# BAKER WATER TREATMENT PLANT OPENS

# **Improving Water Supply Reliability for south Orange County**



s a joint project between the El Toro Water District, Irvine Ranch Water District (IRWD), Moulton Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District, the Baker Water Treatment Plant (WTP) is a collaborative project designed to improve drinking water supply reliability for southern Orange County by constructing a regional water treatment facility. By coordinating on this project, our five agencies have developed a project to repurpose IRWD's Baker Treatment Plant in order to treat water from various sources. The completed project, located in the City of Lake Forest, provides 28.1 million gallons per day (mgd) of drinking water.



Baker Water Treatment Plant

Increased Water Supply Reliability: The Baker WTP provides increased water supply reliability to South Orange County by increasing local treatment capability from multiple water supply sources, including imported untreated water from the Metropolitan Water District of Southern California (MWD) through the Santiago Lateral and local surface water from Irvine Lake. ETWD participated in the project to improve potable water treatment reliability for our customers. With today's conservation strides by our customers and ETWD's investment in expanding recycled water deliveries, our total potable water treatment demand is about 6.8 MGD. Of that 3.2 MGD or about 47% will be satisfied by the Baker Water Treatment Plant.

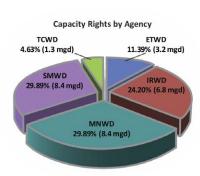
ETWD's ultimate local reliability goal with an interruption to the imported ater source of supply is to be able to sustain curtailed potable water deliveries for a period of as much as 60 days. In pursuit of this goal this project along with our existing dedicated emergency storage, extends the District's ability to withstand an emergency interruption on the import supply to 35 days.

**Protection in Emergencies:** The plant provides a reliable local drinking water supply during emergencies or extended facility shutdowns on the MWD delivery system. It also increases operational flexibility by creating redundancy within the water conveyance system.

**Improved Water Quality:** The Baker WTP utilizes advanced microfiltration treatment and ultraviolet disinfection technologies to produce water that meets standards stricter than current regulatory requirements, resulting in a consistent, high quality source of drinking water for South Orange County.

**Sustainable and Efficient:** The Baker WTP is designed to minimize waste through on-site recycling and treatment of waste streams, resulting in a 99% recovery efficiency.

Project Ownership: Irvine Ranch Water District (IRWD), El Toro Water District (ETWD), Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD) and Trabuco Canyon Water District (TCWD) each own capacity rights in the Baker WTP's 28.1 mgd production capacity, as



shown in the chart at right. At capacity, the Baker Water Treatment Plant produces enough water to serve 63,300 homes within South Orange County.

**Timeline and Cost:** Plant construction began in early 2014 and was completed in late 2016 at an overall project cost of \$107 million shared proportionally by the project partners.

For more information, please visit: <a href="https://www.bakerwatertreatmentplant.com">www.bakerwatertreatmentplant.com</a>

# DROUGHT UPDATE JOIN US IN MAKING PERMANENT CHANGES IN WATER USE

hallenges can bring out the best in people and we've certainly found that to be true of our customers. When asked to make mandatory steep cuts in water use in 2015 due to California's ongoing drought, our customers stepped up, letting lawns go brown and placing buckets in showers to catch water. We applaud you for your commitment and the concrete actions you have taken to save water.

Thanks to last winter's modest storms and our ongoing investments in drought-resilient water supplies, we are able to move beyond the stringent measures required last year to more sustainable practices this year. Though we have certified that we are drought-prepared in the event of three more dry years, it's important to maintain waterwise practices and continue making permanent changes to the way we use water so we can remain efficient and resilient.

Our agency has many programs to help customers make changes that will result in permanent water savings. We invite you to take advantage of these and continue to do your part to embrace conservation as a California lifestyle.

We know the next dry year is always right around the corner. Ongoing conservation and permanent changes are important because there is never enough water to waste in California.

