

# Water Features

Goleta Water District News – Summer 2017



*Even with winter rains, we remain in a*

**Stage III Water Shortage Emergency**

*Thank you for being a water saver!*

**One Year of Above Average Rainfall Will Not End the Drought**

## Lake Cachuma: Half Empty or Half Full?

The last five years of below average rainfall produced extreme drought conditions that gripped the region. Recent winter rains have refilled Lake Cachuma to 50% of capacity. Lake levels remain below the historical average and the groundwater basin is approaching historical lows. The drought continues for Southern Santa Barbara County, and conservation remains necessary.

**Plus: *Fundamentals of a Groundwater Basin***



*[Photo: The Foothills of the Goleta Valley continue to show the effect of drought conditions]*

# The Drought Continues



Here in Southern Santa Barbara County the drought isn't over. While the Governor lifted the State Drought Emergency declaration due to a historically wet year in Northern California, the County's Emergency Drought Declaration for Santa Barbara County remains in effect and local surface and groundwater supplies remain depleted. All of the South Coast water purveyors, including Goleta Water District, the City of Santa Barbara, Carpinteria Valley Water District, and Montecito Water District, are affected by these conditions. That is unlikely to change until the next rainy season, which typically runs from November through April.

Thanks to this year's above average rains, and the continued exceptional conservation that the community has achieved, an adequate supply of water exists for the next two years. While we have an improved water supply outlook, we are far from a return to normal conditions. It is anticipated that at least another year of above average rainfall is necessary to ease the various restrictions in place to offset our supply deficiencies.

This Newsletter contains a number of features on how recent rains have impacted the District's water supply. The *Update on the Drought* addresses frequently asked questions. Our feature article *One Above Average Year Can't Offset the Drought Deficit* provides a greater understanding of the impacts of this year's rains, and how they compare to the "March Miracle of 1991." Another article provides an overview of the fundamentals of a groundwater basin. On the back page numerous tips are included for conserving water this summer.

The District recognizes the outstanding efforts the community has made, and continues to make, throughout this drought. Rebates and other conservation tools remain available to assist you in your efforts to increase the efficiency of irrigation systems, and install waterwise drought tolerant landscaping. The District also recently added a \$150 Water Efficient Washing Machine Rebate, and now offers up to two free deliveries of mulch (limited to \$80 per delivery or an annual maximum of \$160 per fiscal year) through the County of Santa Barbara. All of these programs can help you save both water and money, and they provide an important benefit to the community.

As we prepare to enter another dry summer, thank you for your continued water conservation efforts.

John McInnes



General Manager

## Stage III Water Shortage Emergency Restrictions Reminder

- ◆ **Outdoor landscape irrigation *remains* limited to no more than two times per week during early morning or late evening hours, and no irrigation is allowed for 48 hours after it rains:**
  - **Manual watering (including with a sprinkler attached to a hose) is only allowed before 8 a.m. or after 8 p.m., any two days per week.**
  - **Use of fixed (i.e. installed) sprinkler systems must comply with the following updated schedule:**
    - **Residential properties may water Wednesdays and Saturdays, before 6 a.m. or after 8 p.m.**
    - **Commercial and institutional properties may water Tuesdays and Fridays, before 6 a.m. or after 8 p.m.**
  - **Public parks, athletic fields, and golf courses may water no more than two days per week, before 6 a.m. or after 8 p.m.**
- ◆ **Hotels, motels, and other lodging are required to post water shortage notices, and refrain from daily linen washing unless specifically requested by the patron.**
- ◆ **Agricultural customers using overhead spray irrigation outdoors are restricted to before 10 a.m. or after 4 p.m.**

For a complete list of restrictions, information on conservation, tips, and rebates visit [www.GoletaWater.com](http://www.GoletaWater.com).



