to completely eradicate poverty and create an entirely new future society?

This can be done. Learn from FDR and Lincoln, and then go beyond them to even greater accomplishments. The great projects they built are not the limit. The methods they utilized to deploy Public Credit to finance these projects are also not a limit. A National Credit System, particularly as it has been re-defined by Lyndon LaRouche, can be a creature of awesome, almost unimaginable, power. What is required is a war-time mentality to carry out a full economic mobilization. Every resource must be utilized.

Such an economic recovery can not proceed stepwise or linearly—building bricks one on top of another. We begin with the possibility of where we need to be in 100 years. From there, we define the key transformative interventions which need to be made; and from there develop a Bill of Materials for what is needed. Start from the future. Start from the top. Solve the key problems. The future necessary potential drives the steps to be taken today.

Given the nature of the universe, we will never know perfectly where we need to be a century hence, but we can define certain necessary goals, and we can operate on the basis of a clear directionality. Those goals and that directionality will also demand certain "leaps" in comprehending and implementing new "platforms" of increased human productivity, with a focus on the most challenging scientific problems.

The axiomatic approach must be to build for two generations out, while keeping an eye on the longer range needs for a century or more into the future. Any perspective to "replace or repair" existing infrastructure must be abandoned. We must build for the requirements of increasingly prosperous future generations.