California Drought Update

For May 19, 2016 by Patrick Ruckert

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A Note To Readers

Long suspected, but also kept behind the curtain, has been the intent of the environmentalist organizations and their allies in the regulatory agencies of the Brown administration to shut down agriculture in the Central Valley and to break the water rights structure of the state. This week's report features their sort of "coming out party" to begin to explicitly make that intent public. "Two Million Acres in the San Joaquin Valley to Be Fallowed" is the title for this report immediately below this introduction. That is followed by reports on the two new directives from the state water agencies.

The US Drought Monitor and Reservoir graph come near the end of our report this week. This section includes some detailed discussion of the relation of the snowpack to the reservoirs, noting that with an earlier snow melt a disconnect is developing between water availability and water demand in the later months of the summer.

The conference report below on "Looking to the Source: The Sierra Nevada Watersheds" illustrates the following question:

What Time is it?

On the *LaRouche PAC Policy Committee Show* on May 16, 2016, Lyndon LaRouche called our attention to this question. When we compare the thinking of those who brought real progress to our nation, like President Roosevelt's TVA Project, the Central Valley Project and the Grank Coulee Dam, and how quickly those projects were begun and completed, and you compare that to today and how it is almost impossible to build anything, we understand something about time more than the movement of the clock. Time moves rapidly and time moves slowly, and sometimes it moves backward; some rapidly create a new future; and some send us to a previous more backward existence.

LaRouche's words:

Well, the point is, one thing you've got to emphasize, is that there's an apparent common clock of history; and there are other clocks of history which are not common. For example, you have great periods of development for relatively short periods of time in the background of history. So therefore, the order of things is not clock time; the order of things is determined on the basis of the rank of progress, which each part of an historical unit expresses.

For example, that's what the situation is. The United States today, for example, the people of the United States today are stupid and backward relative to what my generation; exactly so. So, the clock time is not clock time; it's development time. You get asymmetry among different kinds of economy. For example,

different parts of Eurasia, they're different; they don't have the same time, they don't have the same ideas. They don't have the same perspective.

So, the history of mankind is based on great movements and great cultural movement in human existence; and the others are backward.

The full program is here: <u>https://www.youtube.com/watch?v=tjiCWkhZIUs</u>

Illustrating LaRouche's point that, "For example, different parts of Eurasia, they're different; they don't have the same time, they don't have the same ideas. They don't have the same perspective," is this report from *The Hans India*. Mankind can, when he chooses to do so, move mountains, and rivers.

India to divert rivers to tackle drought

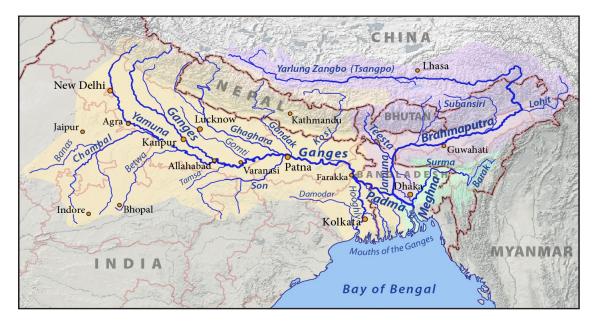
May 19, 2016 (EIRNS)-- India is heavily dependent on monsoon rains which have been poor for the past two years. India is set to divert water from its rivers to deal with a severe drought, a senior minister has told the BBC. Water Resources Minister Uma Bharti said transferring water, including from major rivers like the Brahmaputra and the Ganges, to drought-prone areas is now her government's top priority.

The Inter Linking of Rivers (ILR) has 30 links planned for water-transfer, 14 of them fed by Himalayan glaciers in the north of the country and 16 in peninsular India.

Environmentalists have opposed the project, arguing it will invite ecological disaster but the Supreme Court has ordered its implementation. 'First in India's history' "Interlinking of rivers is our prime agenda and we have got the people's support and I am determined to do it on the fast track," Bharti said. "We are going ahead with five links [of the rivers] now and the first one, the Ken-Betwa link [in Uttar Pradesh and Madhya Pradesh] is going to start any time now.

