NEWS CLIPS

Published September 12, 2014

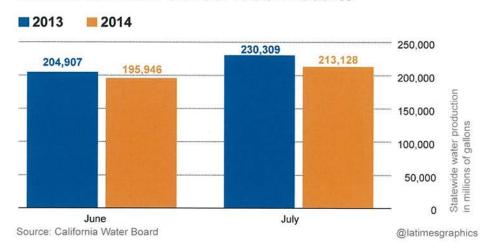


Resource Conservation and Public Outreach

Organized by date

Southern California's water usage drop not as steep as rest of state

Statewide water conservation results



By MATT STEVENS LA TIMES 9/11/2014

Southland water usage dropped 1.7% in July, but California usage declined 7.5% Expert says Southern and Northern California water usage shouldn't be compared because of regional variability

Southern Californians are reducing their water use amid a historic drought, but they've cut back at the lowest rate in the state, the Water Resources Control Board announced this week.

The South Coast Hydrologic Region, which includes major urban areas such as Los Angeles, Santa Ana and San Diego, reduced water use by 1.7% in July — an improvement from May when a voluntary survey by the state board showed an 8% increase in Southern California water use.

I think there are people in large urban centers who now know there is a drought who didn't know in the early part of the year.- Felicia Marcus, chairwoman of the state water board

But the Southland's water-usage reduction paled in comparison to the statewide 7.5% reduction — down more than 17 billion gallons from July last year, the board announced.

Max Gomberg, the state water board's senior environmental scientist, cautioned against comparing Northern and Southern California. He said there is high variability among regions.

Some areas, he said, are simply "starting from different places" when it comes to conservation. For instance, Long Beach may see only a relatively small reduction now, but that's because it has been aggressively conserving water for years, he said.

"Part of the reason we've seen such a huge response from the Sacramento area is because they had higher per-capita use rates to begin with," Gomberg said. "They were able to quickly do things like reduce irrigation frequency, make fixes to irrigation systems, swap out some turf — all things that many Southern California communities have already done."

Declines in California water usage deepened following the adoption in July of emergency conservation regulations. The state saw an average 4.4% reduction in June, but despite calls for conservation, the state saw a 1.5% increase in consumption in May.

Still, Californians are falling far short of the 20% reduction Gov. Jerry Brown called for in January when he issued an emergency drought declaration.

"We're happy to see the attention people have paid and that they're now stepping up," said Felicia Marcus, chairwoman of the state water board. "It's way better than it was. But we obviously want much more."

In July, the state water board adopted conservation regulations that spurred local water districts to tighten local ordinances. In many districts, mandatory outdoor watering restrictions were adopted and some agencies limited water for residential carwashes and pools.

State water officials attributed the increased water savings to new regulations and to amplified media attention. They said they expect the uptick to continue as new ordinances take effect and more people feel the consequences of the ongoing drought.

"I think there are people in large urban centers who now know there is a drought who didn't know in the early part of the year," Marcus said.

The board in July also made reporting water usage mandatory for urban water suppliers. About 87% of water agencies responded to the board's survey, compared with only about 63% that responded voluntarily in May.

The water board is expected to consider whether more aggressive actions are needed to reach the governor's 20% target after the August reports are released in mid-September.

"We're seeing the trend and it's encouraging," Marcus said. "If it tapers off or it doesn't materialize then we'll have to think next steps, but I prefer to be an optimist. Better late than never."

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Malibu Canyon Sewage Line Breaks

By Melissa Caskey Malibu Times

Posted: Thursday, September 11, 2014 3:16 pm | Updated: 4:41 pm, Thu Sep 11, 2014.

4:20 p.m.: Officials with the Las Virgenes Municipal Water District confirmed one lane of traffic is now open in each direction on Malibu Canyon Road between Piuma Road and Mulholland Highway, but repairs could take "several days" depending on the extent of the break.

A sludge-type material known as biosolids spilled into the road in the area from an eight-inch pipeline that pumps up Malibu Canyon Road, said David Lippman, director of facilities and operations for Las Virgenes. The pipeline is approximately 20 years old, Lippman said, which is considered "middle aged."

"The line has been turned off and stopped flowing," he said. "We're in the process of cleaning it up."

Officials won't know how long traffic will be down to one lane each way until they determine the cause of the problem, but if the source of the break came from an attachment to the main line, it will be an easier fix.

Original post: A severe sewage pipe break shut down traffic on Malibu Canyon Road between Piuma Road and Mulholland Highway on Thursday afternoon, according to the California Highway Patrol and City of Malibu.

The break was first reported at 1:30 p.m. in the 1300 block of Las Virgenes Road. CHP was at the scene to help with traffic control, as drivers were forced to turn around and take alternate routes.

According to the CHP site, the break is going to require a multi-day fix with temporary signage and cones diverting lanes.

Details of what caused the break and how long it will take to repair are not yet clear. Calls to the Las Virgenes Water District were not returned. Check back as more information becomes available.

Sewage Leak Causes Delays on Malibu Canyon Road

The affected area is between Mulholland Highway and Piuma Road.

By Penny Arévalo (Patch Staff) Updated September 11, 2014 Calabasas Patch



Originally posted at 2:30 p.m. Sept. 11, 2014. Edited with new details.

UPDATE at 6:48 p.m.: Lanes have been reopened on Las Virgenes Road between Piuma Road and Mulholland Highway after a full closure due to a sewage leak. Motorists should expect delays, according to Malibu Emergency Services. The pipeline has been shut off, and county Department of Public Works personnel are at the scene. The California Highway Patrol reports the cleanup likely will be a multi- day project.

Original post:

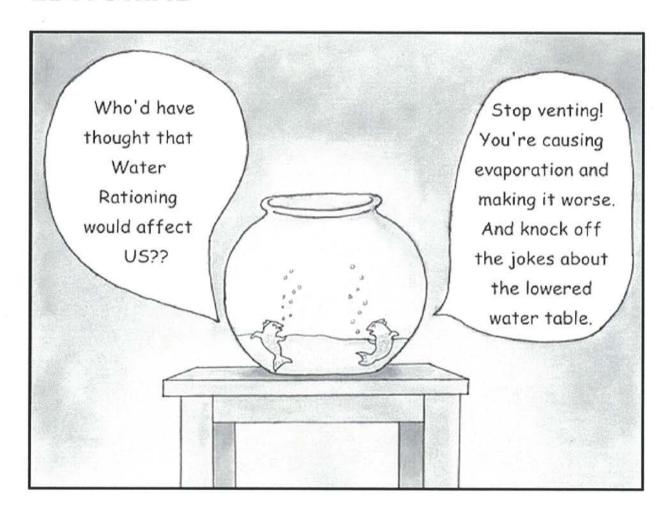
The Los Angeles County Sheriff's Malibu-Lost Hills Station reports a large water leak causing traffic delays on Malibu Canyon Road between Mulholland Highway and Piuma Road.

