California Drought Update



For December 8, 2016 by Patrick Ruckert

Published weekly since July, 2014

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A Note To Readers

Other commitments this week require this report to be brief.

As we approach January 20 and the inauguration of a new President, it appears that the outgoing President's legacy will not last beyond that date. But, it must be emphasized that it is not just in the United States that the potential for a dramatic shift is upon us, but as reported in the article from *LaRouche PAC* on December 5, "The New Paradigm Is the Dominant Dynamic In the World; Italy Delivers Smashing Defeat to EU Oligarchy." Here is the link and the first paragraph of the article:

December 5, 2016

https://larouchepac.com/20161205/new-paradigm-dominant-dynamic-world-italy-delivers-smashing-defeat-eu-oligarchy

On November 9, 2016, the morning after the dramatic U.S. presidential election—when Trump's victory left most analysts at home and abroad either babbling nonsense or in stunned silence—Lyndon LaRouche stated clearly that Trump's victory was part of a global, not a local or national process, in which the entire edifice of globalization and free trade was crumbling. LaRouche said that nothing is yet a settled question, and that the process is being steered by Presidents Putin of Russia and Xi of China, and by the global alternative that they are presenting—an alternative based on policies for which Lyndon and Helga LaRouche have long fought.

Now, as for the drought. It is raining as I write, and more shall come down over the weekend, at least

here in Oakland. The first two months of the water year in the northern Sierras and even in the northern part of the Valley has seen almost 200 percent of the normal precipitation. Nice, but, as one article I cite below cautions, a start, especially in California, tells us little or nothing about what the rest of the winter shall bring.

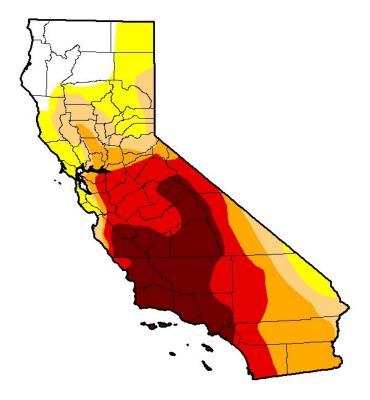
And as the U.S. Drought Monitor shows, three-quarters of the state remains in "Severe Drought" or worse.

The last item in this week's report on the proposed desalination plant at Huntington Beach points to how damn damaging the last decades of environmentalist ideology have been. Years are wasted in moving forward with projects due to the backward thinking about man's role in the biosphere. Reducing the relationship of mankind to one of being in conflict with nature ignores the reality that mankind, too, is a natural part of the biosphere and his destiny is to reshape all around him. How? And in what manner? Since the biosphere, and our universe generally, is an always developing and evolving process, mankind, as the only deliberately conscious being, has the power to guide its development to ever an evermore productive and complex platform.

The best understanding of these ideas can be found in the writings of Vladimir Vernadsky, the early 20th Century Russia-Ukrainian biogeophysicist. Here is a link to many of his writings: https://larouchepac.com/vernadsky

U.S. Drought Monitor





December 6, 2016 (Released Thursday, Dec. 8, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|--------|-------|-------|-------|-------|
| Current | 12.03 | 87.97 | 73.04 | 60.27 | 42.80 | 21.04 |
| Last Week 11/29/2016 | 12.03 | 87.97 | 73.04 | 60.27 | 42.80 | 21.04 |
| 3 Month s Ago 9/6/2016 | 0.00 | 100.00 | 83.59 | 59.02 | 42.80 | 21.04 |
| Start of Calendar Year 12/29/2015 | 0.00 | 100.00 | 97.33 | 87.55 | 69.07 | 44.84 |
| Start of Water Year 9/27/2016 | 0.00 | 100.00 | 83.59 | 62.27 | 42.80 | 21.04 |
| One Year Ago 12/8/2015 | 0.14 | 99.86 | 97.33 | 92.26 | 69.09 | 44.84 |

Intensity:

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

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

Author: Anthony Artusa NOAA/NWS/NCEP/CPC





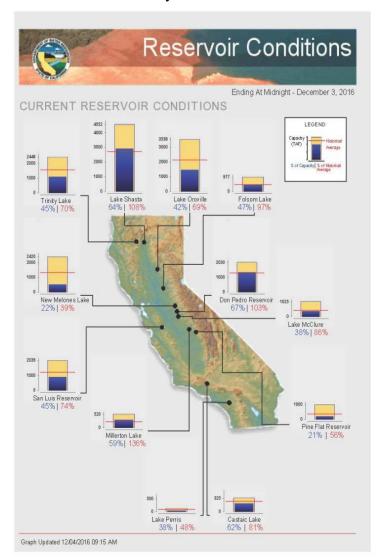




http://droughtmonitor.unl.edu/

The Reservoirs

They are still below normal for this time of the year.



It Is Raining and Snowing

Two articles, excerpted, tell the story. Here is the first:

Fall snow, rains have 'satisfied the drought debt' in Northern Sierra Nevada, climatologist says

By Joseph Serna

December 2, 2016

http://www.latimes.com/local/lanow/la-me-ln-fall-precip-drought-buster-20161202-story.html

The Northern Sierra Nevada area has received more than 17 inches of precipitation through October

and November, nearly 200% above average for the first two months of the water year, the state Department of Water Resources said. The southern portions of the Sierra Nevada, however, remain mired in drought and are only at 81% of average.

And the second:

Next 90 days are crucial for the drought

By Monica Woods
KXTV
December 01, 2016
http://www.abc10.com/weather/next-90-days-are-crucial-for-the-drought/361865197

The California story on this historic drought is about to add another chapter. The next 90 days will be telling since about half of the state's annual precipitation happens between December and February.

