

# California Drought Update



**For September 29, 2016**  
**by Patrick Ruckert**

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## A Note To Readers

October 1, the beginning of the water year, marks the start of the sixth year of the California drought. This one has gone on so long that many reporters have lost track; some think we are beginning the fifth year; others have no idea. But really, whether it is the fifth or sixth year, it is the worst drought in not only the historical memory, as recorded over the past nearly two hundred years, but, as the paleoclimatologists have reported, the worst drought in at least 1,000 years.

Now, as I wrote last week, "... the state regulators proposal of leaving hundreds of thousands of acre-feet of water flowing from the San Joaquin River and its tributaries, if enacted, the proposal will mean large cuts in water deliveries to San Francisco, Modesto, Merced, Turlock as well as to San Joaquin Valley farmers..... this proposal is nothing less than lighting a fuse of 1,000 tons of political TNT."

Most of this week's update reports on some of the fuses of that dynamite being lit.

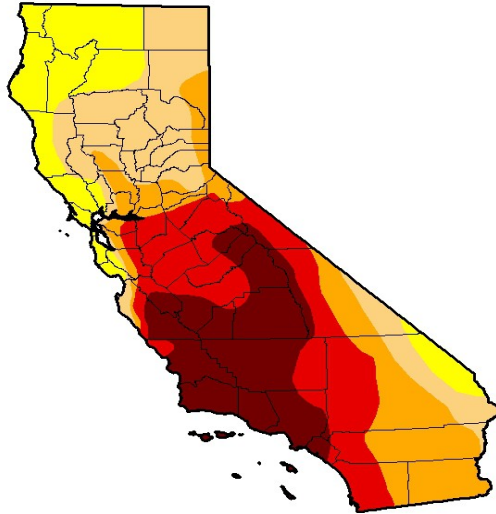
And, if you will recall, I also included in last week's report my "What Is To Be Done" proposal for the proper approach to solving the water crisis. Perhaps some responded that such a comprehensive policy is impossible. Well, whether that is your thought or not, makes no difference. We have now reached the break-point where either that proposal soon becomes the policy, or the dynamite detonates.

The rebuking of Obama by both houses of Congress on September 28 as they overrode his veto of the Justice Against Sponsors of Terrorism Act, should be the first step of changing the entire U.S. policy that has so wrecked the nation for the past 15 years. Read about it here: "Congress Delivers a Deafening Blow to Obama and the Anglo-Saudis." [20160928-congress-passes-jasta.pdf](#)

# The U.S. Drought Monitor

## U.S. Drought Monitor California

**September 27, 2016**  
(Released Thursday, Sep. 29, 2016)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	83.59	62.27	42.80	21.04
<b>Last Week</b> 9/20/2016	0.00	100.00	83.59	62.27	42.80	21.04
<b>3 Months Ago</b> 6/26/2016	0.00	100.00	83.59	59.02	42.80	21.04
<b>Start of Calendar Year</b> 1/1/2015	0.00	100.00	97.33	87.55	69.07	44.84
<b>Start of Water Year</b> 9/29/2015	0.14	99.86	97.33	92.36	71.08	46.00
<b>One Year Ago</b> 9/29/2015	0.14	99.86	97.33	92.36	71.08	46.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

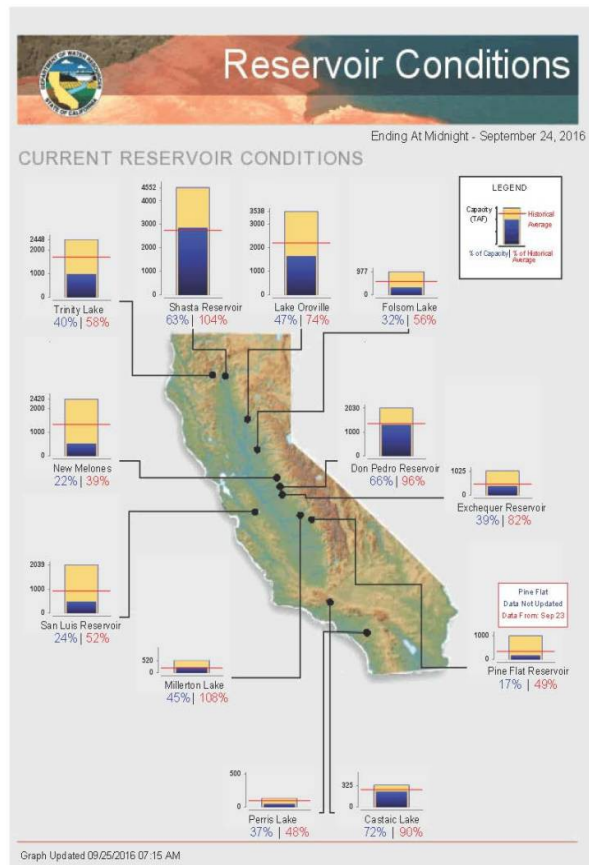
*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

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NCEI/NESDIS/NOAA



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

## Reservoir Conditions



# Yes, the California Management System Is Complex

If you followed the argument reported on last week about the state's proposal of leaving hundreds of thousands of acre-feet of water flowing from the San Joaquin River and its tributaries into the Delta and it left you with a certain level of confusion, the following opinion column from the *Modesto Bee* on September 27 will both clear things up and raise more questions. Above all, it does present the complexities involved in managing the water supply system and the thinking behind the Water Boards proposal, to which the column questions. Extended excerpts follow and I have highlighted a few sentences.

