



California Water and Infrastructure Report

For May 16, 2019

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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Bridenstine stressed that with this increase, “we got out of the gate” and we are “just at the beginning” of realizing a manned lunar landing. And that this \$1.6 billion requested increase is a “down payment” on a program that will require five years of support. This is the first time that a President announced a Moon-Mars plan, and actually requested the money to do it, Bridenstine said, in referring in contrast to both Bush Presidents.

A Note To Readers

We are going to the Moon, again. This time to stay. With \$1.6 billion added to the NASA budget this week, the project for a man and woman landing on the Moon in 2024 is underway.

As the Apollo Project demonstrated fifty years ago, it is the space program that drives scientific and technological progress and lifts the entire economy to a new platform of productivity. Applying the same idea to a crash program to develop fusion and uplifting the nation's infrastructure with great projects like the *North American Water and Power Alliance*, that is what will make America Great Again. Not slogans and not stupid neo-con adventures attempting to turn the U.S. into an imperial empire under British direction.

Our Feature this week updates the Moon Project developments.

The Rest of the Report

It is not suppose to rain (and snow) in California in May. But it is doing just that with more to come. And it is not just California had a great year for snow. So too did the Colorado Basin.

Next is our Oroville Dam Update, with an operations report from the Department of Water Resources,

followed by a couple of items on hysterics generated by ignorance, and what I would characterize as cynicism, claiming that the dam is about to collapse or the new spillway will fall apart.

Then a short section of what passes for water management these days.

The conflict between the Bureau of Reclamation and the State of California over raising Shasta Dam 18 feet is now in the courts. And that may be scaring off the Westlands Water District from its participation.

PG&E is in the news again. This time with reports that the state has officially declared that it was PG&E equipment that is responsible for the Camp Fire last year that killed more than 80 people and destroyed the town of Paradise. PG&E also announced that it will turn off the electricity in areas of the state during high fire danger periods. We could see blackouts that last for days or weeks. Finally, insurance companies paid out \$12 billion in 2018 for fire damage claims.

Under the title of Infrastructure there is a short item on the nation's water infrastructure requirements, which total in the trillions. That is followed by two items on the 150th anniversary of the completion of the Transcontinental Railroad in 1869. Finally, the Trump administration just finished off California's High-speed Rail Project, clawing back almost \$1 billion in federal funds.

We conclude this week's report with the above mentioned new Manned Moon Landing project.

It Is Not Suppose to Rain (or Snow) in May

Well, it is raining in May, and snowing, so enjoy it.

The first item attempts to explain why, and the second is the forecast of three atmospheric rivers coming on. Followed by today's weather report.

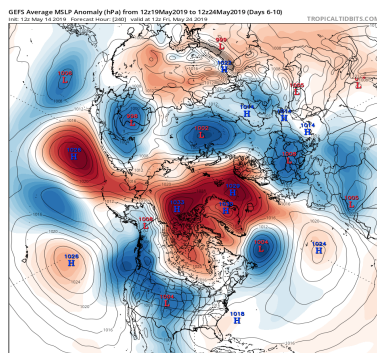
Then a report on the lovely snowpack in the Colorado Basin.

Highly unusual sequence of winter-like storms headed for California (in late May!)

Filed in *Weather/Climate Discussion* by *Daniel Swain* on May 14, 2019

<http://weatherwest.com/archives/6784>

More like March than May: what the heck is going on?



Winter 2018-2019 was a memorable one across much of the continental U.S., with repeated Arctic outbreaks occurring with unusual frequency and intensity across much of the mid-latitude Northern Hemisphere. It's pretty clear that at least a partial [cause of this wild winter pattern was the temporary disruption of the usually-robust circumpolar vortex](#)—the breakdown of which allows pockets of extremely cold Arctic air to spill southward over the continents and subsequently produces some crazy

weather conditions due to the ensuing low-latitude thermal contrasts. In such cases, the Arctic itself tends to experience dramatic warming as its "cold air reservoir" is depleted. This winter was no exception. And interestingly, a similar process appears to be evolving at the moment: extremely warm air temperatures and record/near-record low sea ice extent are occurring, with an unusually wavy (wavenumber 6) atmospheric pressure pattern across the Northern Hemisphere. As was the case this past winter, California once again appears to be the beneficiary of an unusually active North Pacific jet stream (especially for the time of year).

