

California Drought Update

For June 2, 2016
by Patrick Ruckert

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A Note To Readers

California's primary election occurs just a few days from now, so I suppose something should be included on that “important” event here, at least something relevant about who or what may be running the nation starting next January. I may not have written it in any of my reports thus far, but I have often said this year that, there is nobody running for President who is qualified to hold that office. Let me repeat that so I am not misunderstood in what more I have to say: There is nobody running for President who is qualified to hold that office. Maybe I should underline it too, or put it in italics. So, with that out of the way, I'll comment on how in the hell we, as a nation, are in this predicament, and use that theme to get back to our subject-- the drought and water.

A comment by *Families Protecting the Valley* a few days ago was headlined, “Trump Is Only Hope,” and included this statement, “Donald Trump may or may not become a good or great President. But, we do know this: he's the only one who says he'll fix the problem.”

Is that what we have been reduced to, reliance on someone who promises to fix the problem, when we know damn well that not even the President, by himself, can accomplish such a task?

I think I have addressed this at least 50 times in the almost two years I have been writing this weekly report. This time I'll put it this way: If you do not know what the war is about, you may win a battle, but you are sure to lose the war. You may win a cheap victory, which changes nothing fundamentally, once in a while, but a cheap victory, like a cheap wine, will give you one hell of a hang-over.

Until Americans change not so much what they think, but how they think, and they improve their short-term memory capability, they will have no power to once and for all remove the British and Wall Street determination of virtually everything of importance to the future of the nation. It might help for us to recall that in 2008, when the Congress passed the \$800 billion bail-out Wall Street hand-out, you probably were a little upset. Even Congressman Brad Sherman of California said, at the time, that Congress had been threatened with Marshall Law if they did not pass it.

Sherman's warning was right, as far as he went. But, to put it bluntly, we have been living under a form of mental slavery, a dictatorship over the mind, since the Saudi-British attack on this nation on September 11, 2001. That is why, to break this enslavement, the 28 classified pages of the Congressional report on that terror attack must be released. More on this is available at:
<https://larouchepac.com/28pages>

Further, as I have often stated, the first action required to reverse the collapse of the nation's physical economy and infrastructure is the restoration of the Glass-Steagall banking law, which will end all bank bailouts, and provide the opening required to return to a Hamiltonian national banking and credit system to provide the funding for great projects once again.

That was how a partnership of the Federal and State government provided the foundation for building both the Central Valley Project and, later, the State Water Project; the projects which provide water for most of the state's population.

Finally, on this topic is a quote from Lyndon LaRouche in 1985, which might address some of “victimization,” environment that dominates virtually every sector of the American population today:

"We always blame somebody else. Now, the job of a leader is not to blame leaders. We can point out some are bad, some are defective, some are utterly immoral, some are barely human. But the problem lies in the people, not in the leaders. The problem, often, of oppression, lies in the oppressed. Because they will not accept any proposition that is not consistent with the assumption that they must remain the oppressed."

Below you will find a report on one article on the response of the farm sector to the candidates. With that we shall move on.

In drought news this week, in addition to posting what it looks like today from the U.S. Drought Monitor and the Reservoirs Condition graphic, we have some excerpts from an article that explains to anyone who can still reason why the Central Valley is being screwed on water. Related to that is a projection of what the losses to agriculture will be this year.

Our feature this week will return us to the 1930s and the creation of the Central Valley Project. It is the kind of policy, determination and a “living in the future” mentality that should define us today.

The Drought Monitor and the Reservoirs

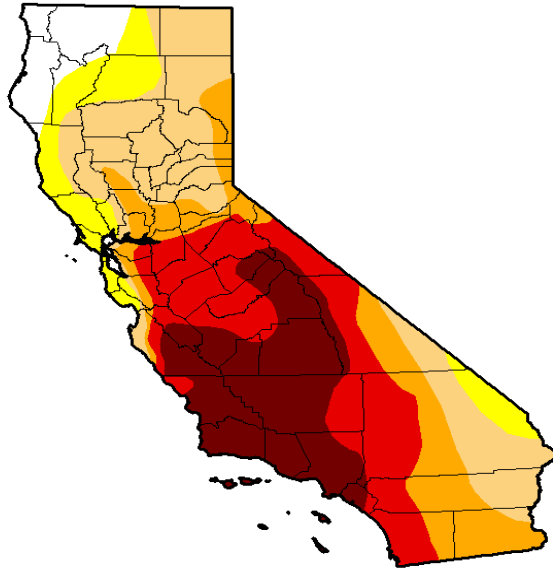
Here we are in the first week of June and the Central Valley and Southern California are recording above 100 degree temperatures. That kind of heat dries things out quickly. And with the rain we did receive this past winter, much of the state saw the growth of plenty of new fuel for the wild fires to come.