"And then we will have the Damnaganga-Pinjal interlink which will sort out the Mumbai drinking water facility." Bharti said the river-linking project would be the first in Indian history since independence in 1947. There were also other projects aimed at supplying water for irrigation and drinking in the next few years and the ILR was a long-term scheme, she added.

To get an idea of the scale of this project, look at a map of these two rivers:



Two Million Acres in the San Joaquin Valley to Be Fallowed

Last week's May 12 report included an item on an article by Jay Lund of the *UC Davis Center for Watershed Sciences*, in which Lund presents seven forecasts for the future of water in California. http://amatterofmind.org/ca-drought-pdf/20160512%20California%20Drought%20Update.pdf

Lund's second forecast is that "*The San Joaquin Valley will have less irrigated agricultural land*." Because of urbanization and other uses some agricultural land is taken out of production each year. That is common knowledge. But, that is not what Lund is talking about. If his article did not specify how much agricultural land would be fallowed, George Skelton in the *Los Angeles Times* on May 12 does, and he quotes Lund as his authority! Skelton is a long-time abuser of agriculture and farmers, and he seems to really enjoy doing so. His article, "So the drought has you watering less? It won't matter much," is typical Skelton. <u>http://www.latimes.com/politics/la-pol-sac-jerry-brown-drought-edict-20160512-story.html</u>

Following his usual outright lies or distortions, he then praises Governor Brown's recent executive order of May 9, which is also covered in my May 12 report, referenced above. Here is the governor's executive order of May 9: <u>https://www.gov.ca.gov/docs/5.9.16_Executive_Order.pdf</u>

Brown did, however, pester farmers a little in his executive order.

Irrigation districts serving at least 25,000 acres currently are required to develop drought management plans and monitor groundwater levels, reporting the numbers to Sacramento. The governor's new edict lowers the acreage threshold to 10,000, covering an additional 1 million acres of farmland.

Then Skelton drags in Mark Cowin, the director of the state Department of Water Resources, and perhaps sets him up. This is where Jay Lund then lets the cat out of the bag: Two million acres of irrigated San Joaquin Valley agricultural land is targeted to be fallowed:

But there's no enforcement of the current regulations.

"There should be," says Mark Cowin, director of the state Department of Water Resources. He says enforcement legislation will be proposed by next year.

"What we're trying to do is see how efficiently agriculture uses water," Cowin says. "We're staying away from mandating land use and types of agriculture."

But agriculture is going to be constrained anyway eventually — by nature and by groundwater regulations — predicts one expert.

"There's not enough water," says Jay Lund, director of the UC Davis watershed center. "It's inevitable."

Lund says less water will be exported south from the deteriorating Sacramento-San Joaquin River Delta. Groundwater is being depleted and contaminated. Seas will rise because of climate change, pushing more saltwater inland. Less snow will fall in the Sierra. San Joaquin Valley soil will become more toxic because of irrigation runoff and imported salty water. And urbanization will eat up cropland. (emphasis added here and below)

He says up to 2 million of the San Joaquin Valley's 5 million irrigated acres will need to be fallowed.

"That looks right to me," Cowin says.

Here is the comment on Lund's two million acres to be fallowed from *Families Protecting the Valley* on May 13. <u>http://familiesprotectingthevalley.com/news.php?ax=v&n=5&id=10&nid=602</u>

There are about 5-million acres in the San Joaquin Valley, but a million-plus are in the North Valley where they are in better shape with water. So, the 2-million acres will come out of the Central and Southern Valley where there are about 3&1/2 million acres. So, over half that land will have to be fallowed. Like Cowin says, "That looks right to me."

If this is all true, it means what we've been told over the years is way off. Farmers probably thought they might lose 10% of the land use, but did it ever occur to anyone that it would be over 50%? "That looks right to me."