## Q&A

### **Q: *Is the drought over?***

**A:** No. Southern Santa Barbara County is among the few remaining areas of California still in drought. Even with winter rains, Lake Cachuma has managed to reach just 50% capacity, and the traditional rainy season ended in April. The District was informed by the Federal Government this spring that we would be receiving only 40% allocation from the lake. The groundwater basin is approaching historic lows, and drought conditions continue to grip the region. The Goleta Valley is now entering the sixth year of the most severe local drought on record.

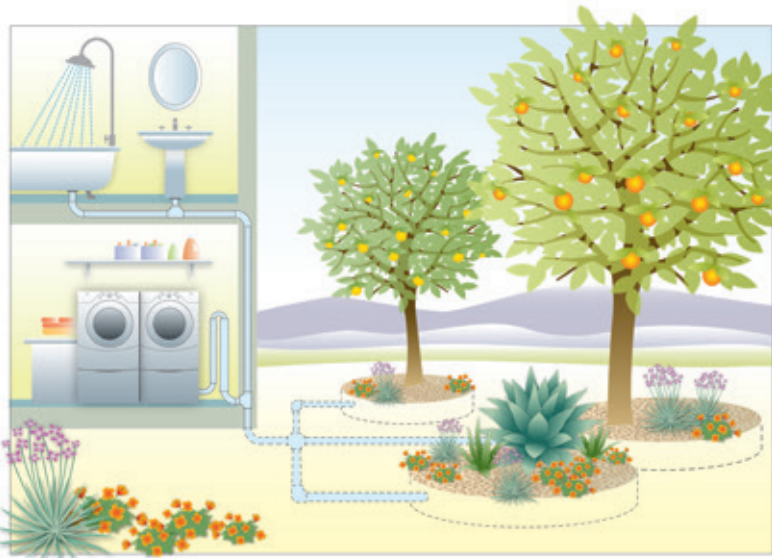
### **Q: *Will the drought stages be changing?***

**A:** Not before the next rainy season, which typically runs from November through April. While recent rains have helped they are not enough to change the current drought stage. It is anticipated that another year or more of normal to above average rainfall will reduce the District's supply deficiency thereby allowing for relaxation of drought stages.

### **Q: *Have other agencies changed their drought stages?***

**A:** Santa Barbara County remains under a Drought Emergency Declaration. All agencies on the South Coast currently remain in drought conditions, and require customers to observe water use restrictions such as watering days and times. Some agencies have lifted more severe restrictions such as lawn watering bans, however, because of the exemplary conservation in the Goleta Water District service area, these restrictions were never necessary in the first place.

## Laundry to Landscape and Showers to Flowers



District customers can use graywater from their bathroom sinks, showers, and tubs on their landscaping without having to apply for a building permit, get an inspection or pay fees. You do still need to meet the plumbing code, but graywater systems are an eligible expense under the Smart Landscape Rebate Program. Contact the District at (805) 964-6761 ext 642, or visit [www.GoletaWater.com](http://www.GoletaWater.com) for more information.

**From laundry to landscape, and showers to flowers,  
save water and money with a graywater system!**

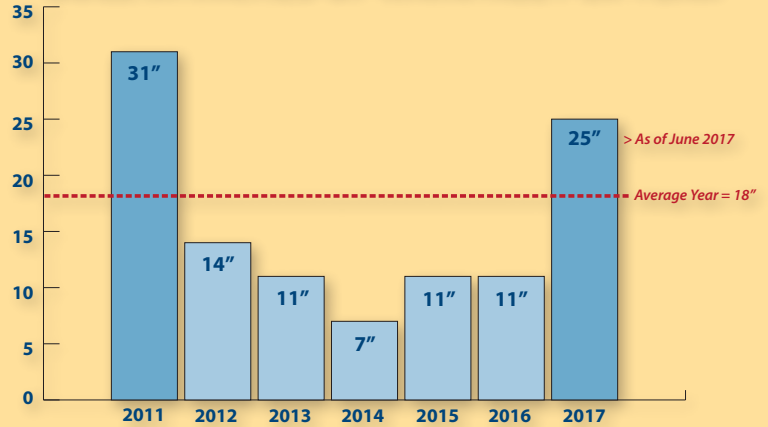


# One Above Average Year Ca

The last five years of below average rainfall produced extreme drought conditions that gripped the region. Even with the recent winter rains that have refilled Lake Cachuma to 50% of capacity, the long term effects of the drought persist and conservation remains necessary. While lake levels have risen, they remain below the historical average and are at levels last seen in 2014. It will take years for the groundwater basin to replenish. The District remains in a Stage III Water Shortage Emergency. Conservation remains critical.

