California Drought Update

For July 7, 2016 by Patrick Ruckert

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A Note To Readers

The handwriting is on the wall

The Book of Daniel, chapter 5, tells the story of the Babylonian King Belshazzar's feast and the handwriting on the wall. One day in the midst of a feast the king and his friends were enjoying, a hand appeared and began writing on the wall of the palace. Belshzazzar, who had blasphemed God, was more than amazed, he was terrified. The hand wrote the words: *MENE*, *MENE*, *TEKEL*, *UPHARSIN*, *meaning: MENE*, *God has numbered the days of your kingdom and brought it to an end; TEKEL*, *you have been weighed and found wanting; and UPHARSIN*, the kingdom is divided and given to the Medes and Persians. The next day Belshazzar was dead and the kingdom was so divided.



Rembrandt, Belshazzar' Feast, 1635 (National Gallery, London)

The message is written in vertical lines starting at the top right corner, with "upharsin" taking two lines.

And what does this have to do with the California drought? Be patient, we will get there.

Two weeks ago the voters of Britain chose to leave the European Union, signalling the coming end of not just the EU, but the entire trans-Atlantic globalized system of financial speculation, austerity and wars. These events are like the handwriting on the wall that brought an end to Belshazzar.

Americans, unlike Belshazzar should heed this warning and change their ways. How? In a statement posted on the *LaRouche PAC* website on July 6, referring to some attempts by Europeans to address the crisis,

"Lyndon LaRouche responded today that these steps, and others like them, are correct and necessary, but not adequate. None of them will work, he said, unless a "superior shift" is implemented from above. Every individual effort to stop the financial panic now sweeping Europe, and soon the US, or to stop the mad killer Obama's war drive, will be inadequate without such a "superior shift" to a new paradigm. This shift must be based on Glass Steagall bank reorganization to shut down the "too big to fail" banks and restore productive credit, collaboration with China's New Silk Road process and Vladimir Putin's "Great Eurasia Project," and, most important, a mobilization of our citizens—especially our youth—to beauty, through a restoration of classical music and culture."

"Financial Panic and War Cries Across Europe—Only a "Superior Shift" Can Re-Direct History"

larouchepac.com/20160705/financial-panic-and-war-cries-across-europe-only-superior-shift-can-redirect-history

For it is only with that kind of policy shift that any major problem in the nation can be addressed and solved. The nation that we live in is increasingly seen as a dying civilization. And we are dying-unable to build what we need and being overrun by drug overdoses, suicides and Presidential candidates who are hated by most of the population.

So, read the handwriting on the wall, reform yourselves and back Mr. LaRouche's recommendation.

Now, as for our drought, do not worry, it will not go away, even though there is not much new to report this week. We will, as usual, post below the statistics from the U.S. Drought Monitor and the Reservoir graph. In addition, articles continue to warn that the relaxing of conservation measures are premature, and I excerpt one of those articles below. Beyond that, there are the wildfires.

So, with such a dearth of news, I shall fill the remaining space with links to the past. Specifically, how one President, John F. Kennedy, unleashed the greatest water project building program the country had seen since the time of Franklin Roosevelt.

The Drought Monitor

This item, I thought, was appropriate to introduce the Drought Monitor for this week:

Downtown L.A.'s five-year rain total is lowest ever recorded http://www.latimes.com/local/lanow/la-me-ln-la-dry-rain-season-future-20160706-snap-story.html

by Joseph Serna

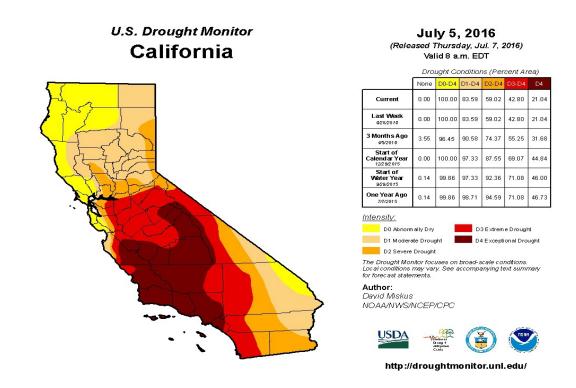
Los Angeles has chalked up yet another dreary milestone in its growing almanac of drought.