The city of Malibu tweeted the leak is sewage.

City News Service contributed to this report.

PHOTO Patch file photo.

EDITORIAL



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September 11, 2014

The Acorn

Let's Talk About Water!

Little Drop likes to talk about water. So he made some videos with information that will help you find a leak, stop a leak, read your meter and more.

You can view them at www.LVMWD.com / For Customers / Conservation / Let's Talk About Water







Topics covered:

- Checking for Leaks
- Connecting with LVMWD
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- How To Turn Your Water Off In An Emergency
- ✓ Mow No Mow Lawn Replacement Program
- Proper Irrigation of Your Lawn
- Rebates from LVMWD
- Saving Water in the Bathroom
- Saving Water in the Kitchen
- ✓ Saving Water in the Laundry Area
- ✓ Smart Controllers

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September 11, 2014

The Acorn

Word leaks out about school

The Acorn 9/11/2014

Last week's *Acorn* article about the water shortage in Oak Park coincided with the arrival in the mail of a notice from the Oak Park Water Service informing Oak Park residents of restrictions being placed on landscape irrigation and a series of fines for violating the restrictions.

It seems like the perfect time for me to point out that Brookside Elementary School irrigates their grassy areas, both outside the fence surrounding the soccer fields and inside the fence, six days a week.

Monday through Saturday those sprinklers run every single day, from approximately 4 to 5:30 a.m., with Sunday the only day that the sprinklers do not run.

It is not posted that the school is using recycled water, and even if they are, there is no need to water that grass six days a week.

Funny how the taxpayer is always required to carry the burden, while government entities, federal, state, county and local, carry on with business as usual.

Hopefully the same restrictions and penalties will apply to all water users, not just the taxpayers.

Matthew Toomey

Oak Park

DROUGHT

Water curbs move ahead

City Council to vote Sept. 22 on restrictions

By Arlene Martinez Ventura County Star 9/11/2014

Residents in Ventura soon could be asked to water their lawns at most two days a week and not at all from 9 a.m. to 6 p.m.

Violators could be fined up to \$50 for repeatedly ignoring the restrictions, which were recommended Tuesday night by the city's water shortage task force. The City Council is expected to vote at its Sept. 22 meeting on implementing the suggestions.

At the same time the city has begun enforcing existing rules against wasting water. If you're repeatedly caught doing things such as hosing off your driveway, washing your car without a shut-off valve for the hose or letting water from your sprinkler hit the sidewalk, you could face fines.

Tuesday's meeting was the third for the group, formed at the direction of the council to look into ways to reduce water use during the drought.

Forty to 60 percent of the city's water is used outdoors, according to water officials, so the committee began its efforts there.

The group chose to let residents pick the days they can water. It exempted sports fields, watering for short periods to adjust or fix an irrigation system and low-flow drip irrigation systems. It defined a week as starting on a Sunday and ending on a Saturday.

Task force member Diane Underhill requested that as part of the motion to limit lawn watering, language be added to prohibit new development as long as the drought lasts. The suggestion didn't go far.

That runs "far afield of the notion that's before us," said the group's vice chairman, Edward McCombs. Chairwoman Suzanne Mc-Combs was absent.

Resident Joseph Richardson, who said he worked for the city's water department from 1985-92, urged the group to redirect its energy toward building desalination facilities rather than getting residents to use less water to make way for future development.

Two residents requested that the task force set the days watering is allowed rather than letting residents choose.

"I don't see how we could ever enforce it if we don't know the days the 100,000 people are watering," resident Carol Lindberg said.

Code enforcement interim Supervisor Teresa Purrington agreed that there would be no way to enforce it.

"We would have a hard enough time even if they did assign days," she said.

Still, water use likely will drop because the city has responsible residents who will comply, Purrington said.

A residence that fails to comply first will receive a notice via a door hanger. A second violation would generate a written notice that requires a signature — proof residents know about the issue. The third time would result in a \$25 fine, and the fourth would cost a household \$50.

The group chose the lightest of three fine structures presented, rejecting two other structures with maximum fines of \$250 and \$500. The fines mirror those levied on violators of the city's existing waterwaste regulations.

Member Don Jensen said by having the existing structure, the fines would cause less controversy when they go before the City Council.

Panel member Bob Mc-Cord said he favored starting on the low end.

"There's nothing that precludes us from increasing those penalties, but I've never seen government go the other way," he said.

Although the city has had water regulations since 1989, it only began enforcing them last month, Ventura Water General Manager Shana Epstein said.

Resident Tim Farrell said Ventura was asking people to conserve but questioned what the city was doing to save water.

"You guys ought to be at the forefront," he said.

Officials said Ventura cut citywide use 11 percent in August compared with August 2013 and 6 percent in July compared with July 2013.

Along with its educational campaign, the city is offering free hourlong visits to any resident interested in getting help reading water bills, identifying indoor or outdoor water waste and learning ways to reduce water use. Call 667-6500, or email myvtawater@cityofventura.net to participate.

Next storm may test engineers' efforts

Ojai project aims for rain to aid aquifers

By Anne Kallas Special to The Star Ventura County Star 9/11/2014



Guests tour a spreading basin at San Antonio Creek on Wednesday in Ojai. The project is intended to redirect excess rainfall into aquifers under the Ojai Valley. CHUCK KIRMAN/THE STAR

An ambitious project to divert excess storm water heading from San Antonio Creek to the Pacific Ocean should work, but it will take a major storm before engineers know for sure.

The San Antonio Creek spreading grounds rehabilitation project was officially unveiled Wednesday during a ribbon-cutting in Ojai.

Four wells — two 90 feet deep and two 110 feet deep — have been dug to deliver water underground, filling four "spreading ground basins" and then recharging aquifers deep beneath the Ojai Valley.

Farmers built four settling ponds in the 1950s to capture rainwater. Those ponds worked until the massive Wheeler Fire in 1985, when firefighters had to use the water to fight the flames. The ponds then filled with debris and sediment.

Ventura County Supervisor Steve Bennett said the project to rehabilitate the ponds has faced a host of regulatory and funding challenges since it was proposed in 2005.

Elizabeth Martinez, environmental planner for the Ventura County Watershed Protection District, stepped in as project manager after \$1.3 million from Proposition 50 water management funds became available in 2007. An additional \$500,000 came later from the California Department of Water Resources.

The total construction budget for the project totaled about \$2.1 million.

The Ojai Basin Groundwater Management Agency, the Ojai Water Conservation District, Golden State Water Co., Casitas Municipal Water District and the Ventura County Watershed Protection District formed a coalition in 2008 to build and maintain the project.