A striking pattern of surface pressure anomalies across the Northern Hemisphere. High-latitude Arctic high pressure systems coincide with net displacement of atmospheric mass (pressure) toward pole, with band of low pressure extending across the mid-latitudes. (NCEP via tropicaltidbits.com)

California braces for feet of snow from storms; 'significant severe weather event' to impact Plains

By [Travis Fedschun | Fox News](#)

May 16, 2019

<https://www.foxnews.com/us/california-storms-snow-severe-weather-plains-tornado-threat>

It may be May, but Spring has not quite sprung in the Golden State.



Heavy snow was reported in Kingsville, Calif. on Thursday as a storm system moved into the region. (KVOR via NNS)

Parts of [California](#) still resemble a scene out of winter, with a [series of storms](#) bringing several feet of snow to mountain areas, ahead of a "significant" [severe weather](#) threat across the nation's [midsection](#).

The National Weather Service [said](#) that a series of Pacific storms are bringing heavy rain, mountain snow, and gusty winds across the West. A winter storm warning was issued Wednesday night that will run through Friday morning for the southern Sierra Nevada.

More storms eye California, western US into Memorial Day weekend

By Alex Sosnowski

AccuWeather senior meteorologist

May 16, 2019

<https://www.accuweather.com/en/weather-news/more-storms-eye-california-western-us-into-memorial-day-weekend/70008292>

Additional storms bearing rain, locally gusty thunderstorms and high-elevation snow will take aim at California, the rest of the Pacific coast and the interior western United States into the Memorial Day weekend.

"A block in the jet stream is forcing storms to take a much more southern route onshore of western North America than usual for the middle to latter part of May," according to AccuWeather Senior Meteorologist Brett Anderson.



The first storm in the series will continue to affect areas from Washington to California into Friday. However, compared to Wednesday and Thursday, most of the precipitation will progressively diminish to more showery patches of rain and high country snow.

Soon after conditions improve along the West coast, the next Pacific storm will begin to make its move toward land this weekend.

Yet another storm is anticipated to roll ashore early next week.

During a blocking pattern, the jet stream can become so convoluted that the normal west to east motion of storms and fair weather systems may stop. Some areas may have an extended period of unsettled or sunny conditions.

The relentlessly wet pattern will produce rainfall that could end up being five to 10 times that of average for May in some locations.

In portions of the Northwest, where dryness was evolving until a week ago, [according to the United States Drought Monitor](#). The pattern will continue to ease drought concerns in the short term.

The rain will delay the onset of the wildfire season in the West in general.

Colorado snowpack, streamflow far exceeding early winter predictions

- By: [Liz Forster](#)
- May 15, 2019

https://gazette.com/news/snowpack-streamflow-numbers-far-exceeding-early-winter-predictions/article_822bfede-7677-11e9-a799-cfa083ce57b3.html

Colorado is swimming in snowpack this year, with the state's southwest corner at 19.5 inches, 220% of the median for May 14 and 1.6 inches above the usual April 2 median peak, federal data show.

So reservoirs are filling, and the generous snowfall has nearly eliminated a drought that hydrologists said in January would take years for recovery.

The drought that ushered in severe wildfires and dismally low reservoir levels is almost history, with about 84% of the state sated, according to the U.S. Drought Monitor, compared with 82% in need of a soak one year ago.

Since the U.S. Drought Monitor was established in 1999, the state always had some abnormally dry areas. Now, only 15.28% of the state is abnormally dry, and less than 1% is in a moderate drought.

Oroville Dam Update

We begin with reality, and then some hysterical fantasy.

The reality is the report on the dam's operations.

The the report on the hysteria. Have some become so cynical that they invent or spread rumors that have no foundation in reality? That is some of the “news” from Oroville Dam this week. Some people on Facebook even post photos of the spillway and claim that they show the new spillway is falling apart. At least the local Sheriff has done his best to counter it. Also weighing in is the California Department of Water Resources.

The third item below takes the hysteria over the edge. It literally invents events that did not happen and worse. Yet, while doing so, it at least has the decency to report the Sheriff's statement.

Oroville Operations and Main Spillway Update



Oroville Dam and Spillways

[California Department of Water Resources](#)

May 9 Oroville Operations and Main Spillway Update:

Lake Level --> Oroville's current reservoir elevation is 888 feet. Total releases into the Feather River have decreased to 7,500 cubic feet per second (cfs). DWR continues to safely manage Oroville reservoir inflows from melting snowpack with releases from the Hyatt Powerplant, located at the base of the dam. DWR is targeting high lake levels through spring and summer in accordance with normal state and federal regulations. A full lake means more access for the upcoming recreation season.