The U.S. Drought Monitor for May 31 shows that the state continues a slow moderating trend of drought; very slow, and I forecast that that trend shall end about now. Yet, compared to one year ago when “severe drought” covered 99 percent of the state, today it is only 59 percent. But, we cannot forget, and I keep repeating myself on this one, 21 percent of the state is in “exceptional drought.” Until July, 2014 not even one percent of the state had ever been in the “exceptional drought” category.

So, here is the U.S. Drought Monitor:

U.S. Drought Monitor California

May 31, 2016
(Released Thursday, Jun. 2, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	6.08	93.92	83.91	59.02	42.99	21.04
Last Week 5/24/2016	5.50	94.50	86.39	61.00	42.99	21.04
3 Months Ago 3/6/2016	0.43	99.57	95.13	82.66	60.86	38.48
Start of Calendar Year 1/22/2015	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year 8/29/2015	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago 6/2/2015	0.14	99.86	98.71	93.91	69.61	46.73

Intensity:



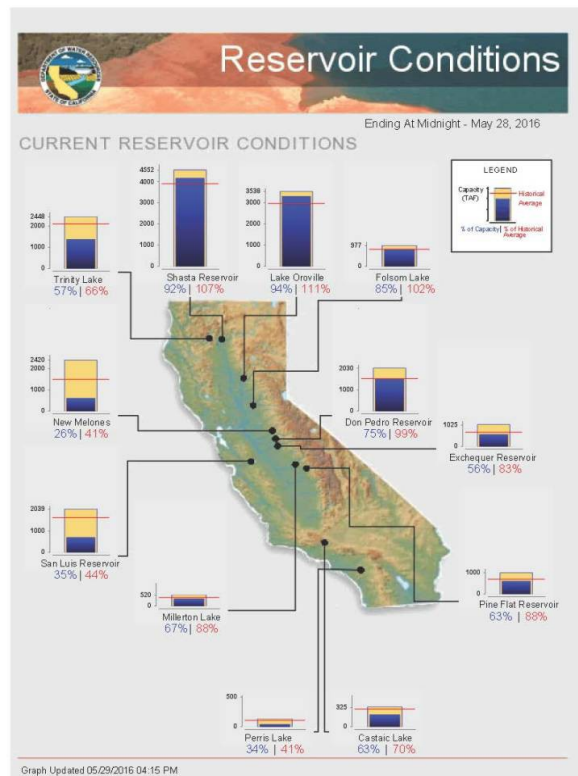
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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

What continues to stand out in the reservoir graph is the rapidly declining level of San Luis. It is now down to 35 percent of capacity. San Luis is the reservoir that is fed by both the Central Valley Project and State Water Project aqueducts. And it is the main source of water for large parts of Central Valley agriculture.



The Farm Sector and the Candidates: Not Much to Choose From

The agricultural oriented publication, *The Californian*, on May 26 had an article on the candidates, “Presidential race unclear for California agriculture.”

<http://www.thecalifornian.com/story/news/2016/05/26/presidential-race-unclear-california-agriculture/85016166/>

Here are some excerpts, which especially highlight the conflict between California farmers dependence on legal and illegal immigrants and Trump.

No doubt about it, California’s agricultural industry is acutely aware that a lot is riding on them in this year’s presidential election.

Trade agreements, workplace law, employee health insurance, immigration and food policies all are topics affected by the White House affecting farmers, ranchers and other businesses tied to the food raised in California — far and away the nation’s top state in agricultural production.

And normally this far in an election year, groups that include the California Fresh Fruit Association would be putting their support behind a particular presidential candidate believed to best represent the interests of farmers.

But that hasn’t happened yet, despite California’s Presidential Primary Election being less than two weeks away.

“I am disturbed that this is the best we have of candidates,” added Manuel Cunha, Jr., president of the Nisei Farmers League, a trade association representing farm owners across California.

But immigration is another major issue for the industry, as many farmers and ranchers depend on cheap labor from Mexico and favor immigration reforms that will allow workers to legally come across the border to work here and then go home.

