

SBCWD UPDATE SPRING/SUMMER 2014



SAN BENITO COUNTY WATER DISTRICT

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Drought 2014—Conservation is Key

The new drought numbers are in for California and the drought will continue. That said, there is some improvement with the storm cycles that happened in March and early April. The Sierra foothills benefited the most from the storm pattern and saw some improvement in drought conditions.

California's snowpack still measures far below average suggesting that the summer snowmelt runoff will offer little relief during the current drought.

Snow surveyors with California Department of Water Resources conducted the first snowpack reading of spring, finding that the Sierra snowpack is just 32% of normal. The April 1 reading is considered a bellwether for how much water runoff will be available in the coming dry months of summer for farms and communities.



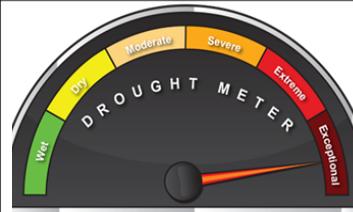
"We're already seeing farmland fallowed and cities scrambling for water supplies," DWR Director Mark Cowin said in a prepared statement after the snow survey results were released. "We can hope that

conditions improve, but time is running out and conservation is the only tool we have against nature's whim."

February and March storms brought some promise to the state after the record-breaking dry months of December and January, but the recent rains have not broken the drought's three-year grip as reservoirs, rainfall totals and the snowpack remain critically low.

The Board of Director's for the San Benito County Water District declared a Water Shortage Emergency and implemented their Water Shortage Contingency Plans at their January Board Meeting. The Plan is outlined in the Hollister Urban Area Water Management Plan 2010. This document is a cooperative effort between the District, Sunnyslope County Water District and the City of Hollister to manage our local water resources. A strategy for drought recognition and response is presented, and shortage response levels and stages of action are described in the document. Currently, we are at Stage One, which ask for a 15% voluntary reduction of water use.

California and federal water officials say there is enough runoff in the Delta from recent storms to begin delivering some water to farms, potentially offering at least temporary drought relief. On Feb. 1, the State Water



Resources Control Board approved a temporary order exempting the California Department of Water Resources and U.S. Bureau of Reclamation from some water quality standards in the Sacramento-San Joaquin Delta to help retain water stored in upstream reservoirs. The exemption was approved on the condition that the agencies jointly divert no more than 1,500 cubic feet per second, and only for public health and safety purposes, which generally means urban uses.

Now, thanks to relatively abundant February rains, DWR and Reclamation have asked for a change to that order so they can send some of this diverted water to farms. They're also asking the water board to relax a standard for Delta freshwater outflow that increases at the end of March, which will allow them to continue holding back water stored in reservoirs. The standard normally requires outflow of 11,000 cfs, but will be reduced to 7,100 cfs.

"We're growing more comfortable that ... we'll be able to meet all essential public health and safety needs," said DWR director Mark Cowin.

Officials cautioned that the announcement does not change the forecast for "zero" water allocations for farms made by DWR and Reclamation in March. Those allocations are a forecast of future deliveries during the dry summer months. "The hydrology is such that there's an awful long way to go to meet the demands we have," said Pablo Arroyave, Reclamation deputy regional director.

The rule amendments also allow DWR and Reclamation to divert more than 1,500 cfs during storm runoff events as long as they satisfy other Delta water quality standards. As a result, they've been pumping water out of the Delta at well above 4,000 cfs during most of March.

Wildlife advocates fear such high diversion rates during the drought, along with loosening of Delta outflow requirements, will harm endangered fish species.

"We get population changes in times like this that ripple forward for decades," said Bill Jennings, executive director of the California Sport fishing Protection Alliance. "This is going to be a horrible year."



The Importance of Groundwater

As the groundwater management agency for San Benito County, the district works to protect and augment groundwater supplies. Our groundwater basin is the single most important source of our water supply. Our imported water from the Central Valley Project (CVP) has been reduced to a trickle due to the drought. This makes our groundwater all that more important. We must use this resource efficiently and protect it from contaminants as much as possible.

