

California Drought (and Flood) Update



For April 13, 2017

by Patrick Ruckert

Published weekly since July, 2014

<http://www.californiadroughtupdate.org>

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

patruckert@hotmail.com

A Note To Readers

One week ago, as President Trump and President Xi of China began two days of meetings at Trump's home in Florida. Accompanying both Presidents were almost the entire cabinets of both governments. What was on the table was potentially the greatest cooperation potential in history, bringing together the two largest economies in the world for a Win Win agreement of world infrastructure building. That China had offered its expertise and financing of President Trump's trillion dollar policy had been widely reported for over two months.

And then, during dinner together Thursday evening, the missiles began to fly, as President Trump ordered the attack on Syria. That President Xi did not then walk out and go home was due to his understanding that the new U.S. administration was a work in progress and disruptive surprises were to be expected.

The President's commitment to better relations with China and Russia, and his commitment to restore the Glass-Steagall banking law, remain still the areas of policy that will define whether he will or will not become, as Helga Zepp-LaRouche put it some weeks ago, "one of the greatest Presidents ever."

There will be no repair of the California water management system should those traitors within his administration that led him to the attack on Syria remain in any authority. And should the American people not make their removability clear to the President, they will not be removed. That the British have made clear over the past few days that they are driving not only the attempt to remove or paralyze the President, but have been bragging about how they drove his administration into that attack on Syria, should make clear to us all that it was not Russia that interfered in the U.S. political process, but it was

that power that we fought a revolution against.

That critical third area of the President's policy-- the restoration of the Glass-Steagall banking law-- continues to make the news. With bills to do so in both houses of Congress now, and the President's budget manager Gary Cohn supporting it, with a real push that crucial policy may quickly redefine all the debate on economic and financial policy.

As I have hoped to make clear in recent weeks, any talk of California's water present or future entirely depends on developments well beyond the borders of the state. But, this report is about California water, so here is what is what we have this week.

First comes the obligatory Drought and Reservoir maps, followed by some reports on the winter's snow pack and precipitation-- both at or near record levels going back 125 years.

That is followed by the announcement by the Governor that the drought is officially over and the announcement by the Bureau of Reclamation that they will, for the first time since 2006, provide 100 percent of water requested by the Central Valley contractors, which they could have done earlier in the year. By not doing so they royally screwed some farmers who had to make planting decisions a month or more ago.

Then comes a short item on the Governor's wet dream of getting \$100 billion from the Trump administration to repair the state's infrastructure.

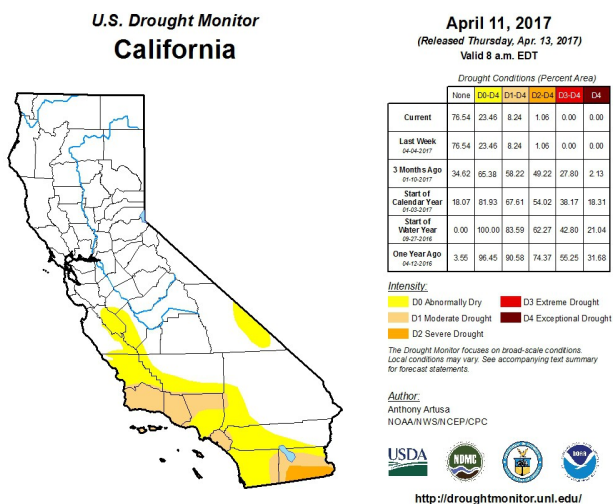
That subsidence is a major problem in the state, especially in the Central Valley is well known. That the aquifers have been permanently damaged is not so well known. A NASA study provides some background to this problem.

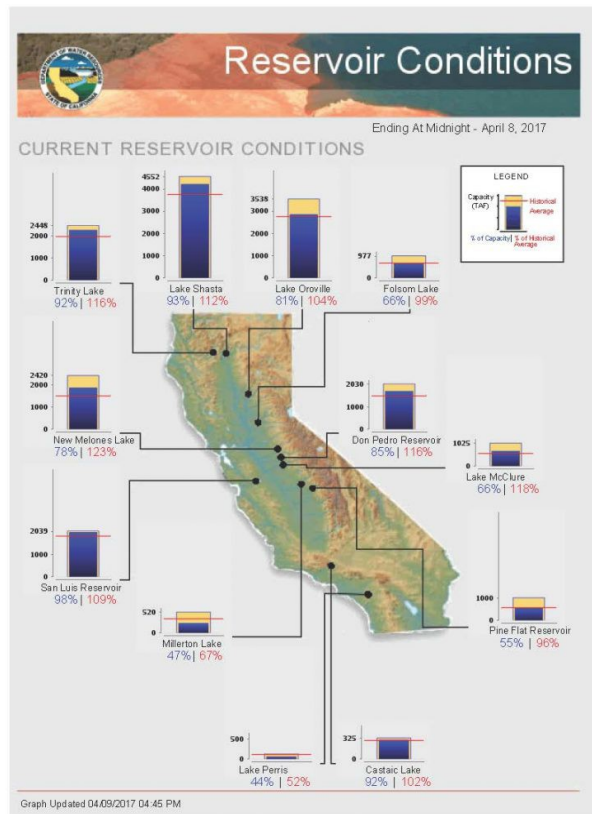
Our Oroville Dam report this week includes reports on the repair plans and more on the secrecy the state has imposed on the damage reports.

