# **NEWS CLIPS**

Published August 15, 2014



# **Resource Conservation and Public Outreach**

Organized by date

# As water cutbacks loom, pumping restrictions get scrutiny

Gretchen Wenner Ventura County Star Aug 14, 2014



ROB VARELA/THE STAR Jason Vis explains how tensiometers that measure moisture in the soil determine how often avocado trees are watered at Lloyd-Butler Farms near Saticoy Monday. Looming groundwater cutbacks because of the drought concern many local growers.

### Rob Varela



ROB VARELA/THE STAR Lloyd-Butler Farms near Saticoy pumps water from a canal, filled by the nearby Santa Clara River for irrigation.



ROB VARELA/THE STAR A sprinkler sprays water onto leaves under an avocado tree at Lloyd-Butler Farms near Saticoy Monday.

Rob Varela



ROB VARELA/THE STAR Jason Vis explains how a groundwater pump automatically turns on based on water levels in storage tanks at Lloyd-Butler Farms near Saticoy.



ROB VARELA/THE STAR Jason Vis checks a pressure gauge on a pump at Lloyd-Butler Farms near Saticoy.



ROB VARELA/THE STAR Young avocados in a grove at Lloyd-Butler Farms near Saticoy. Upcoming groundwater cutbacks are a concern to many local growers.Rob Varela



ROB VARELA/THE STAR Tensiometers that measure moisture levels in the soil determine how often avocado groves are watered at Lloyd-Butler Farms near Saticoy.

# Pumping restrictions scrutinized

Growers must report all water use

By Gretchen Wenner Ventura County Star 8/15/2014

For Ventura County's \$2.1 billion agriculture industry, water is becoming seriously vexing.

Emergency groundwater rules adopted in April are starting to take hold for growers on the Oxnard Plain and inland.

But an effort by local regulators to make pumping cutbacks as fair as possible is encountering head winds.

A Friday morning special meeting of the Fox Canyon Groundwater Management Agency is meant to iron out confusion regarding Emergency Ordinance E, which the fivemember board approved unanimously April 11. The meeting starts at 9 a.m. in the Lower Plaza Assembly Room at 800 S. Victoria Ave. in Ventura.

The ordinance, drafted amid a statewide drought, calls for an eventual 20 percent reduction in groundwater pumping come next summer. Growers, cities and industrial users are affected, although the timeline for farmers differs from that for other users.

The measure does more than restrict pumping. It also fundamentally changes how irrigation water is doled out and managed. Some of those details are meeting significant resistance.

Growers now must report all water use, for example, even if they get surface water or supplies from another farmer.

One major water district believes that the requirement is outside Fox Canyon's jurisdiction.

"We are advising our people not to do it," said John Mathews, general counsel for the Pleasant Valley County Water District, which covers farmland south of Camarillo on the eastern Oxnard Plain In the past most farmers pumped groundwater based on amounts historically allotted to them.

The emergency ordinance temporarily does away with the old system, instead basing pumping allowances on crops grown, soil conditions and other factors. It was devised with input from growers who said acrossthe- board cuts would be unfair to those who'd already invested in more efficient irrigation systems or who have orchards and other long-term crops that can't be fallowed easily.

The ordinance would fine growers who use more than the established amounts for their crops. That computation is based on total water use, including surface water, although any fines would only apply to the groundwater portion.

The ordinance also created a mostly new reporting system that started Aug. 1. The socalled "irrigation allowance index" requires growers to report crops, acreage, water sources and other information, ideally using an online system.

For Jason Vis, 26, who helps oversee operations at the Lloyd-Butler Ranch near Saticoy, that part of the transition has gone relatively smoothly. The stately ranch has operations that include about 170 acres of lemons and 105 acres of avocados.

"It wasn't too difficult," said Vis, who attended a workshop last month on the new reporting system. But some farmers have been struggling, he said.

The emergency ordinance so far has required relatively minor adjustments, he said. Initial reductions to basic allowances mean the ranch has cut back on flushing excess salts, for example.

The real pain is yet to come. If pumping in Fox Canyon's territory doesn't decline, a 10 percent cutback could hit in February, followed by another 10 percent next August. Those looming reductions have Vis and others deeply concerned.

Reported pumping was high in 2013, according to Fox Canyon staff. About 152,000 acre-feet of water was extracted in the agency's territory, and some usage remains unreported. For the 10 prior years, the annual average was 124,586 acre-feet. The amount scientists say can be safely pumped within Fox Canyon's boundaries is 100,000 acre-feet a year. An acrefoot is about 326,000 gallons.

Other issues still to be ironed out include how fallowed land is counted in the new scheme and whether there is an annual cap on per-acre usage. Some growers raise multiple crops during the year. Spinach and cilantro, for example, can be grown and harvested in about a month. Some have said the ordinance isn't clear on whether allowed amounts are per-crop or are annual amounts.

One of the items to be discussed Friday is a proposed annual cap that takes into account shortduration crops. "There are some incredibly complex cropping systems out there," said John Krist, CEO of the Farm Bureau of Ventura County. "It's very thorny and complicated, and there is a lot of technical complexity in all this." The Fox Canyon district was created by state lawmakers in the 1980s as a way to retain local control of groundwater supplies severely stressed by over-pumping and seawater intrusion. Thirty years later those problems remain.

#### **LETTERS**

# Drought issues

Mark Bucell, Thousand Oaks

The two natural resources that California has the most of are salt water and sun. The one natural resource that all of California is in dire need of is fresh water. Let's get our legislators to start leveraging the first two items.

Instead of building a highspeed train for a few Californians, use that funding to build desalination plants, reservoirs and solar generators. By redirecting the planned funding for the train, we can build solar facilities to power future desalination plants along the California coast.

Those newly built reservoirs (close to the desalination plants) can be used for agriculture and nearby cities' consumption. Additionally, use hydroelectric power from the reservoirs to power the transport of the so badly needed water from its source to the consumers. This entire process of desalination can be built to work 24/7 and help resolve our drought issues for many, many years to come.

This is a win-win situation — we don't lose jobs, funding, crops, future growth, etc. California has so many bright people it just surprises me that this strategic solution had not been launched decades ago when we recognized we have periodic droughts.

Legislature and governor: Take some action now rather than just demanding water conservation! Think strategic rather than tactically.

Ventura County Star 8/15/2014

# Three challengers enter LVMWD directors race

### Water board incumbents face uncertain future

By Sylvie Belmond The Acorn 8/14/2014

For the first time in recent memory, three incumbents on the Las Virgenes Municipal Water District board of directors will face challengers at the ballot box.

LVMWD directors Glen Peterson, Lee Renger and Barry Steinhardt are seeking reelection to the board, which controls the sewer services and potable and recycled water delivery in Agoura Hills, Hidden Hills, Calabasas, Westlake Village and surrounding unincorporated areas.

Five directors serve overlapping four-year terms, and each represents one of five divisions. Voters choose only the candidate in division.

Peterson and Hugh Wahler, an Agoura Hills resident, will run for Division 2, which includes portions of Agoura Hills, Calabasas and some surrounding areas.

Renger and Michael Wilk of Calabasas will compete for Division 3, covering the southern part of Calabasas and surrounding incorporated areas.

Steinhardt and Jay Lewitt of Agoura Hills will vie for Division 5, which comprises most of Agoura Hills.

Over the past four years a board majority consisting of Charles Caspary, Peterson and Renger has been criticized by some constituents for its spending practices and farreaching capital improvements, including the 5-million-gallon water tank now under construction in Westlake Village.

"The current majority of the board seems to think that ratepayers have a money tree in the backyard," said Wilk, an attorney who lives in the Calabasas Highlands.

"All of our conservation and financial resources efforts need to be dedicated to saving water," said the Northern California native, who believes that the new water tank in Westlake is unnecessary.

The projects result in unneeded rate increases for ratepayers, he said.

"The district must do with less money. . . . If we don't stop them in the campaign, they're going to just go build more tanks," said Wilk, 56.

To save dwindling water resources, Wilk said he eliminated his lawn and doesn't wash his car at home. He also captures shower water runoff and puts it to work elsewhere. "It's a matter of absolute principal for me that we have to conserve water," he said.

A retired deputy and detective with the Los Angeles Sheriff's Department, Wahler said he would bring a fresh perspective and a different way of doing business on the LVMWD board.

"I thought it was time for me to step up and put my background as a deputy sheriff and detective, and my belief and skills into this race," said the 66-year-old.

"I've been trained through my career to think through things methodically, keep an open mind and draw a conclusion from the facts," Wahler said.

The water district also lacks transparency in its decision-making and it has failed to answer the public's questions, Wahler said.

"As a cop, I've developed this sense to know when people are being genuine and when they've got an angle. I'm going to use these skills if I become a board member to find the truth and find out what's best for the community," he said.

Lewitt, on the other hand, believes the district has been doing a good job managing its resources.

"I want to make sure that we have enough water for a potential fire or in case of a drought like we have now," said the 55-year-old.

Lewitt owns a promotional products company.

If elected, Lewitt said, he would strive to maintain the district's high quality potable water delivery and also ensure that its sanitation services operate in the best interest of the Malibu Creek watershed. "We have the lowest water rates around and I want to make sure we keep them affordable," Lewitt said.

#### Letters

## Water waste

The Acorn editorial of July 31 was so clear on the enormous waste our city is contributing to the waste of water. Yes, there certainly are mixed signals being sent to us by the city.

I have witnessed the daytime watering of the Westlake Golf Course, one time at 11 a.m. and the other at 1:30 p.m. It is as green as can be. Is it necessary in these drought times?

Healthy, old and sick trees are being cut down, only to make way for new plantings of trees and shrubs.

The problem is: I don't see indigenous, drought-resistant plants being the replacements, and new water sprinklers are being put in to water all the new plants and trees.

Malibu seemed to do it right. They planted drought-resistant plants at their new park. It looks great and bows to the rain gods.

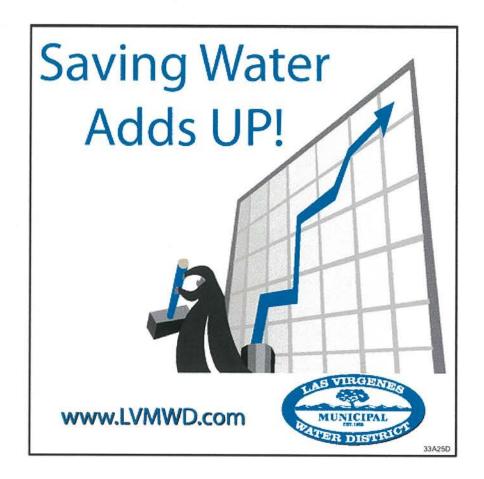
Can someone explain the "why" of all this city waste? What's wrong with the city officials that they keep planting and laying out the miles of lines to water all the new plants?

The "do as I say, not as I do" mentality seems to reign.

## Craige Story

## Westlake Village

The Acorn 8/14/2014



The Acorn

# **Use Every Drop Wisely**



www.LVMWD.com



The Acorn

August 14, 2014

Page 27

# Water bond plan is approved

Ballot to include \$7.5B measure to help state cope with drought

By Timm Herdt Ventura County Star 8/14/2014

SACRAMENTO — Signaling at least a temporary truce in California's perpetual water wars, the Legislature late Wednesday overwhelmingly voted to place a comprehensive water bond on the Nov. 4 ballot.