Importance of groundwater

Groundwater is water that flows beneath the surface through small pores and cracks in the rock and soil. Throughout the world, the majority of available fresh water is in the form of groundwater. In San Benito County, a good portion of all water used comes from groundwater. The county's groundwater basin has a vast storage capacity, estimated to be approximately 500,000 acre-feet.

Ensuring a reliable supply

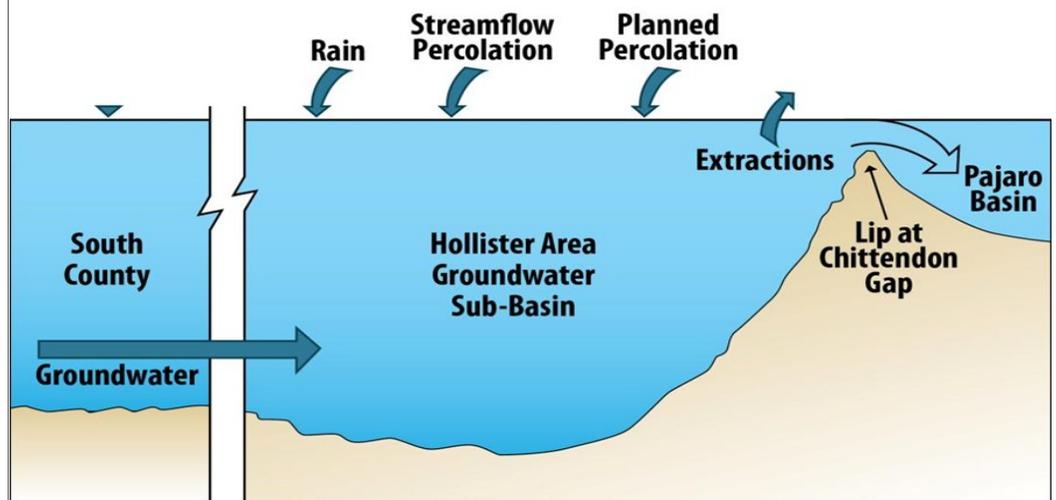
Groundwater basins are naturally replenished by rainfall, water percolating through stream beds, and other sources. As natural recharge is not sufficient to replenish the amount of groundwater pumped, the district releases local and imported surface water through recharge facilities, which include streams and recharge ponds. This coordinated use of groundwater and surface water is critical for ensuring a reliable water supply, storing water for use during droughts and shortages, and preventing land subsidence, which is very costly to the community.

Ensuring a safe supply

Numerous sources can pollute groundwater, making it costly to treat or even unusable. Since the restoration of contaminated groundwater can take years, decades, or longer, the district works to protect the groundwater basins from contamination.



Dr. Larry Schwankl , irrigation specialist & Dr. Daniele Zaccaria, agricultural water management specialist both from UC Cooperative extension conducted a workshop in February at the San Benito County Water District . The workshop was structured for participants to learn the latest ideas, methodologies and technologies for water use efficiency.



The illustration to the right is a representation of our local groundwater basin.

Fortunately, the groundwater basin has been managed to serve as a reserve in times of low CVP allocations and it continues to be a consistent source of supply. The groundwater system can manage short term increases in pumping.

Nonetheless, effective management should continue to be applied to ensure that the basin is adequately recharged and not overly stressed over the long term.

Because the district has developed and continues to develop management tools, it has the ability to alleviate some of the variability of CVP allocations. Given the future uncertainty of CVP water, the district may have to rely increasingly on these tools to provide a consistent water supply to its customers.

Not so in the Central Valley

Lisa M. Krieger in her article entitled, "California Drought: Farms now digging deeper for water", (San Jose Mercury News, March 29, 2014) writes the following about the Central Valley:

"The trends are alarming, the politics complex, but the science is rather simple: The Central Valley -- from Redding to Bakersfield -- is consuming twice as much groundwater as nature is returning through rain and snow.

The rate of water loss over the past two years is the largest since the University of California started using NASA satellites to measure underground water reserves in 2003. The Central Valley's reserves are shrinking by 800 billion gallons a year -- enough to supply every resident of California with water for seven months, according to Jay Famiglietti, director of the University of California Center for Hydrologic Modeling"

"We may only be a few decades away from hitting bottom," said Famiglietti, considered one of the leading experts on state water policy.