On Wednesday, experts at the <u>National Weather Service</u> confirmed that the last five years have been the driest ever documented in downtown L.A. since official record keeping began almost 140 years ago.

Having missed out on most of El Niño's bountiful rains this winter, the Southland experienced yet another dreadfully below-average year of precipitation between July 1 and June 30.

As a result, downtown Los Angeles recorded an average of just 7.75 inches of rain every year since July 2011, according to NWS meteorologist Scott Sukup. That's a total five-year rainfall of just 38.79 inches – roughly half of the amount of rain that would soak L.A. in a normal five-year period, experts say.

Otherwise, as you can see, the monitor shows no change from last week.



This is not the joke about the Nile River

The June 30 article by wunderground.com, "Is California a 'State in Denial' concerning its Drought?" does provide some perspective on just where we stand in regard to the drought and the water supply. So, I have excerpted a few paragraphs below. It was written by Christopher C. Burt. I include one of the author's graphics also.

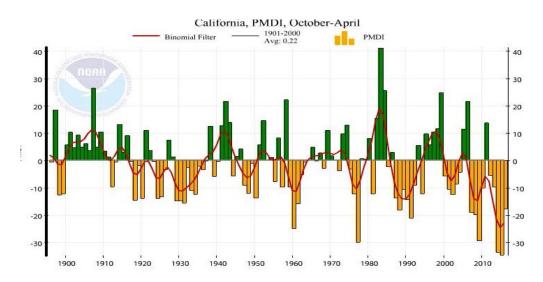
https://www.wunderground.com/blog/weatherhistorian/is-california-a-state-in-denial-concerning-its-drought

Following the first year of near average rainfall compared to the past four years of extreme drought conditions, California has decided to retract all urban water conservation efforts for the foreseeable future. The state's reservoirs are full and various urban water municipalities have been losing money as a result of the water conservation efforts enforced last year. This effort succeeded beyond what was projected. Now all restrictions have been dropped for, at least, urban consumers. Is this a wise

The California precipitation season of July 1, 2015-June 30, 2016 has come to its conclusion and overall produced normal rainfall, the first such since the season of 2011-2012. The northern portion of the state was a bit wetter than average while the southern section was drier.

Although the entire state remains abnormally dry at this time (top map) the areal coverage of 'extreme' and 'exceptional' drought conditions has shrunk considerably compared to a year ago (bottom map): from 47% under 'exceptional drought' conditions in June 2015 to 21% this June and from 71% under 'extreme drought' in 2015 to 43% currently. Drought Monitor maps produced by The National Drought Mitigation Center.

The rosy picture, however, is offset by the fact that the drought situation is actually worse than the figures suggest. This winter's Sierra snowpack (the melt of which provides a third of California's water) peaked at 90% of normal on April 1st but has melted and runoff much faster then expected (or is normal) over the past three months, thanks to a very warm and dry spring. So despite a 90% of normal peak snowpack the actual runoff has been just 71% of normal for the northern Sierra, 77% of normal for the central Sierra, and 63% of normal for the southern Sierra. This means that the reservoir levels are likely to fall much faster than usual over the course of the summer, especially if most water conservation efforts are abandoned. What is still a big question mark, however, is how generous water distribution will be for the agricultural industry, which, of course, is by far the greatest consumer of water resources in the state.

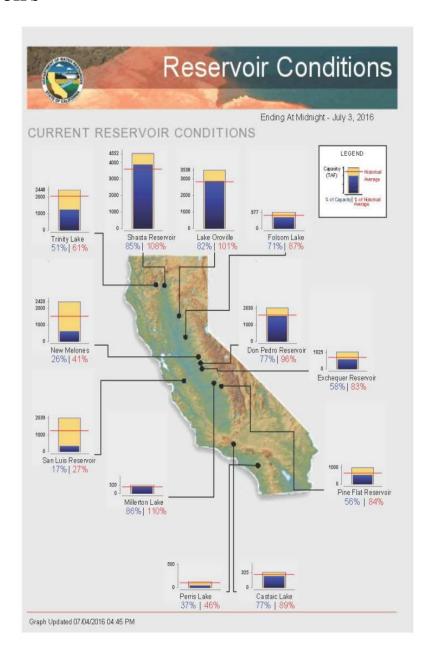


The above graphic of the PMDI (Palmer Drought Index) illustrates just how prolonged the drought in California has been and how far it still has to go before the drought can be said over. Source: NWS Climate Prediction Center.