## ONE ABOVE AVERAGE YEAR WILL NOT END THE DROUGHT

### GOLETA INCHES OF RAINFALL PER YEAR



**THE 25 INCHES OF RAINFALL RECEIVED THIS YEAR IS ONLY 7 INCHES MORE THAN NORMAL**

## Lake Cachuma is still below normal levels



**SUMMER 2017 - 50%**



**WINTER 2011 - 100%**

# Can't Offset the Drought Deficit

The District will receive only 40% of its normal deliveries from Lake Cachuma in 2017.

## Lake Cachuma: Half Empty or Half Full?

After five dry years Lake Cachuma received significant inflow this winter, rising from 7% to 50% of capacity in a span of a few weeks. The series of storms in January and February meant the watershed was primed for maximum inflow, and the lake rose 40 feet in a matter of days. But it wasn't enough to make up for five dry years. Even with winter rains, the Federal Government informed the District that it will be receiving only 40% of normal water supply from the lake. This is an improvement over the zero percent allocation received the last two years, but it serves as yet another reminder that the community hasn't returned to normal conditions. The groundwater basin is approaching historic lows. Water supply projections show that even with water from the lake, a 26 to 35% supply deficiency is forecast through the end of 2017. The community still needs another winter of average or above average rain.

That said, the importance of this year's rain event cannot be discounted. In January the lake was at its lowest level since construction of the reservoir in 1953. The intake tower that delivers water to the South Coast was surrounded by dry lake bed, and the emergency pumping barge had to be moved a second time or it would have been stranded above the waterline. The situation was dire enough that the Director of the Governor's Office of Emergency Services came to Santa Barbara County to hold an emergency meeting on the drought, and the District was close to having to declare a Stage IV Water Shortage Emergency.

With the clouds cleared and the rainy season over, whether the lake is half full or half empty depends on one's outlook. Regardless, the District continues to plan for dry weather, but remains cautiously optimistic that next year's rains could bring drought relief. In the meantime, the District is actively managing its groundwater basin to ensure that in the event the drought stretches on for several more years, water will be available in the drought buffer for the Goleta Valley.

