



## MEMORANDUM

**TO: CITY COUNCIL**

**FROM: GEOFF ENGLISH, DIRECTOR OF PUBLIC WORKS**

**BY: SHANE TAYLOR, UTILITIES MANAGER**

**SUBJECT: MONTHLY WATER SUPPLY AND DEMAND UPDATE**

**DATE: FEBRUARY 23, 2016**

### **RECOMMENDATION:**

It is recommended the City Council receive and review the monthly Water Supply and Demand Report.

### **IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:**

The cost to provide the report is limited to staff time, which equates to approximately \$500.

### **BACKGROUND:**

The severe drought continues to impact the City's water supply and demand. As a result, the City Council declared a Stage 1 Water Shortage Emergency on May 26, 2015. This monthly update on the current supply and demand statistics will provide the Council with the data required to make decisions related to Emergency Water Shortage Restrictions and Regulations.

### **ANALYSIS OF ISSUES:**

The severe drought continues. We have received 10" of rain since July 1, 2015 at the Corporation Yard gauge. Lopez Lake is currently at 29% capacity (14,238 AF of storage). The Low Reservoir Level Response Plan (LRRP) has been enacted.

At the Zone 3 Advisory Board meeting on May 21, 2015, the Board recommended that the deliveries from the Water Treatment Plant be reduced by 10% starting April 1, 2015. This was done in advance of the Lake reaching 15,000 AF of storage, which is the automatic reduction trigger.

In January the City's water use was 28% below January 2013. The reduction requirement imposed by the State Water Resources Control Board for Arroyo Grande is 28%.

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Based on current use and weather patterns, Lopez Lake, as predicted, reached the 15,000 AF storage level around November 1, 2015. The Lopez supply for water year 2015/16 for Arroyo Grande is 2,942 AF, which includes 883 AF of carry-over water. Based on the projected water demand of 2,300 AF, we expect to be able to meet the demand in water year 2015/16 with minimal groundwater pumping.

**ADVANTAGES:**

No advantages noted at this time.

**DISADVANTAGES:**

No disadvantages noted at this time.

**ALTERNATIVES:**

Not applicable at this time.

**ENVIRONMENTAL REVIEW:**

No environmental review is required for this item.

**PUBLIC NOTIFICATION AND COMMENTS:**

The Agenda was posted in front of City Hall on Thursday, February 18, 2016. The Agenda and staff report were posted on the City's website on Friday, February 19, 2016.

Attachments:

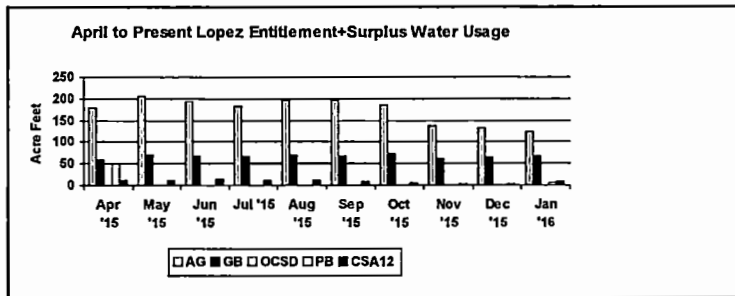
1. January 2016 Water Supply and Demand Charts
2. Lopez Reservoir Storage Projections
3. Zone 3 - Lopez Project - Monthly Operations Report



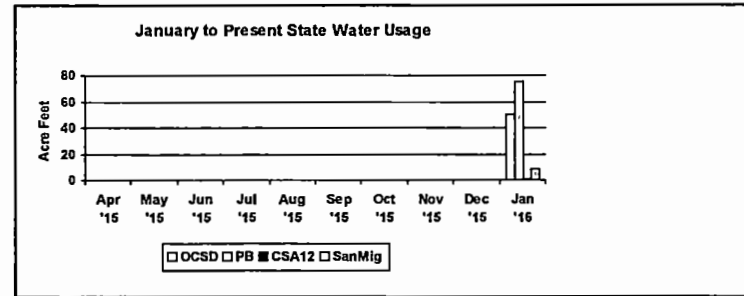


### San Luis Obispo County Flood Control and Water District Zone 3 - Lopez Project - Monthly Operations Report January, 2016

Contractor	Lopez Water Deliveries												State Water Deliveries						Total Water Deliveries This Month						
	Entl	Surplus	Total	This Month				April to Present				Total	This Month			January to Present									
				Entitlement		Surplus		Entitlement		Surplus			Annual Request	Usage	% of Annual Request	SWP Deliveries	Change in Storage	Usage		% of Annual Request	SWP Deliveries				
				Usage	%	Usage	%	Usage	%	Usage	%														
Arroyo Grand	2061	881.20	2942.20	123.33	6.0%	0.00	0.0%	1731.50	84.0%	0.00	0.0%	1731.50	58.9%										123.33		
Oceano CSD	272.7	459.00	731.70	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	750	50.69	6.8%						50.69	6.8%	50.69	
Grover Beach	720	393.60	1113.60	67.86	9.4%	0.00	0.0%	668.84	92.9%	0.00	0.0%	668.84	60.1%										67.86		
Pismo Beach	802.8	504.90	1307.70	4.46	0.6%	0.00	0.0%	54.93	6.8%	0.00	0.0%	54.93	4.2%	1240	75.00	6.0%						75.00	6.0%	79.46	
CSA 12	220.5	289.10	509.60	8.75	4.0%	0.00	0.0%	90.34	41.0%	0.00	0.0%	90.34	17.7%	57	0.62	1.1%						0.62	1.1%	9.37	
San Miguelito														110	7.96	7.2%						7.96	7.2%	7.96	
<b>Total</b>	<b>4077</b>	<b>2527.80</b>	<b>6604.80</b>	<b>204.40</b>	<b>5.0%</b>	<b>0.00</b>	<b>0.0%</b>	<b>2545.61</b>	<b>62.4%</b>	<b>0.00</b>	<b>0.0%</b>	<b>2545.61</b>	<b>38.5%</b>	<b>2157</b>	<b>134.27</b>	<b>6.2%</b>	<b>103</b>	<b>-31.27</b>				<b>134.27</b>	<b>6.2%</b>	<b>103.00</b>	<b>338.67</b>
												Last Month Stored State Water			0			This Month Stored State Water			-31.27				



Note Deliveries are in acre feet One acre foot = 325, 850 gallons or 43, 560 cubic feet. Safe yield is 8,730 acre feet



"Year to Date" is January to present for State water, April to present for Lopez deliveries, and July to present for rainfall

Lopez Dam Operations	This Month	Year to Date	Difference (feet)	% Full
Lake Elevation (full at 522.37 feet)	466.87		-55.50	
Storage (full at 49200 acre feet)	14207			28.9%
Rainfall	6.26	12.36		
Downstream Release (4200 acre feet/year)	174.2	3497.76		
Spillage (acre feet)	0	0.00		

Comments: Reservoir is currently operated under the Low Reservoir Response Plan, therefore Entitlements shown represent a 10% reduction

Surplus water shown is actually "Carry Over" water as designated in the LRRP

1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 1.05 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.05 AF was subtracted from Arroyo Grande's usage this month

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