And fears of getting caught in immigration raids here are keeping some workers from crossing the border, which has exacerbated the shortage of farm laborers here, Cunha said.

While Those North of the Delta Get 100%, the Westlands District Gets 5%

Waterdeeply.com on May 24 featured an opinion column, “Central Valley Project Users Can’t Get a Break,” by “Mike Wade, executive director of the California Farm Water Coalition, examines why water contractors in the San Joaquin Valley who rely on the Central Valley Project are set to receive only 5 percent of their requested allocation.” <https://www.newsdeeply.com/water/oped/2016/05/24/central-valley-project-users-cant-get-a-break>

Excerpts follow, but the entire column is worth reading:

Water supplies are better than normal in Northern California, so why is it that Central Valley Project (CVP) water users can’t get a break? The water users in question are the farms and ranches in the San Joaquin Valley that rely on the federal Central Valley Project water conveyance system. They are set to

receive a meager 5 percent of their water supply this year.

It's the middle of May and rainfall in the northern Sierra is currently 111 percent of normal. Lake Shasta is 93 percent full and 108 percent of its year-to-date average. By all accounts there is sufficient water in the system operated by the federal government to meet the needs that the CVP was designed to serve – irrigation and municipal water supplies. But the priority for the project in the last two decades has shifted from providing water for people to being geared toward environmental demands. This almost complete reallocation of California's federal water supply has reached a point where the people paying for the project are no longer able to rely on it to serve their needs.

The ripple effect reaches an area in excess of 3 million acres (1.2 million hectares) – more than one-third of the irrigated cropland in California. In contrast, California's other large water supplier, the State Water Project, is delivering a 60 percent allocation to its customers. Many other areas of the state are on track to receive 75– 100 percent of their normal water supply.

The newly styled CVP management impacts go far beyond the farms receiving the pittance of water being delivered to the San Joaquin Valley. The kicker is that without farmers paying for irrigation water the repayment of the construction costs of the CVP falls behind, and operation and maintenance (O&M) costs escalate for other users within the CVP. Federal water users in Northern California have seen O&M prices more than double because they end up carrying a greater share of those costs when water supplies are shorted elsewhere in the state.

What is occurring is a slow-motion train wreck. Much of the blame can be placed on federal fishery managers overseeing the Sacramento-San Joaquin Delta with a myopic view of what constitutes effective protection for Chinook salmon and delta smelt.

Another Multi-billion Dollar Loss for Agriculture Forecast for This Year

Following the last two years of between \$2-3 billion lost to agriculture by drought, *prnewswire* published this article, “California Agricultural Producers Face Further Economic Losses as Drought Conditions Persist, on May 26. Some excerpts follow.

<http://www.prnewswire.com/news-releases/california-agricultural-producers-face-further-economic-losses-as-drought-conditions-persist-300275974.html>

Growers expected to fallow up to 350,000 acres across state

DENVER, May 26, 2016 /PRNewswire/ – Despite nearly normal rainfall and snowpack during the 2015 – 2016 rainy season, California farmers and agribusinesses could face up to \$1.5 billion in losses due to persistent drought conditions, according to a new report from CoBank. The drought's lingering effects will lead to another round of water restrictions for producers through the remainder of the growing year and beyond.

Feature:

The Central Valley Project: How the Government Made Possible All That You Have Today

The following are excerpts from my 2013 report: “[The History of the California Water Management System](#).” (Originally titled: “The California Water Crisis, the California Water Management System,

and the Solution—NAWAPA”). The full report is here:

<http://amatterofmind.org/ca-drought-pdf/History-of-the-California-Water-Crisis.pdf>

California was, forty years ago, the most productive economy in the world. That economy was mainly built over an earlier forty year period, beginning in the 1930s. It was the government, both Federal and State, that did that. The last forty years of increasing deregulation, environmentalism and the insane idea that government is the problem, has produced the disaster the state and the nation are in today.

As the major projects, the Central Valley and State Water projects, were being built, millions of people were moving to California because it was the land of opportunity and production. In the World War II years, Los Angeles became the second most industrialized city in the country. California became a major center for the auto, steel, rubber and aerospace industries. In those same years, in California, machine tool production increased by 1000%.

The higher education system of the state was massively expanded to produce the trained and skilled workers that did the production. And anyone could go to college for just a few dollars a year.