A new section: This week's Hysteria Award follows the Oroville Dam report.

Two out of area items round out this week's report: One is on the collapse of farm income and the other is on how Ecuador, unlike its neighbors Peru and Columbia, did not suffer the extensive damage they did from recent floods. How? They had built the water management infrastructure required.

U.S. Drought Monitor and Reservoir Graph





Yes, It Is A Record Precipitation Year

As reported by the Department of Water Resources today, precipitation levels for both rain and snow have broken the record amounts since those records began being kept more than 100 years ago.

Atmospheric Rivers Pushed Total to 89.7 Inches since October 1

April 13, 2017

From the Department of Water Resources:

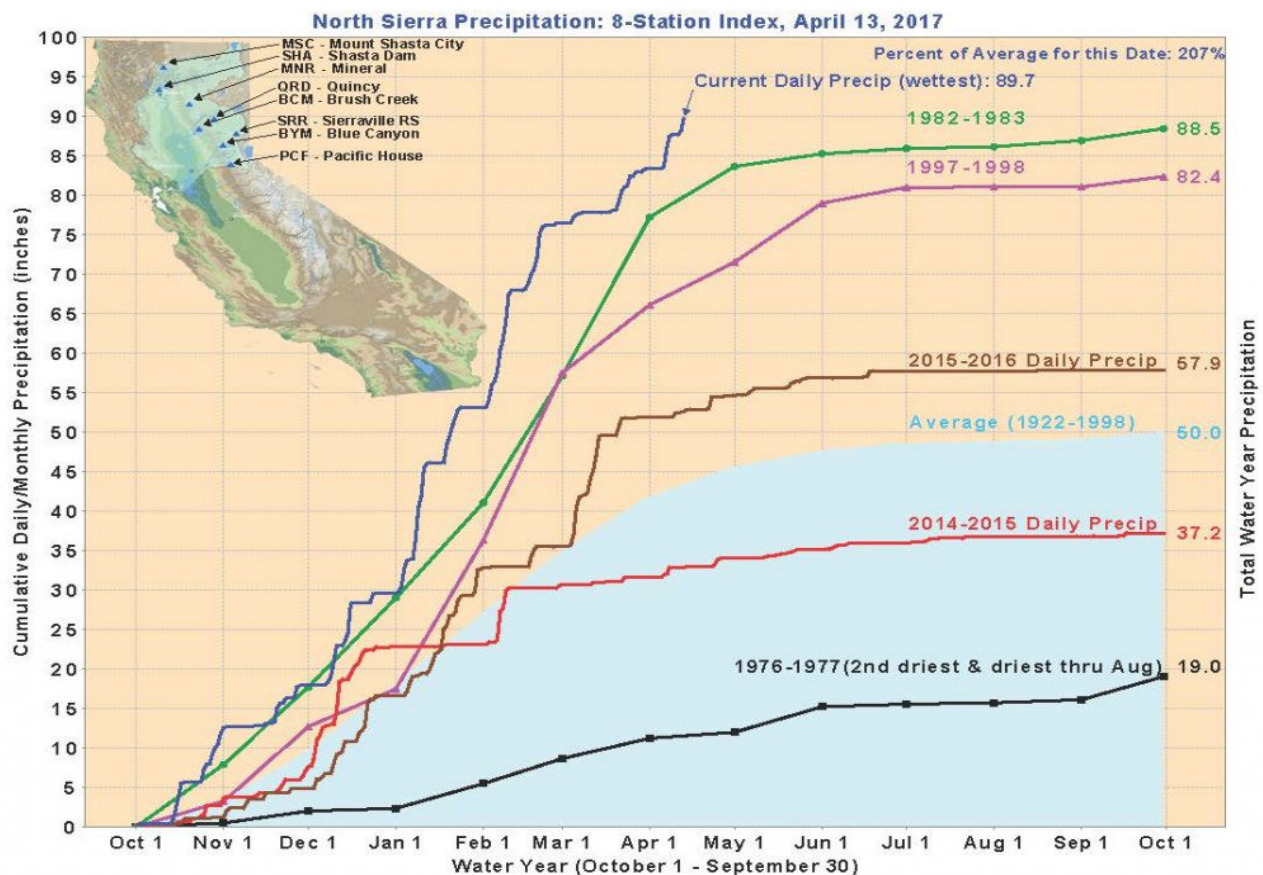


Never in nearly a century of Department of Water Resources (DWR) recordkeeping has so much precipitation fallen in the northern Sierra in a water year. DWR reported today that 89.7 inches of precipitation – rain and snowmelt – has been recorded by the eight weather stations it has monitored continuously since 1920 from Shasta Lake to the American River

basin. Today's total surpassed the previous record of 88.5 inches recorded in the entirety of Water Year 1983. The region's annual average is 50 inches.

