

## MEMORANDUM

**TO: CITY COUNCIL**

**FROM: SHANE TAYLOR, UTILITIES MANAGER**

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

**DATE: OCTOBER 23, 2018**

**SUMMARY OF ACTION:**

The update reports the water supply and demand for September 2018. Current Lopez Reservoir level and projected levels are provided in the attachments.

**IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:**

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

**RECOMMENDATION:**

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

**BACKGROUND:**

On April 25, 2017, the City Council, by resolution, rescinded the Stage 1 Water Shortage Emergency along with related emergency water conservation measures and restrictions. During the public hearing the City Council requested staff to continue preparing the monthly water supply and demand updates. The Council urged citizens to continue to practice every day water saving measures, and reiterated that the previously adopted water conservation measures were to remain in effect.

In September 2018, the City's water use was 215.4 acre-feet with a per capita use of 133 gallons per day/per person. There was a total of 0" of rainfall in September. The water use for the current "rolling" water year from October 2017 to September 2018 was 2,310 acre-feet, which equates to a per capita use of 117 gallons per day/per person.

**ANALYSIS OF ISSUES:**

The United States Drought Monitor, as of October 11, 2018 shows San Luis Obispo County in a severe drought. Rainfall to date (July 1, 2018 to September 30, 2018) is 0 inches at the Corporation Yard rain gauge. Lopez Lake, as of October 11, 2018, is at 43.5% capacity (21,506 acre-feet of storage).

The new water year began on April 1, 2018 and the City's current total available supply from Lopez is 2,290 acre-feet, our normal entitlement plus 564 acre-feet of surplus water.

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In addition, we have 1,323 acre-feet of ground water entitlement from the Santa Maria Basin and 200 acre-feet from the Pismo Formation.

The projected water use for water year 2018/19 is 2,000 acre-feet if the City receives average rainfall.

**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:**

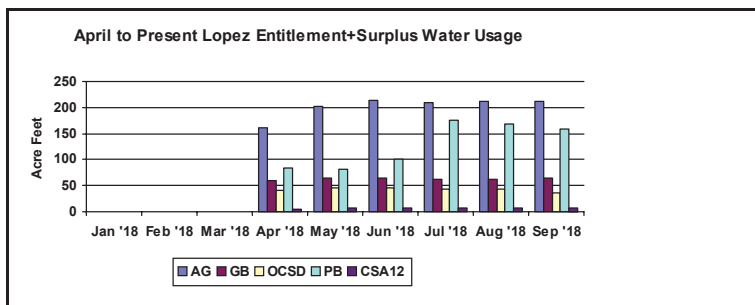
The Agenda was posted at City Hall and on the City's website in accordance with Government Code Section 54954.2.

**Attachments:**

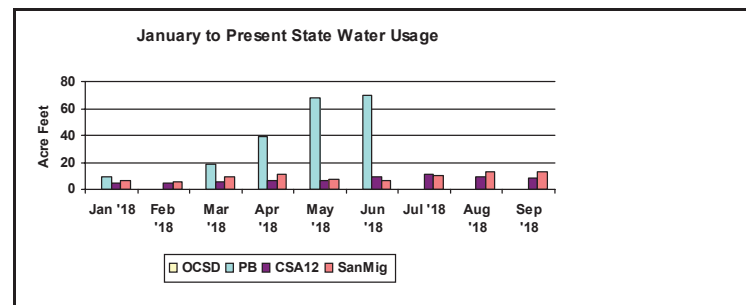
1. Lopez Monthly Operations Report for September 2018
- 1.a. Lopez Monthly Operations Report for March 2018
2. Lopez Reservoir Storage Projection
3. Monthly Water Use Comparison

San Luis Obispo County Flood Control and Water District  
 Zone 3 - Lopez Project - Monthly Operations Report  
 September, 2018

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	564.00	2854.00	212.71	9.3%	0.00	0.0%	1209.04	52.8%	0.00	0.0%	1209.04	42.4%	0	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	212.71																		
Oceano CSD	303	75.00	378.00	36.14	11.9%	0.00	0.0%	254.70	84.1%	0.00	0.0%	254.70	67.4%											205	0.00	0.0%	205.00	100.0%	205.00	100.0%	205.00	100.0%	36.14								
Grover Beach	800	197.00	997.00	64.53	8.1%	0.00	0.0%	378.17	47.3%	0.00	0.0%	378.17	37.9%																					83.96	8.57	10.2%	66.95	79.7%	66.95	79.7%	66.95
Pismo Beach	892	220.00	1112.00	159.79	17.9%	0.00	0.0%	769.03	86.2%	0.00	0.0%	769.03	69.2%											120	13.36	11.1%	82.54	68.8%	82.54	68.8%	82.54	13.36									
CSA 12	245	60.00	305.00	7.05	2.9%	0.00	0.0%	41.49	16.9%	0.00	0.0%	41.49	13.6%																				408.96								
San Miguelito																																									
<b>Total</b>	<b>4530</b>	<b>1116.00</b>	<b>5646.00</b>	<b>480.22</b>	<b>10.6%</b>	<b>0.00</b>	<b>0.0%</b>	<b>2652.43</b>	<b>58.6%</b>	<b>0.00</b>	<b>0.0%</b>	<b>2652.43</b>	<b>47.0%</b>																												
											Last Month Stored State Water			<b>1253.19</b>				This Month Stored State Water			<b>1296.26</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.