The measure, which will appear as Proposition 1, will ask voters to approve spending \$7.545 billion on water projects designed to provide short-term relief from the drought and long-term improvements to a chronically overstressed water system.

Gov. Jerry Brown signed the measure immediately upon receipt, just hours before the official voter guide was to be sent to the printer.

Lawmakers from both parties and from all parts of the state supported the bond, which will replace an \$11.1 billion bond that had been previously scheduled for the ballot. Analysts believed that measurewas too bloated and too controversial to win voter support.

"That old bond would not have fared well in November," said Sen. Fran Pavley, D-Agoura Hills. "I think this new bond passes easily. I will work very hard to let the people of California know this is a bond they can all support."

Pavley, as chairwoman of the Natural Resources and Water Committee, was one of the measure's chief architects. She said the bond will fund projects to benefit all parts of the state — groundwater cleanup and water recycling on the Central Coast, water storage for the Central Valley, stormwater capture in Los Angeles, and new infrastructure to provide clean drinking water to areas that are now without it.

The measure also won the support of legislators from the Sacramento-San Joaquin Delta area because they said it met the test of being "tunnel neutral." By that, they mean that none of its proceeds can be used to design, construct, mitigate the environmental impacts or operate the proposed twin tunnels supported by the Brown administration that would divert water beneath the Delta.

Lawmakers and interest groups had been fighting over provisions of the bond for months, but support came together this week in large part because of what Senate President Pro Tem Darrell Steinberg, D-Sacramento, called "the coalition of the improbable."

That coalition included groups that have battled over water issues for decades, including the California Farm Bureau Federation, the Natural Resources Defense

Council, the state Chamber of Commerce and water districts from all regions of the state.

Republican lawmakers were the last holdouts, but they were won over Wednesday after Brown and Democratic legislative leaders added an additional \$200 million for water storage projects, including two potential reservoirs in the Central Valley.

"This is a tremendous win for the state of California," said Sen. Tom Berryhill, R-Modesto. "This bond is actually going to give us water."

In all, the bond would provide \$2.7 billion for water storage, or about 38 percent of its total proceeds.

The vote in the Senate was unanimous, 37-0, and the Assembly approved it 77-1, with only Assemblyman Tim Donnelly, R-Tw in Peaks, dissenting.

The final package represented a compromise by Brown. The governor, concerned about the annual debt repayment costs from the state budget, had originally asked lawmakers to send him what he called a "no-frills," \$6 billion bond.

If voters approve the measure, the annual debtservice costs to the state will be about \$491 million for 30 years.

Coastal Democrats, including Assemblyman Das Williams, of Carpinteria, were not particularly enthusiastic about the funding for new dams, but Williams said the bond contains ample components for water system improvements "not just in the Central Valley."

He noted that areas such as Santa Barbara and Ventura counties are not as dependent upon imported water from Northern California as are other areas of the state.

"We need money to help our water independence to maintain our ability to resist droughts," he said.

In addition to the money for storage, other components of the bond include:

- \$1.5 billion for watershed and ecosystem improvements around rivers, lakes and streams. Of that money, \$30 million will be specifically earmarked for the Santa Monica Mountains Conservancy.
- \$900 million for groundwater issues, including projects to clean contaminated groundwater and the development of management plans to prevent the over-drafting of aquifers.
- \$810 million for regional water reliability projects, including improvements in delivery systems to make recycled wastewater more broadly available, water conservation

programs, and projects to capture stormwater runoff.

- \$725 million for water recycling projects to allow for the reuse of wastewater.
- \$520 million for projects to provide safe drinking water to dozens of California communities that cannot now deliver clean water to residents.
- \$395 million for flood management projects, including the shoring up of Delta levees.

Copyright © 2014 Ventura County Star 08/14/2014

# Lake Mead will get 10% more water

But level expected to stay critically low

By Felicia Fonseca Associated Press Ventura County Star 8/14/2014

FLAGSTAFF, Ariz. — One of the main reservoirs in the vast Colorado River water system that is struggling to serve the booming Southwest will get more water this year, but that won't be enough to pull Lake Mead back from near-record lows.

Water managers, farmers and cities throughout the region have been closely watching the elevation at the reservoir behind Hoover Dam. It is at its lowest level since the dam was complete and the lake first was filled in the 1930s.

A drop to 1,075 would mean cuts in water deliveries to Arizona and Nevada.

The U.S. Bureau of Reclamation announced Wednesday that it will release 10 percent more water from Lake Powell near the Arizona- Utah border into Lake Mead than it did the past year, thanks to near-normal runoff.

Federal officials said they'll send 8.23 million acre-feet to Lake Mead, up from 7.48 million acrefeet when Lake Powell was at its lowest level ever. An acre foot is about 325,850 gallons, or enough to cover a football field with a foot of water.

Despite the additional water, Lake Mead is projected to remain near record lows at 1,083 feet in January — three feet higher than it was Wednesday. That's because more water will be delivered to cities, farms, American Indian communities and Mexico than Lake Mead will get from Lake Powell.

Federal officials say they will review their projections in April after the winter snowfall, with the possibility of releasing up to 9 million acre-feet into Lake Mead for the 2015 water year.

The August projections from the U.S. Bureau of Reclamation help set the course for water deliveries for the next two years but didn't reveal anything unexpected.

Copyright © 2014 Ventura County Star 08/14/2014

# Some will face watering cutback

Las Virgenes bases system on addresses

From staff reports

Las Virgenes Municipal Water District says it has implemented an alternating-day watering schedule due to drought conditions.

The water district's board of directors voted recently to adopt the even-odd day schedule for outdoor watering for its customers, which include residents of Agoura Hills, Calabasas and Westlake Village. Those with house address numbers ending in even numbers may water their landscapes only Mondays, Wednesdays and Fridays, according to the new plan. Those with address numbers ending in odd numbers may water only on Tuesdays, Thursdays and Saturdays.

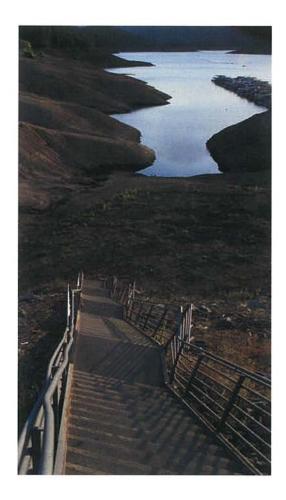
No watering may be done between 10 a.m. and 5 p.m. or Sundays, according to the district.

The schedule will be enforced starting Sept. 1 but is in effect now, according to the district. After Sept. 1, warning letters and fines for repeat offenders will be imposed, the district said.

The district also increased fines up to \$500 for repeat violations within a one-year period. The new schedule is consistent with drought regulations recently mandated by the State Water Resources Control Board.

Copyright © 2014 Ventura County Star 08/14/2014

# California to vote on scaled-down \$7.5-billion water bond in November



A long staircase leads to a dry lake bed as water recedes into Lake Shasta at sunset due to serious drought conditions. State lawmakers Wednesday approved a ballot measure for a \$7.5 billion water bond that includes money for new reservoirs. (Allen J. Schaben / Los Angeles Times)

## By MELANIE MASON

LA Times

Gov. Jerry Brown signs new \$7.5 billion water bond proposal, passed by the Legislature on Wednesday

Water bond proposal includes funding for new reservoirs, water cleanup and environmental protection

After months of political haggling, a ballot measure that will ask voters in November to approve \$7.5 billion in borrowing for water projects sailed through the Legislature on Wednesday.

Soon afterward, flanked by dozens of lawmakers from both parties, Gov. Jerry Brown signed the measure, which is intended to provide funds for new reservoirs, water cleanup and environmental protection.

The big idea is that the future of California needs a lot of water, and we've got to use it in the best way possible.- Gov. Jerry Brown

Passage of the proposal was an "amazing convergence over a big idea," Brown said. "The big idea is that the future of California needs a lot of water, and we've got to use it in the best way possible."

The measure passed 77 to 1 in the Assembly and unanimously in the Senate. The easy approval belied the months of contentious negotiations that pitted Democrats against Republicans, agriculture interests against environmentalists and myriad regional interests all scrambling to secure a share of the potential bond money for their priority projects.

Many of the projects funded by the borrowing would take years or decades to complete, doing little to mitigate the effects of the drought the state is experiencing. But the state's parched conditions were a potent catalyst in driving lawmakers — many of whom are up for reelection this year — to a deal.

Assembly Speaker Toni Atkins (D-San Diego) said the drought "has provided the momentum, the absolute rationale and necessity for us to get something done to take care of us long-term."

Would we have wanted to have more money? Sure. But proportionally, people got what they needed, maybe not what they wanted. And I think it's fair and equitable.Assemblyman Raul Bocanegra (D-Pacoima)

The plan replaces an \$11.1-billion borrowing proposal written by lawmakers in 2009 that was set to go before voters in November. Legislators had twice postponed a statewide vote on that measure, fearing that its high price tag would doom it at the polls.

Brown pressed for a trimmed-down version, citing concerns about the state's debt obligations.

The measure would authorize \$7.12 billion in new borrowing, and appropriate \$425 million in previously approved state bond money that has not been used.

It would put \$2.7 billion toward storage projects, such as reservoirs. Republicans, some of whose votes were needed for passage, and Central Valley Democrats had made

storage a sticking point in negotiations, insisting until Wednesday morning that they wanted \$3 billion.

Bob Huff (R-Diamond Bar), leader of the Senate's Republicans, said they wanted assurances the funds would be sufficient for two planned storage projects — Sites Reservoir in the Sacramento Valley and Temperance Flat Dam on the San Joaquin River.

"We need to have somebody articulate that we can actually build these projects with this money," he said. "And the local water agencies were comfortable with this level."

An additional \$800 million would go toward cleanup of contaminated underground water, which topped Los Angeles-area lawmakers' wish lists. The measure designates \$200 million less than what was in the 2009 bond proposal, but Los Angeles legislators say they're pleased with the package overall.

"Would we have wanted to have more money? Sure," said Assemblyman Raul Bocanegra (D-Pacoima). "But proportionally, people got what they needed, maybe not what they wanted. And I think it's fair and equitable."

Lawmakers also sought to distance the measure from Brown's controversial proposal to construct two giant tunnels to move water from the Sacramento-San Joaquin Delta to the central and southern parts of the state.

Sen. Lois Wolk (D-Davis) described the bond package as "tunnel neutral," saying it "includes protections that the funds will not be used for the design, construction, mitigation, operation or maintenance" of the proposed tunnel project.

Times staff writer Patrick McGreevy contributed to this report.

Copyright © 2014, Los Angeles Times

### WATER BOND PROPOSAL

## Brown thinks accord is near

### Governor wants \$7B deal on state ballot

By Timm Herdt Ventura County Star 8/13/2014

SACRAMENTO — A compromise \$7 billion water bond hammered out by Gov. Jerry Brown and Democratic legislative leaders picked up support Tuesday from key interest groups but had not yet secured the backing of Republican lawmakers, some of whose votes will be necessary to place it on the November ballot.

