



# TRIUNFO SANITATION DISTRICT

A PUBLIC AGENCY

October 14, 2011

Board of Directors  
Triunfo Sanitation District  
Ventura County, California

## WATER STORAGE CAPACITIES AND TIE-IN OPTIONS FOR OAK PARK

### Summary

At the September 26, 2011, board meeting, your Board was advised that the water storage capacities for the district are being evaluated for current and future needs. Your Board requested that staff continue its discussions and analysis and provide recommendations on how best to meet agency requirements. To date, staff has solicited proposed parameters from Las Virgenes Municipal Water District (LVMWD) and California Water Service Company (CWSC) and has authorized AECOM, Inc. to provide a preliminary hydraulic analysis into the feasibility of the proposed interconnections. Staff recommends continuing with negotiating interconnections with LVMWD and CWSC and discussions on tank storage levels for Oak Park requirements.

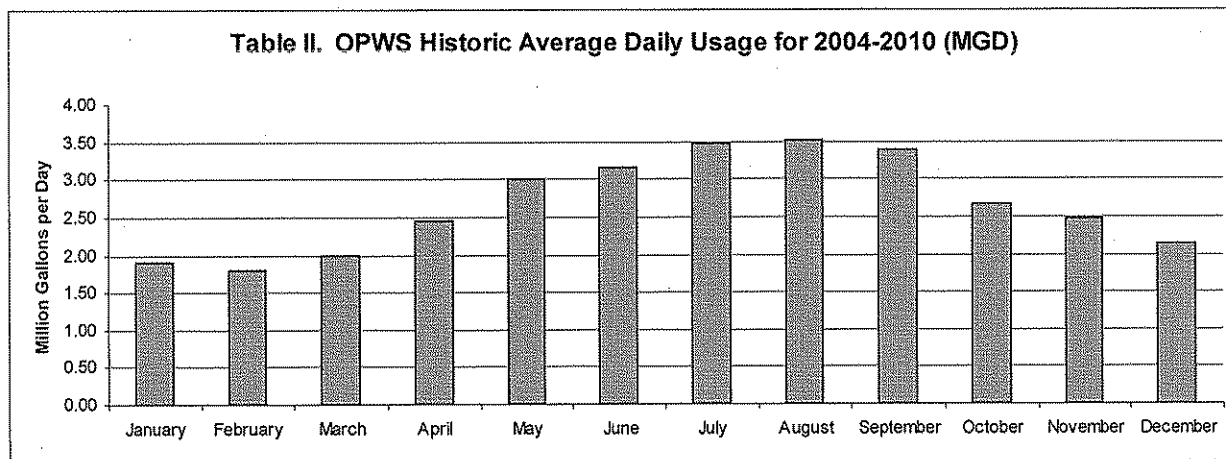
### Background

The construction of the Oak Canyon Reservoir (OCR) serves two purposes; 1) provides a replacement tank for the seismically unstable Conifer tank, and 2) increases the water storage capacity of the District. In evaluating the storage needs of the community for the installation of the Falling Star Meter Station, it is apparent that the District requires additional sources of potable water to supply its customers. Current storage capacity is barely adequate to handle any shutdown greater than 2 days in duration based on tank capacities and historic usage rates shown in Tables I and II below.

**Table I. Current OPWS Storage Capacity in Million Gallons**

Reservoir	Total	Fire	Available	Comment
Kilburn	0.86	0.3	0.56	
Savoy	1.6	0.7	0.9	
Deerhill II	2.1	1.1	1.0	
Conifer	0.5		0.5	Reservoir only filled to half capacity due to foundation instability.
<b>Total</b>	<b>5.06</b>	<b>2.1</b>	<b>2.96</b>	

*Item 13-1*



With OCR fully operational and Conifer tank decommissioned the total capacity increases by 1.3 MG (Table III). The District's ability to handle a protracted supply disruption is below the requirements of Calleguas' Ordinance No. 12 (approved July 21, 1971) which requires a three-day supply capacity. Using Tables II & III, the 4.26 MG available represents a two-day supply in the winter/spring and a little more than a day during the summer months.

**Table III. Future OPWS Storage Capacity in Million Gallons**

Reservoir	Total	Fire	Available	Comment
Kilburn	0.86	0.3	0.56	
Oak Canyon	2.1	0.3	1.6	Fire level less due to Kilburn and Savoy tanks
Savoy	1.6	0.7	0.9	
Deerhill II	2.1	1.1	1.0	
<b>Total</b>	<b>6.66</b>	<b>2.4</b>	<b>4.26</b>	

The usage numbers in Table II reflect actual usage and the residents would be able to dramatically reduce consumption through conservation efforts if an emergency situation were to arise. Nevertheless, there needs to be sources from outside the Calleguas District to assist the Oak Park community in maintaining water flows during emergencies or construction activities.

As mentioned, with the installation of the Falling Star Meter in the OCR Project, the storage capacity has become a critical issue. Calleguas is requiring the District to show adequate storage levels to be self sustaining for a 3-day period during the actual connection to the Lindero Feeder line. Drawing from an existing agreement with LVMWD and the close proximity to the Conifer Zone, staff has proposed a new interconnection with LVMWD. This connection at the intersection of Tamarind and Kanan would provide a new source to the water conveyance system. LVMWD has responded with encouraging numbers for amounts and duration that would bolster the lower zones capacity and reduce strain on the OCR during a crisis. Currently, AECOM

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is performing a hydraulic and feasibility analysis to determine how many zones would be supported by this connection and how the system would balance the remaining supply through turnout stations. In addition, to help better serve the residents in the Kilburn Zone, a request has been made to CWSC to provide a service connection along Pathfinder. Cal Water has not yet responded with actual numbers but has expressed a willingness to develop a proposal for Triunfo's consideration. Once defined parameters are received, AECOM will incorporate those numbers into the analysis for a complete evaluation of the OPWS and recommend any additional features required to implement said services.

Staff is continuing its efforts to evaluate and recommend changes and upgrades to your Board for improving the potable water supply in Oak Park. At this time, these are design concepts and firm numbers and cost estimates have not been established but staff will update this information once it becomes available. Staff plans to pursue these connections along with entertaining further discussions on increasing tank capacities through either new designs or future improvements.

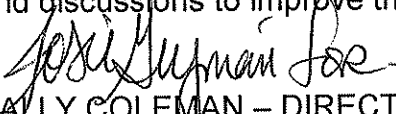
If you have any questions or need additional information, please contact me at 805-658-4674.

### **Fiscal Impact**

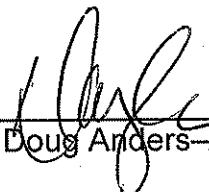
As these potential capital improvements projects will best serve the District, appropriations may be available through the current Oak Canyon Reservoir Project. If funding exceeds the contingency and scope of work already assigned, new funding will be required and the Board will be advised once cost estimates and schedules are established.

### **Recommendation**

It is recommended the Board authorize staff to continue its efforts with these endeavors and discussions to improve the water supply capabilities for OPWS.

  
SALLY COLEMAN – DIRECTOR OF OPERATIONS

APPROVED FOR OCTOBER 24, 2011 AGENDA

  
Doug Anders – Acting District Manager