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DOVE LAKE – A WORKING RESERVOIR

As evident in the banner for our monthly newsletter, Dove Lake is a picturesque location in our local community. The reality is that Dove Lake is a year-round working reservoir for TCWD. The water from the lake supplements the recycled water system. It is through the use of this additional source of water that TCWD is able to keep recycled water rates low, and as such, we like to revisit this topic annually.

Common sense dictates that a diverse investment portfolio is extremely important to a secure financial future. It is no different for water purveyors. The District's water portfolio is comprised of a variety of water sources to meet different types of needs. These sources include imported drinking water supplies, local groundwater supplies (or well water), recycled water, and urban runoff water. Collectively, these different water sources ensure service reliability to our customers.

Historically, TCWD has made a practice of using recycled water for the purpose of irrigation whenever possible. The nasty truth is that recycled water, or purple pipe water, is produced from sewage. The Robinson Ranch Wastewater Treatment Plant (WWTP) provides treatment to the sewage that is collected from all the residential communities located on the upper Plano in the District's service area.

Once the sewage influent is treated in compliance with Title 22 Regulations of the Health and Safety Code of the State of California, the recycled water is stored in the Recycled Water Reservoir at the WWTP. This water is then used for the irrigation of the green belts, street medians, and various parks in the District, as well as the Dove Canyon golf course. Sometimes though, the demand for recycled water can be so great that the

WWTP's recycled water production alone is insufficient.

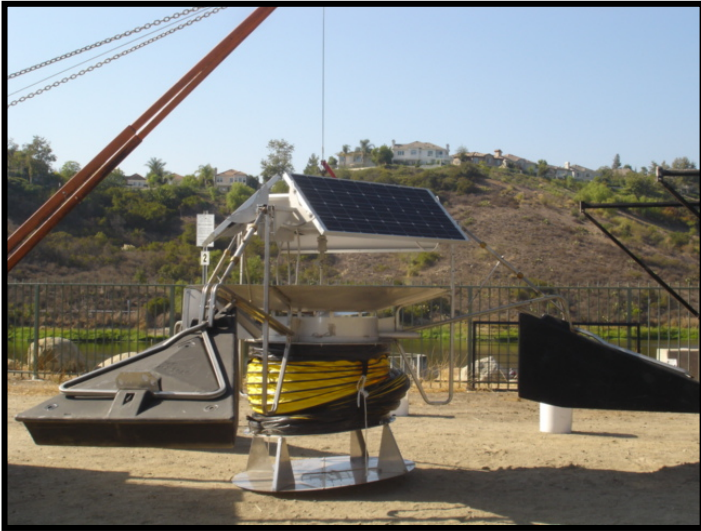
In order to supplement the demand of recycled water throughout the year, the District owns and uses the urban and storm water runoff in Dove Lake, which is located in the Dove Canyon community. Dove Lake is a man-made lake with over five hundred acre-feet of water storage capacity. The District acquired ownership of Dove Lake in the early 1990's.

When additional recycled water is needed during the warm season, the District pumps Dove Lake water back to the Recycled Water Reservoir at the WWTP for distribution to the recycled water users. The District actively monitors Dove Lake to ensure a high water quality level. District Operators routinely test the water's dissolved oxygen levels and collect samples from Dove Lake to determine the overall water quality.

TCWD preserves the water quality in Dove Lake through two different methods. The first way this is accomplished is through a series of air diffusers which are strategically located throughout the lake. Although significantly larger in size, these air diffusers are designed similarly to the type of sandstones that are used in aquariums. The air diffusers are powered by air compressors that aerate the lake water by pumping compressed air into the water. The pumped air helps to maintain the water's dissolved oxygen levels, which can prevent the growth of algae and other waterborne nuisances.

The second method used to maintain the water quality of Dove Lake is through the application of the two Solar Bee devices (pictured below). Dove

Canyon residents and Dove Lake visitors will notice the two devices floating on the lake surface. The Solar Bee devices are solar-powered mixers which are designed to evenly mix the oxygenated water at a slow rate throughout the entire lake. These devices have an adjustable uptake tube that can be extended to twenty feet below the lake surface. This design allows the District to successfully aerate the lake water to a greater depth, which in turn allows the potential for recycling more water without the risk of depleting oxygen levels.



Solar Bee Mixer prior to install

In total, TCWD processes an average of 100 acre feet per year from Dove Lake, which represents about fifteen percent of the total amount of recycled water used annually for irrigation by District customers. By augmenting the recycled water system with water from Dove Lake, TCWD is able to keep recycled water rates lower for homeowner associations and other recycled water users in our service area. Additionally, it is through these recycling efforts that TCWD can effectively stay within our annual drinking water allocation from Metropolitan Water District (MET).

DISTRICT FACILITY RENTAL

The District's public meeting room in the Administration Facility is available for event rental to individuals or groups on weekdays, evenings, and weekends. The room can be set up in many different configurations to meet the needs of your specific event and has a caterer-friendly kitchen. Tables, chairs, audio and electronic equipment for a variety of media sources are available for an additional fee.



Example of a Recent Event

If you are interested in using the public meeting room, we invite you to visit the District website at www.tcwd.ca.gov or stop by the Main Office to see this impressive facility before planning your next celebration or event.

BOARD OF DIRECTORS MEETING

The Board of Directors Regular Meeting is held on the third Wednesday of each month at 7:00 p.m. at the District's office located at 32003 Dove Canyon Drive, Trabuco Canyon. The public is encouraged to attend.

REGULAR BOARD MEETING HIGHLIGHTS

The Regular Board Meeting was held on July 18, 2012, and the following items are highlights from the Meeting:

- Conducted the Public Hearing Regarding Water Standby Assessment for Fiscal Year 2012/2013.
- Discussion and Action Relating to the April 20, 2012, Orange County Grand Jury Report and Required Response.
- Adoption of a Resolution Appointing a District Secretary.
- Status Update Relating to the Baker Regional Water Treatment Facility.
- Status Update Relating to the Alternate Raw Water Transmission Line.

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We welcome your comments, suggestions and questions. Please call or write Michael Perea at
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