## **California Drought Update**



## For October 27, 2016 by Patrick Ruckert

#### Published weekly since July, 2014

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## A Note To Readers

For those who read last week's report wondering why I imposed on you such a political tour de force, I will just remind you that wars are not won by the tacticians, but by those who think strategically; who think of the big picture. There is no problem in the world or in the nation that can be solved by local action. We must change the entire direction of the nation. So, if you have skipped over the material I presented on October 20, here is another opportunity for you to go at it: <a href="http://www.californiadroughtupdate.org/pdf/20161020-California-Drought-Update.pdf">http://www.californiadroughtupdate.org/pdf/20161020-California-Drought-Update.pdf</a>

This week we begin with the insane ruling of the U.S. 9th Circuit Court of Appeals, stating that the computer models of global warming forecasts 50-60 years into the future must be "facts" used to prove that human activity must be restricted under the Endangered Species Act. Farmers have already warned that this ruling can be applied against just about any human activity that is claimed to at some distant moment in the future to in some way potentially threatened some species.

We can say that this ruling is the third of what was a "one-two punch" delivered to agriculture in the state over the past few weeks. One and two are the proposed Water Board policies of increasing the "unimpaired flows" of the San Joaquin and Sacramento Rivers. A summary of that policy and developments flowing from it can be found below. Though some of that report is worth repeating here:

To summarize the state's San Joaquin River plan: The state proposal recommends that 30 to 50 percent of what naturally flows into the tributaries during February to June be left unimpeded and allowed to flow out to the Delta. It will start at 40 percent and adaptive management can kick in to raise or lower that amount as determined by the state.

It is estimated that as much as 300,000 to 400,000 acre feet will be the unimpaired flow, reducing by that much what is normally used by agriculture. Agricultural interests estimate that 24,000 acres of prime farm land will be fallowed, and financial losses will be in the billions. Of course, farmers will resort to more ground water pumping, which undermines the intent of the Sustainable Groundwater Management Act, which is suppose to cut-back on groundwater pumping.

Then, two weeks ago the Water Board released its plan for the Sacramento River. It is called "Phase 2 of its update to the Bay-Delta Water Quality Control Plan." This report proposes that the unimpaired flows of the Sacramento River and delta shall be an average range of 35 percent to 75 percent.

Under the title below "In Case You Missed It" I relate what the state will look like after a 70-year mega-drought according to Jay Lund, Director of the UC Davis Center for Watershed Sciences. In sum, one-half of the state's agricultural acreage will be fallowed. That center's report repeats the fallacious argument that agriculture makes up only 2 percent of the state's GDP.

At the end of this week's report is an item on the Colorado River and Hoover Dam. With Lake Mead at its lowest level ever, a real threat to the water supply of three states and Mexico is now imminent. The article excerpted in this section gives the details.

We shall conclude this introduction with an invitation to read Helga Zepp LaRouche's presentation last week at a conference in Lyon, France: "The Potential for France & All of Europe in the Construction of the World Land-Bridge." <u>https://larouchepac.com/20161024/potential-france-all-europe-construction-world-land-bridge</u>

## **Something Is Very Wrong Here**

The following two headlines illustrate more what we do not know about weather and climate than what we do know.

#### "Weak La Nina may help ease drought"

#### "Drought's grip on Southern California to tighten with La Niña, forecasters say"

The first is from *Capital Press* on October 24. The second is from the *Los Angeles Times* on October 20.

Now, this inability to forecast accurately, or even to agree on a forecast of the weather to come for just the next month, must be kept in mind while you consider the following.

The U.S. 9th Circuit Court of Appeals just ruled that climate models are "so reliable" that the Endangered Species Act can be applied 100 years into the future-- that is, since the forecast of "global warming" levels in 2070 are accurately known NOW, and those temperatures will create an environment that threatens a species 50-60 years from now, then the United States is by law obligated to act now, shutting down all activity required to protect this or that species. Some excerpts from the article in the October 24 *Los Angeles Times* can be found below, but first I have a few words more to say.