Today that is all gone and California relies for its tax base on a shrinking productive work force at low-wage jobs. Why does the state have a perpetual budget crisis, despite cutting \$102 billion from the state budget since 2002? One hint is the following: Between 2000 and 2009 the state lost 471,000 manufacturing jobs.

A near 40-year building program, centered on great water projects, begun in 1935 by President Franklin D. Roosevelt and completed in 1972 by Governor Edmund G. “Pat” Brown, that transformed California from a relative backwater of the nation into the seventh largest economy in the world and the powerhouse of scientific and technological progress for humanity.

The beginning of what would become the Central Valley Project and the State Water Project was in 1919, when Robert Marshall, formerly of the U.S. Geological Survey, proposed the construction of a large storage dam across the upper Sacramento River that would: 1) allow the diversion of water into large irrigation canals running along the west and east sides of the the Sacramento Valley and southward into the San Joaquin Valley; 2) ensure a minimum flow in the Sacramento River for navigation and preventing the influx of sea water into the delta region; and 3) generate large quantities of hydroelectric power that would pay for the overall development. Marshall's proposal, in a general sense, is the essence of what would become the Central Valley Project of the 1930s.

A 1923 report by the California State Engineer of the state's water resources and potential, provided an extensive hydrographic study of precipitation and stream-flow patterns, and presented data regarding more than 1,000 possible reservoir sites in the state.

A follow up report by the State Engineer in 1927 became the basis for the first state water plan in 1929, and included many elements of the soon to be Central Valley Project, which the state committed itself to building in 1933. (This was the Depression and the state was broke). The state government then requested from the FDR administration federal funding for the Project, which was approved in 1935, and the project became a “Federal Reclamation Project,” under the Bureau of Reclamation. Construction began in 1938, and was largely completed by 1951, though some further additions were built into the early 1970s.

The Central Valley Project Gets Underway

The state initiated the project in 1933, and the Federal Government, at the state's request, took it over, and the Bureau of Reclamation built it, beginning in 1935. At President Roosevelt's insistence, the project required that all hydroelectric power generated by the project would be owned by the government. That is, public, not private power, would ensure that the full benefits of the project would be to the population, not private financial interests.

The Central Valley Project provides water to 3.1 million people and irrigates over three million acres, delivering over 7 MAFY.

The project consists of more than 40 dams and reservoirs, 25 canals that cover more than 2,000 miles, and 28 hydroelectric plants. The main elements of the project were completed in 1951.

The Central Valley Project is actually divided into three sections: one on the Sacramento River, the second is the Delta, and the third is on the San Joaquin River.

Shasta Dam and Reservoir



Shasta Lake and Trinity Lake are formed by a pair of dams in the mountains north of the Sacramento Valley. Shasta Dam and Lake are the largest structures in the system; the lake holds 4.5 million acre feet. The Shasta Dam power plant produces 680,000 kilowatts of electricity. Trinity Dam and Trinity Lake creates the state's third largest reservoir, holding more than 2.4 million acre feet.

Water from these reservoirs is released into the Sacramento River, which then flows to the Delta. Dams on the American River, a tributary of the Sacramento, and its tributaries, include the Folsom, the Nimbus and Sly Park.

Water from Shasta, and the other reservoirs in the Sacramento River system, flows to the Delta, the second section of the Central Valley Project. The water travels through the Delta to the C.W. Bill Jones Pumping Plant, which raises it into the Delta-Mendota Canal. The water then flows 117 miles southwards to the Mendota Pool on the San Joaquin River. Then it is pumped into the San Luis Reservoir. The Delta-Mendota Canal is unique in the sense that man has caused a river to run backwards, as the water from the north flowing San Joaquin is now flowing south in the aqueduct. At

the San Luis Reservoir the Delta-Mendota Aqueduct joins with The California Aqueduct of the State Water Project, and heads to Southern California.

A major component of the Central Valley project was the development of the San Joaquin River system, including the construction of Friant Dam on the San Joaquin River, northeast of Fresno, built between 1939 and 1944. Water from the Friant Dam is diverted into two canals, the Madera Canal (to the north) and the Friant-Kern Canal (to the south), which flows 154 miles south to Bakersfield, and irrigates the whole eastern side of the San Joaquin Valley. Both of these canals were completed in 1951. The Madera Canal travels north from the dam to the Chowchilla River. Together, these canals provide irrigation water to some 837,000 acres in the San Joaquin Valley.

The Central Valley Project