## THEN AND NOW: HOW DOES THIS YEAR'S RAIN EVENT COMPARE TO THE MARCH MIRACLE OF 1991?

### March Miracle 1991

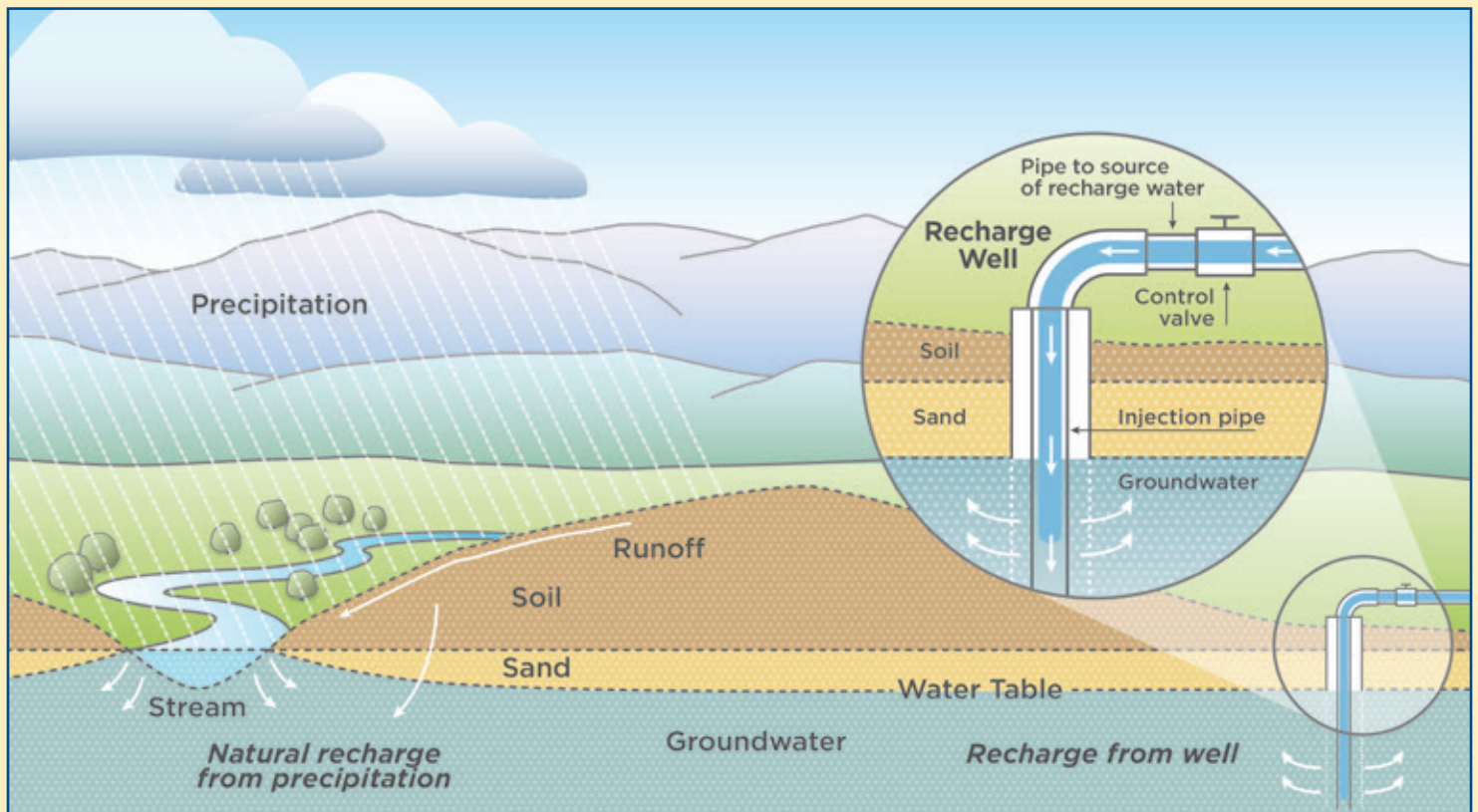
Total Inches:	23 inches for the year (12 in March alone)
Number of Years in Drought:	7 Years (1985-1992)
Did it End the Drought?	No, while the March Miracle lessened the severity of the drought, it was another year before the drought was over.

### Winter Storms 2017

Total Inches:	25 inches (10 in February alone)
Number of Years in Drought:	5 Years (2012-2017)
Did it End the Drought?	No, it will take another year of average to above average rainfall to go to a Stage II, and possibly more to end the drought completely.

# Fundamentals of a Groundwater Basin

The Goleta Groundwater Basin plays a critical role in the District's water supply. But what exactly is a groundwater basin? This illustration shows the basic elements of a groundwater basin, and how it can be recharged.



\*This illustration is for education purposes only, and does not represent a model of the Goleta Groundwater Basin.

## What is Groundwater?

Groundwater refers to water stored underground, in the spaces between sand, gravel, and rock typically referred to as an aquifer. The groundwater basin is recharged naturally by rain and runoff that percolates into the soil, and water from rivers and streams that infiltrate below ground. Recharge to groundwater basins can be increased with landscaping changes that increase the amount of stormwater captured, or by using a recharge well. Water can be allowed to flow into the well, or injected under pressure.