Bennett said the system is designed to capture excess rainfall through a mesh-covered concrete "diversion intake structure." The water will run through a 24-inch pipeline drilled through the base of a mountain, where it will collect in the four basins. The mesh is in place to make sure no steelhead trout or their eggs get caught in the structure.

Martinez said an automated storm gauge on San Antonio Creek near Grand Avenue will send radio signals to the water intake structure upstream, triggering it to open when water in the creek reaches a foot in depth.

After the diverted water travels to the retaining ponds, it will settle. More pipes are in place to divert the water toward four wells that are strategically placed to recharge the aquifers. The system is designed to add 128,000 acre-feet of water to the aquifers but has a capacity of 900,000 acre-feet.

Jordan Kear, principal hydrogeologist for the project, said the tricky part was figuring where to place the pipelines from the wells so water would be directed toward empty aquifers deepest in the ground, recharging them from the bedrock up.

Kear said they drilled a test well with five monitors to make sure the aquifers are ready to receive the water.

Martinez said the project, constructed from September 2013 to July 2014, was made easier because no rain impeded the progress.

Now the test will come when it rains. Project engineers will find out whether their careful calculations and measurements created a system that works the way it is designed.

"Then we'll see what happens and whether we are able to successfully capture part of the rain," said Jerry Conrow, president of the Ojai Basin Groundwater Management Agency.

Across The State

SACRAMENTO

Field Poll: Water bond liked by voters

A new Field Poll finds slightly more than half of likely voters approve of a \$7.5 billion water bond on the November ballot.

Nearly two-thirds of those surveyed had not heard about the proposal.

The survey found 52 percent are inclined to vote yes, and 27 percent said they would vote no. Twenty-one percent are undecided.

The Field Poll interviewed 467 likely voters from Aug. 14-28. It has a sampling error margin of plus or minus 4.8 percentage points.

Letters

Water drain

Carol Davies, Ventura

My question is: How can Ventura possibly consider adding new houses to the already depleted water supply?

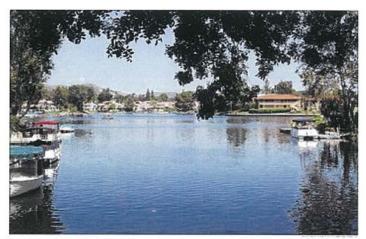
The city has asked us to conserve our limited supply, yet the powers that be are considering an additional drain on our water base.

After living in Ventura since 1962, I can say I am doing whatever I can to conserve our water supply. I am very displeased with this additional drain.

Fire hydrant feeds into Westlake Lake

Board says it aims to protect natural habitats

By Rachel McGrath Special to The Star Ventura County Star 9/10/2014



The Westlake Lake Management Association has connected pipes to a metered fire hydrant owned by Las Virgenes Municipal Water District and pays premium rates for the potable water.

CHUCK KIRMAN/THE STAR

The volunteer board that oversees the management of Westlake Village's iconic lake says it will still buy potable water to pump into the lake to protect natural habitats, even though it is free of state requirements to do so.

The Westlake Lake Management Association has connected pipes to a metered fire hydrant owned by Las Virgenes Municipal Water District and pays what are described as premium rates for the potable water.

In response to questions about the hydrant, the association issued a statement last month saying state law requires it to ensure a flow of 0.25 cubic feet per second from the lake's dam into Malibu Creek downstream from May 1 to Sept. 1.

However, residents noticed that water continued to pump after Labor Day. The board president and vice president say they plan to continue to buy the water to maintain the downstream riparian environment and preserve the habitats of the fish and birds that make Westlake Lake their home.

"We're not mandated to do it, but we continue to do it. It's for our concern about the habitat from the lake all the way to the Santa Monica Bay," said Ed Jefferson, vice president of the board. "The way I think of it is: The water from the hydrant basically goes downstream. Why would we do that other than for environmental concerns? We're

paying for it."

Board President Debbie Denton said the public should understand that no taxpayer money is being used to maintain the lake or buy water.

"This is a private lake. It is funded totally by the 1,300 homeowners that live here," she said.

Carl Koenig, lake operations manager, said the water level at the lake is about 8.5 inches below normal because of evaporation during warm weather and the lack of rainfall. The water from the hydrant is not significant enough to raise the lake's levels, only to maintain a rate of flow downstream, Koenig said.

Two groundwater wells owned by the association are pumping water, but the wells have less water than usual because of the drought.

"I've heard innuendos that we're doing this for other reasons, and that's not true. This is not a swimming pool for rich people," Denton said. "If the lake is down, the boats can still go out, but we have an environment here that we must maintain."

The board is considering drilling more wells to pump more water into the lake.

The lake is licensed by the State Water Resources Control Board, which affords it a number of protections. It is part of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

The plan defines beneficial water use, which includes supporting wetlands ecosystems; helping animal, fish and plant habitats; and maintaining recreational uses such as boating and fishing.

David Pedersen, general manager of Las Virgenes, said the key question is whether water is being wasted or used beneficially.

"We have a duty and an obligation to conserve water during a drought," Pedersen said. "In the case of the lake, there's quite a bit of basis that this is a beneficial use of water, and we believe it's being put to its best use."

Pedersen said similar issues are cropping up across California as agencies, businesses and individuals wrestle with the best way to conserve the state's water resources and who should get priority for use.

He said the water district plans to continue to work with the lake association and the city of Westlake Village and hopes that the association ultimately will be able to meet its own needs through more wells.

Drought-stricken cities thirsting for help

Communities prod Congress to take action

By Michael Doyle McClatchy Washington Bureau Ventura County Star 9/10/2014

Seventeen California cities and counties urged Congress on Tuesday to complete drought legislation that's hung up in secret negotiations.

The municipal resolutions passed in recent weeks by small towns like Dos Palos and counties like Kern and Kings were presented to the House Natural Resources Committee at a hearing on easing environmental rules that went on for several hours.

"It's continuing to make the case that we have to move forward," Rep. Jim Costa, D-Calif., said of the hearing Tuesday. Later, he said, "People in California are wondering if we in Congress are capable of coming together."

Costa presented the local drought resolutions during that hearing that on its surface was about six different bills centering on the Endangered Species Act. He wrote one of the bills, designed to boost water exports to San Joaquin Valley farms.

Costa's legislation would effectively minimize water delivery restrictions imposed as a means to protect Sacramento- San Joaquin Delta fish listed under the Endangered Species Act.

"It would significantly increase water supply for the benefit of workers, farmers and consumers alike," testified Thomas W. Birmingham, general manager of the Westlands Water District.

Tom Barcellos, a Tipton, Calif., farmer and board member of the Lower Tule River Irrigation District, added in a written statement that "it's time for Congress to provide clear direction" on how to apply the Endangered Species Act in the Delta" and warned that "if nothing changes, 2015 will be a catastrophe."