A fundamental principle of the history of our planet, the life that the planet hosts, the evolution of species and the biosphere generally, is that all species but mankind go extinct. It is estimated that 90-98 percent of all species that have ever existed are now extinct. Why? Simply because the geological, chemical, atmospheric and climatic conditions of our planet are always changing, and those new conditions no longer allow some species to continue to exist. Those changes are largely determined by Solar and galactic forces and processes. The biosphere itself both changes with and in response to those changes, and part of that process is the extinction and the creation of new species. The extinction of species are a "natural" process of the evolving biosphere, as is the creation of new species. Mankind is the only species that can do more than adapt to the changing world around him, he is the only species that can increasingly control those processes of change themselves.

It is within mankind's power to determine if this or that species shall live or die, but the idea that our civilization should be controlled by the attempt to save all species, presently threatened or not, is not only absurd and destructive, but also is, ironically, a violation of the natural processes of our biosphere; a violation of natural law. Tell that to the next environmentalist you meet.

# Species may be listed as threatened based on climate change projections, court says

http://www.latimes.com/local/lanow/la-me-species-climate-projections-20161024-snap-story.html by Maura Dolan Los Angeles Times October 24, 2016 Federal authorities may list a species as "threatened" based on climate models that show habitat loss in the coming decades, an appeals court decided Monday.

The state of Alaska, oil company groups and Alaskan natives had challenged a decision by the federal government to list a sea ice seal subspecies as threatened and deserving of protection.

The challengers maintained the subspecies' population was currently healthy and the climate projections were speculative.

A three-judge panel of the San Francisco-based U.S. 9th Circuit Court of Appeals disagreed. The ruling would allow government protection of all sorts of wildlife likely to be affected by climate change in the decades ahead.

The panel decided unanimously that the National Marine Fisheries Services reasonably determined that loss of Arctic sea ice over shallow waters would "almost certainly" threaten the survival of a Pacific bearded seal subspecies by the end of the century.

"This legal victory is likely to have major implications for many other climate-threatened species," said Kristen Monsell, a staff attorney for the Center for Biological Diversity, which sought the listing.

A lawyer for the state of Alaska said the ruling may be appealed.

"If this opinion stands, the National Marine Fisheries Service would list a species that is abundant and in good health based on the claim that climate change will impact habitat over the next 100 years and may cause harm," said Brad Meyen, senior assistant attorney general for Alaska.

### Drought, Rain, La Nina, and Whatever

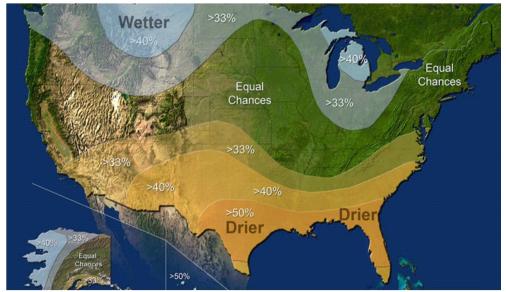
Here are the two articles on the maybe or maybe not La Nina:

"Weak La Nina may help ease drought" Capital Press October 24, 2016 by Don Jenkins http://www.capitalpress.com/California/20161024/weak-la-nina-may-help-ease-drought

#### Drought's grip on Southern California to tighten with La Niña, forecasters say

Los Angeles Times October 20, 2016 http://www.latimes.com/local/lanow/la-me-ln-la-nina-20161020-snap-story.html Associated Press and Times Staff

This one is accompanied by a nice graphic:



*This map provided by NOAA shows the winter precipitation outlook for the U.S. It doesn't look good for drought-hit California. (NOAA via AP)* 

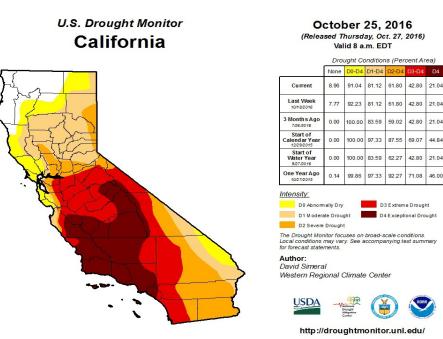
NOAA's forecast is summarized in this article (some excerpts follow) on October 22 by Andrew Freedman, "You're probably not going to like the forecast for this winter:" http://mashable.com/2016/10/21/winter-outlook-snow-cold/#ppE\_oHuCGkqX

#### NOAA: Bad news on drought

According to NOAA, drier and milder than average conditions will be the rule across much of California, which is terrible news for the drought-riddled state. The state's worst drought on record is likely to intensify further during this winter, according to NOAA, potentially forcing the state to reinstate emergency water use restrictions.