Main Spillway --> At this time, there is no need to use the main spillway. Releases from Hyatt Powerplant are adequate to meet operational requirements. DWR may need to use the main spillway again this spring to manage inflows from snowmelt and will notify the public and media if this is necessary.

Road Construction --> Repaving operations are ongoing on Oroville Dam Crest Road, the Spillway Boat Launch facility, and other nearby roads. Paving construction vehicles will continue to use Hyatt Access Road through Wednesday, May 29. DWR apologizes for any inconvenience and will notify the public when there are any changes to this information. Thank you for your continued patience.

Spillway concerns? DWR, Sheriff Kory Honea say no

By [Brody Fernandez](#)

May 14, 2019

<https://www.chicoer.com/2019/05/14/spillway-concerns-dwr-sheriff-kory-honea-say-no/>

OROVILLE — The California Department of Water Resources released a Lake Oroville [community update](#) on Monday afternoon amid rumors of ongoing safety concerns regarding the Oroville Dam's main spillway.

These rumors have been circulated mostly on Facebook, according to DWR Public Information Officer Elizabeth Whitmore

“At this time, the community update should answer all questions regarding any safety issues with the main spillway, as well as concerns growing over the upcoming rain storm,” Whitmore said.

Oncoming storm

Currently the elevation of the water in Lake Oroville stands at 889 feet elevation — 11 feet below the top — while outflows to the Feather River are 9,500 cubic feet per second, according to the state's data exchange center.

In regards to concerns the storm could bring several inches of rain into the lake forcing the spillway to release water, the community update from the DWR states:

“Forecasts and weather can change rapidly, and DWR will notify the public and media if the main spillway needs to be used to manage reservoir levels ... DWR is targeting high lake levels through spring and summer in accordance with normal state and federal regulations, which is good news for local recreation and for statewide water supply.”

Sheriff weighs in

Butte County Sheriff Kory Honea also released a statement Monday morning via [Twitter](#) after rumors and concerns about the spillway's safety circulated on social media.

In the statement, Honea says he has spoken to hydrology experts, engineers and DWR officials over the past week regarding the safety of the spillway. The sheriff remained adamant in his statement:

“Based upon (meeting with local officials) I don't believe there is a current imminent threat.”

Honea visited the the site Friday.

Erin Mellon, DWR assistant director for public affairs, said water will be released if the lake gets up to 899 feet, at least.

“Just because we are not using the spillway right now, doesn't mean we're not releasing water from the lake,” Mellon said.

Deja Vu: Is the Oroville Spillway About To Fail Just Two Years After Near-Disastrous Evacuation?

Wed, 05/15/2019

Authored by Daisy Luther via [The Organic Prepper blog](#).

<https://www.zerohedge.com/news/2019-05-15/deja-vu-oroville-spillway-about-fail-just-two-years-after-near-disastrous?fbclid=IwAR0fxJctONZ4W3UDVhx3QWM-GNOnHhV7C6sopdi4QTU6Ey1dwsOPw2RjYU>

It may be hard to believe but **only two years after a near-disastrous last-minute evacuation**, the Oroville Spillway could be on the **verge of failure again**. A major piece of infrastructure in Northern California, the spillway has not been well-maintained despite continuously increasing taxes for that purpose.

And despite a very near miss two years ago, it looks like we're seeing a replay of those same events. According to a report on The Common Sense Show with Dave Hodges, some folks downhill from the dam have already evacuated due to the strong possibility of imminent failure. Hodges is issuing a warning to people in the path of the looming disaster. He wrote:

*I asked Paul Preston, “**How close is the dam to failing?**” Preston replied “**It could go by this weekend**”.. His comments, in part, are based upon the dire weather forecast in which intense rainfall is forecasted between Wednesday May 15 and Sunday, May 19th. This is significant because this could greatly add to the inflow and the outflow data which shows an extreme imbalance. And when we consider that the dam is 12 feet from overtopping, the danger multiplies exponentially. When any structure takes on more water, whether it be a ship or a dam, it is going to fail/sink...*

***At the same time, local officials are assuring people that there is no danger.** The Butte County Sheriff released the following statement on Twitter:*

The Department of Water Resources released a statement explaining why the spillway is not a concern.

DWR is monitoring weather forecasts into the Feather River basin this week, and the impact incoming storms will have on melting snowpack. Forecasts and weather can change rapidly, and DWR will notify the public and media if the main spillway needs to be used to manage reservoir levels. Currently the reservoir is at an elevation of 889 feet and outflows to the Feather River are 9,500 cubic feet per second. DWR is targeting high lake levels through spring and summer in accordance with normal state and federal regulations, which is good news for local recreation and for statewide water supply. ([source](#))

But not so fast – let's revisit the Department of Water Resources actions the last time the dam was near failure.