*September 27, 2016 3:21 PM*

*Twin tunnels, Delta and Tuolumne are all connected*

*By Rob Santos and Paul Campbell*

<http://www.modbee.com/opinion/article104524301.html>

*[California WaterFix](#) is Gov. Jerry Brown's plan to build twin tunnels under the Delta to move water directly from the Sacramento River to the California Aqueduct, which serves the urban and agricultural interests of Southern California.*

*These twin tunnels are supposed to prevent damage to the Delta ecosystem caused by direct pumping of water from the south side of the Delta.*

***The governor says that no one will get more water and no one will get less water with the tunnels project.***

***So why would water users in Southern California come up with hundreds of millions of dollars to construct these twin tunnels when there is no new water for them?***

*Their answer is that they need reliability and consistency.*

*The amount of water Southern California receives from Northern California varies each year. The amount is dictated by federal and state agencies and is based on the amount of rainfall and snowfall and how much water is stored each year in Northern California reservoirs. Environmental concerns also factor into the equation, and threats to the Delta ecosystem can temporarily halt the pumping of water from the Delta.*

*For example, in 2007, a federal agency ordered the Delta pumps be turned off to help a species of smelt found only in the Delta. So, no water flowed to Southern California.*

***That begs the question, if the twin tunnels provide Southern California with consistent and reliable water by pulling water directly from the Sacramento River – before it ever gets to the Delta – who makes up for the reduced amount of water that flows into the Delta?***

***Gov. Brown's solution? Take it from the east-side tributaries – the Tuolumne, Merced, and Stanislaus rivers.***

*For the governor, the State Water Resources Control Board and many of the special interest groups that profit from our state and federal water systems, this is a no-brainer.*

*For them, water from our rivers is new water – which can be used to offset their own, over-obligated water sources.*

*And they get it for free.*

*That is why the state water board is so insistent on an enormous increase in flows from the Merced, Stanislaus and Tuolumne rivers.*

*The governor would have us believe the tunnels are not related to flows. His agencies claim survival of salmon is the reason for sending water down the river. They ignore the science and demand more water.*

*Without the new water, approval of the tunnels becomes more problematic. The tunnels guarantee water goes south before it reaches the Delta. With less freshwater flowing in from the Sacramento River, the Delta becomes saltier. And the state water board cannot have the Delta get saltier. Hence, the need for greater San Joaquin River flows.*

*We become the sacrificial lambs.*

*The state water board wants us to release over 1 million acre feet down our Tuolumne River and into the Delta in some water years. Historically, this is the water we use to fill Lake Don Pedro – the largest reservoir in California constructed without federal or state help. This will create another “permanent regulatory drought” that will decimate one of the most productive agricultural regions in the world. The state knows this; its plan says the damage is “significant and unavoidable.”*

*How can the state water board ask anyone for that kind of sacrifice?*

*Water board officials refused to discuss the impacts of this flow project on drinking water, groundwater and irrigation water with our local governments and education officials, let alone our water and agricultural industries. The failure of the water board to discuss the assumptions and data behind the flows proposal with the people most impacted – before determining their recommendations – suggests they already had their minds made up.*

*They forfeit any confidence we might have had, or would like to have, in our state administration.*

## **The Real Impact of Human Engineering**

The *Daily Democrat* makes an interesting point on September 22, while warning that the state's plan for the increased flow from the San Joaquin is only a warm-up for “draining the Sacramento, also into the Delta. Without the Shasta Dam, the article states, by September the river is almost dry. Some excerpts follow.

***State water board not as critical here*** <http://www.dailydemocrat.com/opinion/20160922/state-water-board-not-as-critical-here>

*Sure, it's good to have the hammer, but you don't always need to use it. You only do that when there's a crisis. A huge river like the San Joaquin disappearing is a crisis. But if the state wants to look at “historical” flows, like it is on the San Joaquin, the fact is that there's more water in the Sacramento River in September than any other September before Shasta Dam was built. Before the dam, you could walk across the river in Redding in September. That's when natural river flows were the lowest. The dam's releases keep the river artificially high at a time when adult salmon need water to get upriver to spawning grounds.*

## **The Farmer Takes a Stand**

That was the title of a book published in 1952 which tells the story of President Franklin Roosevelt's Rural Electrification Administration. When begun in 1936, 90 percent of the farms of the country did not have electricity. By 1952, 80 percent of the farms had been electrified. The driver that made the program work was the farmers of the nation, who created the co-ops required to get the job done.