Costa's bill, called the More Water and Security for Californians Act, appears not to be going anywhere this year. The Obama administration opposes it, as do some other California Democrats, and Congress has only a few business days remaining before lawmakers go home to resume campaigning.

But as stalking horses, Costa's legislation and the other five Republican bills considered Tuesday serve several purposes. Not least, they keep heating the decades-old debate over the tradeoff between endangered species protections and human demands — a debate at the center of the California drought bill negotiations.

"The central reason for reduced water supplies in California stems from drought, not

from implementation of the ESA," said Gary Frazer, assistant director for endangered species at the U.S. Fish and Wildlife Service.

The GOP-controlled House passed a California water bill in February, without a committee hearing.

July's water use falls 7.5% amid drought

Monthly use dropped by 4.4% in June

By Fenit Nirappil Associated Press Ventura County Star 9/10/2014

SACRAMENTO — California water agencies reported a 7. 5 percent drop in monthly water use in July in a survey released Tuesday, falling far short of Gov. Jerry Brown's call for a 20 percent reduction in water use when he declared a drought emergency.

The State Water Resources Control Board adopted statewide water restrictions in July and will consider whether more aggressive steps are needed to conserve water in the worst drought in a generation. The figures released Tuesday showed that water use fell in July compared with a year ago.

"While this initial report is an improvement, we hope and trust that it is just a start," Felicia Marcus, the board's chairwoman, said in a statement.

A survey this year showed that monthly water use actually increased by 1 percent in May, one of the reasons the water board imposed restrictions that include fines of up to \$500 per day for water wasters.

Monthly water use fell by 4.4 percent in June.

The mandatory survey includes water suppliers that serve roughly 33 million Californians, according to the water board.

The results also show each of the state's 10 hydrological regions reduced their water use. For example, Southern California coastal communities that reported an 8 percent increase in May reported a 2 percent drop in July.

Figures for August, when new statewide regulations were in full effect, will be released later this month. Depending on those results, the board may consider even more aggressive steps to meet the governor's call for a 20 percent reduction.

The surveys do not capture some of the reasons monthly water use rises unrelated to conservation. For example, cities that battled large fires, added golf courses or new businesses, or had major leaks may register large increases.

The surveys do not show per capita water use, which will be reported in October.

House blocks EPA rule on water

Bill not likely to advance in Senate

By Matthew Daly Associated Press Ventura County Star 9/10/2014

WASHINGTON— The Republican- controlled House on Tuesday approved a bill to block the Obama administration from implementing a rule that asserts regulatory authority over many of the nation's streams and wetlands — an action that critics call a classic Washington overreach.

The Environmental Protection Agency has proposed a rule that it says will clarify which streams and waterways are shielded from development under the Clean Water Act, an issue that remains in dispute even after two U.S. Supreme Court rulings.

Agriculture groups and farm-state politicians call the proposed rule a power grab that would allow the government to dictate what farmers can do on their own land. They said the rule is an example of governmental interference by bureaucrats who don't know as much as farmers and ranchers do about how to be good stewards of their land.

The EPA proposal would have "devastating consequences on every major aspect of the economy," from farming to manufacturing and road-building, Rep. Steve Southerland, R-Fla., said. Southerland is a cosponsor of the bill, which would block the EPA and the Army Corps of Engineers from developing or finalizing the proposed rule.

The House approved the bill, 262-152. Thirtyfive Democrats joined 227 Republicans to support the bill. Rep. Chris Smith, R-N.J., was the sole Republican to oppose it.

The measure is not expected to advance in the Democratic-controlled Senate.

In any case the White House has threatened to veto the bill, saying the federal rule is needed to ensure clean water for future generations and to reduce regulatory uncertainty. More than 115 million Americans get their drinking water from rivers, lakes and reservoirs that are at risk of pollution from upstream sources, the White House said.

EPA Administrator Gina McCarthy said the proposal does not include new restrictions and merely clarifies what bodies of water already are under federal jurisdiction in the Clean Water Act.

Water use strains lake

Resource Casitas offers leaves district

By Claudia Boyd-Barrett Special to The Star Ventura County Star 9/09/2014

For almost a decade, Ventura has struggled to provide water to its eastern half, supplementing supplies there with water from Lake Casitas even though lake water was never intended for the area, documents show.

Since 2005, Ventura has pumped almost 8,000 acre-feet of lake water, or about 2.6 billion gallons, to residents and businesses east of Mills Road. The area is outside the boundaries of the Casitas Municipal Water District, and the lake is not supposed to serve that part of the city.

East Ventura typically gets water from the Ventura River and groundwater sources, but the city also has been using lake water, originally because of damage to some of its wells and now because of the drought, officials said.

Lake Casitas officials said the city needs to stop its out-of-district use, particularly because the drought has dramatically reduced water levels in the lake.

"As the lake goes down, things are going to get tighter, and we don't have surplus water to provide at this time," General Manager Steve Wickstrum said.

A 1995 agreement governs the supply of Lake Casitas water to Ventura. Under that contract, the city is supposed to use lake water for the area west of Mills Road, primarily midtown, downtown and the Westside. Any lake water used outside that area incurs a rental charge, which the city must pay annually until it can return the water to the lake.

The out-of-district lake water has cost the city almost \$1 million in rental charges since 2010, according to an invoice from the district to the city. The money paid is in addition to the regular \$360 charge Casitas levies per acre-foot for all water Ventura takes from the lake, Wickstrum said.

Because the city has never returned any lake water used outside the district, rental charges have piled up annually, starting at just over \$128,000 for the 2010-11 fiscal year and reaching almost \$391,000 for the 2013-14 fiscal year.

The annual rent would have climbed higher except the district chose not to charge Ventura for renting water from 2005-10, Wickstrum said. During those years, the district attributed the out-of-district demand to circumstances beyond the city's control, namely storm damage to wells that extract river water, he said.

"The problem is: It causes cumulative effects on Lake Casitas and the district's water

supply by taking water out and not returning it," Wickstrum said.

Meanwhile, Ventura's in-district use of lake water has declined from a decade ago. Letters to the district from Ventura's water department indicate demand in the district averaged about 7,000 acre-feet per year about a decade ago. That has since dropped to less than 5,000 acre-feet per year. Officials said the decline occurred because some large businesses moved out, pipelines were repaired, and consumers in general used less water.

Under the 1995 agreement, Ventura is supposed to buy at least 6,000 acrefeet of water from Lake Casitas each year for indistrict use, a figure it has not reached in the past nine years.

Wickstrum said the agreement needs to be changed to reflect current in-district use. Ventura Water General Manager Shana Epstein and he said both sides are in negotiations to resolve how the city uses lake water.

The use of Lake Casitas water outside the district has drawn concern from some residents, who have questioned whether the city has enough water to support new development. Some are calling for a moratorium on development until the city's water supply becomes more stable.