California traditionally receives 30 to 50 percent of its annual precipitation from atmospheric rivers (ARs), long and relatively narrow "rivers in the sky" laden with moisture that blow in from the Pacific. The West Coast experienced 46 ARs between October 1 and March 31, the first six months of Water Year 2017. Nearly one-third of the total were "strong" (13) or "extreme" (3) ARs.

The snow water equivalent of California's snowpack is far above average throughout the Sierra Nevada — 176 percent of the April 13 average. DWR will conduct its final snow survey of the season on May 1 at Phillips Station in the Sierra 90 miles east of Sacramento.



Incredible snow totals in Sierra as more is forecast for this week, along with rain in Sacramento

By Bill Lindelof

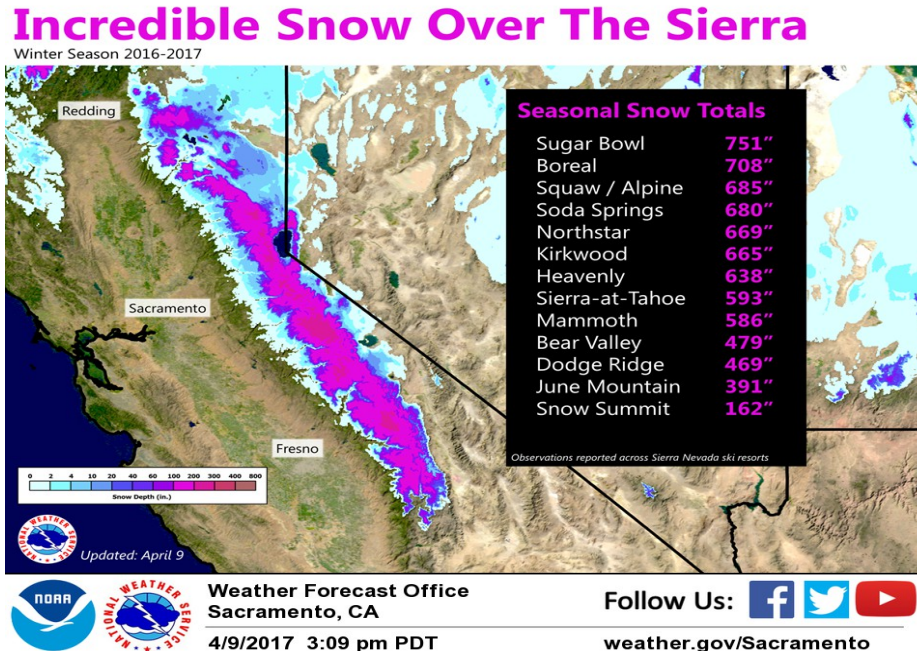
Sacramento Bee

<http://www.sacbee.com/news/weather/article143912744.html>

A National Weather Service list of snow totals in the mountains confirms that an incredible amount of

the white stuff has fallen this season.

From 162 inches at Snow Summit ski resort in the San Bernardino mountains to 751 inches at Sugar Bowl in the Sierra, the winter has delivered wave after wave of snowstorms. Other resorts posting hefty seasonal totals include 708 inches at Boreal, 685 at Squaw Valley/Alpine Meadows and 680 at Soda Springs.



It is not just the total amount of snow that is measured, but the water content of the snowpack is even more important. Here is a report on NASA's research into that:

NASA Is Digging In The Snow To Help The West Manage Its Water

By [Christie Aschwanden](#)

NASA

April 10, 2017

<https://fivethirtyeight.com/features/nasa-is-digging-in-the-snow-to-help-the-west-manage-its-water/>

Launched this year with a \$4.5 million budget funded by NASA's Terrestrial Hydrology Program, the SnowEx project involves nearly 100 scientists from [two dozen organizations](#) and aims to answer a [basic question](#): How much water is stored in Earth's snow cover?

The answer has important economic implications. Water is the [lifeblood of the West](#), and managing it requires tracking and understanding snowpack dynamics because [more than half](#) of the water supply in the western U.S. comes from mountain snowmelt. Snowpack at high elevations provides a natural reservoir that holds water in reserve and then gradually (or sometimes not so gradually) releases it in the spring and summer. The western U.S. gets most of its drinking water, agricultural water and hydropower from the snowpack, and "if we can do a little bit better in forecasting how much [snowmelt] is coming out of the mountains and when it's going to come out, it's worth millions to billions of dollars in terms of commerce," said [Kelly Elder](#), a research hydrologist at the U.S. Forest

Service and a leader of the fieldwork that took place in February on the [Grand Mesa](#) in western Colorado. The dollars he refers to represent the money that can be saved or lost through decisions regarding water allocation for agriculture, domestic use and flood management, among other things.