The Oroville Spillway almost failed in 2017

Back in 2017, the people of Oroville were in a very similar situation. Nearly 200,000 residents were evacuated due to fears that the main spillway is pending imminent collapse. The emergency spillway isn't some high tech engineer's creation – it is just a cleared hill which showed massive erosion when they tested it with a small amount of water.

When drought-stricken California got the equivalent of five years' worth of rain all at once, crews were left to work frantically around the clock to fix the spillway.

The local government gave only a ONE HOUR warning to local residents.

Of course, the lack of maintenance and mishandled tax dollars are unforgivable, but the lack of warning was even worse.

...the real lesson here isn't the faulty infrastructure or the mismanagement of funds.

It is the deception of the public and the way that officials will go to great lengths to cover their butts – even if that means giving a warning to the public that could be too late. [This isn't the first time that the government has completely failed in an emergency response to an imminent disaster](#), and it won't be the last.

Officials waited until they believed that the disaster was only 60 minutes away to evacuate nearly 200,000 people. ([source](#))

Water Management: Blah, blah, blah

Articles like the one below really make you wish for the return of those who think big, like those who built the *Los Angeles Aqueduct*, the *Central Valley Project*, the *Californian State Water Project*, and those who planned to build the *North American Water and Power Alliance (NAWAPA)*.

Drought: The Time For NAWAPA has Come

<https://www.youtube.com/watch?v=QC-tOKUAoTA&fbclid=IwAR2Pt5LVEVCnfzHdHL37YxDHs4PmUa0xTWslsryVgb8CmKaHQBRpxvUaYeU>

Capitol-to-Capitol: Finding Better Water Management for California

May 9, 2019, by [Joe Khalil](#)

<https://fox40.com/2019/05/09/capitol-to-capitol-finding-better-water-management-for-california/>

WASHINGTON -- *When it rains in California, it pours.*

But when it doesn't, California's drought years can have a devastating impact on the state.

California's water experts are looking for ways to better store water during rainy years like 2019 so the state can have it during years when the rain and snow inevitably dry up.

"The reality is our system was built for a significant snowpack. It was modeled on a snowpack that probably is not as reliable and won't be in the future," Public Policy vice-chairman Ed Manning said.

The challenge is an immediate one, but Manning says solutions can often take years.

"Water moves at glacial speed in terms of policy change, but you have to take a long-term view," Manning said.

The long-term view means identifying sites for potential new reservoirs, improving older ones and trying to come up with smarter ways to harness water.

Disputes center on when and how water from parts of Northern California should be shipped to Southern California.

Historically, there's also been an urban-versus-rural dispute over water claims, which recently pitted the Trump administration against the state.

Harder calls the old water infighting a "20th-century mindset."

"What can we do to grow the available pot, make sure there's more water to go around for everyone? That's what we're trying to do here," Harder said.

They Will Not Build and Seek to Block Those Who Will

The Trump administration in collaboration with the Westlands Water District had already begun preliminary work on raising Shasta Dam by 18 feet to increase storage capacity by 14 percent.

Attorney General Becerra Sues Westlands Water District to Block Unlawful Shasta Dam Project

[May 14, 2019 Maven](#)

<https://mavensnotebook.com/2019/05/14/this-just-in-attorney-general-becerra-sues-westlands-water-district-to-block-unlawful-shasta-dam-project/>



Shasta Dam

From the Office of the Attorney General:

California Attorney General Xavier Becerra has filed a lawsuit to block Westlands Water District (Westlands) from taking unlawful action to assist in the planning and construction of a project to raise the height of Shasta Dam. The project poses significant adverse effects on the free-flowing condition of the McCloud River and on its wild trout fishery, both of which have special statutory protections under the California Wild and Scenic Rivers Act. The Act prohibits any agency of the State of California, such as Westlands, from assisting or cooperating with actions to raise the Shasta Dam. In addition to the lawsuit filed by Attorney General Becerra, a coalition represented by Earthjustice has filed a separate suit. The coalition includes Friends of the River, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, Natural Resources Defense Council, Defenders of Wildlife, Sierra Club, and Golden Gate Salmon Association.

Despite these impacts, Westlands has unlawfully assumed the lead agency status for the \$1.3 billion project and has allocated funding of over \$1 million for the preparation of an Environmental Impact Report under the California Environmental Quality Act as part of its planning to become a 50 percent cost-sharing partner with the federal government.