Now, I think, if we put together a picture which includes Lund's proposals, the new Department of Water Resources regulations for groundwater management plans (which are covered immediately below), and the warning issued last week in regard to the challenge to water rights law being mooted in regard to Nestle's bottling operations (see my report from May 5: <u>http://amatterofmind.org/ca-drought-pdf/20160505%20California%20Drought%20Update.pdf</u>), then, some alarm bells should be going off.

Finally, if anyone has any doubt that the subject of water rights is not the bullseye some are aiming at, then this article from the *Fresno Bee* on May 8, "Dan Walters: Water rights will be next big California fight," should dispel that idea. Here are some excerpts:

http://www.fresnobee.com/news/politics-government/article76440537.html.

It also reflected one of the most vexing aspects of California's perpetual conflict over water – a complex thicket of water rights dating back to the 19th century that's fundamentally based on seniority.

As summarized by the Public Policy Institute of California, "Those who own land along a river or who staked early claims on that water have top priority. Those with rights established before the first state water administrative system was created in 1914 are subject to less direct oversight than those with more recent rights. In times of shortage, junior rights are curtailed and right-holders must either reduce their water use or rely on water from other sources."

The farmers on the West Side of the San Joaquin Valley who see the greatest curtailment of deliveries lack the rights that earlier agricultural regions obtained.

The drought, coupled with fears about the effects of climate change on California's future water supplies, has already compelled California to rethink aspects of its water situation long thought to be politically untouchable.

It's led to the first system for regulating use of underground aquifers, which supply about a third of California's water, and seems to be reducing opposition to creating more reservoirs to capture winter rains.

California's next water policy frontier, it would seem, is revising its complex structure of water rights, either directly or indirectly.

The <u>PPIC report on water policy reform</u>, released last year, notes that California already has laws on the books, rarely invoked, that might allow regulators to abridge even the most senior water rights on grounds of public health or safety or environmental damage.

Two New Regulatory Edicts From the State

It should surprise no one that the Brown administration, in order to avoid actually creating a future for coming generations by unleashing the creative power we human beings, have once again acted to shift the deck chairs on the Titanic. Regulating and conserving our way to a "less is more" tomorrow, which should be obvious to anyone, never works. We must create new water supplies, just as did the nation and the state did with the great Central Valley Project and the California State Project. This time with projects like the North American Water and Power Alliance and the President John Kennedy project of building nuclear-powered desalination plants. But, I repeat myself, and regular readers of this report have heard it all before, so I'll leave that here for now.

Here are the two new edicts:

First the Banks, Now the State Water Board: A 'Stress Test' Approach to Water Conservation Regulation

During the past year of so, in order to avoid a return to the Glass-Steagall banking law (1933-1999), which made it illegal for banks to speculate with your deposits and prevented any major banking crisis for those 66 years, the Federal Reserve and the Obama administration has adopted a cute "regulatory" procedure called a "stress test," in which banks evaluate their ability to survive another bank melt-down without having the tax payers bail them out.

Now, the California Water Board has adopted their own "stess test" that mandates urban water suppliers act now to ensure at least a three year supply of water to their customers under drought conditions.

While the banks have virtually all failed their stress tests, perhaps the Water Board can do better.

Of interest is the *Sacramento Bee* coverage of the new regulation on May 18, "California lifts tough statewide water conservation rules," by Phillip Reese and Ryan Sabalow. Some do not like this measure at all. You can read it here: <u>http://www.sacbee.com/news/state/california/water-and-drought/article78513297.html</u>

Here are a few excerpts from the State Water Boards directive of May 18. <u>https://mavensnotebook.com/2016/05/18/this-just-in-state-water-board-adopts-stress-test-approach-to-water-conservation-regulation/</u>

May 18, 2016

From the State Water Resources Control Board:

The State Water Resources Control Board today adopted a statewide water conservation approach that replaces the prior percentage reduction-based water conservation standard with a localized "stress test" approach that mandates urban water suppliers act now to ensure at least a three year supply of water to their customers under drought conditions.