What is behind both the record drought and the record water year? A new study discusses something most are most likely unfamiliar with: Atmospheric waves.

Scientists link California droughts and floods to distinctive atmospheric waves

April 6, 2017

<https://phys.org/news/2017-04-scientists-link-california-droughts-distinctive.html#jCp>

The crippling wintertime droughts that struck California from 2013 to 2015, as well as this year's unusually wet California winter, appear to be associated with the same phenomenon: a distinctive wave pattern that emerges in the upper atmosphere and circles the globe.

It Is About Time, But Too Late For Some

Two days ago the Federal Bureau of Reclamation, which is responsible for the Central Valley Project announced that a full 100% allocation for the Central Valley will be met. This is the first time that has been done since 2006, underlining the fact that the California water management system is broken.

From the Bureau of Reclamation

April 11, 2017

The Bureau of Reclamation today announced an update to the 2017 water supply allocation for all Central Valley Project contractors South-of-Delta to 100 percent of their contract supply for the first time since 2006.

On Feb. 28 and March 22, 2017, Reclamation announced a 100 percent allocation for all CVP contractors with the exception of agricultural water service contractors South-of-Delta (contractors in the Delta Division, San Felipe Division, and the San Luis Unit), who were initially allocated 65 percent of their contract supply, and Municipal and Industrial (M&I) contractors South-of-Delta, who were initially allocated 90 percent of their contract supply.

West Side has full water supplies for first time since 2006

By John Holland

April 12, 2017

Modesto Bee

<http://www.modbee.com/news/business/agriculture/article144295649.html#storylink=cpy>

Full water deliveries have returned to the last of the West Side irrigation districts affected by federal water cutbacks in recent years.

The U.S. Bureau of Reclamation announced Tuesday that it will provide 100 percent of the contract amounts this year to a class of customers that had suffered the worst during the drought. This has not happened since 2006.

The news came too late for some farmers, who have already planted based on the earlier projection of 65 percent for 2017.

Full Water Allocation Too Late For Some Calif. Farmers

Courthouse News Service

[April 12, 2017](#)

By DEREK FLEMING

<https://www.courthousenews.com/full-water-allocation-late-calif-farmers/>

SACRAMENTO, Calif. (CN) – For the first time since 2006, many farmers in California’s Central Valley will have the water their crops need. But for many farmers in the south part of the valley, the good news leaves them treading water.

Last year, Westlands Water District farmers received only 5 percent of their water allocation, and were told the water could not be used during the irrigation season. This forced them to fallow hundreds of thousands of acres.

But this year, news of an increased water allotment came too late to help.

“For farmers who had to make planting decisions several months ago, (Tuesday’s) announcement of an increase in supply comes too late in the season to aid their operations,” Westlands said in a statement Wednesday.

Westlands, which stretches east of Interstate 5 from Firebaugh to Kettleman City, is one of five irrigation districts responsible for water resource management in California. The district is considered to be the nation’s most productive farming region.

The Governor's Wet Dream

California officials want \$100B for dams, roads and water from Trump. Will they get it?

By Jesse Marx

The Desert Sun

April 12, 2017

<http://www.desertsun.com/story/news/politics/2017/04/12/trumps-infrastructure-plan-uncertain/304996001/>

In early February, Brown's office released to the Trump administration — through the National Governors Association — a \$100 billion wish-list of investments for not only roads and bridges, but energy, military, ports and public transit, some 51 projects total.

It's too early to say whether any or all of the projects on the state's wish-list will get money. Chao, Trump's transportation secretary, has suggested that a clearer picture would be available by end of 2017.

“There is no plan, at least not yet,” said Sean Sloane, senior transportation policy analyst at the Council of State Governments. “We can read tea leaves, but we’re two months into this administration and we know virtually nothing.”

Oroville Dam Update

There are two things of note in this week's dam update, though, for some that might be spelled damn: First, and this should be noted well, all the red tape is being cut and all the delaying environmental studies are being trashed as is required to get the job of repairing the spillway done. Second, 911 gave us the security state, which is being used to protect the incompetent and the guilty for the disaster. This story, I am sure, will provide plenty of copy for the months to come. I include short excerpts from each article, but some of the articles are quite good, full of details and of interest to both specialists and non-specialists alike. The geology reports, especially, are very interesting. And those who are looking for more rocks to throw at Jerry Brown, they will find plenty of ammunition here.

DWR unveils plans to replace Oroville Dam spillway

By Risa Johnson

April 6, 2017

<http://www.oroillemr.com/20170406/dwr-unveils-plans-to-replace-oroville-dam-spillway>

The state Department of Water Resources Thursday outlined its plans for repairs and replacement of the Oroville Dam spillway by Nov. 1, with the undamaged top chute as the priority.