Epstein said the city still has enough water to supply its residents and that development is not occurring at a pace that causes concern. She said the water department is examining other ways to get water, such as importing it from the state and recycling wastewater. However, building new water infrastructure would take at least five to seven years, she said.

"It's something we're addressing, and we have potential solutions," she said. "It's just working through with all the different parties involved."

Epstein also said more homes have yards on the east side of the city and that that distribution accounts for a large part of the water demand.

The city's Water Shortage Task Force has recommended mandatory restrictions on outdoor watering in the hope of reducing citywide use 20 percent. If that reduction occurs, Wickstrum said, it would likely eliminate Ventura's need to use lake water outside the Casitas district.

Bills regulating state's groundwater not an instant fix for aquifers

By <u>BETTINA BOXALL</u> LA TIMES

Package of bills awaiting Gov. Jerry Brown's signature is not instant fix for state's shrinking aquifers

It could be decades, experts say, before the most depleted groundwater basins recover under the legislation

California is finally about to join the rest of the West in regulating groundwater supplies. But the package of bills awaiting Gov. Jerry Brown's signature is not an instant fix for the state's shrinking, over-pumped aquifers.

It could be decades, experts say, before the most depleted groundwater basins recover under the legislation, which is a historic step in a state that long resisted managing a key water source.

The bills, which Brown is expected to sign, will take years to implement. And they create a weaker regulatory framework than is found elsewhere in the West.

This is a much more laissez-faire approach and a much more light-hand-of-government approach than just about any other state.- UCLA law professor Jonathan Zasloff

"This is a much more laissez-faire approach and a much more light-hand-of-government approach than just about any other state," said UCLA law professor Jonathan Zasloff.

In most years, groundwater amounts to between 30% and 45% of the state's water supplies. In dry periods such as the current drought, when reservoirs are low, that can jump to 60%. And some regions, such as the Central Coast, always draw the majority of their supplies from the ground.

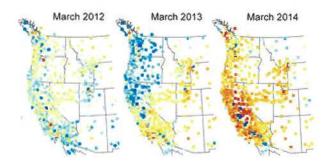
Despite that reliance, pumping from most groundwater basins has gone unregulated, driving down water tables and in some areas causing land surfaces to sink more than 20 feet.

"We've been doing this going on 100 years," said Tim Parker, chairman of the legislative committee of the Groundwater Resources Assn., a professional group.

Most groundwater is used for agriculture, and some of the most depleted basins are in the farm-rich Central Valley, where the water table dropped to record lows during the last six years. In parts of the southern valley, groundwater levels recently plunged by 60 feet or more over the course of a single year.

The bills, sponsored by Sen. Fran Pavley (D-Agoura Hills) and Assemblyman Roger Dickinson (D-Sacramento), are designed to halt that trend by directing local public agencies to establish groundwater entities that will develop sustainable management plans.

If the local agencies fail to do that, the State Water Resources Control Board can eventually step in and do it.



A year and a half of drought has depleted 63 trillion gallons of water across the Western United States, according to a new study that documents how the parched conditions are altering the landscape. (Rong-Gong Lin II)

"What the state will need to do is to threaten enough so that they can get the local governments to do something, while all the time probably hoping that they won't actually have to do anything," said law professor Buzz Thompson, director of the Stanford Woods Institute for the Environment.

Authorities in the most over-pumped basins would have to submit sustainability plans to the state by January 2020. Other basins ranked as a priority would have another two years to adopt a plan. The agencies would then have an additional 20 years to stop serious overdraft, which means the full force of the measures wouldn't be felt until at least 2040.

For some experts, that is too long. "Meanwhile the problem gets more and more protracted and the potential exists for more and more irreversible damage," said Richard Frank, director of the California Environmental Law & Policy Center at UC Davis.

The bill also leaves wiggle room for local agencies. They are supposed to manage basins to avoid "an undesirable result," including a "significant and unreasonable depletion of supply" and "significant and unreasonable land subsidence."

But the measure doesn't define "significant and unreasonable."

The package was supported by the Assn. of California Water Agencies but opposed by agricultural interests.

"We thought these bills were too far-reaching," said Paul Wenger, president of the California Farm Bureau Federation. "They open the door for lawsuits on the environmental side of things.... But we also realize we can't continue to pump at will."

Drought and environmentally related cuts in surface water deliveries have increased groundwater demand, he said.

"We do know what our aquifers are doing and farmers have been concerned for years," Wenger added. "But when you have a huge mortgage and you have a huge investment and you have employees dependent on you, you do kind of look the other way — and it's unfortunate."

Under the legislation, local basin managers will have a number of powers: They can collect fees from groundwater users, monitor withdrawals, limit pumping and buy water or water rights to replenish aquifers.

"Some farmers are going to be having to cut back at least in the short run," said Doug Parker, director of the California Institute for Water Resources, which is part of the University of California system.

The legislation will have little effect on coastal Southern California, where groundwater litigation years ago resulted in heavily managed aquifers.

In other parts of the state, though, local water officials don't know the condition of their aquifers, Parker said.

"It's just been willful ignorance of what the groundwater basin can and can't do," he said.

Despite growers' reluctance to enter the new world of groundwater regulation, UC Davis groundwater hydrologist Thomas Harter predicted their successors will appreciate it.

"In the long run, my view is that the next generation and two generations down of farmers will find this a lifesaver," Harter said.

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West Basin water district board member pleads guilty to embezzlement

By DAVID ZAHNISER

LA Times 9/09/2014

Ronald Smith, a West Basin Municipal Water District board member, gets 180 days in jail in embezzlement case

West Basin water district board member Ronald Smith pleads guilty to one count of embezzlement

A board member at the West Basin Municipal Water District was sentenced Monday to 180 days in jail after pleading guilty in an embezzlement case involving his agency and a local nonprofit group.

Ronald Smith, 55, pleaded guilty to one felony count of conflict of interest and, according to prosecutors, admitted that he used funds from his agency to pay for his family's expenses, including rent, boat repairs, and his children's tuition and dance lessons.

As part of his plea deal, Smith agreed to resign from the water district board and provided a \$10,000 check to his agency as partial reimbursement. Prosecutors, in turn, dismissed six other counts against Smith: four counts of perjury and two counts of misappropriation of funds.

Los Angeles County Superior Court Judge Thomas Sokolov placed Smith on five years' probation and ordered him to pay an additional \$7,765 in restitution to the water agency, which serves Malibu, West Hollywood, Culver City and much of the South Bay. Smith's attorney, Robert Ernenwein, declined to comment.

Smith, the water board's treasurer, was arrested two months ago as part of a larger case targeting Rob Katherman, a former aide to Los Angeles City Councilman Curren Price. Katherman, 68, and his wife Marilyn, 65, were charged last month with two felony counts of misappropriation of public funds. Both have said they are innocent.