"We're very close," Brown told reporters after meeting with representatives of about 30 interest groups, including business, agricultural and environmental organizations. "There's been a lot of compromise."

Legislators have only until Wednesday to reach an agreement to put a bond on the ballot to replace an \$11.1 billion measure now scheduled to go before voters on Nov. 4. Most analysts believe that measure is too large, too laden with projects not directly related to water supply, and too closely linked with a controversial Delta tunnel plan to win voter support.

If negotiations fail, Brown said, California will have lost a historic opportunity to respond to the ongoing drought and improve its long-term water supply.

"If we don't get something done now," he said, "it could be decades later."

The major sticking point remains how much money the bond measure will raise for water storage projects, chiefly in the Central Valley. Republicans are seeking \$3 billion. Brown, concerned about debt payments on a large bond, originally asked for \$2 billion for dams, but has since raised the amount to \$2.5 billion, or 43 percent of the bond proceeds.

Sen. Fran Pavley, D Agoura Hills, was one of three senators to participate in Wednesday's bond discussions in Brown's office. In an interview afterward, she noted that the amount of money Brown is seeking for dams has gone up while the amount he is seeking for such projects as groundwater cleanup and water recycling has gone down.

The irony of that, Pavley said, is that groundwater cleanup, recycling and other regionally based water projects are the kinds of measures that can deliver the quickest relief to address drought caused water shortages.

"This bond provides a tremendous opportunity for local agencies to put in place local

solutions that can deliver water sooner rather than later," she said.

Pavley said she believes the structure of the scaled down bond would be a relatively easy sell to voters who are anxious to see the state take action to address the drought.

Peter DeMarco, spokesman for the Senate Republican Caucus, said GOP lawmakers are hopeful a deal can be reached.

"You've got to have more storage. We're not there right now," he said. "I can't understate the critical importance of storage for the Central Valley."

While the disagreement over money for dams remains, other obstacles to a potential waterbond deal appear to have diminished.

Brown and Democratic leaders have insisted the bond must be "tunnel neutral" to avoid triggering an opposition campaign to a controversial Brown administration plan to build two tunnels to divert water beneath the Sacramento San Joaquin Delta for delivery to the south. The major water contractors that would pay for the tunnels through rate increases on their customers have resisted that idea.

They would prefer that some bond money be used to pay for specific ecosystem restoration projects that are part of the comprehensive Bay Delta Plan. One component of that plan is construction of the tunnels.

One of the two major contractors is the Metropolitan Water District of Southern California, whose member agencies serve 19 million Southern Californians, including much of Ventura County On Tuesday, Metropolitan General Manager Jeffrey Kightlinger called Brown's bond proposal "a workable framework" and said it would fund local projects that closely match "the needs of the Metropolitan service area, while investments in statewide system reliability will provide both environmental and supply benefits."

Also voicing support were the California Farm Bureau Federation, California Chamber of Commerce and some environmental groups, including the Nature Conservancy and Natural Resources Defense Council.

Director Kathryn Phillips said Sierra Club California remains in opposition. She said it would "accelerate the taking of water from the Delta."

In addition, Phillips said, the dams the bond would help to fund "are extremely expensive, would not create new water, won't solve drought problems and are bad for the environment."

It also appeared that progress has been made toward at least softening opposition from Delta area residents. Sen. Lois Wolk, D Davis, the legislator who has been most vocal about protecting Delta interests, attended the meeting in Brown's office. In addition, a

coalition representing the five Delta counties publicly released a letter to that, while not supportive, was cooperative in tone and listed a limited number of concerns.

Senate President Pro Tem Darrell Steinberg, D Sacramento, said negotiations would continue overnight and that he remains hopeful an 11thhour deal will be reached.

"Tomorrow is the deadline," he said Tuesday. "It could be late in the day. ... Undoubtedly, it will be late in the day."

Copyright © 2014 Ventura County Star 08/13/2014

## West keeps eye on Lake Mead

### Cities, farmers scramble as reservoir sees all-time low

By Ken Ritter Associated Press Ventura County Star 8/13/2014



The bathtub ring of light minerals that delineates an earlier level of Lake Mead is seen at Hemenway Harbor in the Lake Mead National Recreation Area in Nevada. A 14-year drought has caused the water level in the reservoir to shrink to its lowest point since it was filled in the 1930s. ASSOCIATED PRESS

LASVEGAS— Once-teeming Lake Mead marinas are idle as a 14-year drought steadily drops water levels to historic lows. Officials from nearby Las Vegas are pushing conservation but also are drilling a new pipeline to keep drawing water from the lake.

Hundreds of miles away, farmers who receive water from the lake behind Hoover Dam are preparing for the worst.

The receding shoreline at one of the main reservoirs in the vast Colorado River water system is raising concerns about the future of a network serving a perennially parched region home to 40 million people and 4 million acres of farmland.

Marina operators, water managers and farmers who for decades have chased every drop of water across the booming Southwest and part of Mexico are closely tracking the reservoir water level already at its lowest point since it was first filled in the 1930s.

"We just hope for snow and rain up in Colorado, so it'll come our way," said marina operator Steve Biggs, referring to precipitation in the Rockies that flows down the Colorado River to help fill the reservoir separating Nevada and Arizona.

By 2016, continued drought could trigger cuts in water deliveries to both states. While water authorities say they've been saving water for potential dry days, the prospect of the first cuts is already prompting action.

"I've downsized in the last couple of years, probably a good thing the way this water shortage is going," said farmer Dennis Bagnall, who has planted just 225 of the 1,500 acres that are typically green this time of year on his farm south of Phoenix.

Last week, officials announced an \$11 million pilot program involving the federal

government and water agencies in Denver, Los Angeles, Las Vegas and Phoenix to pay farmers, cities and industries to reduce river water use.

"We can certainly hope for better conditions than we've experienced in recent times, but we have to actively and continue to plan for the worst case," said Michael J. Lacey, director of the Arizona Department of Water Resources.

This week, an update from the federal Bureau of Reclamation, the keeper of the Colorado River network's dams and reservoirs, will help set the course for water deliveries for the next two years. Administrators say they are confident they can meet current commitments next year.

Federal officials and water administrators in metro areas such as Las Vegas and Phoenix say they're committed to finding new ways to make every drop of river water count — from cloud seeding to pipelines to new reservoirs to desalination plants.

They point to agreements to leave surpluses unused in wet years, share pain in dry years and buy water designated for farms for city use.

But they're all watching Lake Mead, the biggest in a Colorado River basin that supplies water to California, Arizona, Colorado, New Mexico, Nevada, Utah, Wyoming and part of Mexico. The states get annual allotments dating to the Colorado River Compact of 1922.

Over the years, the amount hasn't kept pace with a postWorld War II development boom in the Southwest, and pressure has increased with drought gripping the region for almost 15 years.

The effect of increased demand and diminished supply is visible on Lake Mead's canyon walls. A white mineral band often compared with a bathtub ring marks the depleted water level.

The lake has dropped to 1,080 feet above sea level this year — down almost the width of a football field from a high of 1,225 feet in 1983.

A projected level of 1,075 feet in January 2016 would trigger cuts in water deliveries to Arizona and Nevada.

At 1,000 feet, drinking water intakes would go dry to Las Vegas, a city of 2 million residents and a destination for 40 million tourists per year that is almost completely dependent on the reservoir.

That has the Southern Nevada Water Authority spending more than \$800 million to build a 20footdiameter pipe so it can keep getting water.

If cuts do come, they'll test the agreements forged in recent years between big, growing

cities and farmers.

In California, home to 38 million residents, farmers in the sparsely populated Imperial Valley in southeast California have senior water rights ensuring that they get water regardless of the condition.

Kevin Kelley, general manager of the Imperial Irrigation District, defends his agency's position at the head of the line and dismisses the idea that water should go to those who can pay the most or make the most compelling economic argument.

Imperial Valley farmers grow about 200 crops, Kelley said, from alfalfa to cotton and celery to zucchini. "There has to be a place in a diverse economy and a diverse Southwest for a place like this that grows food and fiber yearround," he said.

Copyright © 2014 Ventura County Star 08/13/2014

## Restoration of land eyed at LosPadrescampground

## Blue Point has been closed nearly 15 years

By Cheri Carlson



Irvin Fox-Fernandez, a resource officer for the Ojai Ranger District, walks areas that are overgrown with grass and weeds at the Blue Point Campground. U.S. Forest Service officials want to decommission the campground, which has been closed since 2000, and restore the land. JUAN CARLO/ THE STAR

Dry stalks of buckwheat grow waist-high and a fallen oak tree blocks a road through the old Blue Point Campground in Los Padres National Forest.

After closing the campground nearly 15 years ago, the U.S. Forest Service recently announced plans to decommission the site. That would mean pulling out structures, from firescorched picnic tables to a concrete creek crossing, and restoring the land.

Before any work happens, however, officials will review the proposal. They also are seeking public input on the project.

Their review will include studying Clean Water Act requirements and analyzing effects on endangered species, said Irvin Fox Fernandez, resource officer for the Ojai Ranger District.

"That's where the bulk of the specialists will have to concentrate their efforts, to make sure that we have properly analyzed and understand those impacts, and figure out if there are ways to avoid impacts and still continue," he said.

The Forest Service officially closed Blue Point campground in 2000 to help protect endangered species, including the arroyo toad that lives and breeds along streams and creeks.

Then in October 2007, the Ranch Fire burned through the area, damaging facilities from the restrooms to the water spigots.

Ringed by craggy hillsides and a stretch of Piru Creek, the campground sits on the edge of Los Padres along the Ventura Los Angeles county line a few miles north of Lake Piru.

People are allowed to hike in, and that isn't expected to change.

There also is legal access for several private landowners to drive up from Lake Piru to the entrance of Blue Point, but that road has been closed to the public since the campground was shuttered. Gates block access to the winding canyon road to keep cars out.

A lot of hikers in the area are headed to the Pothole Trail, south of Blue Point campground. The Agua Blanca Trail also is nearby.

"We don't see a lot of litter," said Diane Cross, assistant recreation officer for the Ojai Ranger District. If people used the campground regularly, rangers likely would see signs, she said.

Last week, the only signs of recent occupation were a metal fork that rested on an old grill and a pile of gray ash in the fire pit nearby.

Backcountry camping is allowed, although Los Padres currently has restrictions regarding campfires.

"In this case, there are some safety issues associated with these facilities and fire danger," FoxFernandez said. "This campground isn't kept up."

If a car did find a way in through an opened gate, crossing the creek also could cause problems, including disturbing the habitat of protected species.

Jeff Kuyper, executive director of Los Padres Forestwatch, said his organization supports efforts to restore the small stretch of Piru Creek.

"It's good for fish, good for wildlife and good for clean water," he said.

He also hopes people will continue to look for ways to improve access to recreational trails in the area he described as an oftenforgotten corner of the forest.