A number of communities in California are exploring the use of highly treated recycled water to replenish groundwater basins. The District recently completed a Potable Reuse Facilities Plan to explore whether this type of conjunctive use might work in the Goleta Groundwater Basin. Funds are budgeted for a pilot project to evaluate the viability of current technology for FY 2017-18.

## Help Protect Water Quality

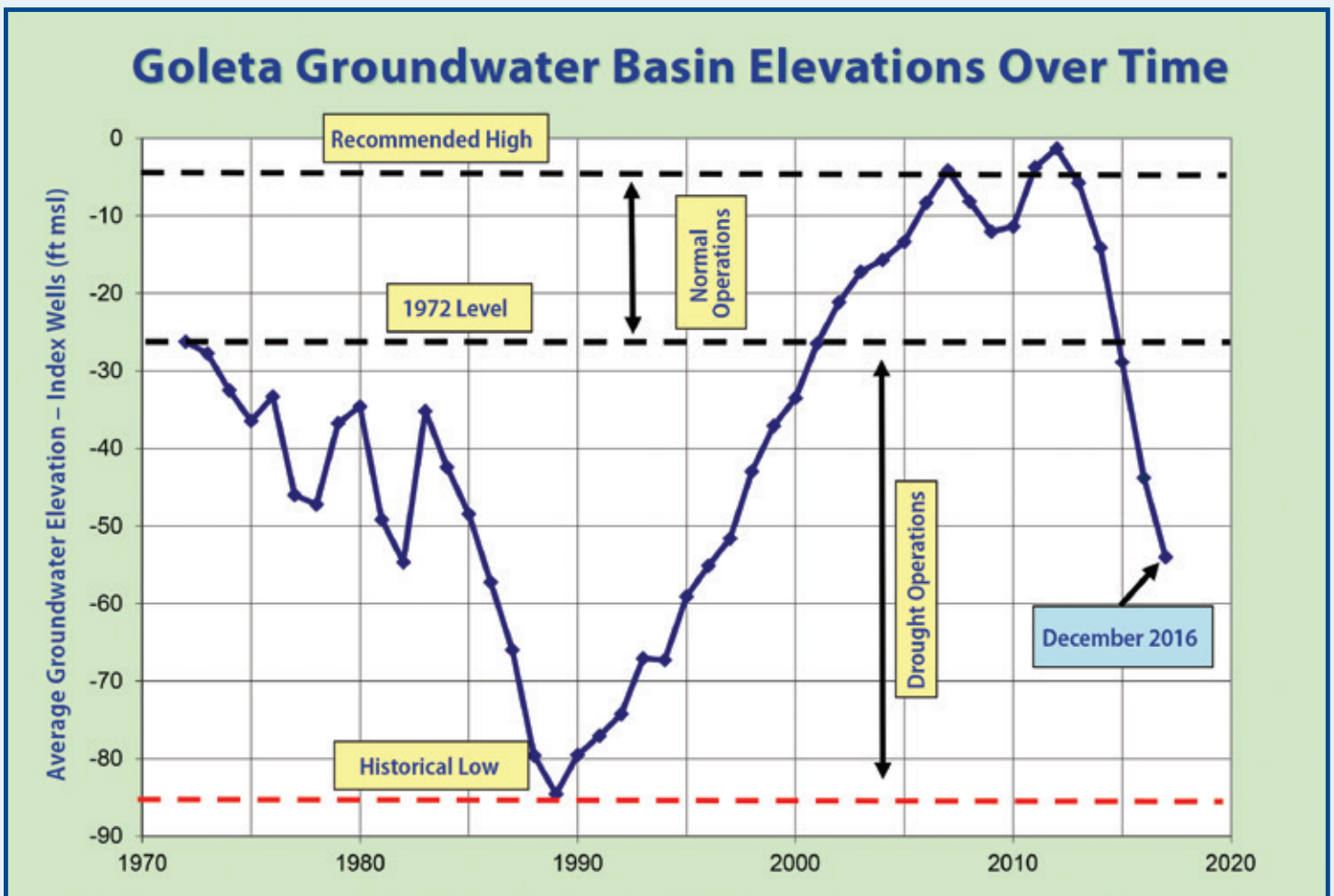


You can help protect the groundwater basin from contamination through the choices you make at home, and by disposing of hazardous goods properly. Limit the use of fertilizers to prevent runoff, and choose the least toxic paints and cleaners possible. Dispose of used motor oil, solvents and paint by taking them to the **Community Hazardous Waste Collection Center** at UCSB, Bldg 565, Mesa Road, UCSB. For residents, drop off is Saturday 9 a.m. to 3 p.m., and Sunday 11 a.m. to 3 p.m. For businesses please call (805) 882-3602 to set up a Friday appointment.

# The Goleta Groundwater Basin Will Take Years to Recharge

The 1989 Wright Judgment and 1991 voter-approved SAFE Ordinance set forth a complex set of management rules for the Goleta Basin, including defined limits on extraction, storage requirements, allowed uses, and the establishment and maintenance of a drought buffer for use in times of drought emergency. The groundwater basin provides a critical source of supply in drought years when the District can draw on water stored in the drought buffer to provide the majority of water served to customers.

The drought buffer is the key to sustaining the Goleta Valley through the drought. Under normal conditions, the District has a court-determined right to pump 2,350 acre feet per year. During wet winters when excess water is available, the District uses the wells to replenish the basin by injecting excess water from Lake Cachuma, and draws on other supply sources to leave groundwater in the basin. This drought buffer provides a critical source of supply.



## Did You Know?

The District monitors the health of the basin including how much water has been extracted and the current elevations. As a result of the District's use of the drought buffer the elevation of the Goleta Groundwater Basin has been approaching historic lows.