Prosecutors contend that the Kathermans, while running the nonprofit Adopt a Stormdrain Foundation, used organization funds to cover Smith's financial obligations.

While entering his plea, Smith said he worked with Katherman to funnel money from the water district to Adopt a Stormdrain, a Torrance nonprofit group that focuses on preventing pollution of the region's waterways and ocean, said Deputy Dist. Atty. Dana Aratani. Checks from the nonprofit later paid for tuition for Smith's son and two daughters, along with other family expenses, prosecutors said.

Katherman attorney Mark Werksman said his client had no knowledge that Smith was using the funds for improper purposes. Had he been aware of Smith's activities, Katherman "never would have issued those checks," Werksman said in an e-mail.

"It is unfortunate that in his desperation to get out of jail, Ron Smith has lied about Robert Katherman's knowledge of Ron Smith's illegal theft of Adopt a Stormdrain Foundation funds," Werksman said.

An arraignment hearing for the Kathermans is scheduled Oct. 1.

Smith's resignation from the water board took effect Monday. Donald L. Dear, the board's president, said Monday's guilty plea "should not detract from the hard work" being done by the agency and its employees.

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Napa earthquake reveals a surprise amid drought

Creek beds, streams fill up across region

By The Associated Press Ventura County Star 9/08/2014

VALLEJO — A major Northern California earthquake that caused an estimated \$400 million in damage also unloosed torrents of groundwater that may help ease the region's drought.

The San Francisco Chronicle reported Sunday that the magnitude 6.0 earthquake on Aug. 24 unexpectedly forced groundwater to the surface, filling dry creek beds and parched streams in the region.

Water officials in Vallejo and elsewhere are hopeful they can capture some of the extra water for use. California is experiencing a years long drought.

"This is an unusual thing to have happen," said Franz Nestlerode, the assistant public works director for water in Vallejo. "Potentially it could turn out well for us."

Nestlerode said officials are testing the new water to ensure it's safe for public consumption.

"We'll use it if the tests come back in a couple of weeks and everything checks out," Nestlerode said.

He said at least 200,000 gallons of water a day are flowing down Wild Horse. The natural flows were about a tenth of that before the earthquake, Nestlerode said.

Scientists say they've known of this phenomenon since at least the 1860s and have documented similar occurrences with underground water after several major earthquakes.

The U.S. Geological Survey has received reports of dramatic water increases as much as 20 times average in creeks near Napa, Sonoma and Vallejo. USGS geologist Tom Holzer said he expects other creeks throughout the region of having received similar water infusions.

Holzer said the earthquake opened new cracks and fissures and allowed groundwater to find its way to the surface.

The potential bonanza is expected to dry up in about six to eight weeks when underground water levels return to normal and may even diminish, affecting residents with wells.

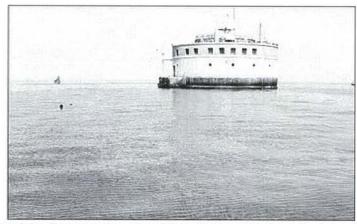
"There is only so much water in there," Holzer said. "It's like a bank account. You've just

reached into the bank account and borrowed some money, but the spending spree will eventually end."

After water scare, states look to EPA

There are no guidelines for treating, testing

JOHN SEEWER Associated Press Ventura County Star 9/08/2014



An algae bloom covers lake Erie near the city of Toledo water intake crib about 2miles off the shore of curtice, Ohio. Blobs of algae that leave behind potentially dangerous toxins in drinking water reservoirs and along beaches are far from just a lake erie problem. Associated press file photos

TOLEDO, Ohio — Algae that turned Lake Erie green and produced toxins that fouled the tap water for 400,000 people in the Toledo area are becoming a big headache for those who keep drinking water safe even far beyond the Great Lakes.

But with no federal standards on safe levels for drinking algae-tainted water and no guidelines for treating or testing it either, water quality engineers sometimes look for solutions the same way school kids do their homework.

"We are Googling for answers," said Kelly Frey, who oversees a municipal system in Ohio that draws drinking water from the lake. "We go home and spend our nights on the Internet trying to find how other places manage it."

The contamination left about 400,000 people in parts of northwestern Ohio and southeastern Michigan without clean tap water for two days in August.

Spurred by the august water emergency, a growing chorus is calling for the U.S. Environmental Protection Agency to create a national standard for allowable amounts of microcystin, the toxin that contaminated Toledo's water.

Ohio, Oregon, Minnesota, Florida and Oklahoma have set their own drinking water standards for microcystin, which can cause headaches or vomiting when swallowed and can be fatal to dogs and livestock. Most of those states rely on a measurement

suggested by the World Health Organization.

"There needs to be one consistent standard," said Dan Wyant, director of Michigan's Department of Environmental Quality.

Environmental regulators from Ohio, Indiana and Michigan met with EPA officials last month, asking the agency to press not only for clear water quality standards, but also a strategy for reducing the pollutants that help the algae thrive.

But it may be several more years before the EPA is able to come up with a new benchmark because a great deal of study is still needed to determine how different amounts of the algae-related toxins affect people of all ages, said Craig Butler, director of the Ohio EPA.

"That puts the states in a tough spot," Butler said. "We wish there was more data and information, as does U.S. EPA."

The federal agency is working toward developing drinking water advisories and testing methods that would be released sometime next year and give treatment plants and states guidance for dealing with microcystin and another toxin, said Laura Allen, an EPA spokeswoman.

Water plant operators contend there's also a need for more guidance on how often to test the water and more sharing of information on combating the toxins.

Some cities where there's a known threat of harmful algae take samples daily, while others getting water from the same source might run tests once a week. Sometimes, it depends on when the testing lab is available, said Frey, the sanitary engineer in Ohio's Ottawa County.

The EPA did announce this past week that it would put more money toward helping cities along Lake Erie monitor their water. Ohio's environmental regulators also have pledged help and have been taking a bigger role in assistingwater plants as of late, Frey said.

That includes routine conference calls over the past year between Ohio EPA administrators and water plant operators on the front line of the algae threat, Butler said.

Algae outbreaks — some that leave behind a variety of toxins and some that don't — are popping up increasingly in every state, fouling rivers and lakes of all sizes.

In lowa's largest city, water plant workers decide when to sample based on "instinct and experience as opposed to requirement," said Bill Stowe, chief executive of the Des Moines Water Works.



Despite the growing threat to water quality, there are no rules for treating or testing the water.



A sample glass of Lake Erie water is photographed near the city of Toledo water intake crib on Lake Erie.

Water main break in Encino forces evacuation of two homes



A 16-inch water main that ruptured in an Encino neighborhood Monday tore through a street and sent water gushing. (Francine Orr / Los Angeles Times)

By VERONICA ROCHA LA TIMES

Water main break in Encino forces evacuation of two homes Crews reduce Encino water main break to a trickle; heavy damage to Karen Drive

A 16-inch water main that ruptured in an Encino neighborhood Monday tore through a street and sent gushing water into several backyards, prompting the evacuation of two homes, officials said.