The following excerpted item from *agalert.com* on September 21 presents the view of the California farmers of the San Joaquin River plan

### ***Farmers consider impacts of river plan***

*By Christine Souza*

<http://www.agalert.com/story/?id=10164>

*Affected irrigation districts, farmers and others have started poring over thousands of pages of documents that detail a state water board proposal to reserve more water for fish in the lower San Joaquin River watershed.*

*The State Water Resources Control Board released a revised plan last week that proposes to leave more water in the main tributaries to the San Joaquin—the Stanislaus, Tuolumne and Merced rivers—during periods it considers key for "at-risk native fish species." The proposal from board staff recommends that between 30 percent and 50 percent of the rivers' "unimpaired flow" be dedicated to fish, compared to an average of 20 percent under current conditions.*

*California Farm Bureau Federation President Paul Wenger said water supplies directed to fish should be subject to the same efficiency standards as those affecting farmers and homeowners.*

*"For years, regulators have been requiring increasingly more water in the name of environmental protection, but fish populations have continued to decline," Wenger said. "Regulators have no idea how many more fish—if any—would result from dedicating even more water to environmental purposes. But we do know one thing: This will hurt people."*

*Wenger estimated the board proposal could dry up as much as 240,000 acres of Central California farmland—with no guarantee the redirection of water would help the fish it's intended to benefit.*

*The board said its plan aims to enhance the flow of water through the system for protected salmon and to maintain salinity standards through the Sacramento-San Joaquin Delta. The proposal would result in significant impacts to water supplies on the eastern side of the San Joaquin Valley, from San Joaquin through Stanislaus and Merced counties.*

*Water and agricultural organizations estimated the board proposal could result in an average of another 350,000 acre-feet of water being dedicated to outflow, which would come on top of restrictions on deliveries to other water users that resulted in a redirection of approximately 1 million acre-feet of usable water this year alone.*

*Farmer Ron Macedo of Turlock, who serves on the Turlock Irrigation District board, agreed that the proposal from the state water board would likely force growers to pump more groundwater—and said it comes at a time when implementation of the state Sustainable Groundwater Management Act will lead to additional regulation on that source.*

*"With all of the groundwater regulations that are being put on the books, you could really devastate agriculture here in this whole San Joaquin Valley," Macedo said.*

*CFBF President Wenger described the approach outlined in the board plan as untested, unproven and unpromising, given past results, and also cited the impact to the regional economy.*

*"Forcing farmland to be fallowed—as this proposal would surely do—degrades the unique environmental resource represented by California farmland, and will hurt people and the economy throughout the region and state," he said. "It would create another area of chronic water shortage and economic distress, without any proven environmental benefit."*



# No One Should Be Surprised

With water virtually cut off to entire regions of the Central Valley once again this year, and the new groundwater pumping regulations being geared up to be implemented, farmers are drilling more wells than ever. The governor and some of the media may be “shocked,” but if one's future is on the line, then people will do what they must do. Of course, this does not really guarantee a future for this farmer or that farmer, but act they will.

The following are excerpts from *sanluisobispo.com* on September 26.

*California farmers say 'no apologies,' as well drilling hits record levels*

<http://www.sanluisobispo.com/news/state/california/article104251276.html>

*Two years after Gov. Jerry Brown signed a bill designed to limit groundwater pumping, new wells are going in faster and deeper than ever. Farmers dug about 2,500 wells in the San Joaquin Valley last year alone, the highest number on record. That was five times the annual average for the previous 30 years, according to a Sacramento Bee analysis of state and local data.*

*The new groundwater law won't kick in until 2020, and won't become fully implemented for another 20 years. In the meantime, farmers say they will continue drilling and pumping. It's their right, they say, and their only practical choice given the government's limited surface water deliveries.*

*From 2012 through 2015, San Joaquin Valley farmers dug more than 5,000 wells, more than were dug cumulatively over the previous 12 years.*

*In Fresno and Tulare counties, where most of the drilling occurred, officials issued an average of almost 10 agricultural well permits every business day in 2015, though not all of those permits were used. That pace has fallen some in the first few months of 2016, but remains well above pre-drought levels. Tulare and Fresno are two of the three largest agricultural counties in the state, as measured by farm revenue.*

*In conversations throughout the valley, it's also clear that farmers seethe with anger at the government for not sending more surface water their way. While much of California remains unusually dry, precipitation levels returned to normal in Northern California last winter, bringing key reservoirs back to relatively healthy levels.*

*Farmers feel they haven't gotten their fair share of that water. The reason? State and federal officials allowed more water to flow through the Sacramento-San Joaquin Delta and out to the Pacific Ocean during portions of winter and spring to try to revive the native fish species, including salmon and smelt, whose numbers have plummeted in the drought.*

*“The farmers need the water, you know,” said Kulwant Gadri, a Tulare County almond grower who's spending more than \$1 million this year on new wells. If an almond orchard goes longer than two months without it, “the orchard is gone.”*

*The situation is getting so dire, said Arthur, the Fresno well driller, that he questions whether the 2014 state law placing limits on pumping will ever get implemented.*

*“They stop drilling wells, they're going to kill this valley,” he said. “They may never get this law going.”*