After AG sues, Westlands Water District says it's studying whether to support Shasta Dam raise

[Damon Arthur](#), Redding Record Searchlight

May 14, 201

<https://www.redding.com/story/news/2019/05/14/state-ag-environmental-groups-sue-stop-shasta-dam-raise/3668909002/>

Two days after being sued over its involvement in a proposal to raise the height of Shasta Dam, a San Joaquin Valley irrigation district said it is merely studying whether it wants to support the project.

The Bureau of Reclamation for many years has been interested in raising the height of the dam 18½ feet to increase the amount of water in Lake Shasta by about 14 percent.

"This case challenges Westlands Water District's unlawful assistance and cooperation with the U.S. Bureau of Reclamation's plan to raise Shasta Dam and enlarge Shasta Reservoir — a project that would flood the protected and imperiled species, in the interest of delivering more water from Shasta County to California's Central Valley," the lawsuit filed by the environmental groups says.

Raising the dam 18½ feet would actually raise the maximum lake level 20 feet, according to the bureau.

Ron Stork with the Friends of the River said the environmental group joined the suit because of the need to protect the McCloud River.



In September 2018, Nathan Morgan hangs over the side of Shasta Dam. Morgan and others were drilling holes in the dam to test the strength of the concrete in preparation for raising the height of the dam. (Photo: Damon Arthur/Record Searchlight file photo)

“Westlands is violating the law by cooperating with the Trump Administration’s aggressive plan to raise Shasta Dam,” said Stork.

“The largest agricultural water district in the country is trying to use taxpayer dollars to gain more water to sell to corporate agriculture in the San Joaquin Valley.”

The bureau went through an environmental review and feasibility study of raising the height of the dam, but in 2015 decided not to go forward until local or state partners joined in helping to pay for the \$1.4 billion project.

While the state can't support projects to raise the dam, the federal government does not face the same restrictions. Congress last year voted to set aside \$20 million for design and pre-construction on the project.

Wildfires, PG&E, Blackouts Coming, Cost in 2018-- \$12 Billion

PG&E Transmission Lines Caused California's Deadliest Wildfire, State Officials Say

by [Richard Gonzales](#)

May 15, 2019

<https://www.npr.org/2019/05/15/723753237/pg-e-transmission-lines-caused-californias-deadliest-wildfire-state-officials-sa>

Electrical transmission lines owned and operated by utility giant Pacific Gas and Electric (PG&E) caused last fall's Camp Fire, the deadliest and most destructive wildfire in California history, state fire investigators said Wednesday.

The fire in Northern California's Butte County burned more than 150,000 acres and killed 85 people.

"After a very meticulous and thorough investigation, CAL FIRE has determined that the Camp Fire was caused by electrical transmission lines owned and operated by Pacific Gas and Electricity (PG&E) located in the Pulga area" of Butte County, California fire officials [said in a statement](#). The

fire had two ignition sites, according to investigators, as the second fire in a different part of the county was consumed by the initial blaze that started near Pulga.

The Cal Fire report has been forwarded to the Butte County District Attorney Mike Ramsey.

The finding was not unexpected. PG&E had even pointed to its transmission lines and the dry vegetation around them as a possible culprit in an [earnings report](#) issued in February.

"In addition to claims for property damage, business interruption, interest and attorneys' fees, the Utility could be liable for fire suppression costs, evacuation costs, medical expenses, personal injury damages, punitive damages and other damages under other theories of liability, including if the Utility were found to have been negligent," the company said.

The Cal Fire announcement came the same day that PG&E's new CEO, Bill Johnson, was testifying before a state Assembly committee.

"I have made the assumption when I got here that PG&E equipment caused the fire," he said as [quoted](#) by The Associated Press. "It's a disappointment that this happened. Let's not do it again."

California wildfire insurance losses top \$12 billion for 2018

May 9, 2019

<https://www.intelligentinsurer.com/news/california-wildfire-insurance-losses-top-12-billion-for-2018-18227>

Insurance losses of \$614 million from the “record-breaking” Camp Fire, and Woolsey and Hill Fires, have pushed total claims over \$12 billion as of April 2019, according to the California insurance commissioner Ricardo Lara.

The Department of Insurance released the data during Wildfire Preparedness Week (May 6-12) and urged homeowners and businesses to “take a fresh look” at their insurance coverage.

“Wildfire has long been part of California’s landscape and insurers understand that this risk is increasing,” said Nicole Ganley, senior director of public affairs for the American Property Casualty Insurance Association. “The 2018 wildfires resulted in \$12 billion in insured losses, making them the costliest fires in state history.