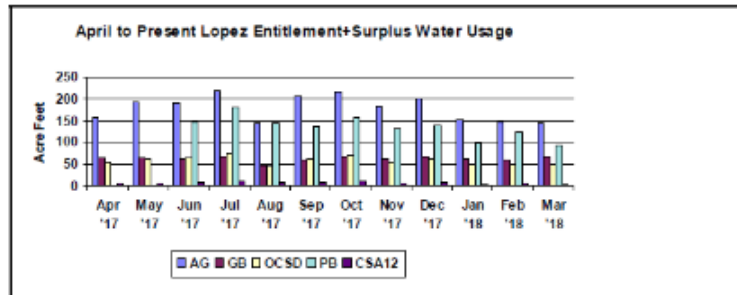
Lopez Dam Operations	This Month	Year to Date	Difference (feet)	% Full
Lake Elevation (full at 522.37 feet)	483.07		-39.30	
Storage (full at 49200 acre feet)	21200			43.1%
Rainfall	0	0.00		
Downstream Release (4200 acre feet/year)	382.38	2160.19		
Spillage (acre feet)	0	0.00		

Comments: Surplus water shown is as designated per BOS May 15, 2018 Declaration of Surplus Water.

1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.23 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.23 AF was subtracted from Arroyo Grande's usage this month.

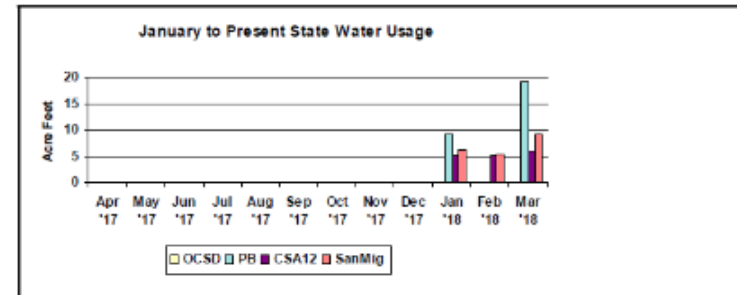
San Luis Obispo County Flood Control and Water District  
Zone 3 - Lopez Project - Monthly Operations Report  
March, 2018

Contractor	Lopez Water Deliveries												State Water Deliveries						Total Water Deliveries This Month				
	This Month			April to Present				This Month					January to Present										
	Entl.	Surplus	Total	Entitlement		Surplus		Entitlement		Surplus		Total	Annual Request	Usage	% of Annual Request	SWP Deliveries	Change in Storage	Usage		% of Annual Request	SWP Deliveries		
			Usage	%	Usage	%	Usage	%	Usage	%	Usage	%											
Arroyo Grande	2290	1249.20	3539.20	144.13	6.3%	0.00	0.0%	2146.32	93.7%	0.00	0.0%	2146.32	60.6%										144.13
Oceano CSD	303	840.50	1143.50	0.00	0.0%	50.60	6.0%	303.10	100.0%	404.39	48.1%	707.49	61.9%	227	0.00	0.0%		0.00	0.0%				50.6
Grover Beach	800	240.20	1040.20	66.10	8.3%	0.00	0.0%	748.85	93.6%	0.00	0.0%	748.85	72.0%										66.1
Pismo Beach	892	1834.20	2726.20	0.00	0.0%	91.82	5.0%	892.00	100.0%	458.17	25.0%	1350.17	49.5%	1120	19.00	1.7%		28.00	2.5%				110.82
CSA 12	245	499.60	744.60	3.17	1.3%	0.00	0.0%	87.92	35.9%	0.00	0.0%	87.92	11.8%	27	6.02	22.3%		16.12	59.7%				9.19
San Miguelito														127	8.99	7.1%		20.55	16.2%				8.99
<b>Total</b>	<b>4530</b>	<b>4663.70</b>	<b>9193.70</b>	<b>213.40</b>	<b>4.7%</b>	<b>142.42</b>	<b>3.1%</b>	<b>4178.19</b>	<b>92.2%</b>	<b>862.56</b>	<b>18.5%</b>	<b>5040.75</b>	<b>54.8%</b>	<b>1501</b>	<b>34.01</b>	<b>2.3%</b>	<b>67</b>	<b>32.99</b>	<b>64.67</b>	<b>4.3%</b>	<b>111.00</b>		<b>389.83</b>
													Last Month Stored State Water		1143.09		This Month Stored State Water			1176.08			



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

Lopez Dam Operations	This Month	Year to Date		
Lake Elevation (full at 522.37 feet)	491.65		Difference (feet)	-30.72
Storage (full at 49200 acre feet)	25934		% Full	52.7%
Rainfall	8.69	12.67		
Downstream Release (4200 acre feet/year)	247.35	3436.48		
Spillage (acre feet)	0	0.00		



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

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 2, 2017 Declaration of Surplus.

1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 1.55 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.55 AF was subtracted from Arroyo Grande's usage this month.