The rupture, reported around 9:40 a.m., affected backyards in the 17900 block of Karen Drive, Los Angeles Fire Department spokesman Erik Scott said. No injuries were reported.

L.A. Department of Water and Power crews worked to shut off the main, reducing the flow of water to "a trickle," he said.

At least 100 LADWP customers were affected by the break.



Water was gushing and swirling beneath a collapsed street in Encino after a water main broke Monday morning.

Officials said the cast iron pipe burst as a result of typical erosion. Crews were still working to completely shut off the valve Monday afternoon.

Although the utility did not immediately know how much water was lost as a result of the leak, the pipe experienced "heavy leaking" for about an hour, said Mike Miller, a district superintendent for LADWP.

The pipe was expected to be fully repaired by 8 p.m. But officials don't know when repairs will be completed to the road, which suffered extensive damage due to the force of the water, he added.

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UPDATE

2:29 p.m.: This post has been updated with more details about the number of people affected and the ruptured water main. It was initially published at 12:55 p.m.

Water use goes unchecked

Many homes in California without meters

By Scott Smith Associated Press Ventura County Star 9/07/2014



A field technician for Bakman Water co. installs a water meter on a home under construction in Fresno. since 1992, state law has required that all new homes have meters. Associated Press Photos

FRESNO — Although California is locked in a third year of historic drought, many homeowners and businesses still don't have meters telling them just how much water they are using.

That's changing, but some say it's not fast enough. State law requires water meters by 2025, but the State Water Resources Control Board says dozens of water districts, many in the thirsty Central Valley, aren't totally metered.

More than 235,000 homes and businesses in the state are not equipped with meters, according to the most recent figures for 2013 collected by the State Water Board. An Associated Press analysis found that Californians who live in 10 water districts with the highest number of unmetered home or business all used more water each day than the state average.

The number of unmetered homes and businesses represents a small fraction of water services statewide, but officials say every drop counts. Gov. Jerry Brown in January declared a drought emergency, and state officials in July approved fines up to \$500 for residents caught wasting water. Some communities have put water cops on patrol.

The state's unmetered homes and businesses are example of California's struggle to track water use.

A recent AP story revealed that many state agencies don't know if they are meeting the

governor's goal of conserving 20 percent. Another found that state regulators do not know how many trillions of gallons have been used by corporations, agricultural concerns and others with senior water rights. And only now is California moving to regulate groundwater pumping.

Peter Gleick, who studies global water issues as president of the Pacific Institute in Oakland, said he would like every home and business to be fitted with a meter today, rather than waiting more than a decade for the deadline.

"It's inappropriate in the 21st century for us not to be carefully measuring and monitoring our water use," he said. "Especially in California during a drought."

Residents of cities such as Los Angeles, San Francisco and San Jose have been metered for decades. However, many customers served by about 40 water districts in a 300-mile stretch of the Central Valley continue to pay a flat rate, meaning they can use as much water as they want without seeing their bills rise.

All new homes built since 1992 in California were required to have water meters, and in 2004, a state law called for retrofitting the rest by 2025, except those in the smallest water districts.

It took state and federal legislation to force change in communities such as Fresno and Sacramento, where the city charters said no homes would be metered.

In Sacramento, attitudes about water date back many decades and spring from its abundance in a city at the confluence of two major rivers, said Tom Gohring, executive director of the Water Forum, a coalition with the mission providing a reliable water supply.

Throughout the Central Valley, people believed for years that runoff from landscaping and agriculture ended up in streams or seeped into underground basins where it could be reused, Gohring said. "It was a political vestige of another era. I think that day is gone."

Getting Sacramento fully metered is a \$450 million project fraught with challenges, said Dan Sherry, supervising engineer for the city's utility department.

"Replacing backyard mains and putting them out in the street, that's a big deal," he said, adding that as of June, 49 percent, or 66,250 homes and businesses, still needed meters.

Sacramento has the largest number to install, followed by water districts in Bakersfield (35 percent unmetered), Modesto (24 percent unmetered) and Lodi (55 percent unmetered), according to the state's 2013 figures.

Meters play on basic human behavior— and people billed monthly for their water use

tend to use less, said Lisa Maddaus, a water resources engineer and partner at Maddaus Water Management Inc. based in Folsom.

In studying the conversion to water meters in Davis, which was completed in 1998, she found that in the first year, residents used 18 percent less water. After the initial spike in savings, she said residents used about 10 percent less in the second year.

"Everyone tightens up their homes, maybe does a little better with leak repairs," Maddaus said. "We see in an energy crisis, people turn off lights more. In the water crisis, you're more prudent with your water use."

Homeowners in Sacramento without meters pay a monthly flat rate of \$45.73, and the average single-family home with a meter paid \$35.82 each month in the most recent fiscal year, city officials said.

A law passed in 1992 required communities that use water from the federally run Central Valley Project to be fully metered by Jan. 1, 2013. Fresno met the deadline by spending \$75 million. Water use dropped by about 10 percent after meters were installed, city spokesman Mark Standriff said.

Julie Kaiser still pays a \$56 flat-rate each month. She lives in a corner of Fresno served by the private Bakman Water Company, which is preparing to install meters. Kaiser doesn't look forward to it, because she doesn't like being told what to do.

Besides, Kaiser said, she and her husband already conserve water, letting their front lawn die of thirst. It is yellow and crunches under each step.

"If you do have a problem with my front lawn, I don't really care. Tough," Kaiser said. "My basic mantra in life is not to waste."



Julie Kaiser let the front lawn of her residence in Fresno die of thirst to conserve water and money.

STATE WATER METERS AT A GLANCE

UNMETERED WATER CONNECTIONS

Californians who live in 10 water districts with the highest number of unmetered homes or businesses all used more water each day than the state average. The figures below are for the 2013 calendar year.

Water provider	Unmetered totals	Percentage unmetered	Daily gallons per person used
1. City of Sacramento Main	72,544	54%	209
2. California Water Service, Bakersfield	22,325	35%	212
3. City of Modesto	16,248	24%	258
4. City of Lodi	14,050	55%	224
5. Sacramento Suburban Water District	13,015	28%	196
6. City of West Sacramento	12,231	85%	214
7. City of Merced	10,773	36%	304
8. Sacramento County Water Agency, Laguna-Vineyard	7,354	17%	180
9. City of Galt	6,429	87%	238
10. Oildale Mutual Water Co., Kern Count	ty 6,067	75%	272
State average			172
Source-State Water Resources Control Board			

Source: State Water Resources Control Board

METERS BY REGION

Several Central California counties from Kern to Sacramento lead the list of those without fully installed water meters. The figures below are for the 2013 calendar year. Rank County Number of unmetered connections:

1. Sacramento	109,202	4. Stanislaus	16,335
2. Kern	36,250	5. Merced	14,914
3. San Joaquin	20,073	6. Fresno	7,697

Source: State Water Resources Control Board

ANSWER LIES IN THE DIRT

Hortau soil-monitor tool takes guesswork out of irrigation

By Carol Lawrence Ventura County Star 9/07/2014



Will Gerry, owner Coastal California Blueberry in Camarillo, accesses information on the Hortau irrigation management system from his cellular phone. The system measures the amount of water moisture and content of the soil, which allows Gerry to decide how much water to give to the field.