Looking ahead to the 2019 wildfire season, Ganley warned that a combination of drought and bark beetle infestation have killed millions of trees, providing more fuel for wildfires. While extensive rain earlier in the year will create even more fuel and wildfire risk during summer and fall months.

California May Go Dark This Summer, and Most Aren't Ready

By [Mark Chediak](#) and [Brian Eckhouse](#)

May 12, 2019, 4:00 AM PDT Updated on May 13, 2019, 7:51 AM PDT

https://www.bloomberg.com/news/articles/2019-05-12/california-may-go-dark-this-summer-and-most-aren-t-ready?fbclid=IwAR3vOBmt_Sk3UgtstF8PxNHVTz1urHdtozwppzWui7okzePXxyx8KmOpaZc

- PG&E plans to cut power on windy days to avoid sparking fires
- ‘I’m worried,’ governor says, fearing week-long blackouts

A plan by [California](#)’s biggest utility to cut power on high-wind days during the onrushing wildfire season could plunge millions of residents into darkness. And most people aren’t ready.

The plan by [PG&E Corp.](#) comes after the bankrupt utility said a transmission line that snapped in

windy weather probably started last year's Camp Fire, the deadliest in state history. While the plan may end one problem, it creates another as Californians seek ways to deal with what some fear could be days and days of blackouts.

"I'm worried," Newsom said Thursday during a budget briefing in Sacramento. "We're all worried about it for the elderly. We're worried about it because we could see people's power shut off not for a day or two but potentially a week."

Six of the 10 most destructive wildfires in California history have come in the last 18 months, killing 123 people, and often shutting down large sections of the state's electrical grid.

PG&E has warned the city of Calistoga that it could cut service as many as 15 times this fire season, said Chris Canning, mayor of the Napa Valley town scarred by wildfires two years ago. But in an interview, the company's vice president of electric operations, Aaron Johnson, said the number will depend on how extreme the weather is.

Infrastructure

Water

Keeping Congress Focused on Water Infrastructure

by Dave Eggerton

April 26, 2019

<https://www.acwa.com/news/keeping-congress-focused-on-water-infrastructure/>

According to combined estimates from the U.S. Environmental Protection Agency, Bureau of Reclamation, Army Corps of Engineers, Department of Agriculture, and Indian Health Service, the needed investments in water infrastructure nationwide in the coming decades for drinking water, wastewater, and irrigation systems total more than \$780 billion dollars. Adding urgency to this need is the sobering fact of what happens without that investment – the loss of nearly 500,000 U.S. jobs by 2025 and \$508 billion in gross domestic product, according to the American Society of Civil Engineers.

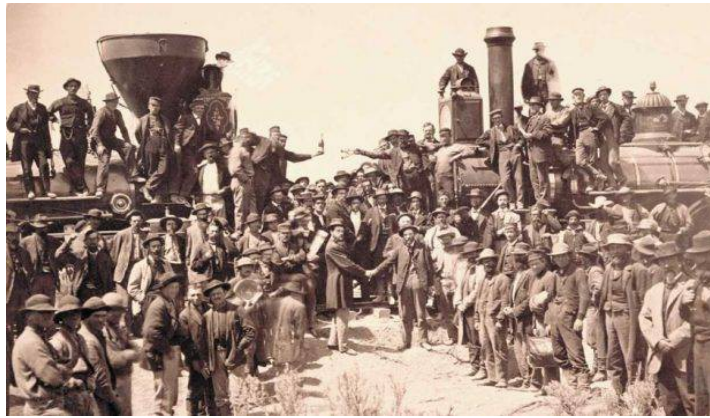
Railroads

Construction of Transcontinental Railroad 150 Years Ago, A Shining Example of U.S.-China Cooperation

May 11 (EIRNS)—Yesterday was the first of several days of celebration to commemorate the 150th anniversary of the Transcontinental Railroad. At a ceremony held at the Golden Spike National Historical Park at Promontory Summit, about 100 km northwest of Salt Lake City, thousands of people came out to participate, and to also honor the crucial role of Chinese workers in building the project which transformed the United States. At the site, the last spike of the transcontinental railroad was ceremonially driven in here by Central Pacific Railroad President Leland Stanford on May 10, 1869.

In a statement issued on the occasion of this anniversary, President Donald Trump stated that “our Nation celebrates the thousands of workers who diligently laid track for six years across desolate plains and treacherous mountains. We honor the undaunted efforts of the people who made this innovation possible, including workers of Irish and Chinese descent, as well as freed slaves, Native

Americans, Civil War veterans, and Latter-Day Saints. Roughly 12,000 workers of Chinese ancestry worked to dig out a particularly challenging section. Through blizzards and other treacherous weather, they blasted and chiseled 15 tunnels through the hard granite of the Sierra Nevada Mountains.