The project's environmental review is expected to take at least a year. Depending on the outcome, the work would likely take an additional few years. Public comments on the project must be submitted by Sept. 4 and may be submitted to: Ojai Ranger District, Attn: Irvin FoxFernandez, 1190 E. Ojai Avenue, Ojai, CA 93023.

Comments also can be submitted by email to commentspacificsouthwestlospadresojai@ <u>fs.fed.us</u>. Include the words "Blue Point Campground Decommissioning Project" in the subject line.

Visit <a href="http://www.fs.usda.gov/">http://www.fs.usda.gov/</a> projects/lpnf/landmanagement/ projects for more information and other ways to comment.

Contact FoxFernandez at 6464348, ext. 312, or ifernandez@ <u>fs.fed.us</u> to ask questions about the proposal.



Irvin Fox-Fernandez, resource officer for the Ojai Ranger District, crosses Piru Creek, which leads into Blue Point Campground. JUAN CARLO/ THE STAR

Copyright © 2014 Ventura County Star 08/13/2014

#### Letters

Ventura County Star 8/13/2014

# Drought problems

Robert McBurney, Ventura

This is a short "How To" book for Ventura city planners.

We read something about a water shortage nearing drought conditions almost daily. Then, on consecutive days we read about a proposed development of 138 condos at Thompson Boulevard and Ventura Avenue followed by 55 "large lot" homes above Ventura High School.

Could there be something wrong with this picture if these developments are approved?

Using the WeCalc formula, an online calculation service, we find that a large-lot occupancy of two people will consume about 180 gallons per day of water — a very conservative estimate allowing for little or no landscape use. That is merely an additional 3,600,00 gallons per year.

That pales in comparison to the same occupancy of the condos at 150 gallons per day which works out to over 7,555,000 gallons per year — again presuming two occupants per unit.

Gee! That only increases the water demand by 11 million gallons per year. I wonder if that is enough to be the tipping point between shortage and drought.

Has anyone considered mandating a moratorium on issuing new water meters? Other communities have done so.

Now, let us consider the increase in traffic density due to these developments. But, I digress. That is for another "How To" book.

## Water costs

Eugene D. Hubbard, Oxnard

The Oxnard golf courses are looking lush and green. I was curious as to the amount of water our two courses use in these drought conditions and started to dig for information. There are two regulation 18-hole courses, with eight acres of lakes, on the River Ridge

Golf Club.

With no help from the city in my research, I did find that a conservative estimate of golf courses of similar size and climate used, on average, 395 acrefeet of water per year. The fair market value of water is about \$1,000 per acre-foot, if the city decided to use recycled water that figure would double to \$2,000 per acre-foot.

So, two courses times 395 acre-feet times \$1,000 an acrefoot sums up to a very hefty amount of annual costs.

Cross checking my figures, I went to the city's Comprehensive Annual Financial Report for 2012-13 (Municipal Golf Course, page 29). Imagine my surprise that there were no charges for water use on the golf course books. Even a conservative estimate should show hundreds of thousands of dollars worth of water use. Where are the reports on the golf course books?

In the past, there have been allegations of a cover-up — cooking the books — to hide the true cost of the golf courses from the Oxnard taxpayers. This would seem to bear out those allegations.

# Asleep at the wheel

Michael Skopes, Thousand Oaks

Think of the numerous, outstanding accomplishments engineered and constructed by Americans who had a vision. Visions that produced magnificent gifts to humanity.

The list is something to behold. Advances in medicine — the polio vaccine comes to mind. Looking at construction, I think of the Hoover Dam, the interstate highway system and skyscrapers.

Then, there is the exploration of our moon and the space program in general, which has revealed astronomical secrets that just a few short decades ago seemed impossible to know.

Now, I think of the drought we are suffering through in California. It is called potentially the worst in the state's history. California was in the midst of a serious drought in 1977 when I moved here, now this one is about to put that to shame.

Where is the American vision now? Where has that vision been for the past quarter of a century? Where were the planners of the late '70s after that drought who could have

looked ahead to develop technology that would have prevented such a future calamity? Have we been asleep at the wheel?

Were we a smarter people back in the '50s when huge dams and expansive interstates were built?

Did putting men on the moon in the '60s take less intelligence than say — oh, I don't know — creating a comprehensive, reliable water system to hydrate Southern California? Snap out of it!

Copyright @ 2014 Ventura County Star 08/13/2014

# Crippling California drought levels off, latest map shows



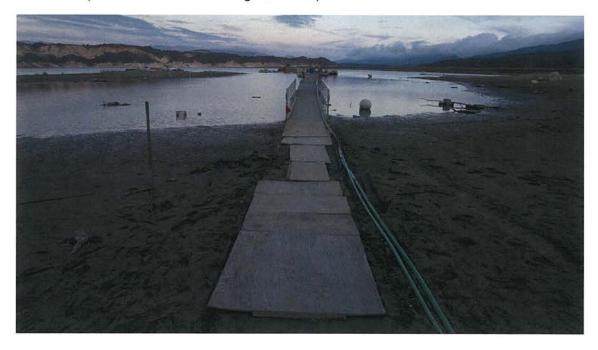
Brandon Arthur, 10, crawls out of the gooey muddy tailings left by his father Steve Arthur's water well drill site in Terra Bella. (Bob Chamberlin / Los Angeles Times)



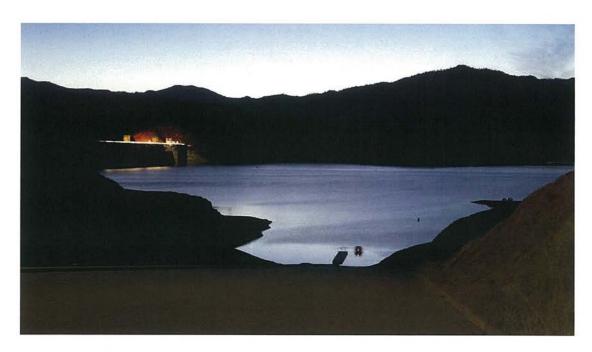
Sunrise illuminates previous signs of life amid the dry, steep banks due to drought conditions at Lake Shasta. (Allen J. Schaben / Los Angeles Times)



Puddles of water are all that remain in some areas of San Gabriel River's West Fork in the Angeles National Forest. (Allen J. Schaben / Los Angeles Times)



Pastel colors at dawn reveal a receding Lake Cachuma in Santa Barbara County. (Allen J. Schaben / Los Angeles Times)



Dusk falls as a lone boater heads out on Lake Shasta near the Lake Shasta Dam. Amid serious drought conditions, Lake Shasta is at only 37% of capacity and is likely to go lower. (Allen J. Schaben / Los Angeles Times)

By VERONICA ROCHA LA TIMES 8/13/2014

Latest map shows California drought remains unchanged despite recent thunderstorms statewide

More than 80% of California continues to suffer extreme drought conditions

After months of worsening drought across California, conditions appear to have leveled off, at least for now.

According to the latest assessment released Thursday, more than 80% of California continues to suffer extreme drought conditions -- a figure that has remained unchanged now for roughly two weeks. Things had been on a steady march toward worse, pushing more than half of California to the most severe level of drought for the first time since the federal government began issuing regular drought reports in the late 1990s.

Despite recent thunderstorms, 58% of California continues to experience "exceptional" drought -- the harshest on a five-level scale. Nearly 82% of the state, meanwhile, is experiencing "extreme" drought, according to the latest U.S. Drought Monitor map.

"It was seasonably dry along the West Coast, with measurable precipitation limited to parts of the Sierra Nevada and northeastern California," according to Richard Tinker,

who authored the latest map. "To wit, areas of dryness and drought remained unchanged."

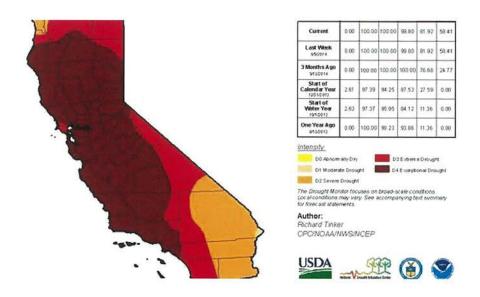
The state's major reservoirs total 59% of the historical average, but are "still above the 41% of average recorded during the 1976-77 drought."

Still, Tinker added that some reservoirs in the west-central parts of the state are below 1977 levels.

The report comes after a series of thunderstorms this week pummeled Northern California, where firefighters have been battling numerous wildfires burning in extremely dry terrain.

Thunderstorms brought lightning, which sparked dozens of fires, further stretching already thin fire resources.

Rain and hail fell in some parts of Northern California and eastern San Bernardino County, but forecasters said this week it was not enough to make a dent in the drought.



The latest U.S. Drought Map shows the level of drought in California remains unchanged. (National Oceanic and Atmospheric Administration)

Copyright © 2014, Los Angeles Times

#### Capitol Journal

## Gov. Jerry Brown helps whip up a palatable water bond



George Skelton LOS ANGELES TIMES 8/13/2014



A lateral canal flows off the Glenn-Colusa Canal near fields of rice and nut orchards near the town of Williams in the Sacramento Valley. (Brian van der Brug, Los Angeles Times)

Gov. Brown and the Legislature negotiate a \$7.5-billion water bond measure that seems relatively pork-free

The \$7.5-billion water bond measure put together by Gov. Brown and the Legislature would be called Prop. 1

Five years after producing a pork-bloated water bond proposal that failed the smell test, the Legislature has offered up a new serving that's lean and digestible.

Credit mainly Gov. Jerry Brown, who had the right recipe: smaller portions, light on delta ingredients.

The Legislature passed the bond bill Wednesday night.

It doesn't quite fill everyone's appetite but will do just fine.

The governor and Legislature were at their best: dickering, rather than dithering, while admittedly prodded by a deadline to place a bond measure on the November ballot.

"You want what you want, but all politics is a matter of compromising and making sure you get what you need," said Senate leader Darrell Steinberg (D-Sacramento).

Well, all good politics anyway. Too often in Sacramento, the governor and the Legislature are paralyzed by partisan politics, only slightly less repugnant than the president and Congress in Washington.

Steinberg, nearing the end of his reign as Senate president pro tem, was instrumental in negotiating the new \$7.5-billion bond measure. He also was a principal negotiator of the 2009 \$11.1-billion borrowing measure that was so larded with putrid pork that legislators twice pulled it from the ballot, fearful voters would gag.

This latest bond — to be called Proposition 1 — will replace the former stinker, which was saturated with fatback to attract legislative votes as sleep-deprived lawmakers and then-Gov.Arnold Schwarzenegger bargained all night.

"In the final day of negotiations," then-Assemblyman Chuck DeVore (R-Irvine) told me, "the bond's value grew by \$100 million an hour."

It contained such extraneous goodies unessential to water development as bike trails, "watershed education centers" and open space purchases. There also was money for a Lake Tahoe water taxi — in a watershed that actually feeds Nevada.

Back in 2009, Steinberg recalled Tuesday, "I was at the beginning of my tenure as leader. You dive in. My goal was to get a water deal. There had not been one for many decades."

After that, Steinberg learned a bad deal is worse than no deal at all.

It wasn't all bad, however. That bond proposal was part of the most comprehensive water package in half a century, dating to when Gov. Pat Brown — Jerry's father — created the ambitious California Water Project.