Oroville Dam repairs will be long, complicated. Here’s a look at who might do the work.

By Dale Kasler

Sacramento Bee

April 6, 2017

<http://www.sacbee.com/news/state/california/water-and-drought/article143200489.html>

The repair job at the battered Oroville Dam spillway lacks a price tag and a finalized design. But it has drawn the interest of four leading construction contractors, all with experience in big dam projects.

The four contenders for the project are Kiewit Corp. of Omaha, Neb.; Granite Construction of Watsonville; Barnard Construction Co. of Bozeman, Mont.; and ASI Constructors Inc. of Pueblo West, Colo., according to the Department of Water Resources.

DWR released its repair plan Thursday, acknowledging the work won’t be finished until 2018 and will leave the fractured spillway partially undone when the next rainy season begins this fall. Nonetheless, Acting DWR Director Bill Croyle said the 3,000-foot-long concrete chute, whose problems led to a [near catastrophe](#) in February, will be functional by the time the rains arrive in November.

Jerry Brown's administration blocks public review of Oroville Dam records

By Ryan Sabalow and Dale Kasler

April 11, 2017

<http://www.sacbee.com/news/state/california/water-and-drought/article143990719.html#storylink=cpy>

Gov. Jerry Brown's administration is using federal security regulations written to thwart terrorism to deny public access to records that experts say could guide repairs to the Oroville Dam and provide insight into what led to the near catastrophic failure of its emergency spillway.

Oroville Dam document secrecy frustrating lawmakers

By Dan Reidel

Chico Enterprise-Record

04/12/17

<http://www.chicoer.com/general-news/20170412/oroville-dam-document-secrecy-frustrating-lawmakers>

Two California legislators who represent those living downstream from the dam are also upset that they aren't getting answers.

State Senator Jim Nielsen, R-Gerber, and Assemblyman James Gallagher, R-Yuba City, published a statement in early April that said written communication between the federal government and the California Department of Water Resources should be made public in the interest of "full transparency."

The state senator mentioned that U.S. Rep. Doug LaMalfa, R-Richvale, told the [Sacramento Bee](#) he had been asked to sign a non-disclosure agreement before viewing documents related to the Oroville Dam spillway.

"That's insulting," Nielsen said. "We're going to be complicit in hiding information? No way."

Nielsen said he understands that concerns could be real, and security is "a lot different today than it used to be," but said non-disclosure agreements for public representatives are unacceptable.

"We expect what we will be shown will not be the whole story," Nielsen said. "If we are not allowed to comment on it we will be absolutely derelict to the citizens we represent."

The documents in question are reports from an independent review board selected by the DWR and the plans on which contractors are bidding to repair the spillway.

DWR's acting director Bill Croyle said in a press conference last week that those documents were being kept secret for security concerns.

Oroville Disaster May Have Been Caused by Weak Soil Under Spillway

<https://www.newsdeeply.com/water/articles/2017/04/07/oroville-disaster-may-have-been-caused-by-weak-soil-under-spillway>

The destruction of Oroville Dam's main spillway in February likely occurred because it was built on highly erodible rock, according to several experts interviewed by Water Deeply. If confirmed by a forensic investigation now underway, rebuilding the spillway will require a much more expensive and time-consuming effort.

Rogers pointed to aerial photography of the disaster's aftermath that reveals dark red or orange earth beneath the section of the spillway that was ripped apart. This, he said, is a type of rock known as saprolite, which literally means "rotten rock" in Greek.

Why wasn't the erodible saprolite excavated and replaced with concrete when the spillway was built in the 1960s? This would be the recommended method to address such a weakness in a spillway built today. It's an obvious question with a surprising answer.

Rogers said the erosive risks of saprolite were not recognized 50 years ago when Oroville Dam was built. In fact, it wasn't even recognized by geologists as a distinct rock type until the 1970s, when it was given the name saprolite.

It was another dam disaster in 2005 that first raised red flags about saprolite. The [Taum Sauk Dam](#) in Missouri overflowed due to a combination of errors, eroding saprolite from underneath the concrete dam itself, causing the dam to collapse.

In February, engineers became concerned about a similar failure at Oroville Dam's emergency spillway as the disaster unfolded.