She goes on to write, "So with the drought cutting off their deliveries, farmers say they must rely on the only source left. Those who can afford the \$200,000 to \$600,000 price tag are digging deeper and deeper to tap into a once-unreachable aquifer. Many are taking out loans, betting on crop yields to break even."

For the full article go to:

http://www.mercurynews.com/ci_25442667/california-drought-farms-now-digging-deeper-water?source=most_emailed

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The San Benito County Water Districts Annual Groundwater Report for Water Year 2013, which was published last December makes the following statement in regards to our local groundwater basin:

In October 2013, groundwater levels were 10-20 feet lower than in October 2012 in some parts of the basin but slightly higher in others.

However, water levels in most subbasins remain higher than historical minimum water levels. In October 2012, relatively high water levels and steady groundwater storage indicated that the basin underlying Zone 6 was near its capacity. The basin had sufficient storage to supply all demands in the event of a dry year or limited CVP allocation, which is in fact what happened in 2013.

Sufficient storage remains in the basin to accommodate additional consecutive dry years with limited imported water availability.

However, conservation and water use efficiency are critical to stretching that supply. And remember, San Benito County and the rest of the state are always one dry winter away from drought. We must always use water efficiently, even during a wet year!



Drought Resources

FOR FARMERS, RANCHERS, & FARMWORKERS

[USDA Farm Service Agency](#)

The USDA's Farm Service Agency (FSA) assists California's farmers and ranchers through farm loans, commodity price support, disaster relief, and conservation practices.

[Tree Assistance Program \(TAP\)](#) – This program provides financial assistance to qualifying orchardists and nursery tree growers to replant or rehabilitate eligible trees, bushes and vines damaged by natural disasters. The 2014 Farm Bill makes TAP a permanent program and provides retroactive authority to cover eligible losses back to Oct. 1, 2011. To qualify for TAP, orchardists and nursery tree growers must: 1) suffer qualifying tree, bush or vine losses in excess of 15 percent (adjusted for normal mortality) from an eligible natural disaster for the individual stand; 2) have owned the eligible trees, bushes and vines when the natural disaster occurred; however, eligible growers are not required to own the land on which eligible trees, bushes and vines are planted; 3) replace eligible trees, bushes and vines within 12 months from the date the application is approved. A sign-up time frame for the program will be announced in the near future.

[Emergency Conservation Program \(ECP\)](#) – This program provides up to 75% of costs, capped at \$200K, to help farmers and ranchers to repair damage to farmlands caused by natural disasters and to help put in place methods for water conservation during severe drought. Funding is provided to: remove debris from farmland, restore livestock fences and conservation structures, and grade and shape farmland damaged by the natural disaster. FSA county committees determine eligibility based on on-site inspections. For land to be eligible, the natural disaster must create new conservation problems that, if unattended, would impair or endanger the land; materially affect the land's productive capacity; represent unusual damage which, except for wind erosion, is not the type likely to recur frequently in the same area and; be so costly to repair that federal assistance is or will be required to return the land to productive agricultural use. Residents of Del Norte, Imperial, Riverside, and San Diego counties are not eligible to apply for this program. Residents of Alpine, Inyo, and Mono counties must apply through the Minden, Nevada Farm Service Agency Office. **Late applications may be accepted for this program.**

[USDA Natural Resources Conservation Service](#)

The USDA's Natural Resources Conservation Service (NRCS) works with landowners through conservation planning and assistance that results in productive lands and healthy ecosystems.

[Conservation Technical Assistance \(CTA\)](#) – Conservation Technical Assistance provides help to land users – farmers, ranchers, nonindustrial private forests landowners and tribes – to address opportunities, concerns, and problems related to the use of natural resources and to help land users make sound natural resource management decisions.

Drought tips: http://ucanr.edu/News/Drought/Drought_tips/

California suffered a multi-year statewide drought from 1987 to 1992, according to the California State Department of Water Resources. In 1991, the driest single year of the drought, 23 of California's 58 counties declared county-wide local states of emergency.

At the time, federal and state agencies collaborated with the University of California to create 17 "Drought Tips." Links to those tips in pdf format can be found at the web address above.