**GOLETA WATER DISTRICT**  
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 info@goletawater.com

## REMEMBER, YOU CAN PAY YOUR BILL ONLINE

### Visit our website for more information

[www.GoletaWater.com](http://www.GoletaWater.com) is a great resource  
 Water-Wise Landscaping Tips and Planting  
 Resources | Board Meeting Agendas and  
 Minutes | Information About Rates | Water Quality  
 and more...

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## Waterwise Landscaping



Waterwise landscaping is the key to a beautiful lush landscape that uses less water! Summer is a great time to plan irrigation and landscaping upgrades for your garden so you will be ready to plant in the fall.

- ✿ Explore the virtual gardens on [WaterWiseSB.org](http://WaterWiseSB.org).
- ✿ Get pre-qualified for a District rebate program.
- ✿ Schedule a conservation check up for your irrigation system and landscaping.
- ✿ Attend a WaterWise workshop and learn how to plan a waterwise garden.
- ✿ Research plant needs, soil type, and drainage to determine whether graywater systems will work for your landscaping.

## Summer Conservation Tips

- ◆ Decide which trees and plants are the most important and dedicate limited water to them first.
- ◆ Check for and fix leaks in your irrigation system.  
Visit [www.WaterWiseSB.org](http://www.WaterWiseSB.org) for video tutorials.
- ◆ Consider replacing older, less water efficient equipment. District rebate programs are available to help fund these replacements.
- ◆ Install a Laundry to Landscape or Showers to Flowers graywater system to reuse water for sustainable landscape irrigation.
- ◆ Use a bucket to catch water in your shower for use on your plants.
- ◆ Direct your gardener to implement waterwise landscaping practices.
- ◆ Mulch plants to reduce evaporation.

For more water saving tips and information visit [WaterWiseSB.org](http://WaterWiseSB.org)! Follow the District on Twitter and Facebook!



### Contact

**Call us:** (805) 964-6761  
**Press 1** for drought information

**Visit our office:** 4699 Hollister Ave.  
 8 a.m. to 5 p.m., Mon. – Fri.

**Send us an email:**  
[info@GoletaWater.com](mailto:info@GoletaWater.com)

**Visit our website:**  
[www.GoletaWater.com](http://www.GoletaWater.com)

**The District Board of Directors** meets on the second Tuesday of every month at 5:30 p.m. at the District office. The public is always welcome.