The 2009 deal imposed a new, streamlined governing structure for the Sacramento-San Joaquin River Delta — the state's main, broken water spigot — paving the way for massive replumbing and ecological restoration, plus statewide groundwater monitoring.

This latest bond seems relatively pork-free — "seems" being a necessary wiggle word because as the amended bill was being rush-printed Wednesday for votes in both legislative houses, only a few people had fully scrutinized it.

Everyone at the negotiating table got something. Nobody went starving.

Brown for months resisted placing a water bond on the ballot as he ran for reelection. He apparently feared that it would blemish his image as a fiscal conservative and that the measure would become a referendum on his controversial \$26-billion delta tunnels project.

But politically he couldn't afford to look like an obstructer of water development during a historic drought. And now he correctly looks like a leader.

"He's doing a great job," Senate Republican leader Robert Huff of Diamond Bar told me Monday. "He's engaged. He's trying to make it happen. It's a little bit late in the game, but he is engaged."

After Democrats tried floating \$10.5 billion in borrowing, Brown offered \$6 billion, ultimately raising the sticker price to \$7.5 billion to accommodate Republican demands for more dam money.

The Democratic governor expressed concerns about the state's already outstanding general-obligation bond debt of \$76 billion, which requires annual payments of \$5.2 billion.

When Brown did weigh in, he pushed hard. He negotiated personally with Democrats andRepublicans and cautioned them not to procrastinate.

"When a water plan fails, it's not years until the next plan is taken up, it's decades," he said Tuesday. "I've certainly seen that in my own life."

Republicans made off with \$2.7 billion in dam construction money. Brown originally offered only \$2 billion, then \$2.5 billion. He came up an extra \$200 million at the end while tagging on a \$150-million sweetener in non-dam money for coastal areas.

The GOP had demanded \$3 billion for water storage. But Brown's offer was one they couldn't refuse. Either they voted for it or their brains would be splattered in full public view.

That \$2.7 billion — if approved by voters — would be the most money, by far, ever appropriated by Sacramento for dam construction.

Some of the GOP's most influential constituents — the state Chamber of Commerce, California Farm Bureau, Western Growers Assn., Westlands Water District — wound up supporting the compromise.

So did influential Sen. Lois Wolk (D-Davis), a major opponent of Brown's twin tunnels — 40-foot-wide, 35-mile monstrosities that would siphon fresh Sacramento River water under the delta and divert it into the San Joaquin Valley and Southern California. She made sure the bond was truly "delta neutral," with none of the money being spent, directly or indirectly, on the project.

"The tunnels will be going on a separate path — a pretty rocky path," she said. "It would be cheaper and more effective for the state just to reduce reliance on delta water."

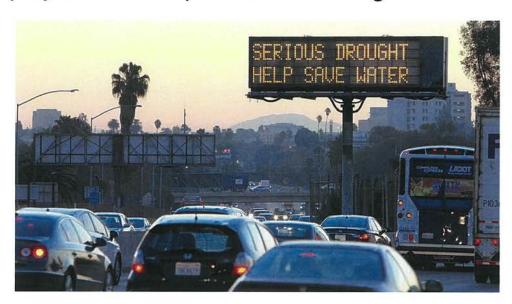
The bond would help with that by offering billions for local projects such as wastewater management, storm water capture, recycling and groundwater cleanup. Local communities become big winners.

It's finally a bond measure voters can swallow.

Copyright © 2014, Los Angeles Times

#### Readers React

## Local projects can keep the water flowing in L.A.



An electronic sign next to the Hollywood Freeway reminds L.A. drivers of California's drought. (Richard Vogel / Associated Press)

LA Times 8/13/2014

To the editor: There's no denying Jim Newton's point that the issue of how water is sourced and distributed throughout California is contentious. Yet the future of Los Angeles' water supply is less about fighting others for water than it is about making smart investments and using ratepayer dollars wisely. ("The contentious, complicated fight for water in California," Op-Ed, Aug. 10)

Los Angeles has made great strides in water efficiency, and it can now increase and diversify its water supply by cleaning up groundwater, creating incentives for efficiency and fixing its crumbling pipes. These measures will not be cheap, but they are essential to ensuring the continued flow of clean water to Los Angeles homes and businesses.

In contrast, Gov. Jerry Brown's plan to dig tunnels underneath the Sacramento-San Joaquin River Delta would put Los Angeles ratepayers on the hook for billions and not deliver any new water.

Given widespread skepticism toward the Los Angeles Department of Water and Power, it is important for the city to spend wisely on projects that create real value for ratepayers.

Alexandra Nagy, Los Angeles

The writer is Southern California organizer for Food and Water Watch.

**To the editor:** Newton's final paragraph is key. It contains the observation by Metropolitan Water District General Manager Jeff Kightlinger that in California, "the people do not live where the water is."

When the L.A. Aqueduct opened a century ago, water poured into the San Fernando Valley, which then was not part of L.A. The water changed that.

California is a real estate game, with water moving to where the weather is easy, making developers rich and the Owens Valley a dust bowl. Elsewhere, major rivers such as the Sacramento and Colorado have become plumbing for the land speculators.

Newton mentions that water storage in L.A. is key, but contamination beneath the San Fernando Valley makes that difficult. So why don't we heed Kightlinger's words and start living where the water is, or at least used to be? Let's free ourselves from the wishes of developers.

Jim Odling, Los Angeles

**To the editor:** Rick Silva, the "water cop" in your article, said, "I don't want my neighbor watering his lawn if I won't have enough water to drink and live." ("This L.A. cop gets the drop on water offenders," Aug. 10)

That sort of says it all, doesn't it? When you get past the glamour, the glitz, the big houses and toys, it comes down to the basic fact that we have to have water to live.

Since we are in a severe drought, and if 40% of the city's drinking water is really used to irrigate landscaping, then our lawns have to go. Yes, that includes all of the cities in the L.A. and Orange County areas.

Jay James, Pico Rivera

Copyright © 2014, Los Angeles Times

# Oil companies fracking into drinking water sources, new research shows



Tanker trucks for hauling water and fracking fluids line up near a natural gas flare in Williston, N.D. Fracking has touched off a nationwide oil and gas boom, and with it, worries about public health and the environment. (Charles Rex Arbogast / AP)

#### By NEELA BANERJEE

LA Times 8/13/2014

Study: Fracking has occurred in underground sources of drinking water

Fracking occurring at shallower depths than widely believed, in sources of water that could be used by people

Researchers: No evidence that fracking contaminated water, but better monitoring needed

Energy companies are fracking for oil and gas at far shallower depths than widely believed, sometimes through underground sources of drinking water, according to research released Tuesday by Stanford University scientists.

Though researchers cautioned their study of hydraulic fracturing, or fracking, employed at two Wyoming geological formations showed no direct evidence of water-supply contamination, their work is certain to roil the public health debate over the risks of the controversial oil and gas production process.

Fracking involves high-pressure injection of millions of gallons of water mixed with sand and chemicals to crack geological formations and tap previously unreachable oil and

gas reserves. Fracking fluids contain a host of chemicals, including known carcinogens and neurotoxins.



An EPA staff report indicates well water is tainted, but it is still deemed safe to drink. ( Neela Banerjee )

Fears about possible water contamination and air pollution have fed resistance in communities around the country, threatening to slow the oil and gas boom made possible by fracking.

Fracking into underground drinking water sources is not prohibited by the 2005 Energy Policy Act, which exempted the practice from key provisions of the Safe Drinking Water Act. But the industry has long held that it does not hydraulically fracture into underground sources of drinking water because oil and gas deposits sit far deeper than aquifers.

The study, however, found that energy companies used acid stimulation, a production method, and hydraulic fracturing in the Wind River and Fort Union geological formations that make up the Pavillion gas field and that contain both natural gas and sources of drinking water.

"Thousands of gallons of diesel fuel and millions of gallons of fluids containing numerous inorganic and organic additives were injected directly into these two formations during hundreds of stimulation events," concluded Dominic DiGiulio and Robert Jackson of Stanford's School of Earth Sciences in a presentation Tuesday at the American Chemical Society conference in San Francisco.

The scientists cautioned that their research, which is ongoing and has yet to be peerreviewed, "does not say that drinking water has been contaminated by hydraulic fracturing."

Rather, they point out that there is no way of knowing the effects of fracking into groundwater resources because regulators have not assessed the scope and impact of the activity.

"The extent and consequences of these activities are poorly documented, hindering assessments of potential resource damage and human exposure," DiGiulio wrote.

Underground sources of drinking water, or USDWs, are a category of aquifers under the Safe Drinking Water Act that could provide water for human consumption.



A study of hydraulic fracturing sites in Colorado finds substances that have been linked to infertility, birth defects and cancer. ( Neela Baneriee )

"If the water isn't being used now, it doesn't mean it can't be used in the future," said DiGiulio, a Stanford research associate who recently retired from the Environmental Protection Agency. "That was the intent of identifying underground sources of drinking water: to safeguard them."

The EPA documented in 2004 that fracking into drinking water sources had occurred when companies extracted natural gas from coal seams. But industry officials have long denied that the current oil and gas boom has resulted in fracking into drinking water sources because the hydrocarbon deposits are located in deeper geological formations.

"Thankfully, the formations where hydraulic fracturing actually is occurring...are isolated from USDWs by multiple layers and often billions of tons of impenetrable rock," said Steve Everley, a spokesman for Energy in Depth, an industry group.

Industry officials had not seen the Stanford research.

DiGiulio and Jackson plotted the depths of fracked wells, as well as domestic drinking water wells in the Pavillion area. They found that companies used acid stimulation and hydraulic fracturing at depths of the deepest water wells near the Pavillion gas field, at 700 to 750 feet, far shallower than fracking was previously thought to occur in the area.

"It's true that fracking often occurs miles below the surface," said Jackson, professor of environment and energy at Stanford. "People don't realize, though, that it's sometimes happening less than a thousand feet underground in sources of drinking water."



An inspector general's report says the EPA was justified in investigating claims of water contamination near a fracking site in Texas. ( Neela Banjeree )

Companies say that fracking has never contaminated drinking water. The EPA launched three investigations over the last six years into possible drinking water contamination by oil and gas activity in Dimock, Pa.; Parker County, Texas; and Pavillion, Wyo. After initially finding evidence of contamination at the three sites, the EPA shelved the investigations amid allegations by environmentalists and local residents that the regulator succumbed to political pressure.

Jackson said the Stanford study's findings underscore the need for better monitoring of fracking at shallower depths. "You can't test the consequences of an activity if you don't know how common it is," he said. "We think that any fracking within a thousand feet of the surface should be more clearly documented and face greater scrutiny."

The Stanford study focuses on Pavillion, in part because of DiGiulio's familiarity with the area when he served as an EPA researcher in the latter stages of the Pavillion water study. Industry and the state of Wyoming questioned the EPA's methodology after its 2011 draft report found the presence of chemicals associated with gas production in residents' well water. In June 2013, the EPA turned over the study to Wyoming regulators, whose work is being funded by EnCana, the company accused of polluting the water in Pavillion.