PHOTOS BY JOSEPH A. GARCIA/THE STAR

Hortau Inc.'s remote irrigation management system is making the challenging but critical task of judging how much water to use on crops a little easier for Ventura County growers.

The Quebec, Canada, company is also aggressively promoting its system as a water savings tool at a time when new mandates and fees are making growers watch their water use more closely than ever before.

"It is a precision farming tool," said soil physicist Jocelyn Boudreau, Hortau's co-founder and CEO. The system, which measures soil moisture, "has been shown to decrease water usage 20 to 35 percent," Boudreau said, while also increasing plant yield.

The Quebec, Canada, company is also aggressively promoting its system as a water savings tool at a time when new mandates and fees are making growers watch their water use more closely than ever before.



Will Gerry, owner Coastal California Blueberry, uses the Hortau irrigation management system, which measures the amount of water moisture and content of the soil.



Acres of blueberries, grown at Coastal California Blueberry, use the Hortau irrigation management system. The system, which can be accessed from a computer, cellular phone or mobile device, is able to send information about the moisture, humidity and other soil conditions.

Anything that can help growers reduce water use without hurting fruit and vegetable production — the key crops in the county's \$2 billion-plus agriculture industry — attracts attention during the current drought.

Hortau says it has 20 to 30 customers in Ventura County alone, and that its California business has grown so much that it has opened an office in San Luis Obispo and is expanding across the country.

"We've been operating behind the scenes up until this drought, when all of a sudden we became hyper focused," said Jeremy Otto, Hortau's business development manager. A recent \$6.5 million in venture capital from an agriculture-oriented private equity firm helped pay for this year's expansion, helped along by the third year drought conditions.

Plants need water, but only a certain amount. Too little water and they go into water stress from dry soil, says Hortau. They become more vulnerable to heat stress, effects from salt and pests, and produce less.

Too much water and plants suffer from a lack of oxygen, causing them to produce more vegetation but less fruit, or vegetables. They are also more susceptible to root disease, says Hortau's brochure.

Hortau's system works by installing sensors into the soil among the roots of plants and under them. The sensors then measure how much effort the roots have to exert to pull water from the soil.

"The sensor acts like a mechanical root that tells the grower when to run that irrigation, and how to manage crop stress, which is a driver in quality and yield," Otto said.

Growers can then read that data in real-time on mobile devices or on Hortau's website. Graphs and curves, which are easy to read, say the growers, show them whether soils and plants are in the wet zone, which means they are over watering; the dry zone, which means under watering or in the comfort zone, where all is good.

That information is "crucial" for Will Gerry's 170 acres of blueberries that grow in Camarillo at his Coastal California Blueberry Farm. He installed Hortau's system in July 2012.

"Blueberries are very sensitive to moisture," Gerry said. "They hate to be dry, but don't like wet feet or over watering. It (the system) is helping us be more precise and keep that plant in its happy zone."

He accesses the system six to 10 times a day, Gerry said, and at night to plan what to do the next day. It's also helped him water and fertilize more efficiently.

Several growers say they use the system as a weather station because of its remote access capability, and to call up prior days' weather conditions to see how their fields reacted.

Among them is Richard Martinez, who grows organic celery and all sorts of leafy greens and herbs for Deardorff Family Farms on 450 acres in Piru, Santa Paula, Ventura and the Oxnard Plain.

He installed his first system about a year and a half ago, and just added seven more. He uses its temperature- sensing capabilities to monitor conditions at fields far away from where he is at the moment.

"If I know what the temperature is in Piru, and it's really hot and there's low humidity, and I know if I have a crew harvesting lettuce there, I can tell the guys to stop harvesting," Martinez said, to prevent the plants from dehydrating.

Hortau's system works with every crop and soil type, Otto said. The first California customer was an Oxnard strawberry grower in 2008, but now it's used for avocados, citrus, vegetables, grapes and nuts.

Growers rent the equipment and can own it after three years, Otto said. Monitoring stations cost about \$175 per month for 36 months, which includes field support, training,

software and uploading the software.

After the three years, the grower pays only a service fee of \$35 to \$75, depending on the number of monitoring locations, and the services continue.

Oxnard strawberry growers Pal Halstead and Will Terry use the system in conjunction with irrigation managers and/or irrigation management plans. They also confirm the data with manual tensiometers.

"There have been some inaccuracies because of the weather," Halstead said. On occasion with very high temperatures, the system has indicated soil tension is dry, he said, while his manual devices say the opposite.

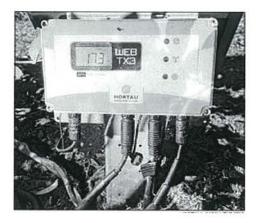
Several growers say they are watering more efficiently with the system, but not necessarily less overall.

Hortau co-founder Jean Caron, now a soil physicist with Laval University in Quebec, is researching soil comfort zones for Hortau in key strawberry areas of Oxnard, Santa Maria and Watsonville.

Caron said growers who over watered before installing the system are reducing water by up to 35 percent, although those who had under-watered — many of the Oxnard growers — are watering more.

But, he added, if growers are irrigating consistently to keep soils in the system's comfort zone, they could see their water use go down.

"I know we are more efficient," Gerry said. "That probably means some water savings."

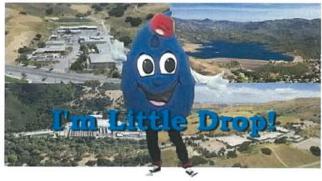


The Hortau irrigation management system gives farmers a way to measure the amount of water moisture and content of the soil. The system is being used at Coastal California Blueberry in Camarillo. JOSEPH A. GARCIA/THE STAR

Let's Talk About Water!

Little Drop likes to talk about water. So he made some videos with information that will help you find a leak, stop a leak, read your meter and more.

You can view them at www.LVMWD.com / For Customers / Conservation / Let's Talk About Water







Topics covered:

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- ✓ How To Turn Your Water Off In An Emergency
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- ✓ Proper Irrigation of Your Lawn
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- Saving Water in the Bathroom
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- ✓ Saving Water in the Laundry Area
- Smart Controllers

Page 12, Valley News Group, September 4, 2014