

## MEMORANDUM

**TO: CITY COUNCIL**

**FROM: CHRISTOPHER MAGDOSKU, DIRECTOR OF PUBLIC WORKS**

**BY: SHANE TAYLOR, UTILITIES MANAGER**

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

**DATE: MAY 23, 2017**

### **RECOMMENDATION:**

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

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

Approximately two (2) hours of staff time is required to prepare the monthly report.

### **BACKGROUND:**

On April 25, 2017, the City Council, by Resolution, rescinded the Stage 1 Water Shortage Emergency and related water conservation measures and restrictions. The City Council also requested that staff continue preparing the monthly water supply and demand updates.

In April, the City's water use was 41% below April 2013. The State's required reduction was based on the 2013 water usage. There is currently no required reduction imposed by the State Water Resources Control Board. The City is, however, still required to report monthly statistics to the State.

### **ANALYSIS OF ISSUES:**

The United States Department of Agriculture (USDA) Drought Monitor, as of May 2, 2017, shows San Luis Obispo County as abnormally dry. Rain fall to date (July 1, 2016 to April 30, 2017) is 26.4" at the Corporation Yard gauge. Lopez Lake, as of May 10, 2017, is at 61% capacity (30,656 AF of storage).

The Lopez supply water year for 2016/17 ended on March 31, 2017. The City took delivery of 1,697 AF of Lopez water and pumped 232 AF of groundwater, for a total of 1,929 AF. This resulted in a per capita use of 98 gallons per day. The new water year began on April 1, 2017 and the current total available supply from Lopez is 2,290 AF, our normal entitlement, plus 1,249 AF of carryover. In addition, the City has 1,323 AF of

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ground water entitlement from the Santa Maria Basin and 200 AF from the Pismo Formation.

Based on the projected water use of 2,500 AF, the City will meet the demand in water year 2017/18, using only 50% of current supply.

At the April 25, 2017 City Council meeting, the Council urged citizens to remain cognizant of how they use water, and that the previously adopted water saving measures are still in effect.

**ADVANTAGES:**

No advantages identified at this time.

**DISADVANTAGES:**

No disadvantages identified at this time.

**ALTERNATIVES:**

Not applicable at this time.

**ENVIRONMENTAL REVIEW:**

No environmental review is required for this item.