Recognizing persistent yet less severe drought conditions throughout California, the newly adopted <u>emergency regulation</u> will replace the Feb. 2 emergency water conservation regulation that set specific water conservation benchmarks at the state level for each urban water supplier. Today's adopted regulation, which will be in effect through January 2017, requires

locally developed conservation standards based upon each agency's specific circumstances.

These standards require local water agencies to ensure a three-year supply assuming three more dry years like the ones the state experienced from 2012 to 2015. Water agencies that would face shortages under three additional dry years will be required to meet a conservation standard equal to the amount of shortage. For example, if a water agency projects it would have a 10 percent supply shortfall, their mandatory conservation standard would be 10 percent.

DWR Regulations for Groundwater Management Plans

Here are some excerpts from the Department of Water Resources announcement of May 18: <u>https://mavensnotebook.com/2016/05/18/this-just-in-dwr-regulations-to-guide-local-sustainable-groundwater-management-plans-approved-by-california-water-commission/</u>

May 18, 2016

From the Department of Water Resources:

High- and medium-priority groundwater basins identified as critically over-drafted must be managed under groundwater sustainability plans by January 31, 2020. All other high and medium priority basins must be managed under a groundwater sustainability plan by January 31, 2022 or an alternative to a plan by January 1, 2017. DWR offers technical and financial assistance to help local agencies develop their plans.

From the outset, the SGMA was intended to recognize that groundwater is best managed on the local level and that each groundwater basin has unique characteristics and challenges. An inherently technical and complex task, managing groundwater requires regulations that can address the goal of sustainability across such a geologically and hydrologically diverse state as California.

These regulations recognize the two key principles of the groundwater legislation. First, that groundwater is best managed at the local or regional level, and local agencies should have the tools they need to sustainably manage their resources. Second, when local or regional agencies cannot or will not manage their groundwater sustainably, the state will intervene until the local agencies develop and implement sustainable groundwater management plans.

You Depend on These People for Your Water

This report may be a little lengthy, but to do justice to the topic this is a brief as I can make it.

On May 18 about 75 people gathered for a conference in Auburn, CA; a gathering of some of the people that run the state's water districts; the people who ensure that water flows when you turn on the tap and that farmers get the water they need to grow your food.

"Looking to the Source: The Sierra Nevada Watersheds," sponsored by the *Mountain Counties Water Resources Association*, was designed to deepen the knowledge and cooperation of the California water management system for those who do the managing. This was not the usual gathering of the Brown administration water regulators, nor their associated environmentalist organizations. These are people who we used to proudly refer to as the producers. And since most of these people are elected by those they serve, what was striking was their passionate commitment to make the system work despite the drought; despite the state and federal governments' commitment to save a few fish and to hell with the well-being of millions of people.

I will not attempt to report on all the presentations, nor the panel discussion held in the afternoon, but I hope to at least give the readers here a sense of the tone almost universally presented. In addition, I'll report on some of the ideas and important points presented.

Here is a list of the speakers and panelists:

- Tom Birmingham, General Manager, Westlands Water District (Afternoon Panelist)
- Phil Williams, Deputy General Counsel, Westlands Water District (*Morning Presenter and Afternoon Panelist*)
- Ara Azhderian, Water Policy Administrator, San Luis & Delta-Mendota Water Authority
- Andy Fecko, Director Resource Development, Placer County Water Agency (Morning Presenter)
- Andrew Fecko, Director of Resource Development, Placer County Water Agency
- David Guy, President, Northern California Water Association (Afternoon Panelist)
- Brent Hastey, Director, Yuba County Water Agency & Vice President, ACWA
- The Honorable Phil Isenberg, Retired Keynote Lunch Speaker
- Einar Maisch, General Manager, Placer County Water Agency (*Afternoon Panel Moderator*) (*Afternoon Panelist*)
- Jason Peltier, General Manager, San Luis & Delta-Mendota Authority (Morning Presenter and Afternoon Panelist)
- Devan Upadhyay, Water Resource Manager, Metropolitan Water District of Southern California
- James Watson, General Manager, Sites Project Authority (*Morning Presenter and Afternoon Panelist*)

An article by John Kingsbury of the Mountain Counties Water Resources Association published on April 27, 2016 in the *Daily Digest*, I think, summarizes the tone of the conference. Here is an excerpt: <u>http://mountaincountieswater.com/2016/04/my-turn-on-water-management/</u>

My Turn – On Water Management!