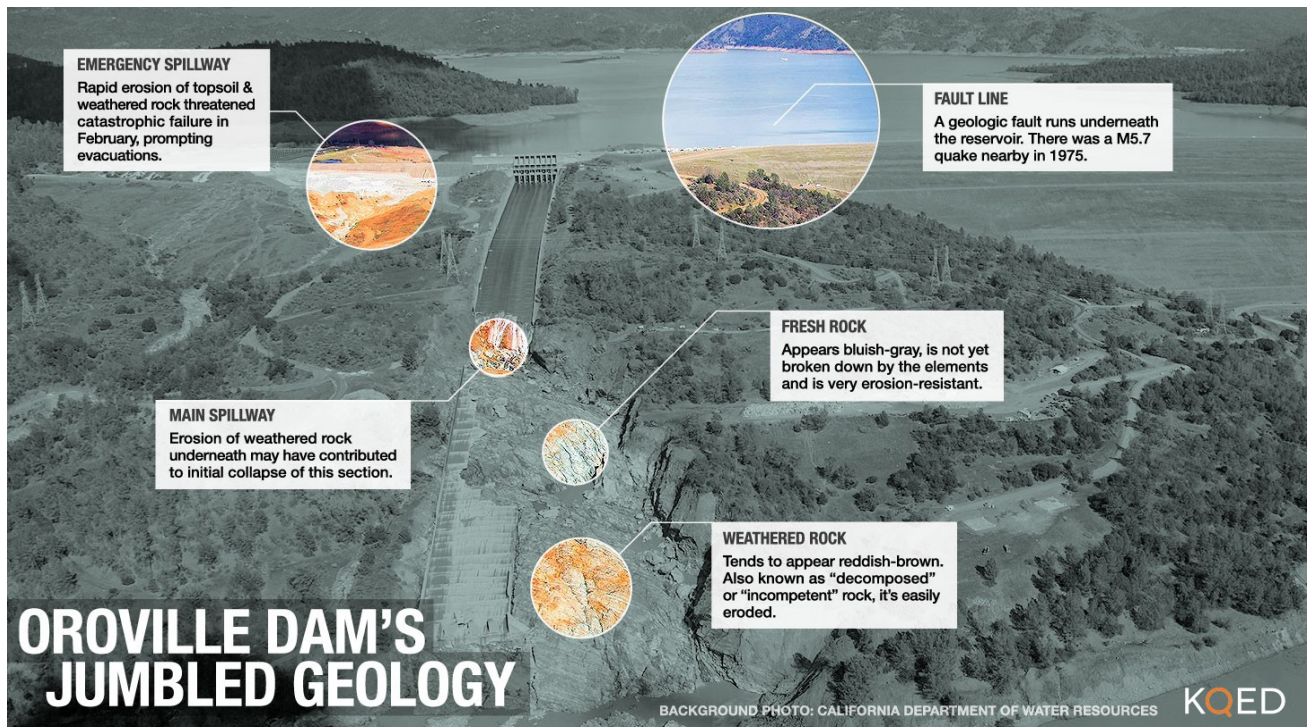
How 'Incompetent Rock' Led to the Oroville Dam Crisis

By Craig Miller

April 7, 2017

KQED

<https://ww2.kqed.org/science/2017/04/07/how-incompetent-rock-led-to-the-oroville-dam-crisis/>



"They did not anchor the spillway in fresh rock," says [Eldridge Moores](#), an eminent geologist and one of the world's leading experts on the geology of the Sierra Nevada. (He's the central figure in John McPhee's 1993 book, [Assembling California](#).)

"Fresh" is the term geologists use for rock that is fully intact and has not yet begun to break down. It is

typically smooth and highly resistant to erosion.

But much of the rock those spillways relied upon is “weathered,” the more fractured rock that is decomposing from long exposure to the elements.

“The fresh rock has been combined with the atmosphere,” explains Moores, and when that happens, you get this chemical change and you produce this softer sort of rock that’s falling apart.”

Incompetent Rock

Engineers call that “incompetent rock.” And that, says Moores, is what Oroville’s main concrete spillway was built on and what the emergency spillway was made of.

Groundwater Overpumping in the Central Valley

The following excerpted article is fairly technical, but in clear language explains the process of the permanent damage done to aquifers by overpumping of groundwater.

Overpumping Reduces California's Groundwater Storage

April 12, 2017

NASA

[https://www.jpl.nasa.gov/news/news.php?](https://www.jpl.nasa.gov/news/news.php?feature=6810&utm_source=iContact&utm_medium=email&utm_campaign=NASAJPL&utm_content=daily20170412-2)

[feature=6810&utm_source=iContact&utm_medium=email&utm_campaign=NASAJPL&utm_content=daily20170412-2](https://www.jpl.nasa.gov/news/news.php?feature=6810&utm_source=iContact&utm_medium=email&utm_campaign=NASAJPL&utm_content=daily20170412-2)

Decades of overpumping groundwater have irreversibly altered layers of clay beneath California's Central Valley, permanently reducing the aquifer's ability to store water, finds a new satellite remote sensing study by scientists at Stanford University, Stanford, California; and NASA's Jet Propulsion Laboratory in Pasadena, California.

The study, published online in the journal Water Resources Research, reveals that overpumping caused land in the state's San Joaquin Valley to sink almost 3 feet (85 centimeters) during a recent drought from 2007 to 2010. As a result, the aquifer permanently lost between 336,000 and 606,000 acre-feet of natural water storage capacity. An acre-foot is equal to 326,000 gallons. In comparison, the Hetch Hetchy Reservoir that stores the primary water supply for the San Francisco Bay area has a capacity of about 360,000 acre-feet.