The reality is that the drought is far from over and its effects will be far reaching: a recent survey has found that at least 66 million trees have died in the Sierra Nevada alone as a result of the now five year-long drought, portending a potentially catastrophic fire season ahead. The El Nino of this past year (which only brought a normal season of rain and snowfall) has transitioned to a La Nina pattern which may portend a drier than average winter this year and next (although not necessarily, see <u>Jan Null's excellent analysis of the affect La Nina has on U.S. precipitation anomalies here.</u> Even if the

coming winters bring normal precipitation to California, water conservation will remain necessary for the foreseeable future as the state's population continues to grow and the aquifers in the Central Valley continue to drop. Furthermore, as this <u>Stanford University report published last year</u> points out, warming temperatures as a result of AGW are likely to increase the frequency and intensity of drought impacts in California going into the future. Even if precipitation is normal the warming temperatures are likely to result in diminished snow accumulations in the Sierra Nevada with earlier spring melts thus also diminishing the state's so-called 'water bank.'

The Reservoirs



The Wildfires

Cal Fire says it has responded to more than 2,400 wildfires in California so far in 2016. The Erkskine, in Kern County, alone, is now at 50,000 acres. Two weeks ago the total acreage for the year was 20,000. Now we are above 70,000 acres.

Feature

President John F. Kennedy was the last President who actually built the nation, creating, as he often said, a future for the next generations, a future that those of us who are building that future will not see. Kennedy lived the idea of the Preamble of the U.S. Constitution:

We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

The legacy of his Apollo Project to put a man on the Moon, and return him safely to Earth, continues to provide the new technologies and even the daily gadgets that surround us today. Though the vision Kennedy expressed as the mission for NASA has been severely damaged by the destructive policies of the past 50 years (and especially by Obama), the arrival of the satellite Juno at Jupiter on July 4 demonstrates still what the nation is capable of doing.

Less known to most is the commitment of President Kennedy to ensure the nation's water for the future.

Every Member of Congress, everyone in the executive branch from the President on, in the field of national resources, has to plan during their period of administration or office for the next generation, because no project that we plan today will be beneficial to us. Anything we begin today, is for those who come after us. And just as those who began something years ago make it possible for us to be here, I hope we'll fulfill our responsibility to the next generation that's going to follow us."

—John F. Kennedy,

Pueblo, CO August 17th, 1962

The video, "JFK Speeches Toward a Nation Wide TVA," was put together by LaRouche PAC, and presents to you the memory of JFK, by means of six speeches on the subject of national resources, with focus on water projects. John F. Kennedy here will help you remember, through these films, a legacy which is your own, even if you are unaware of that fact.

https://www.youtube.com/watch?v=TP8xpevlLNE

1 hour 27 minutes

"When we are inclined to take these wonders for granted, let us remember that only a generation or two ago all the great rivers of America, the Missouri, the Columbia, the Mississippi, the Tennessee, ran to the sea unharnessed and unchecked. Their power potential was wasted. Their economic benefits were sparse. And their flooding caused an appalling destruction of life and of property. Then the vision

of Theodore Roosevelt was fulfilled by Franklin Roosevelt, and to demonstrate how important this is as a national issue, two distinguished American Presidents from New York State saw how essential it was to the Nation and New York State to develop the resources of the West. And as a result this Nation began to develop its rivers systematically, to conserve its soil and its water, and to channel the destructive force of these great rivers into light and peace. And today, as a result of this, the face of this Nation has been changed. Forests are growing where there was once dirt and waste. Now there is prosperity where our poorest citizens once lived. If there is one outstanding story among all this which indicates the kind of progress we can make working together, it's the story of the REA, and of Sam Rayburn of Texas, and Franklin Roosevelt of New York, and George Norris of Nebraska."

— President Kennedy, Oahe Dam, 1962

In California, President Kennedy inaugurated the building of the *San Luis Reservoir* on August 18, 1962. Though this video is a part of the longer one above, I include it here for those in California, or elsewhere, who would like to use it.

President John Kennedy and California Water-- San Luis Reservoir https://www.youtube.com/watch?v=oOd4m0fCJ0s



San Luis Reservoir