The EPA study looked at whether chemicals migrated upward from fracked geological zones into people's well water. The Stanford research does not explore the possibility of migration, focusing instead on the injection of fracking chemicals directly into geological formations that contain groundwater.

The EPA does not keep track of whether underground sources of drinking water have been hydraulically fractured as part of oil and gas development, said Alisha Johnson, a spokeswoman. "EPA does not maintain a database of all the wells being hydraulically fractured across the country," she said in an email.

In their presentation, DiGiulio and Jackson noted that the EPA considers the Wind River formation and the Fort Union stratum below it to be underground sources of drinking

water. The conventional image of tight geological formations where fracking occurs is that they are monolithic stretches of rock. But the scientists say the geology of the two formations is mostly sandstone of varying permeability and water.

"People think these formations are impermeable, and so they wonder, 'Why are you worrying about water?" DiGiulio said. "But it is an extremely heterogeneous environment, with areas of low and high permeability mixed together and with many lenses conducting water."

Follow @neelaeast for energy and environmental news.

Copyright © 2014, Los Angeles Times

## Moves buy water bond time

Legislators act to renumber ballot, delay voter guide deadline

By Timm Herdt Ventura County Star 8/12/2014

SACRAMENTO — Anticipating that a deal may be near to place a scaled-down water bond before voters in November, the Legislature on Monday took two emergency actions designed to save a prime place for it on the ballot.

Lawmakers extended from Monday to Wednesday the mandated deadline for the secretary of state to send the Voter Information Guide to the state printer. The final Senate vote came about a half-hour before the voter guide was to have been sent out.

But the details for an actual water bond remain devilish.

An \$11.1 billion water bond approved in 2009 is scheduled to be on the ballot as Proposition 43, but the prevailing sentiment in the Capitol is that it is too expensive to win approval.

Separately, lawmakers approved a measure to renumber the ballot propositions in a way that reserves "Proposition 1" for a new water bond, if one is approved in the next two days. The bill passed Monday changes the ballot measure to establish a rainy day budget reserve, originally designated "Proposition 44," to "Proposition 2." It leaves unchanged, at least for the moment, the first measure on the ballot, Proposition 43. If a new bond measure is approved, Proposition 43 would be stricken from the ballot and replaced by the new bond, which would become "Proposition 1."

Whether a deal can be struck to gain the support of a two-thirds majority of lawmakers and Brown's signature, however, remains uncertain. Because of the two-thirds majority requirement, the support of at least some Republicans will be necessary.

Senate Democrats are seeking a \$7.5 billion bond, Senate Republicans last week released a proposal for an \$8.7 billion bond, and Assembly Democrats have been advocating an \$8 billion bond. Last week Gov. Jerry Brown released a proposal for what he called a "no-frills" \$6 billion bond.

Embedded among the proposals are differences of opinion on key issues such as how much would go for new water storage projects and how much money could be spent on projects to facilitate the Brown administration's plan to build two tunnels to divert water under the Sacramento-San Joaquin Delta.

Legislative sources said Monday that negotiations are continuing and that an agreement may be close. The Brown administration and legislative leaders Sunday began circulating a proposal, obtained by The Star, which calls for a \$6.995 billion bond that

would include \$2.5 billion for water storage. It also would allocate \$200 million from past bond measures to pay for projects to provide safe drinking water to communities without it.

The proposal falls short of Republican insistence that at least \$3 billion be allocated for water storage, and other provisions were immediately assailed by environmental groups and Delta advocates.

Assembly Republican leader Connie Conway, of Tulare, said that discussions are "going in the right direction" but that the Brown plan "fails to provide a sufficient down payment on the two large storage projects that are the backbone of any compromise water plan."

In a joint statement, the Sierra Club California and the Planning and Conservation League said the proposal would "enable the Bay-Delta Tunnels," and the group Restore the Delta issued a news release saying provisions would allow for "water purchases to make the twin Delta tunnels operational."

Most analysts think a bond must be "tunnelneutral" to win voter approval because any measure perceived to facilitate the tunnel project would generate organized opposition.

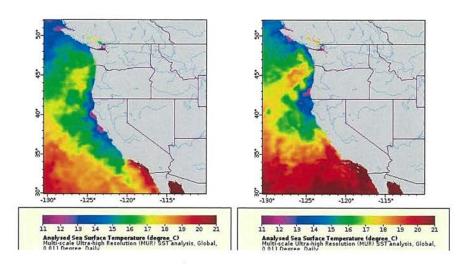
A poll conducted for Senate Democrats in April showed that support for the existing bond measure dropped to 44 percent from 57 percent after voters were told it "will help fund the Delta tunnels plan."

To accommodate a new bond and the renumbering of two ballot measures will require the publication of a second, supplemental voter guide. A spokeswoman for the secretary of state said the timetable to send 12 million supplement guides to voters will require mailing them first-class rather than at the bulk mail rate that is customary for the regular voter guide.

The requirement for a supplemental voter guide will cost several million dollars, she said, with the precise amount to be determined by the number of pages involved.

Copyright © 2014 Ventura County Star 08/12/2014

# 'Remarkable' warming reported in Central California coastal waters



Satellite images show the warming reported off the Central California coast during the first three weeks of July. (National Oceanic and Atmospheric Administration)

By VERONICA ROCHA LA TIMES 8/12/2014

Warming in California Central coastal waters leads to 'unusual encounters' with some fish species

Ocean temperatures along the Central California coast experienced a "remarkable" warming period during the first three weeks of July, leading to unusual encounters with some fish species, scientists reported.

The warmer ocean correlated with weaker winds, which reduced coastal upwelling, allowing warmer water to move inshore, according to the National Oceanic and Atmospheric Administration.

The warming is related to unusual weather pattern seen in the Sierra Nevada, where recent thunderstorms have pummeled dry forest lands with bursts of rain and lightning, Nate Mantua, Team Leader of Landscape Ecology for Southwest Fisheries Science Center, said in an email.

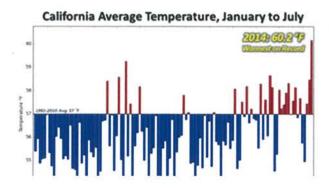
The upper ocean within 50 to 100 miles of the coast has been 3.6 to about 7 degrees Fahrenheit warmer than what's typical for this time of year, mostly south of the Golden Gate, he said.

"Scientists and many others that are interested in our ocean are paying close attention to this warming because it will likely impact marine life, and it could impact marine life beyond this summer," he said.

For instance, warming of the upper ocean usually comes with changes in the plankton and fish communities found along the California coast, he added.

The warm water reached depths of 20 to 40 meters, allowing "unusual encounters" with ocean sunfish and jellyfish called "sea nettles," scientists with NOAA's Southwest Fisheries Science Center reported during a survey on the Tomales Bay and Pigeon Point.

The jellyfish were also spotted farther north than they are typically seen.



The first seven months of this year have been the warmest on record for California, according to the National Weather Service. ( Veronica Rocha )

If the warming continues this summer, he said more subtropical species like ocean sunfish, albacore, dorado, yellowtail, yellowfin or bluefin tuna, or humboldt squid could move into water near the shore. The species typically avoid those waters when it is colder.

But if the warming persists into fall, Mantua warned some cold-environment species could suffer reduced growth, poor reproductive success and population declines. Warmwater species, however, may experience a reproductive boom.

Rick Powers, owner of Bodega Bay Sport Fishing Center, said he has seen plenty of ocean fish recently, but more so since the water has become noticeably warmer.

"As far as productivity, our trips have been successful all summer," he said.

Rockfish has been particularly active and salmon fishing was "good," but they appeared to be closer to the sea floor, Powers said.

Still, he said the warmer ocean temperature could indicate something else.

"I really believe we have some type of El Niño in progress," Powers said.

An El Niño weather pattern would bring more exotic fish, including Marlin, Dorado and white seabass, offshore during September, October and November.

But Mantua said, the patches of warm water in the North Pacific don't appear to related to a tropical El Niño so far.

If an El Niño forms and spreads the warming along the Pacific coast into next winter and spring, he said "impacts on marine life would definitely carry over into next spring and early summer."

"It would be a double-whammy of bad news for California's Pacific salmon that are currently under stress in their freshwater habitats from the ongoing drought," Mantua said.

In June, the National Oceanic and Atmospheric Administration reported that the first six months of this year were the hottest ever in California. And it was the second warmest year, on average, in Los Angeles in the last 70 years.

Just last week, forecasters said the chances of a wet El Niño weather pattern decreased to about 65%, and if it does arrive, it will probably be weaker than originally expected.



<u>Just how dry is California? Here is every map of California released by the U.S. Drought Monitor since</u> 2011 (Kyle Kim, Thomas Suh Lauder)

Copyright © 2014, Los Angeles Times

## West Basin Water Official Accused of Misusing Taxpayer Money

Malibu is one of several cities that buys water from the West Basic District.



#### westbasin.org

By Melissa Caskey / melissa@malibutimes.com | Posted 6 days ago Malibu Times 8/12/2014

A board member with the West Basin Municipal Water District (WBMWD) was arrested last week for allegedly misusing public funds.

Board member Ronald C. Smith is facing seven criminal counts, including two counts alleging misuse of public funds, one count for allegedly having a "financial interest in a contract entered into by his agency" and four counts for allegedly filing false affidavits.

Smith has pleaded "not guilty" to all charges and his next court date, a preliminary hearing, is set for Aug. 12. A spokesperson for the L.A. County District Attorney's Office told the Daily Breeze that the charges pertain to approximately \$20,000 in taxpayer funds, including at least \$8,000 that went to an unnamed nonprofit organization that Smith may have been involved with.

Malibu is one of several Los Angeles-area cities that buys wholesale water from the WBMWD, which provides water and recycled wastewater in its 185-square-mile service area.

Smith has served on the board since 2006 as a representative for the South Bay cities of Ranchos Palos Verdes, Carson, Rolling Hills Estates, Palos Verdes Estates and part of San Pedro.

In a statement released to the media, West Basin officials tried to distance themselves from Smith and said his situation should have no bearing on WBMWD's ongoing operations.

"West Basin wants our communities and stakeholders to know that this situation will not impact our commitment to transparency and sound financial and resource management of public funds," said Board Vice President Gloria Gray.

#### Public safety briefs

#### VENTURA COUNTY

## Drought forces halt to creek boating

The United Water Conservation District said Monday that it will not offer whitewater boating on Lower Piru Creek this fall because of the drought.

The district typically releases water from Lake Piru forseveralweeksinSeptember and Octobertorecharge groundwater basins downstream, officials said.

Because of the very low levels of water stored in Lake Piru this year, the district will not conduct a fall release, officials said. Rafting and kayaking on Lower Piru Creek will not be available in 2014.

For more information on future whitewater boating opportunities, contact Clayton Strahan, senior park services officer at Lake Piru Recreation Area, at 317-8990 or claytons@ unitedwater.org.

