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Recent Writings on California's Water Future

Will Funding for New Water Storage Be Hijacked at the Last Minute? by Tim Anaya

The effort to build more water storage in California just hit another setback.

The bureaucrats at the California Water Commission just released their scorecards for 11 proposed water projects from around the state. Their scorecard—which supposedly ranks their "public benefit" to California taxpayers—ranked two critical statewide water storage projects very low.

According to The Fresno Bee, the proposed Temperance Flat dam project near Fresno earned a zero score. Another important project, the shovel-ready Sites Reservoir project in Northern California, also received a low score. Temperance Flat would generate enough water storage to provide water for 2.6 million Californians for a year, while Sites would provide enough water storage for 3.6 million people.

It should come as no surprise that unelected state bureaucrats act without accountability to taxpayers. This happens all the time.

But throwing a wrench in the proposed funding for these two projects—potentially placing their construction in jeopardy—goes completely against the will of the voters.

California has neglected its water infrastructure for too long. We simply don't have enough water storage capacity in the rainier parts of the state to capture this water for the rest of the state.

Year after year, water bond proposals were bogged down at the Capitol not over partisanship, but over geo-

graphical differences. How you think about water in Sacramento is very different than how you think about water in Chico, Stockton, Fresno, Bakersfield, or across Southern California.

Finally – thanks to the leadership of then-Assembly Republican Leader Connie Conway (my former boss), Assemblyman Frank Bigelow, and others – a breakthrough occurred in 2014. Agreement was reached on a \$7.5 billion water bond proposal.

As part of the agreement, Conway and others made clear that the water bond must fund at least two large surface storage projects. That's why the final bond earmarks \$2.7 billion for above-ground storage, a figure which was calculated to ensure that the Sites and Temperance Flat projects would be able to secure funding to finance each respective project. This bipartisan bond was enacted with 77 votes in the Assembly. It was later overwhelmingly approved by state voters, who made a strong statement that they wanted to fund new above-ground water storage. Meanwhile, the funding has been stuck in neutral for more than 3 years now and this latest funding hiccup could jeopardize these projects entirely.

When the members of the California Water Commission take up this matter to decide which projects are funded later this year, they would be wise to remember the will of the Legislature and the voters and not take a misguided course that would threaten California's future health and economic vitality.

Water, Water, Everywhere, Nor Any Drop to Drink Excerpt from *Eureka: How to Fix California* by Arthur B. Laffer

Unfortunately, California's anti-market regulations are not restricted to the electricity market. For instance, California imposes a byzantine set of rules and pricing requirements on water that separate users' marginal costs from users' marginal benefits.

Economics 101 teaches us that under such a scenario the inevitable result is market inefficiencies followed by periods of shortages and surpluses—often precipitated by natural climactic variability. The continued "water crisis" that posits inevitable water shortages and laments the insufficient investment in the water infrastructure is simply the pre-ordained outcome from the same water regulations.

California consistently faces water crises and shortages. However, why anyone would describe California as having periodic water shortages is beyond us. The price of water is simply too low because government controls its distribution and price. The economics of water is the domain of politicians and bureaucrats. It's as simple as that.

Periodically, prolonged droughts will greatly diminish the water available to California. At the same time, California's population continues to grow. But just because demand grows while supplies will periodically contract doesn't warrant the moniker "shortage." If that name were appropriate then every market would always be in a perpetual state of shortage or surplus. It's price changes that keep markets in balance as Samuelson's parrot knows.

Higher priced water really would discourage waste and entice additional supplies such as desalinization. Price changes keeping demand and supply in balance are the essence of markets. California's problem is one of government interference not inherent water shortages. State and local governments have prohibited markets from doing what they do well—allocating scarce goods.

Even more to the point, California state and local governments are capable of controlling the price of water, but their ability to alter the weather is in considerable doubt. Framing the issue in terms of a shortage guarantees fuzzy thinking. One of my neighbors during the so-called shortage shouted, "How in the hell can there be a shortage? Every time I turn on my faucet water comes out just fine."

With water, California's state and local governments have already gone way too far, and by their actions, have guaranteed major trauma. We personally have nothing against alfalfa, rice, and cotton farmers—and presume the same is true for the average Californian. But, all too often during California's water crisis, government attempts to frame the issue in terms of one person's shower versus a farmer's flood irrigation. Class conflict is all but certain when the issue is framed in this manner. Government regulators, as smart and as fair as they may be, just don't hold a candle to free markets.

To minimize the damage from a prolonged history of abusive government interference in the water market, the State of California should forthwith:



- Charge all farmers, government agencies, and other water users the same price for water, no exceptions. Everyone should have the same incentive to treat water with the respect it deserves.
- The price of water should be raised such that the average price charged is initially set at five times the current average price. Such a dramatic move would clearly get people's attention. Because households are currently charged much more for water than are farmers, a higher average price, in conjunction with one price for all consumers, would still mean a relatively small increase for households.
- Grant all existing water users a credit on 70 percent of the amount of water they used last year. Consumers, therefore, would pay the same total amount they paid last year at 70 percent of last year's usage. Above that point they would pay the new market price for all water in excess of 70 percent of last year's usage. If usage were less than 70 percent of last year's usage, then a credit would be given for their conservation at the new market price.
- The rationale for the 70 percent credit is based solely on fairness grounds. If farmers and other users were required immediately to pay an enormous amount more for each unit of water, some would suffer tremendous hardship. Fairness requires that people be given a period of adjustment. And yet, incentives do need to be continuous both discouraging of profligacy and encouraging of efficiency. This credit is specifically designed to reduce the unfairness of a radical change in water policy and yet not interfere with the process of allocation by price.
- Each year the credit will be reduced by 10 percentage points until it disappears in seven years. All users need to be given full information for planning purposes. Announcing the fact that the credit diminishes will make it more difficult for special interest groups to change the decision by lobbying politicians.
- Government should under no circumstances deprive the natural environment of its water set-asides. Our forests, bays, rivers, and marshes already share the burden of drought with us and can ill-afford any additional deprivation by reducing water set-asides. These water set-asides are a small gesture reflecting the fact that other life forms share the planet with us.
- Lastly, if water usage doesn't fall below supplies at the new higher price the price should be raised until it does. Once water usage falls below supplies and reservoirs of water are rebuilt then water prices should be adjusted continuously to balance supply and demand.

Besides having a natural superiority for fairness and efficiency, market pricing may also help California's state and local governments meet their budget obligations. In fiscal year 2008 total state and local utility revenues for water were about \$9.7 billion. A five-fold increase in water prices could add billions of dollars a year to California state revenues after the seven year adjustment period. Depending upon your point of view, however, giving our government more money may be a blessing or a curse.



Court Should Pave Way for State to Plan for Next Drought? by Kerry Jackson

Things became so heated during the state's painful six-year man-made drought that government agencies asked some Californians to snitch on neighbors they thought used too much water. Things are calmer now, but just as surely as clear skies follow rain, there'll be another drought. It would be wise to prepare for the inevitable.

Astonishingly, not everyone sees it that way. The Center for Biological Diversity and Center for Food Safety want to shut down a project that would pump water from the Mojave Desert to Southern California. Cadiz Inc., a publicly traded water resource developer, has long planned to draw groundwater before it flows into an aquifer under the San Bernardino desert floor and pump it into the Colorado River Aqueduct through a 43-mile pipeline. From there, it would be sold to local water districts.

Opponents say the project will disturb the desert ecology, and have sued in federal court to shut it down. Ileene Anderson, a Center for Biological Diversity scientist, argues that it "will suck the desert dry" and is "an unsustainable water-privatization scheme." There are also claims the water will be laced with harmful chemicals and unfit for human consumption.

These objections are overwrought and exaggerated. Let's take them in order.

First, the pipeline will travel in the Arizona & California Railroad Co.'s right-of-way. That strip of the desert is already developed. Laer Pearce, a longtime consultant who has advised Cadiz, says the rail line "was selected specifically because putting the pipeline there would have no impact on the desert's flora, fauna or land." Furthermore, Scott Slater, CEO of Cadiz, notes that "if there are signs of any harm" caused by the project, "the county has the authority to intervene and reduce or stop pumping."

Second, the claim that the project will "suck the desert dry" is hyperbolic. The Mojave is nearly 50,000 square miles. That's a lot of earth to "suck dry" from the Cadiz footprint which, at roughly 50 square miles, is only about one-one thousandth of the entire desert. It also overlooks the fact that left alone, the water flows into a salt lake. From there, it either evaporates or is contaminated by the salt.

Third, water-privatization efforts are not schemes. Water markets provide a consumer goods the same

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way grocery stores sell food, automobile dealerships sell cars, and department stores sell clothing and home goods. While water is technically a public resource, Property and Environment Research Center Executive Director Reed Watson points out that it is commonly "privatized throughout the West" and "courts have been unequivocal that Cadiz has a right to the groundwater underlying its Mojave property."

Finally, the health risks are not a settled issue. The element likely causing the most concern is chromium 6. It can be a carcinogen when inhaled, but experts disagree "on its toxicity in drinking water due in part to the possible changes to chromium 6 in the stomach when it is ingested," according to the Association of California Water Agencies.

Some, but apparently not all, of the Cadiz water has 16 parts per billion of chromium 6. While the California Department of Public Health says that up 10 ppb is safe, the federal standard is 100 ppb. Before it arrives at consumers' taps, the Mojave water will be combined with water that has no detectable chromium 6, and will therefore be diluted and unlikely to reach even California's standard. A court has found the state's standard to be too strict and returned it to 50 ppb.

As a safeguard, Cadiz will also employ a treatment system that reduces chromium 6 to levels so low that it would be undetectable in the water supply. This should also ensure that the water meets all quality standards.

Should it survive the legal challenge, the Cadiz project will bring water to a region that's parched even when there's no drought. It "would be the first new source to come online in decades," says Watson. Its second phase will increase water storage, which California has not added since 1979, when the state had 15 million fewer residents.

Unused native water and imported water will be stored in the underground aquifer, which "has an estimated storage capacity of more than 1 million acrefeet," says Watson, more than enough to "create much needed security for Southern California water users during prolonged drought."

This project has already been thoroughly scrutinized, meets all federal standards, was green-lighted last year by the California 4th District Court of Appeal, and most recently by the Trump administration. Activists' hostility toward it is shortsighted and unreasonable. The federal court should see right through their transparent facade.