Again, we thank you! You are the ultimate stewards of California's precious water. Keep up the good work, and visit <a href="www.saveourwater.com">www.saveourwater.com</a> for water savings tips. And visit our website for more on our rebates, our drought-resilient supplies and what we are doing to raise the bar on efficiency.

ETWD customers and the ETWD Recycled Water Expansion Project saved 30% in September and 26% in October. Please keep up the good work.

# **HOW TO DETECT LEAKS**Faucets and Toilets



**Leaking Faucets:** Leaking faucets are generally a result of a worn rubber washer. The washer on a sink is usually located under the handle. These are relatively easy to replace, if you have the right tools. It does require shutting off the water under the sink or at the main shutoff valve and removing the handle. (Note: faucet handles are not shutoff valves.) Check your local home center or hardware store on how to repair faucet leaks.

**Leaking Toilets:** Toilet leaks can waste hundreds of gallons and often times are silent. Even a small leak can add up to a lot of wasted water

and money over time. Fortunately, most toilet leaks are easy and inexpensive to repair.

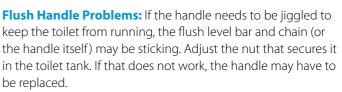
To help determine if you have a leaking toilet, simply remove the tank lid and place a few drops of food coloring in back of the toilet tank (if you do not have food coloring, you can pick up dye tabs from ETWD's customer service office or purchase them from a hardware store). Wait about 5 minutes, without flushing, and then look in the toilet bowl to see of any color has come through. If the water is clear, water is not leaking. If you see food coloring in the bowl you have a leak.

In most cases, you will simply just need to replace the toilet flapper and/or filling mechanism. These are available at hardware or home center stores for about \$8.00 each.

### **Flapper Valve Leaks:**

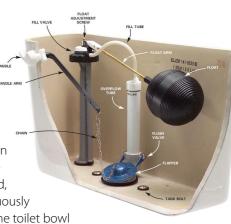
without flushing.

The most common reason for a leaking toilet is one that has an improperly working or sealing flapper. The flapper is the rubber valve in the bottom of the tank that lifts up when the toilet is flushed. If the flapper is worn or cracked, it allows water to continuously flow from the tank into the toilet bowl



**Overflow Tube Leaks:** Ideally the water level should be set so that is about even with the fill line on the back of the toilet tank (approximately ½" below the overflow tube). If the water is too high in the toilet tank and is spilling into the overflow tube, the water level can be adjusted by turning the adjustment screw or by very gently bending the float arm down so that the water shuts off at a level below the overflow tube.

Note: If none of these steps solve the problem, you may need to contact a plumber to repair or replace the toilet.

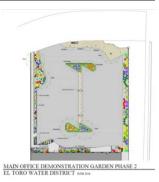


# **ETWD DEMONSTRATION GARDEN PROJECT**

is excited to be making permanent changes in water use by embarking on next phase of the Demonstration Garden Project that will rehabilitate the landscaping of the Main Office parking lot area and the large turf area adjacent to Los Alisos Blvd. The main objective of this project is to promote efficient outdoor water use and demonstrate a variety of California Friendly and drought tolerant plants and features for our customers. The landscaping will include four gardens and incorporate decomposed granite walkways, boulders, dry creek stream beds, bridge, mulch, synthetic turf and interpretive signage. Smart irrigation timers and an updated drip irrigation system will also be utilized.

ETWD began planning the project two years ago working with the Saddleback College Landscape Designers Alumni Association to develop a conceptual plan and developed that plan into a design with Richard Fisher and Associates. Recently, DMA Greencare, Inc. was awarded the construction contract and we look forward to starting the project in January 2017. ETWD staff will also be working with the Lake Forest Garden Club and local Boy Scouts to determine ways that we can partner with each other. Stay tuned for updates along the way.









### PERMANENT STATE AND DISTRICT WATER USE PROHIBITIONS

The following water use prohibitions are in effect.