Staff reports

Copyright © 2014 Ventura County Star 08/12/2014

#### DRINKING WATER

## Officials seek ways to stop future toxins

Agricultural runoff led to lake pollution

By John Seewer Associated Press Ventura County Star 8/11/2014



Ohio Air national Guard senior Airman nick Wander fills a 400-gallon receptacle with fresh drinking water in Toledo, Ohio. Associated Press File

TOLEDO, Ohio — Scientists and farmers agree that phosphorus from agriculture runoff is feeding the blue-green algae blooms on Lake Erie linked to a toxin found in the drinking water of 400,000 people in Ohio and southeastern Michigan last week.

Ohio's political leaders are calling for more studies to find out why the blooms are increasing and how to control them. A number of environmental groups say it's time for strict regulations on the agriculture industry.

But how much of a role do the farms play? Researchers already know some of the answers, yet there are still many unknowns.

#### THE SOURCES

The debate over the algae blooms that produce the toxins found in Toledo's water starts with what is causing them.

Scientists say climate change has brought on more heavy spring rains that are washing fertilizers off farm fields and lawns and causing sewer overflows in cities. All of those combine to dump more phosphorus in the rivers and streams that flow into the lake.

At the same time, scientists believe invasive zebra mussels in Lake Erie have disrupted the food chain so much that it has helped the algae flourish.

Then there is the question of where all the phosphorus is coming from. It's found in farm

fertilizers, livestock manure and raw sewage.

The Ohio Phosphorus Task Force — a group in Ohio representing the agriculture industry, environmental researchers and state regulators — concluded nearly two years ago that agriculture was the leading source of the phosphorus. Some researchers say it's as much as two-thirds from agriculture.

That's mainly because half the phosphorus in the lake comes down the Maumee River, which drains 3 million acres of farmland before flowing through Toledo and into the lake — not far from where last week's algae bloom overwhelmed Toledo's water intake.

#### THE UNKNOWNS

While it's now widely accepted that much of the phosphorus is coming from farmland, what's much more difficult to pin down is exactly where and why.

There's an assumption that farmers are simply over fertilizing their fields. Soil tests have shown that about 30 percent of fields have more phosphorus than they need. Cutting down on fertilizing that land would help with the problem.

But industry sales figures also show that farmers are using much less fertilizer because of advanced technology that allows them to apply it just where it's needed. The amount of phosphorus fertilizer sold in Ohio in 2011 was less than half that sold in the mid-1990s.

Another assumption is that the main source of phosphorus is the manure produced by large livestock operations and mega dairies, which have increased dramatically over the past two decades along with the algae blooms.

But there's not enough monitoring right now to know if those mega farms are the culprit, researchers say. "Without soil tests it's totally impossible to determine," said Jeff Reutter, head of the Ohio Sea Grant research lab.

Copyright © 2014 Ventura County Star 08/11/2014

#### Local briefs

#### SANTA PAULA

## City Council will look at sewage rates

The City Council will discuss using a new way to calculate residential sewer fees when it meets Monday.

Critics say the city has what some say are the highest sewage rates in Ventura County.

Critics also say the way Santa Paula calculates its sewage prices, which are based on water use, is unfair. They say many households typically use more water in summer months to water lawns and other plants. All or most of this water goes into the ground, with little traveling to the water treatment plant.

Critics say a fairer system would resemble the city of Ventura's. Ventura's sewage rates are based on a baseline of water use in the three wettest months of the year, when much if not all water enters the sewer.

The council also is expected to discuss water conservation.

The council will meet at 6:30 p.m. at 970 Ventura St.

Copyright © 2014 Ventura County Star 08/11/2014

## This L.A. cop gets the drop on water offenders



Rick Silva, a water cop in L.A.'s Water Conservation Response Unit, patrols the city's streets in search of wasteful homes or businesses during the state's extreme drought. (Luis Sinco / Los Angeles Times)

By DASHIELL YOUNG-SAVER LA TIMES 8/11/2014

Rick Silva began his investigation at the end of an alley, on a hot day in L.A.'s Westlake community. Driving down a busy thoroughfare, he spied water runoff on a sidewalk.

He steered his city-owned Honda Civic into the alley and followed the water to a small plastic pipe adjacent to a convalescent home.

Silva parked and went inside to see the manager. After introducing himself as "LADWP," Silva said loudly, "You know there's a drought."

The manager replied that the runoff was from the cleaning of barrels for sanitation purposes. He added that the facility used water-saving pressure hoses for the job.

Silva smiled. The place checked out.

Silva is a water cop in the city's Water Conservation Response Unit. While other kinds of investigators follow fingerprints or eyewitness accounts, Silva follows the water, patrolling the streets of Los Angeles in search of wasteful homes or businesses during the state's extreme drought.

It's a daunting task — just four people, full time, policing an area of about 460 square miles. For that reason, they mostly respond to calls or emails from people who report their neighbors watering lawns on the wrong days, spraying down sidewalks or allowing street runoff. The agency does not reveal the identity of the tipsters.

If Silva sees other violators while driving to check out tips, he stops to talk to them as well.

The phone lines have been busy since July, when the state announced daily fines of up to \$500 for violators. News reports about the fines raised public awareness, and Silva estimates the number of tips rose fourfold, with about 75% pertaining to violators in single-family homes.

If we don't get rain for another two or three years, then everyone becomes a water cop. I don't want my neighbor watering his lawn if I won't have enough water to drink and live.- Rick Silva

The fines applied to water districts across the state, although not in Los Angeles, which has had restrictions in place since 2009. Los Angeles decreased its water consumption 2.4% in the five months since Gov. Jerry Brown declared the drought last winter, compared with the same period last year.

In L.A., fines of \$100 can be levied for such behavior as using sprinklers more than three days a week, watering outdoors between 9 a.m. and 4 p.m., hosing down sidewalks and allowing water runoff into the streets.

The fines can rise to \$300 for repeat violators. Businesses pay double those amounts.

For the most part, a warning is all that is needed.

Penny Falcon, who manages water conservation policy for the Department of Water and Power, said the agency has found that "once people become educated on what requirements there are, they want to respond and do the right thing." The conservation unit sends out informational letters and gives personal warnings to water wasters, handing out fines only after repeated violations.

Since fall 2013, the city has received more than 1,100 reports of water violations. Of those, more than 850 repeat offenders received warnings. None had to be fined for continued violations.

Rather than ramping up enforcement, the DWP is focusing on educational outreach through Silva's unit, in which he was the lone full-time employee until three others were added in recent weeks.

Silva said he is ready for stricter rules if the drought worsens. If rain and snowfall levels are low again this winter, he said, outdoor irrigation could be further restricted or completely outlawed as early as next summer, leaving almost every lawn in Los Angeles dead. Currently, about 40% of the city's drinking water is used for landscape irrigation.

"If we don't get rain for another two or three years, then everyone becomes a water cop," Silva said. "I don't want my neighbor watering his lawn if I won't have enough water to drink and live."

But for now, even as statewide predictions look bleak, the water cop has hope.

"L.A. gets it — not to the very last person — but on the whole we get it," Silva said. "If everyone contributes, we can go into these regular cycles and everything will be OK."



Water copy Rick Silva tries to trace the source of water running down an alley in the Temple-Beaudry neighborhood of Los Angeles. If Silva sees other violators while driving to check out tips, he stops to talk to them as well. (Luis Sinco / Los Angeles Times)

Copyright © 2014, Los Angeles Times

## Water wasters are schooled in drought

#### Attendance negates fines in Santa Cruz

By Martha Mendoza Associated Press Ventura County Star 8/10/2014



Nik Martinelli, a water conservation specialist for the city of Santa Cruz, finds a broken sprinkler head July 29 in Santa Cruz. Santa Cruz is among those worst hit by the drought because it relies almost exclusively on storm runoff.

SANTA CRUZ — Some overindulged their zucchini patch. Others didn't bother with that dripping kitchen sink. But now every Monday night in this droughtstricken beach town, dozens of residents who violated their strict rations take a seat at Water School, hoping to get hundreds of thousands of dollars in distressing penalties waived.

Nik Martinelli, a Santa Cruz water-conservation specialist who is up before dawn patrolling for overwatered lawns, launched a recent lesson.

"We all know why you're here. You all went over your allotment and got a big penalty," he said.

Margaret Hughes nodded grimly. Her \$210 water bill came with a \$775 fine last month. She drove from her home four hours north of town to face the scolding, even though she had no idea the toilet in a vacant house she inherited had been leaking.

Two hours later, everyone was ready to ace their Water School quiz, identifying the community's sparse water sources, listing ways to conserve water, describing how to use their water meters to check for leaks.

"They're turning this into something positive," said Hughes, adding that she might take advantage of a \$150 rip-out-your-lawn rebate she learned about.



A water conservation sign is displayed outside City Hall in Santa Cruz.

California is in the third year of the state's worst drought in recent history. Farmland is going fallow. Lakes are turning to mud. Golf courses, cemeteries and parks are browning.

Earlier in the year when winter storms didn't blow in and the forecast was grim, most communities took the "ask nicely," approach, suggesting residents cut water use by 20 percent.

But Santa Cruz, a coastal town about 60 miles south of San Francisco, couldn't afford to wait.

Unlike most cities that have either groundwater, a connection to state water canals, or vast reservoirs, Santa Cruz is among those worst hit by the drought because what makes it special — the town is surrounded by ocean and mountains — also means it relies almost exclusively on storm runoff into a river, creeks and an aging reservoir.

"We're completely dependent on Mother Nature, so we're vulnerable" Santa Cruz Water Director Rosemary Menard said. "There really is no carrot in the situation that we're facing. We had to ration."

The city cracked down in May, deploying "drought busters," whom locals call "water cops," to warn — and then penalize — anyone openly watering between 10 a.m. and 5 p.m., washing down pavement or refilling a spa. A logo, "Surf City Saves," was launched, and a hotline to tattle on water wasters and mandatory household limits, allowing just 249 gallons per day for a family of four, were set. A typical dishwasher load is 20 gallons, a load of laundry can be 25 gallons, a toilet flush can be 3 gallons. It adds up. Nationally, a family of four averages 400 gallons a day.

Most Santa Cruz residents, 94 percent of them, cut back as required, some with zeal.

Energy consultant Joel Kauffman has his household of three adults and a toddler using just over 100 gallons a day.

"We don't use the shower as a place to hang out. That's for the living room or the beach," Kauffman said.

Kauffman has installed low-flow toilets and shower heads. They don't always flush urine, they water their fruit trees with laundry runoff and a shower bucket gets dumped in the toilet tank or in the garden.

Some were not so ardent.

In June, the first month of rationing rules, 1,635 Santa Cruz household accounts faced \$341,000 in fines. In July, 2,121 accounts had penalties applied, totaling \$175,725.

So far \$202,340 in fines have been suspended for Water School graduates. And there's a waiting list for weeks to come.

Water Education Foundation Deputy Director Sue McClurg said they haven't heard about schooling repeat offenders, "but if it can educate customers on water conservation, it could be helpful."

University of California, Davis, professor Jay Lund, who directs the Center for Watershed Sciences, laughed when he heard about Santa Cruz's approach, but he said it might catch on.

"It makes sense, like traffic school," he said. "It has an educational purpose, but also a punishment aspect to it."