**PUBLIC NOTIFICATION AND COMMENTS:**

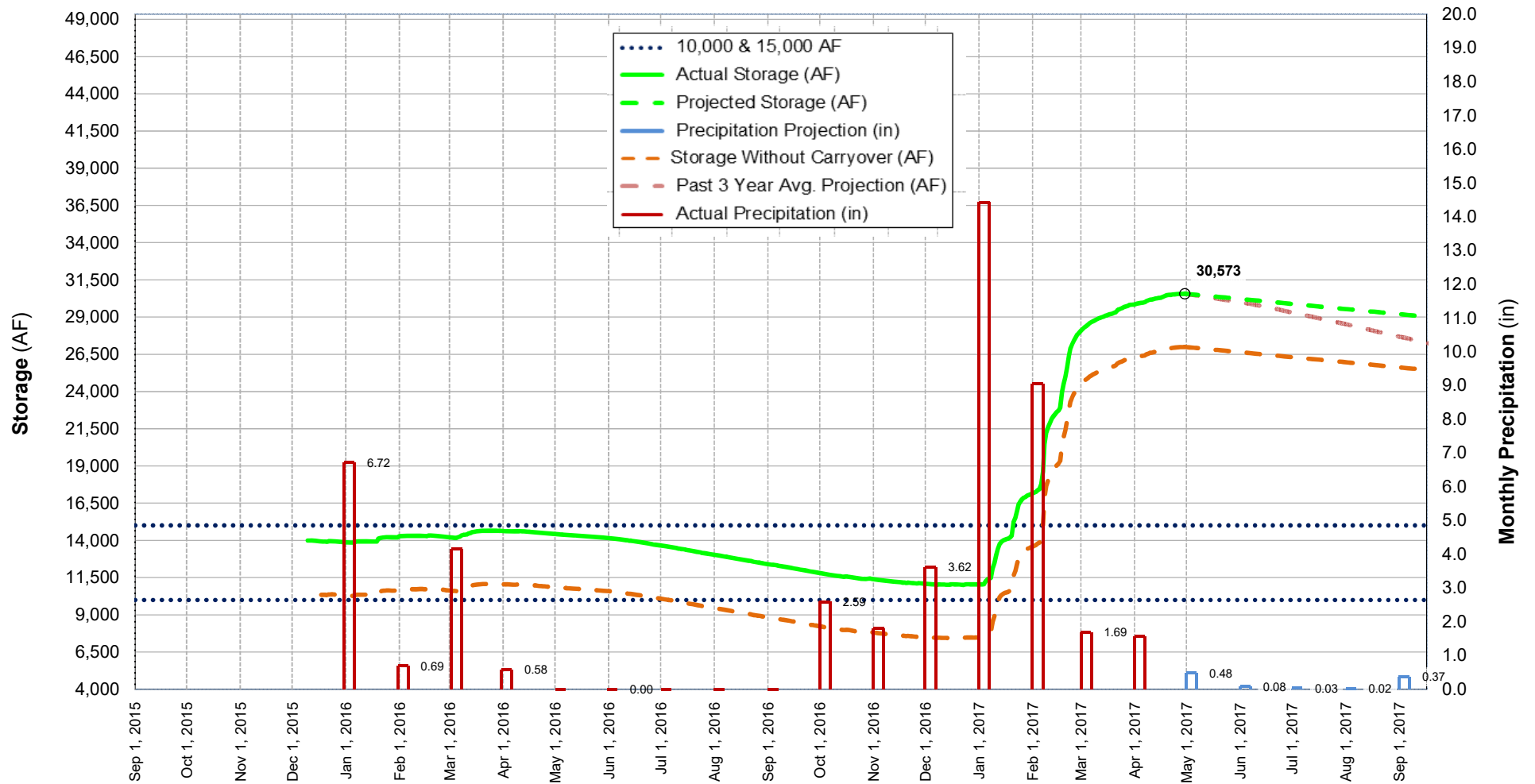
The Agenda was posted at City Hall and on the City's website in accordance with Government Code Section 54954.2.

Attachments:

1. Lopez Reservoir Storage Projections
2. Zone 3 – Lopez Project – Monthly Operations Report

**Lopez Reservoir Storage Projections**  
 (precipitation scenario source: www.LongRangeWeather.com)

Revised: 4/30/2017

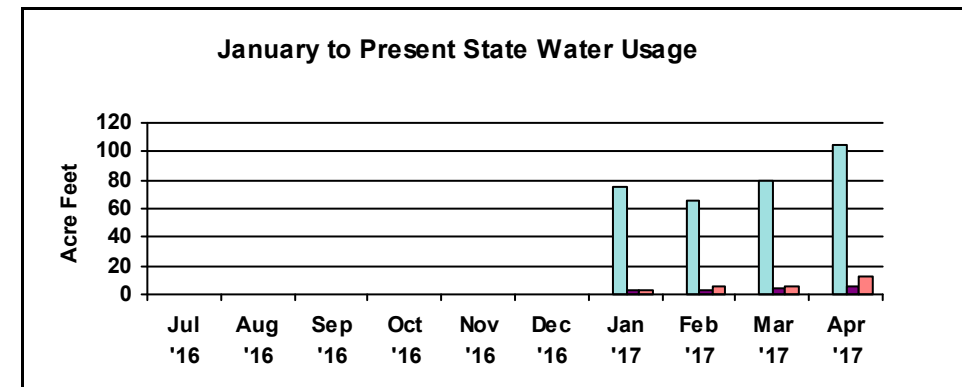
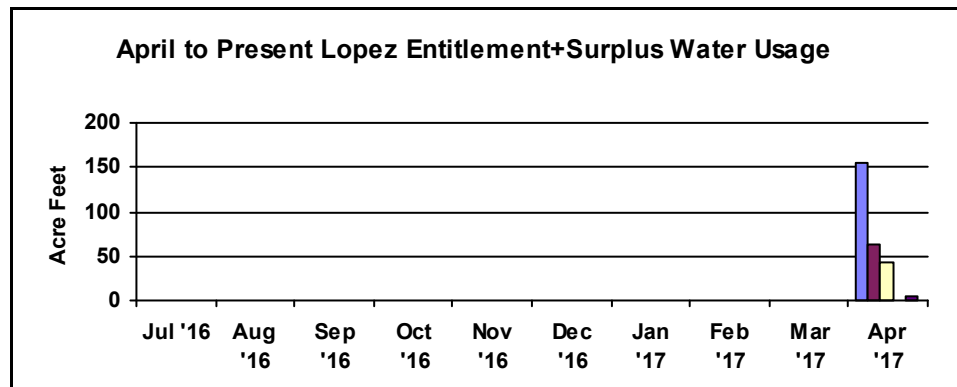