"California is getting all of this rain, but in the Central Valley, there has been a loss of space to store it," said study coauthor Rosemary Knight, George L. Harrington professor at Stanford's School of Earth, Energy & Environmental Sciences.

Subsidence happens when the water pressure in the subsurface dips below a critical level when too much groundwater is removed, causing the sediments to compact. "As you pump groundwater out of an aquifer, the water pressure in the tiny pores of the sediment drops," said study first author Ryan Smith, a doctoral candidate in Knight's lab. "That reduces the ability of the aquifer to hold up the ground above it and causes it to collapse. That collapse is manifested at the surface as subsidence."

If too much water is extracted, particularly from clay layers, the compaction becomes irreversible, and the soil's ability to retain water is permanently diminished. "When too much water is taken out of clay, its structure is rearranged at the microscopic level and it settles into a new configuration that has less

storage space," said Knight, who is also affiliated with the Stanford Woods Institute for the Environment.

This not only makes it more difficult to store water in the future, but also makes it harder to draw any existing water out of the ground today. "It's like trying to suck water from a really thin straw," Knight said. "The pressure that needs to be exerted to pull the water out gets greater and greater as the clay structure collapses."

Mega-Floods and Mega-Droughts

Our mini-megadrought and our record precipitation winter takes us back to the subject of the dominant climate of the region over the past two thousand years: Alternating megadroughts and megafloods. This report has covered the topic frequently and thus will not repeat that here. But, others are covering the topic more frequently.

Have we underestimated the West's super-floods?

Scientists warn that enormous floods may be more likely than we thought — and the Oroville Dam and others weren't built to withstand them.

By Krista Langlois

Feb. 28, 2017

<http://www.hcn.org/issues/49.6/copy-have-we-underestimated-how-often-super-floods-pound-the-west>

Earlier this month, when a spillway at the nation's tallest dam in Oroville, California, nearly buckled under the pressure of record rainfall, the consequences of under-estimating flood risks were brought into sharp relief. Dams aren't built to withstand every curveball nature can throw — only the weather events that engineers deem most likely to occur within the dam's lifespan. When many Western dams were built in the mid-20th century, the best science to determine such probabilities came from historical records and stream gauges.

But that record only stretches back to the late 1800s, a timespan Baker calls "completely inadequate." Today, technology allows scientists to reconstruct thousands of years of natural history, giving us a much clearer picture of how often super-floods occur. "The probability of rare things is best evaluated if your record is very long," Baker explains.

This Week's Hysteria Award Goes to Two Recipients

One must ask, since California legalized marijuana, are some of these writers over-indulging? The first recipient of our award goes to *San Francisco Gate* and, apparently, Jerry Brown's minions in the state government. But, for those who are truly alarmed that unless we stop the release of CO2 we shall drown, perhaps, you too, are over-indulging.

The second winner this week is the *Jane Goodall Institute*, which takes a real potential threat and runs off the cliff with it. As is my practice, the articles are excerpted.

Sea-level rise in California could be catastrophic, study says

By Kurtis Alexander

April 12, 2017

<http://www.sfgate.com/bayarea/article/Sea-level-rise-in-California-will-be-bad-to-11069686.php>

A state-commissioned report on climate change released Wednesday raises the stakes for fighting global warming, offering a clearer and, in some cases, more catastrophic picture of how much sea levels will rise in California.

The Bay Area will see the ocean swell as much as 3.4 feet by 2100 if significant action isn't taken, the report says. The scientists who produced the study pegged the prospect of that outcome at 67 percent. Tougher action on greenhouse gases would mean a lesser rise of up to 2.4 feet, the study says.

The scope of the likely rise is largely in line with earlier estimates, but not completely. One worst-case scenario says ocean levels could rise 10 feet by century's end, which would swamp countless homes, roads, harbors and even airports along the coast.

"We have learned that the potential for a higher sea level is greater than we thought," said [Gary Griggs](#), a professor of Earth sciences at UC Santa Cruz and one of seven climate experts who prepared the report.

200 More Years of Drought, California? Time to Rethink Water Conservation

Messages.

Jane Goodall Institute

By Oliva Columbo

April 5, 2017

<http://news.janegoodall.org/2017/04/05/200-years-drought-california-time-rethink-water-conservation-messages/>

California is one step closer to a 200-year-long mega-drought, and water conservation messaging may be contributing to the problem, instead of acting as a solution.

The Collapse of U.S. Farm Income

U.S. Farmbelt Crisis: A first-hand report from my associate Bob Baker

April 10, 2017

2017 is the fourth year straight that prices for farm output are below their costs of production. From grain elevators, to machinery dealers, to local households, to community banks, to milk herds and livestock barns, the situation is ready to bust apart. One image of this are the huge mounds of grain (from Kansas wheat, to Dakotas corn) still piled on the ground at rail sidings, not gone to market, (with increasing amounts spoiling).