Ezecue Leon, 5, takes a shower before going to the city pool in Porterville Friday. Because people from East Porterville are living in the county area, they cannot connect to the city water system. As a result, their well went dry for weeks. Associated Press Photos

## Keeping it clean

#### Firm offers wide range of services in waste water

By Allison Bruce Special to The Star Ventura County Star 8/10/25014



Mark Albillar, operator, at Southern California Waste Water in Santa Paula, checks the PH levels on the GEM system. The company just bought a Ozone Generator from Sea World and is putting it to use at the plant. PHOTOS BY JUAN CARLO/ THE STAR

The behind-the-scenes services that Southern California Waste Water provides help keep many of Ventura County's companies operating.

The company, a subsidiary of Green Compass Group, handles nonhazardous waste water treatment for residential and industrial customers, keeping those customers compliant with the latest regulations on how their waste water is handled.

It has its headquarters in Oxnard and its treatment facility in Santa Paula.

"It's no exaggeration to say that if SCWW were to close its doors, dozens of county businesses would have to close their doors within days because they would not be compliant," said Chief Executive Officer Doug Edwards.

In addition to waste water treatment, the company coordinates supporting services, such as transportation, to meet customer needs.

SCWW relocated its corporate offices to Oxnard in 2013 so it could grow its processing space at its Santa Paula site, which still has room for future growth, said Chuck Mundy, general manager and vice president of environmental safety. It also operates a facility in Kern County.



Southern California Waste Water in Santa Paula has a dump station and overall pit stations. The company has its headquarters in Oxnard.

A consortium of oil and gas companies started SCWW in 1959, and the company was privatized in the 1980s as oil prices dropped, changing its focus from the oil and gas industry to domestic and industrial waste, Edwards said.

Edwards said his family acquired the company after it filed for bankruptcy in 2004. In the 10 years since, SCWW has grown from 13 employees to about 100, with more than 80 percent of those people employed in Ventura County, he said.

<u>Waste360.com</u>, an industrial magazine, ranked SCWW 63rd out of the 100 largest solid waste and recycling companies in the nation in 2013.

Edwards said the company has returned to servicing local oil needs in addition to its work with domestic and commercial waste. The largest commercial industries in Ventura County are agriculture and energy, Edwards said, though the company treats a diversity of waste streams, ranging from mortuaries to manufacturing. It also serves an important role in treating stormwater.

As the company has grown, it has focused on two things to drive that growth — new technologies and customer service.

New rules and regulations for processing waste water at the end of the Clinton administration put stricter demands on the industry and led to SCWW putting new procedures in place, Edwards said.

The company had previously used chemicals to treat waste water. New regulations, particularly for privately owned treatment facilities that discharge their treated water into

a local municipality's treatment plant — as SCWW does — meant that other technologies, which had been cost-prohibitive before, now made sense, Mundy said.

After researching different operating processes and technologies, SCWW shifted to mechanical methods of cleaning the waste water.

SCWW uses electrocoagulation, which precipitates solids out of the water, ozone treatment to destroy organic compounds in the water and other approaches, such as filtration through sand, carbon and micron filters.

There are plans to modify the ozone system and make it more efficient, Mundy said. He and Edwards said SCWW is always looking for ways to make the plant more costeffective and cost-efficient.

#### **EXPANDED SERVICES**

But SCWW's growth doesn't just stem from what it is doing within its treatment facility. The company also has expanded the services it offers customers.

"Our approach has always been to try to create efficiencies to try to operate in a way most beneficial for our clients," Edwards said. Adding additional shifts to keep the facility operating at all hours or contracting with transportation companies fit naturally into that approach, he said.

As an example, Edwards noted that SCWW handles about two-thirds of the county's septic waste from private homes. It also treats the waste from chemical toilets used in farm fields and at events, such as the Strawberry Festival.

"Those things need to be dealt with on a realtime basis," he said. The weekend of the Strawberry Festival, waste haulers can't collect the waste and just store it somewhere — they need to have someplace to bring it for treatment.

The same logic applies to treating the waste water, solids and additives from drilling a well, Mundy said. Companies can't simply hold off on drilling until someone can pick up and treat the waste — it has to be done as it is generated.

Dylan Gerazi, senior project manager for drilling company Layne's water resource division, said storage for drill cuttings and water is often limited at a site and can sometimes fill up in a day.

"We need someone who can answer the call and be responsive ... so operations can continue," he said.

Having pickup, transportation and disposal all handled by SCWW saves on time and increases efficiency, while also making it easier to estimate the cost of a water well project, he said.

Gerazi said before he started working with SCWW there was always the challenge of trying to estimate the cost to transport and dispose of each load. If the estimate was off in the bid, it could cost the company a lot by the end of the project. More uniform pricing up front means being on budget when it comes to load cost, he said.

"I would highly recommend them to any driller," Gerazi said.

He said SCWW has a reputation for integrity and proper waste disposal, which is vital for a company working in an environmentally sensitive state, such as California.

"They take ownership of the derived waste and, when you have a big company like Layne ... it is important that you have trust that your contractors are going to do the right thing when they take ownership," he said.

To better serve customers such as Layne, which works in multiple locations, SCWW has expanded its reach into other areas and states by contracting with other waste water treatment facilities. That way, a client who does business in several locations only has to make one call to coordinate its waste treatment, Edwards said.

"It's good for them, and it's good for us," he said. "It gives us a way to expand without having to purchase asset space."

Mundy said SCWW's job becomes how best to serve each client.

"Our job is not just the disposal side," he said.

This story is part of an occasional series on how Ventura County technology companies are impacting people. If your company fits that profile and you would like to be part of the series, send information about your company and a contact number to DeAnn Justesen at <a href="mailto:dajustesen@vcstar.com">dajustesen@vcstar.com</a>.



Mark Albillar, operator, at Southern California Waste Water in Santa Paula checks the PH levels on the GEM system.

#### PHOTOS BY JuAn CArlO/ THE STAr



Carl Edwards, vice president sales and marketing, looks at one of the holding tanks at Southern California Waste Water in Santa Paula.

## Technology at Work



## **SOUTHERN CALIFORNIA WASTE WATER**

Head quarters: Oxnard

Treatment facility: Santa Paula

Founded: 1959

Employees: About 100, with more than 80 percent employed in Ventura County

Scale: SCWW provides service to more than 30,000 waste generators, including households and commercial customers. The company has received and processed more

than 2 billion gallons of waste water since 1959.

What they treat: SCWW handles nonhazardous waste water from industrial, governmental and domestic customers, including waste from septic systems, chemical toilets, stormwater runoff and water that leaches from landfills. The company even processes bio-waste from exploratory centers in Antarctica.

Copyright © 2014 Ventura County Star 08/10/2014

## Chance of El Niño will drop to 65%

Forecasters say if it comes, it will be weak

By Paul Rogers San Jose Mercury News Ventura County Star 8/09/2014

SAN JOSE — A powerful El Niño that had been emerging in the Pacific is fizzling out, evaporating hopes it will deliver a knockout punch to California's three year drought.

A new report from scientists at the National Oceanic and Atmospheric Administration decreases the probability of El Niño — the condition that occurs when warm Pacific Ocean water at the equator affects the jet stream — to 65 percent starting in October, down from 82 percent in June.

More significantly, researchers said, the ocean water that had been warming steadily through the spring has cooled off in recent months. So most of the world's leading meteorological organizations now say that if El Niño arrives this winter, it is likely to be a weak or moderate one — not the kind historically linked with wetter-than normal winters in California.

"It's fair to say that it's plateaued," said Michelle L'Heureux, a meteorologist with the NOAA Climate Prediction Center in College Park, Maryland.

Other researchers are more blunt.

"We're back to square one. It's finished. I don't think we even have an El Niño any more," said Bill Patzert, a research scientist and oceanographer at NASA's Jet Propulsion Laboratory near Pasadena.

"If I were a betting man, I'd say it's 75 percent that we'll have another dry winter," he said. "The unfortunate fact is that it looks like the last three years all over again."

To be sure, California could still have a wet winter to help fill depleted reservoirs, replenish streams and raise over-pumped water tables.

If a steady series of low pressure systems develops off the Pacific Coast later in the year, that could bring tropical storms dumping rain in large amounts. The trend, known as an "atmospheric river" or "Pineapple Express," has soaked the state in the past. But it has been all but shut down over the past three years as unusually persistent ridges of high pressure off the coast pushed winter storms north to Canada instead.

But the possibility that a strong El Niño won't be there to help is "not good news, especially if we are using El Niño as an optimism index. It's not what we want to see," said meteorologist Jan Null, with Golden Gate Weather Services in Saratoga.

Generally speaking, the warmer the ocean water during El Niño years, the greater the likelihood of heavy winter rainfall. During mild El Niño years, when the ocean water is only slightly warmer than historic averages, there are just as many drier-than-average winters in California as soaking ones.

Since 1951, there have been six winters with strong El Niño conditions. In four of them, rainfall from the Bay Area to Bakersfield was at least 140 percent of the historic average, Null found.

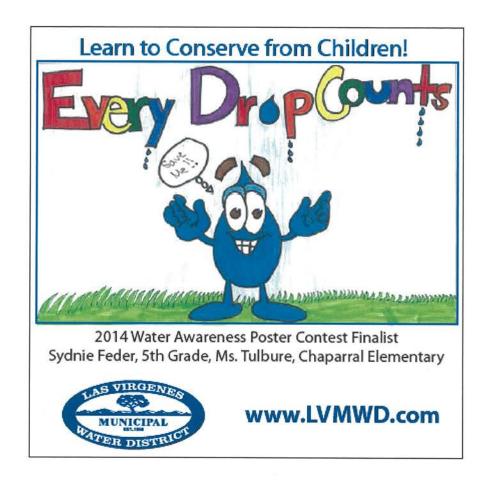
But in the 16 winters since 1951 when there was a weak or moderate El Niño, California experienced below- normal rainfall in six of them. There was average rainfall in five and above normal precipitation in the other five.

Thursday's NOAA report was based on ocean temperature readings from dozens of buoys, wind measurements, satellite images and more than a dozen computer models from scientific agencies around the world.

In April, the report noted, Pacific Ocean waters were nearly 4 degrees Fahrenheit warmer than normal along the equator from the surface down to about 1,000 feet deep. But by last month, they had cooled — and are now half a degree cooler than normal. Wind bursts from Indonesia that had pushed warm water toward South America and the United States diminished. And huge amounts of heat dissipated and failed to trigger weather changes in the atmosphere.

"We've seen very lackluster atmospheric response," said NOAA's L'Heureux.

Copyright © 2014 Ventura County Star 08/09/2014



Valley News Group, August 7, 2014

# WATER CONSERVATION MEASURES Now in Effect

Irrigation is prohibited between the hours of 10 a.m. and 5 p.m.

Irrigation may not occur during periods of rain or in the 24 hours following rainfall of an inch or more.

Irrigation may not run off the property into streets, gutters or onto adjacent properties.

The washing down of sidewalks, parking areas and driveways is not permitted.

A trigger nozzle is required on hoses used for home car washing.

Fountains or water features must use a recirculating system.

Hotels & motels must give multi-night guests the option to retain towels and linens during their stay.

## SAVING WATER MAKES A DIFFERENCE



www.LVMWD.com

Valley News Group, August 7, 2014