**Notes:**

- For "Dry Months" (April - October), projected increases and/or decreases in storage estimated to mimic conditions from 2015.
- For "Wet Months" (November - March), projected storage declines assume LRRP annual downstream release of 3,800 AFY and deliveries of 4,077 AFY.
- For "Wet Months", projected storage increases based on historic trends from actual storm data for the period of 12/1993 through 6/2011.
- Storage projection for "Wet Months" assume that unsaturated conditions exist.
- Rainfall projection provided by www.LongRangeWeather.com, and updated 2/1/2017. Evaporation included in storage projection.
- Past 3 Year Avg. Projection uses historic daily capacity changes averaged from 2014, 2015, 2016
- Actual precipitation is the total of the previous month.
- Actual precipitation is the rainfall measured by FRM at Lopez Rec Area.

San Luis Obispo County Flood Control and Water District  
 Zone 3 - Lopez Project - Monthly Operations Report  
 April, 2017

Contractor	Lopez Water Deliveries												State Water Deliveries						Total Water Deliveries This Month				
	Entl.	Surplus	Total	This Month				April to Present				Annual Request	This Month				January to Present						
				Entitlement		Surplus		Entitlement		Surplus			Usage	% of Annual Request	SWP Deliveries	Change in Storage	Usage	% of Annual Request		SWP Deliveries			
				Usage	%	Usage	%	Usage	%	Usage	%												
Arroyo Grande	2290	1249.20	3539.20	155.97	6.8%	0.00	0.0%	155.97	6.8%	0.00	0.0%	155.97	4.4%									155.97	
Oceano CSD	303	840.50	1143.50	42.75	14.1%	0.00	0.0%	42.75	14.1%	0.00	0.0%	42.75	3.7%	0	0.00	0.0%							42.75
Grover Beach	800	240.20	1040.20	63.96	8.0%	0.00	0.0%	63.96	8.0%	0.00	0.0%	63.96	6.1%										63.96
Pismo Beach	892	1834.20	2726.20	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	1240	104.61	8.4%							104.61
CSA 12	245	499.60	744.60	5.16	2.1%	0.00	0.0%	5.16	2.1%	0.00	0.0%	5.16	0.7%	69.96	5.72	8.2%							10.88
San Miguelito														110	12.67	11.5%							12.67
<b>Total</b>	<b>4530</b>	<b>4663.70</b>	<b>9193.70</b>	<b>267.84</b>	<b>5.9%</b>	<b>0.00</b>	<b>0.0%</b>	<b>267.84</b>	<b>5.9%</b>	<b>0.00</b>	<b>0.0%</b>	<b>267.84</b>	<b>2.9%</b>	<b>1419.96</b>	<b>123.00</b>	<b>8.7%</b>	<b>206</b>	<b>83.00</b>	<b>367.48</b>	<b>25.9%</b>	<b>613.00</b>		<b>390.84</b>
												Last Month Stored State Water		<b>644.26</b>			This Month Stored State Water		<b>731.45</b>				



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		
Lake Elevation (full at 522.37 feet)	498.96		Difference (feet)	-23.41
Storage (full at 49200 acre feet)	30573		% Full	62.1%
Rainfall	1.96	37.24		
Downstream Release (4200 acre feet/year)	165.11	165.11		
Spillage (acre feet)	0	0.00		

Comments: Reservoir is currently operated under the Low Reservoir Response Plan. Reservoir is above 20,000 AF therefore no reduction in entitlements.

Surplus water shown is actually "Carry Over" water as designated in the LRRP and updated per BOS May 10, 2016 Declaration of Surplus.

1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 1.85 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.85 AF was subtracted from Arroyo Grande's usage this month.