AJ Russell's famous "champagne" photo

“We also honor our former leaders who had the vision and understanding that a robust infrastructure supports a vibrant economy. In the years that followed, this tremendous engineering feat helped revolutionize interstate travel and commerce. The completion of the transcontinental railroad catalyzed our country’s development, empowered greater settlement of the American West, and expanded prosperity from the Atlantic to the Pacific. On this sesquicentennial celebration, we recognize the American ingenuity and the hard work and grit of all the workers that made the construction of this railroad and the unification of our Nation possible.”

China’s daily Global Times reported that in a video message recorded for the event, Chinese Ambassador to the U.S. Cui Tiankai described the railroad as “a project of wonder of the world that linked America from sea to shining sea and laid the foundation for the American economic boom.” The project was also an excellent example of how the Chinese and American people can come together to get things done, he said, “and make the impossible possible. A strong bond between China and the United States can deliver real benefits to our two countries and to the world community,” Cui said.

Presidential Message on the 150th Anniversary of the Completion of the Transcontinental Railroad

Issued on: May 10, 2019

https://www.whitehouse.gov/briefings-statements/presidential-message-150th-anniversary-completion-transcontinental-railroad/?utm_source=facebook&fbclid=IwAR2M1mbJYuDpKT2p_QPXUiJKsbPR4zttmyZbO5K_sI6mOs40UP_s9W8BFT4

One hundred fifty years ago, the first transcontinental railroad in the United States was completed, and our Nation was changed forever. On May 10, 1869, the final golden spike was driven into the ground at Promontory Summit, Utah, joining the tracks of the Central Pacific and Union Pacific railroads. This unbroken rail line of nearly 2,000 miles from Omaha, Nebraska, to Sacramento, California, connected the existing eastern rail network to the western states and territories, enabling passengers and goods to travel from coast to coast more economically and in as little as a week.

Our Nation celebrates the thousands of workers who diligently laid track for six years across desolate

plains and treacherous mountains. We honor the undaunted efforts of the people who made this innovation possible, including workers of Irish and Chinese descent, as well as freed slaves, Native Americans, Civil War veterans, and Latter-day Saints. Roughly 12,000 workers of Chinese ancestry worked to dig out a particularly challenging section. Through blizzards and other treacherous weather, they blasted and chiseled 15 tunnels through the hard granite of the Sierra Nevada Mountains.

We also honor our former leaders who had the vision and understanding that a robust infrastructure supports a vibrant economy. In the years that followed, this tremendous engineering feat helped revolutionize interstate travel and commerce. The completion of the transcontinental railroad catalyzed our country's development, empowered greater settlement of the American West, and expanded prosperity from the Atlantic to the Pacific.

On this sesquicentennial celebration, we recognize the American ingenuity and the hard work and grit of all the workers that made the construction of this railroad and the unification of our Nation possible.

And In California: The Death Blow to High Speed Rail



A Railroad to Nowhere

First: My article from March 1, 2019

High Speed Rail: Do It Right-- Begin by shutting down the California high-speed rail project

<http://www.californiadroughtupdate.org/pdf/20190301-High-Speed-Rail-Do-It-Right.pdf?t=1551658490>

Then the announcement from the Trump administration today:

Trump Cancels \$929 Million Grant for California Bullet Train

By Romy Varghese

May 16, 2019

<https://www.bloomberg.com/news/articles/2019-05-16/trump-cancels-929-million-of-grants-for-california-bullet-train>

- *Comes amid escalating tension between state and administration*
- *Federal officials may also claw back \$2.5 billion in funds*

The Trump administration officially canceled \$929 million in federal grants earmarked for California's ambitious high-speed rail project, escalating tensions between the federal government and the most-populous U.S. state.

Federal Railroad Administrator Ronald Batory said in a letter Thursday to Brian Kelly, the chief executive officer of the state agency running the project, that California has failed to show progress and meet requirements under the agreements for the funds. Governor Gavin Newsom, through a spokesman, vowed a court fight.

"It is now clear that California has no foreseeable plans, nor the capability, to pursue that statewide HSR System as originally proposed," Batory wrote.

Initially conceived as connecting San Francisco and Los Angeles with a high-speed train that would slash travel times and transform the state's economy, the project has been beset by cost overruns and delays, causing its estimated price to balloon to \$79 billion. Newsom, a Democrat who took office this year, said in February that the train as planned "would cost too much and take too long," and he would focus on finishing roughly 170 miles of track already under construction in the Central Valley.