- Watering or irrigating is prohibited any day of the week between 10 a.m. and 5 p.m. unless using a hand-held bucket or a hose with a positive shut-off nozzle. Recycled water customers are exempt.
- Turn off sprinklers when it rains and for at least 48 hours after it stops raining.
- Hosing off sidewalks, driveways and other hardscapes
- Watering or irrigating causing runoff
- Washing cars without a positive shut-off hose nozzle
- Decorative features that use non-recirculating water
- Fix leaks as soon as possible
- Outdoor irrigation is limited to 15 minutes per valve per day

ETWD's Water Conservation and Water Supply Ordinance limits outdoor irrigation to 1 day per week from November 1 through March 31. Under the current drought conditions and State regulations, ETWD is allowing outdoor irrigation 1 - 3 days per week.

### **REMINDER**

**RUNOFF IS PROHIBITED** 

## PLANT SPOTLIGHT

### **SALVIA CLEVELANDII**

'Winifred Gilman' Plant this California Native shrub in a sunny location and enjoy its fragrance

Salvia clevelandii 'Winnifred Gilman' is one of the smaller clevelandii only growing to about 3 feet tall. It is extremely drought-tolerant with attractive purple to lavender golf ball-shaped flower clusters and fragrant grey-green foliage. The bloom period is about one month in early spring or summer. Removing spent flowers will cause a second flush of bloom later in the season. Bees and hummingbirds are attracted to this extremely fragrant plant, which can be used as a foundation plant background for perennial gardens.

Source: Tree of Life Nursery, San Juan Capistrano | Bloom Time: Spring to early summer Size: 3 feet tall and wide | Color: Violet Blue | Water: Low | Exposure: Full Sun







### **SMART SPRINKLER TIMERS**

Choose a weather-based irrigation controller that adjusts the watering schedule based on current weather conditions, or a soil moisture sensor controller that measures the soil's water content to determine how much water plants need.

**Water Savings:** 40-50 gallons per day

### **ROTATING SPRINKLER NOZZLES**

Upgrade to rotating sprinkler nozzles that water more evenly and efficiently than traditional pop-up spray heads.

**Water Savings:** 15 gallons per da





### **DRIP IRRIGATION**

Convert spray heads to drip irrigation, which uses emitters to deliver water to specific locations at or near plant root zones.

Water Savings: 50 gallons per day

### **RAIN BARRELS**

Capture the rain water that falls on your roof and use it to water your plants! Rain barrels can reduce urban runoff and ocean pollution.

Water Savings: Varies based on rainfal





### HIGH EFFICIENCY CLOTHES WASHER

Upgrade your old washing machine to a high efficiency clothes washer that uses up to 55% less water and gets clothes just as clean.

**Water Savings:** 15 gallons per day

### **HIGH EFFICIENCY TOILETS**

Get paid to replace your old toilets with high efficiency models that use just 1.06 gallons or less per flush while maintaining high performance standards.

**Water Savings:** 45 gallons per day



### **Sprinkler Adjustment Reminders**

Sign up for free sprinkler adjustment reminder emails that tell you when/how to use the percent adjust feature on your basic sprinkler timer, ensuring appropriate watering year-round. Visit OCWaterSmart.com



\*Rebate levels are subject to change based on funding availability. Rebate paid will not exceed device cost. Please check OCWaterSmart.com for a list of current rebate levels.











www.OCWaterSmart.com | 888.376.3314

# TURF REMOVAL

ETWD is currently funding turf removal rebates while funding lasts. Please visit **www.ocwatersmart.com** for more info or to apply.

### INDOOR AND OUTDOOR COMMERCIAL REBATES ALSO AVAILABLE



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Water Views is published quarterly to keep water users in the El Toro Water District informed about water and wastewater related issues and events. If you have any comments or suggestions, please mail them to: Sherri Seitz, Editor El Toro Water District 24251 Los Alisos Boulevard Lake Forest, CA 92630

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