"The winter forecast doesn't bode well for this region," said Mike Halpert, the director of the Climate Prediction Center in Maryland, on a Thursday conference call with reporters.

## The U.S. Drought Monitor and Reservoir Graph



D2-D4 D3-D4

61.80

59.02 42.80 21.04

87.55 69.07

62.27

92.27 71.08 D4

44.84

46.00

42.80 21.04

42.80 21.04

NORR

**Reservoir Conditions** Ending At Midnight - October 22, 2016 CURRENT RESERVOIR CONDITIONS LEGEND Capacity (TAF) 300 Folson 33% Trinity Lake 39% | 60% Pedro Reser 65% | 99% Exchequer Reser 35% | 80% san Luis Reservo 25% | 49% Millerton Lake 42% | 109% 0 Perris Lake 37% | 48% Castaic Lake 73% | 95% Graph Updated 10/23/2016 08:45 AM

## We Have Been Up This Creek Before and Now They Have Taken Our Paddle Away

I have covered the new State Water Board plan for the San Joaquin River and the Sacramento River over the past few weeks, and I do not want to just repeat it all. But, the issue will not go away, so some coverage is probably going to be here each week for awhile.

Two terms that we should be familiar with pop up in most discussions of the topic. "Unipaired flow" means just let the river run as it was designed by nature to do so, more or less. The second is "adaptive management," meaning to adjust the flow of the river to the level of flow required to meet the "biological objectives" of saving fish.

To summarize the state's San Joaquin River plan: The state proposal recommends that 30 to 50 percent of what naturally flows into the tributaries during February to June be left unimpeded and allowed to flow out to the Delta. It will start at 40 percent and adaptive management can kick in to raise or lower that amount as determined by the state.

It is estimated that as much as 300,000 to 400,000 acre feet will be the unimpaired flow, reducing by that much what is normally used by agriculture. Agricultural interests estimate that 24,000 acres of prime farm land will be fallowed, and financial losses will be in the billions. Of course, farmers will resort to more ground water pumping, which undermines the intent of the Sustainable Groundwater Management Act, which is suppose to cut-back on groundwater pumping.

Then, two weeks ago the Water Board released its plan for the Sacramento River. It is called "Phase 2 of its update to the Bay-Delta Water Quality Control Plan." This report proposes that the unimpaired flows of the Sacramento River and delta shall be an average range of 35 percent to 75 percent. That is not quite as dramatic as it sounds since currently about 50 percent of the Sacramento flows out the Delta. But, any increase, especially toward that 75 percent would be a disaster to agriculture. "California Farm Bureau Federation President Paul Wenger called the Sacramento River report 'part of a one-two punch aimed at rural California''' as reported by *agalert.com* on October 26.

More coverage of this is in the Sacramento Bee on October 19 (excerpts):

#### California eyes more Sacramento River water for fish, less for farms, cities

October 19, 2016

*By Ryan Sabalow and Dale Kasler http://www.sacbee.com/news/state/california/water-and-drought/article109239047.html#storylink=cpy* 

Signaling a cutback in water supplies for farming and cities, California regulators on Wednesday issued a new scientific analysis that proposes overhauling the management of the Sacramento River and devoting more water to Northern California's dwindling fish populations.

The State Water Resources Control Board, in a widely anticipated report crafted by its staff, said it's considering allowing much more of the flow from the Sacramento River and its tributaries to wash out into the ocean.