"The Trump administration's action is illegal and a direct assault on California, our green infrastructure, and the thousands of Central Valley workers who are building this project," Nathan Click, a spokesman for Newsom, said by email. "Just as we have seen from the Trump administration's attacks on our clean air standards, our immigrant communities and in countless other areas, the Trump administration is trying to exact political retribution on our state."

Newsom's comments on the train in February were initially interpreted as walking away from the project that has been in the works for more than a decade, and the Trump administration subsequently seized on them to announce its intent to cancel the grant and claw back dollars already spent. The Federal Railroad Administration "continues to consider all options" regarding the return of \$2.5 billion in federal funds already awarded to the project, the agency said in a statement Thursday.

Feature: We Are Going! (to the Moon)

At the end of March, President Trump announced that America is going back to the Moon, this time to stay, and to prepare next to go to Mars. A man and a woman will land on the Moon in 2014 and a manned Moon base will be established by 2018. This week the President authorized another \$1.6 billion for the project. What follows are some updates on the project. We begin with a three minute video from NASA on the project.

We Are Going-- Video

<https://mail.google.com/mail/u/0/#inbox/FMfcgxwCggBFmjzzqzbXjBNZpxJxTKMP?projector=1>

We are going to the Moon, to stay, by 2024. And this is how.

Like Apollo, New Lunar Program 'Will Transform and Elevate Human Condition,' Says Bridenstine

https://larouche.pub.com/pr/2019/190514_new_lunar_program.html?fbclid=IwAR2v-rrazEEdVwprf7T-QqCKgWw4Z1aGz1lkOYqFmoLYO-JyaonKPYipzkc

May 14, 2019 (EIRNS)—The NASA Administrator made that comment during a Town Hall this afternoon from NASA Headquarters in Washington, with participation of the entire NASA workforce across the country. His remark was directed toward motivating agency employees to communicate why this program—just named Artemis, in Greek mythology, the twin sister of Apollo—is important,

especially to Members of Congress, who will have to approve the \$1.6 billion increase in NASA's Fiscal 2020 budget, that the administration is requesting.

In his taped video message last night, Bridenstine said that the budget amendment adding \$1.6 billion in FY20 to NASA's budget, which has been sent to Congress, will enable accelerating the work on the major elements of the Moon landing.

In all of his presentations today, in addition to the Town Hall, at the Humans to Mars conference, and in testimony before the Senate Committee on Commerce, Bridenstine stressed that with this increase, "we got out of the gate" and we are "just at the beginning" of realizing a manned lunar landing. And that this \$1.6 billion requested increase is a "down payment" on a program that will require five years of support. This is the first time that a President announced a Moon-Mars plan, and actually requested the money to do it, Bridenstine said, in referring in contrast to both Bush Presidents.

Addressing employees who work in areas seemingly not relevant to landing humans on the Moon, who fear that their research will be cut in order to pay for the lunar program, Bridenstine outlined the way in which all of the branches of research in the agency, whether astrophysics or aeronautics, make a coherent whole, and help answer basic questions; like the Moon itself, which we will explore, but which also serves as the history book of the Solar System.



Op-Ed: That Moon Colony Will Be a Reality Sooner Than You Think

Friday, May 25, 2018

By Wilbur Ross

<https://www.commerce.gov/news/op-eds/2018/05/op-ed-moon-colony-will-be-reality-sooner-you-think?fbclid=IwAR2xIdCEUjJjjlEidb-WfF0Pr5foJ6k4klkEeIL3DKccJYpW33TzQuKP7k>

The first man on the moon held an American flag. In the not-too-distant future, astronauts on the moon may be holding fuel pumps.

The future for American commercial space activity is bright. Space entrepreneurs are already planning travel to Mars, and they are looking to the moon as the perfect location for a way station to refuel and restock Mars-bound rockets. As much as this sounds like the plot of "2001: A Space Odyssey," it is coming closer to reality sooner than you may have ever thought possible.

A privately funded American space industry is the reason. This industry is making progress in leaps and bounds. The global space economy is approaching \$350 billion and is expected to become a multitrillion-dollar industry. There are more than 800 operational American satellites in orbit, and by 2024 that number could exceed 15,000. Thanks to public-private partnerships, for the first time in seven years American rockets will soon carry NASA astronauts into space. Long dormant, Cape Canaveral is now bustling with activity. America is leading in space once again.