Epic rain in October and a decent November has set up parts of northern California to ease some of the drought conditions. Extreme northern California has continued to stay out of drought since mid-October. Southern California has not seen the same plentiful precipitation, and so much of that part of the state remains in exceptional drought.

Dec.1 is the date the state starts to compare snow pack averages. The state average so far for the Sierra is at 61 percent for this time of year. The northern Sierra is coming out slightly above this average at 85 percent, but this region still needs nearly 70 inches of precipitation to catch up after five dry years.

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New Bill In Congress May Be Cheered By Some, But....

Much is being made of the water bill now before the Congress by both those who wish for more water for agriculture and the environmentalists, who make clear they do not give a damn about farmers, or really, anyone.

But, regardless of whether it passes or not, there should be no delusions that such stop-gap measures will never address the fundamental problem of water supply for the state. Until we have a paradigm shift in thinking about how the nation begins building today what we shall require 50-100 years into the future, then stop-gaps is all we shall get.

I shall address this once again next week, with a focus on step one, the over-all economic and financial policy required.

Here are some excerpts from the *Modesto Bee* coverage of the new bill:

California's water future will change as a result of this bill set for House approval

Modesto Bee By Michael Doyle

December 7, 2016

http://www.mcclatchydc.com/news/politics-government/congress/article119554688.html#storylink=cpy

A California water bill set for House approval on Thursday that's split the state's two Democratic senators will make it easier for the incoming Trump administration to build new Western dams.

Non-native predatory fish in the Stanislaus River will be test-targeted for elimination. New Melones reservoir storage could expand. Money would flow to water recycling projects in cities such as Sacramento and San Luis Obispo, and to desalination projects like ones proposed for Southern California.

Not least, farmers south of the Sacramento-San Joaquin Delta may get more of the water flowing through Central Valley Project canals, though, precisely how much more is just one of the ambiguities still surrounding the California package.

And here is a link to the coverage of some of the comments on the bill from farmers and environmentalists:

Latest compromise drought relief bill receives praise, opposition

<u>Tim Hearden</u>

Capital Press

Published on December 7, 2016

http://www.capitalpress.com/California/20161207/latest-compromise-drought-relief-bill-receives-praise-opposition

Brown Is Not Hurting Farmers Enough!?

Last week we reported on the new water conservation plan put forward by the Brown administration. http://www.californiadroughtupdate.org/pdf/20161201-California-Drought-Update.pdf

According to some, the plan does not hurt the farmers enough. A short item from *Associated Press* elaborates:

California's new water conservation plan focuses on cities

December 1, 2016

http://www.scpr.org/news/2016/12/01/66738/california-s-new-water-conservation-plan-focuses-o/

California officials crafting a new conservation plan for the state's dry future drew criticism from environmentalists on Thursday for failing to require more cutbacks of farmers, who use 80 percent of the water consumed by people.

Gov. Jerry Brown ordered up the state plans for improving long-term conservation in May, when he lifted a statewide mandate put in place at the height of California's drought for 25-percent water conservation by cities and towns.

Ben Chou, a water-policy analyst with the Natural Resources Defense Council, criticized state planners for not mandating any new water-savings by farm water districts.

Desalination: Whose Time Has Come, But....

Below are excerpted some lines from a *Water Deeply* article of December 7, demonstrating how decades of wrong thinking about mankind's role in our biosphere has created a gauntlet of obstacles to getting anything done. Rethinking is required, and I urge the reader to begin exploring Vladimir Vernadsky, referenced above.

Why One Decision Could Decide the Future of Desalination in California

by Tony Davis

December 7, 2016

The future of coastal desalination in California could be determined by the decision on permits for a plant in Huntington Beach, where regulators and the plant's company have locked horns on the issue of subsurface intake pipes.

https://www.newsdeeply.com/water/articles/2016/12/07/why-one-decision-could-decide-the-future-of-desalination-in-california

A protracted conflict over whether and how to protect fish from dying at desalination plants is clouding prospects for what would be California's second large plant of this type – and for the future of desalination along the entire California coastline.

For years, a proposed Poseidon Resources desalination plant in Huntington Beach in Orange County has been kept in limbo. This has been due in part to disagreements over whether the plant should use conventional, surface-based intake pipes to take salt water directly from the ocean – intakes that already exist in a neighboring electric power plant – or use "subsurface intakes" that would suck in the saltwater underground.

The purpose of subsurface intakes is to prevent fish and other marine life from being trapped and killed in seawater flowing into the plant, a process known as entrainment. Another concern is impingement, in which fish are trapped against intake screens – juvenile fish typically can't survive this for more than 24 hours. At least partly because of their higher construction costs, most large desalination plants worldwide don't use subsurface intakes.

But now new California regulations governing desalination plants make subsurface intakes mandatory unless it can be shown they're not economically and/or technically feasible. The new rules – the only such regulations in the world – are forcing additional delays for the proposed plant, which has been seeking state permits since 2001.

It's clear that this case's outcome will set a precedent for whether up to 15 proposed desalination plants are developed along the California coastline.

The new regulations were approved by the State Water Resources Control Board in May 2015 and ratified by the Environmental Protection Agency in April 2016. But they haven't changed Poseidon's longstanding position that subsurface intakes are not feasible at the Huntington Beach plant, in part because they would cost \$1-1.5 billion to build, on top of the plant's estimated \$2 billion construction tab. The plant is expected to produce about 56,000 acre feet (69 million cubic meters) a year, or 50 million gallons (189 million liters) a day, of desalinated water.