The board avoided issuing a specific recommendation on how much additional water should go to fish. Instead, the agency is analyzing the impact of allowing anywhere from 35 percent to 75 percent of the flows from the Sacramento River watershed to wash out to sea. Currently about half of the flow from the Sacramento and its tributaries, including the American and Feather rivers, is allowed to flow unimpeded to the ocean for the benefit of fish. As should be expected, there is a growing anger in the agricultural community. I have included just a few examples below. The articles are excerpted.

#### First the Feds, Now The State Plans More Water Diversions From Farms

September 28

http://californiaagtoday.com/tag/phase-one/

Boccadoro noted, "It looks like Governor Brown has it in for farmers. We have problems with groundwater and increasing water scarcity in the state, and the result of this [plan] would be increased groundwater pumping—until they tell us we can't pump groundwater. At that point, they are basically telling us, 'You can't farm any more.'"

"It's a huge problem, said Boccadoro. "For whatever reason, it appears that the Brown administration has declared war on California agriculture. Enough is enough. We need to push back hard against the Water Board's decisions," noted Boccadoro.

#### State water plan is 'idiocy,' OID official says

By Garth Stapley

http://www.modbee.com/news/local/oakdale/article109451487.html

Members of an often-divided irrigation board joined together Wednesday in a united vote condemning a state proposal to reduce amounts of water normally used for farming.

"It's a water grab under the guise of preserving a fish population that is not sustainable," said Linda Santos, an Oakdale Irrigation District board member. And at least for once, all other board members agreed.

#### SSJID: Plan is about taking water, period

Glenn Kahl gkahl@mantecabulletin.com October 20, 2016

It's about taking water and not about fish. South San Joaquin Irrigation District General Manager Peter Rietkerk

#### Hundreds rise in defense of the region's rights to water

October 22, 2016

http://www.modbee.com/opinion/article109952842.html

By Mike Dunbar

The real question facing the people of this Valley is no longer whether they will fight the state's devastating water grab, but how.

"Have you ever heard of Admiral Yamamoto?" Stanislaus County Supervisor Terry Withrow asked Les Grober. Facing five angry supervisors on the dais with some 300 angrier people sitting just over his shoulder, Grober didn't answer.

Withrow was speaking about Isoroku Yamamoto, the Japanese marshal admiral who masterminded the bombing of Pearl Harbor. "He's quoted as saying, 'I fear we've awakened a sleeping giant.' You've

awakened the giant. We're not going to sit back and just let this happen."

Grober, the State Water Resources Control Board's deputy director, was at Tuesday's Stanislaus County Board of Supervisors meeting to explain the state's plan to redirect roughly 300,000 acre-feet of water away from fields and orchards in a wrongheaded, and likely futile, effort to "save" salmon that don't exist.

Last week I mentioned that a new report commissioned by the *Westlands Water District*, included this sentence: "*The Central Valley Project is broken, the management of state water resources is jeopardizing the region, and without a solution there is little hope of a turnaround that will improve conditions for farming in 2017.*" Here is the link to the article from the *Business Journal:* 

#### New report slams Valley water supply restrictions

Published on 10/12/2016

By Business Journal Staff

http://www.thebusinessjournal.com/news/agriculture/24310-new-report-slams-valley-water-supply-restrictions

## In Case You Missed It

At a conference sponsored by the Water Education Foundation and the Delta Conservatory in Stockton on Tuesday, October 25 (more on this conference next week), I had a short discussion with the keynote speaker Jay Lund, Director of the UC Davis Center for Watershed Sciences. I asked him about his center's report from several years ago and reported on most recently in 2014. The report, *"Economic consequences of optimized water management for a prolonged, severe drought in California,"* claims that since agriculture is only 2 percent of the state's GDP, a megadrought lasting 72 years would have little negative affect on the state's economy. Mr. Lund responded to my statement that since the official GDP of the state is "finance, real estate and insurance," the real portion of the GDP by the real economy like agriculture is much larger than two percent. Mr. Lund effectively said, well that is all a matter of opinion. More important in that discussion for the readers of this report is what the UC Davis Center report says about agriculture's future in the state. In summary it is this: Farm income will remain high as the lack of water forces a shift to more financially lucrative crops, but the number of irrigated acres in the state will be one-half of the nine million acres now irrigated.