Also, it's disheartening to see the state's largest storage reservoirs, Shasta, Oroville, and Folsom flush millions of gallons of fresh water to the ocean. In doing so, the state and federal agencies robbed agricultural interests and homes in both northern and southern California of water that could be put to beneficial use. Rather than wasting the water, state and federal agencies should implement projects to capture and store winter's excess flood flows as a water "bank" for later use in the summer and fall. Of course, others will argue that this water is more appropriately needed for fish and to flush the Delta. Long-term water management is more than flow for fish.

Now for some odds and ends gleaned from a very interesting day.

Phil Williams opened the conference with a short version of the history of water management in California, putting all that was to come in its proper context. Williams stressed that the system must work for the entire state or it will not work at all. Representing the Westlands Water District he reported on how his district had received zero percent allocation in 2014 and 2015, and has been informed that it will receive five percent allocation this year. He noted that that five percent will not actually happen because the regulatory structures will, in the end, not be able to deliver it.

Ara Azhderian attacked the entire water provision structure now in place run by the state Water Board. He made the point that given the massive flow of water through the Delta earlier this year but almost no water

pumped to the reservoirs, demonstrated that the system has divorced hydrological capability from actual pumping. The Water Board, he said, has a myopic view of saving fish regardless of the consequences. He also demonstrated that the board's actions have no scientific foundation.

Andrew Fecko spoke on climate change and water, making the important point that if there is climate change the way you prepare for it is the same way you prepare for drought-- build the storage you will require and understand that denying surface water to farmers prevents their irrigation action from restoring the acquifers.

The most polemical of the speakers was Jason Peltier, who hammered on what he called "a failed regulatory regime." And, he said, to change this we need a revolution.

Devan Upadhyay, representing the agency that provides water to 19 million people of southern California also went after the Water Board and other agencies for having a myopic view that saw their actions only benefiting fish, but being oblivious to the cost to agriculture and the population.

The lunch time speaker was Phil Isenberg, a fifty year politician and commissioner for various water related boards, angered some of the speakers with his off-hand remark that the state has done well in the drought since no had died. He dismissed the billions in financial losses and the tens of thousands of jobs lost as not serious.

He was lucky he left immediately after speaking, for, among others, Tom Birmingham especially went after him, stating that thousands have had their lives destroyed and thousands more are suffering diseases due to excessive dust, among other serious results of the drought. Birmingham also challenged Isenberg's statement that we have to adjust to a static water supply and a fixed water resource. Nothing is fixed with resources, he said, that is a false choice. He concluded by warning that the regulatory structure and those who run it, like veterans of the Natural Resources Defense Council, are attempting to divide us; creating conflicts between water districts and conflicts between agriculture and urban areas. These environmentalists, he said, do not care about the environment. He was implying that what they want is to shut down agriculture in the Valley.

Devan Upadhyay pinned the broken system on the NGOs, meaning environmentalist organizations that have taken over the regulatory agencies.

James Watson made the point that the entire system of water management is unsustainable under the present policy paradigm, and that even just building the Sites Reservoir, which he represents, will not be enough.

One question from the audience on how can we get more water into the system was answered bluntly by Tom Birmingham. "Log the forests," he said. The extreme restrictions on logging has allowed such an overgrowth of trees that they suck up millions of acre-feet preventing that water from flowing into the surface water system. In addition, the practice has made forest fires larger and more destructive.