This hurts the grain elevators. Another image, is that you see vast "windmill farms," and even growing numbers of solar panel farms, and vapor from ethanol distilleries dotting the countryside, while in

between these green energy systems are (increasingly) vacant, decaying farmsteads and run-down small towns, because prices have been too low for years.

The trend is to see increasingly huge, multi-thousand acre farming operations being cultivated by very savvy and highly skilled high tech farmers, who have "gone big," and by investor syndicates, where there were once family-sized operations and thriving towns. Grain elevators and coops are trying to merge to survive.

It is dramatic, that even with huge amounts of corn--40% of of the U.S. harvest total--going into ethanol production and very sophisticated broker engineered grain marketing techniques (futures, forward hedging, puts, calls, etc) used by today's farmers, nevertheless, large numbers of farmers still can't make it, because the the price of grain is still below the cost of production. Some farmers and community bankers comment that another bumper crop will drive prices even lower and bankrupt many of the big-farm producers.

The fight in people's minds in farm communities, is: can the person break free from adapting to the "markets manipulation" mentality. Young farmers are steeped in the "markets" at college--how to hedge, to "manage" risk, to buy and sell, and trained in sophisticated highly technical marketing strategies, etc. Current farm commodity prices are in general 29% of parity (the price a farmer needs to stay in business, plus be able to create conditions for future generations of farming, at higher tech levels.) Even in 1933, the depths of the depression, the farmer was getting 66% of parity.

Some of the older farmers, who knew and understand parity pricing, fall into demoralized thinking that, it "can never come back." There's nothing you can do. It's hard for them to make the leap to imagine there can be a "win win" paradigm of trade and innovation.

Many farm organizations promote sophisticated board of trade marketing strategies and falsely think more ethanol in gas will mean higher prices, even though record ethanol usage and exports still find corn prices below the cost of production. For example, some push to bump up the current 10% ethanol gas-blend to 30%! According to the (green) "markets" line, this will increase demand and give corn-growers a decent price.

At present, the minimum cost of producing a bushel of corn is over \$4.00,(ISU) when all costs are calculated, but the farmer is offered a price of barely \$2.90 to \$3.30 in some parts of the farmbelt. Full parity for corn would be \$12.50/bushel. The orderly way the parity principle has worked, is that the government took actions to guarantee a floor-price of 90% of cost of production, but also, a "release" price was specified, e.g. 170% of cost.

It's the Infrastructure, Stupid

Tale of Three Floods: Ecuador Benefits from 'Investing for the Common Good'

The intelligent response to weather is infrastructure, not shutting down industrial capacity

April 3, 2017 (EIRNS)--The candidate of the governing coalition in Ecuador, Lenin Moreno, won the second round of presidential elections on Sunday, defeating banker Guillermo Lasso, 51% to 49%. Lasso, notorious for profiteering by his Banco de Guayaquil off the collapse of Ecuador's banking

system in 1999-2000, has refused to accept the election results and is mounting protests, hoping to set off a "color revolution."

The catastrophic flooding and mudslides hitting Ecuador's neighbors Peru and now Colombia make clear the physical economic stakes for South America in this battle. A rise in the temperature of the Pacific off the coasts of these three nations, called a "coastal El Nino" by local authorities, has produced record levels of torrential rains. Over the past month, 20% of all roads and almost every bridge in Peru have been destroyed by floods and mudslides; agricultural crops in the north have been wiped out completely; electricity and water outages have been widespread (the capital, Lima, had no water for four days); the death toll has now risen over 100, and 70,000-plus are homeless. The death toll from a mudslide in Moncoa, Colombia, over the weekend, had exceeded 265 by Monday night, most victims being children.

No catastrophic flooding has occurred in Ecuador, which lies in between them and has been affected by the same weather system, a difference which has not been lost on Peru's people. What created the difference? In the past five years, President Rafael Correa turned to China International Water and Electricity (CWE) and China's Gezhouba Group Corporation for help in building levees, diversion channels, dams, and other water management infrastructure across the southern Naranjal region, which was always subject to devastating floods.

In a March 24 TV address, outgoing Ecuadorian President Rafael Correa, cut to the chase as to principle. What made the difference? Not chance, but "planning. Good investments..." "The stupidity of the rightwing, which has the mentality of the bankers, of private enterprise, is that everything is financial returns, profit making. No! That is the logic of the private sector. The logic of a statesman, of the public sector is different. It is that of the Common Good.

"If we invest a billion for these purposes, and we don't recover even a cent, but our agricultural producers can continue producing; families are not flooded out, they live undisturbed; children don't die in the floods: this is a social return. And this is what is important on a public, a political level. It isn't financial return. Sure, financial returns are important in some circumstances, but in *many*, like these, we don't recover any financial return, but the projects are highly profitable because of the social return.... We recover it as a society, not as a government, but as a society."