Here are links to two articles on the UC Davis Center's report. Note the headlines present opposite conclusions.

#### In virtual mega-drought, California avoids defeat

Los Angeles Times October 6, 2014 by Bettina Boxall http://www.latimes.com/science/la-me-megadrought-20141006-story.html

#### 'Megadrought' could have catastrophic effects on California

The Daily News

October 25, 2014 http://www.dailynews.com/general-news/20140125/megadrought-could-have-catastrophic-effects-on-california

### **Director Cowin Responds To A Rumor**

As reported by numerous media over the past month, and in this report, that contrary to the long stated position of the Brown administration, the Delta tunnels will need a substantial Federal and State contribution to the \$16 billion price tag. As reported by *Alex Brietler* on October 11, Mark Cowin, director of the state Department of Water Resources, definitely said that is not true. Here is the link to the article:

#### Cowin on tunnels subsidy: 'I can put that to rest'

By Alex Breitler

October 11, 2016

 $\label{eq:http://blogs.esanjoaquin.com/san-joaquin-river-delta/2016/10/11/cowin-on-tunnels-subsidy-i-can-put-that-to-rest/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+san-joaquin-river-delta+%28Alex+Breitler%27s+San+Joaquin+Delta%2C+Delta+College+Blog%29}$ 

## A Reminder: The Colorado River Is Crucial To the California Water Management System

As Lake Mead has reached the lowest level ever since it began filling in the 1930s, what to do about it when it reaches a critical break-point as early as next year is under negotiations between all the states, the federal government and Mexico. This article from the *Desert Sun* on October 21 provides an update. Some excerpts:

#### Negotiations moving forward on plan to avert Colorado River 'crash'

The Desert Sun By Ian James October 21, 2016 http://www.desertsun.com/story/news/environment/energy-water-summit/2016/10/21/negotiationsmoving-forward-plan-avert-colorado-river-crash/91694988/

Lake Mead reached its lowest point on record this year, and federal water officials estimate the odds of the reservoir slipping into shortage conditions in 2018 at nearly 50-50.

The reservoir's decline reflects a fundamental deficit in how the Colorado River has been divided up for decades. The old system of allotments that sustains farms and cities is doling out much more water than the river can provide, and the strains on the river are being compounded by 16 years of drought and rising temperatures.

If the level of Lake Mead crosses a critical threshold by next summer and a shortage is declared, Arizona and Nevada would automatically face cutbacks in water deliveries in 2018. And if the reservoir near Las Vegas keeps dropping, eventually California would also receive less water.

Representatives of the three states, the federal government and water districts have been in negotiations on a "drought contingency plan" in an effort to head off Lake Mead's downward spiral and make the math of the river more manageable.

The federal Bureau of Reclamation could declare a shortage next summer if officials project Lake Mead's level would be below an elevation of 1,075 feet at the beginning of 2018. Larger reductions in water deliveries to Arizona and Nevada would take effect at an elevation of 1,050 feet, and the Secretary of the Interior could step in with additional measures if the water level falls below 1,025 feet.

The decline of Lake Mead threatens not only the water supplies of farms and cities but also the electricity generated by Hoover Dam. The dam's power-generating capacity has already declined substantially. And if the water level eventually falls below an elevation of 950 feet, some water would still flow through the dam but its generators would near a point at which they could no longer churn out power.

Representatives of the three states have discussed a "framework" of measures to jointly leave more water in Lake Mead. Arizona and Nevada would forgo larger amounts than they have previously agreed to under a first-level shortage, and water users in California would also pitch in before they would otherwise be legally required to.

That plan includes a "backstop concept" of making sure Lake Mead's level doesn't fall below the mark of 1,020 feet elevation, said Tom Buschatzke, director of the Arizona Department of Water Resources.

"None of us can live with that ultimate crash," Buschatzke said in a telephone interview. "That's the backstop goal, is to stop that from happening."



The graph projects the lake level through the end of 2015. Reductions in deliveries of water will begin when the lake hits 1,050 feet above sea level.