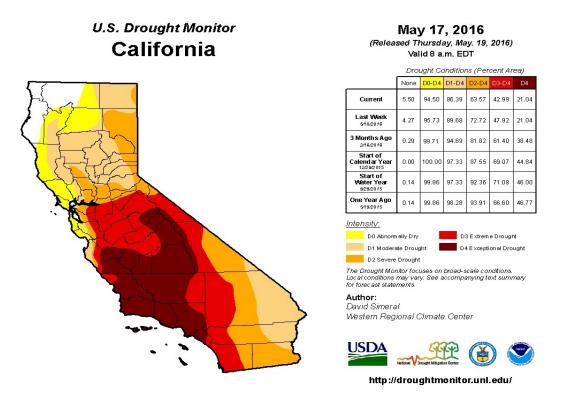
Drought Monitor and Reservoirs

The U.S. Drought Monitor this week shows a slight improvement in drought conditions in California, with a nine-percent reduction in the level of severe (63.5 percent) and a five-percent reduction in extreme (42.9 percent) drought. In February 2016, extreme drought covered 61 percent of the state.

Overall, 94.5 percent of California remaining abnormally dry, with 86 percent in moderate drought.

Exceptional drought is 21 percent this week. Exceptional drought, to remind everyone, means a region's precipitation, streamflow, reservoir storage, and soil moisture are in the 1 to 5 percent ranges of normal.

So with more than 70 percent of the state remaining in severe, extreme or exceptional drought, have no illusions, we will be back where we were last year.



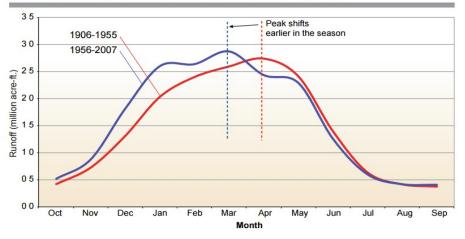
So, while the northern reservoirs are full, that will not last long since the Sierra snowpack is at just 33 percent of normal for this time of year. The earlier in the year melting of the snowpack means that there is a longer gap of time between peak runoff and peak demand.

This development is covered more extensively in an article by Monica Woods of *KXTV* on May 12, "Sierra snowmelt peaking earlier." <u>http://www.abc10.com/weather/sierra-snowmelt-peaking-earlier/187931002</u>. Here are some excerpts:

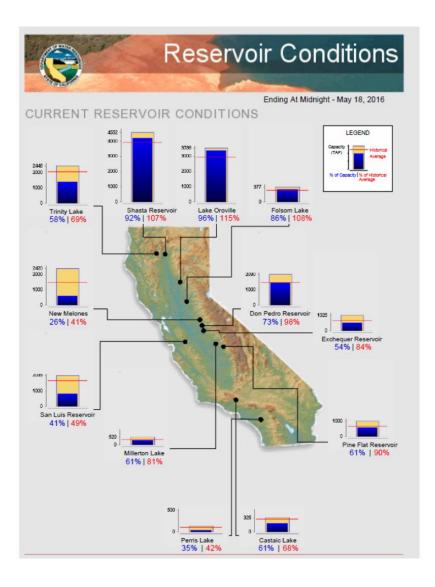
Snow in the Sierra is a great resource for water during the dry late spring and summer months. With a nice, steady snowmelt reservoirs get replenished as water is released to ease the dry conditions. Problems arise though when the peak runoff is well ahead of peak demand. This is the case again this year. A couple of warm weather stretches in March and April started the snowmelt earlier than normal. This led to earlier runoff into area reservoirs and forced DWR to release some of the water due to flood control regulations.

Since the "rain in Spain falls mostly on the plain," with a little bit of a different geographical result in California, the report from the *U.S. Drought Monitor* notes that, "In southern California, precipitation accumulations since the beginning of the Water Year have been below-normal, especially in coastal areas of Los Angeles, Orange, and Ventura counties where the percentage of normal precipitation is less than 50 percent for the Water Year."





California Department of Water Resources change in peak snowmelt runoff



From the California Department of Water Resources