



## MEMORANDUM

**TO: CITY COUNCIL**

**FROM: SHANE TAYLOR, UTILITIES MANAGER**

**SUBJECT: CALENDAR YEAR 2018 WATER SUPPLY AND DEMAND UPDATE**

**DATE: JANUARY 22, 2019**

**SUMMARY OF ACTION:**

The update reports the water supply and demand for Calendar Year 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 Calendar Year 2018 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On April 25, 2017, the City Council, by Resolution, rescinded the Stage 1 Water Shortage Emergency along with related emergency water conservation measures and restrictions.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 everyday water saving measures, and reiterated that the previously adopted water conservation measures were to remain in effect.

In 2018, the City's water use was 2,212.5 acre-feet with a per capita use of 112 gallons per day/per person. There was a total of 12.2 inches of rainfall in 2018.

**ANALYSIS OF ISSUES:**

The United States Drought Monitor, as of January 8, 2019 shows San Luis Obispo County in a severe drought. Rainfall to date (July 1, 2018 to December 31, 2018) is 3.4 inches at the Corporation Yard rain gauge. Lopez Lake, as of January 10, 2019, is at 39.6% capacity (19,537 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. 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.

**CITY COUNCIL  
CALENDAR YEAR 2018 WATER SUPPLY AND DEMAND UPDATE  
JANUARY 22, 2019  
PAGE 2**

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

On November 14, 2018, Lopez Lake storage fell below 20,000 acre-feet. The City requested a voluntary 10% flow reduction to conserve 175,000 gallons a day behind the dam. No additional restrictions are placed on our customers with this flow reduction.

**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:**

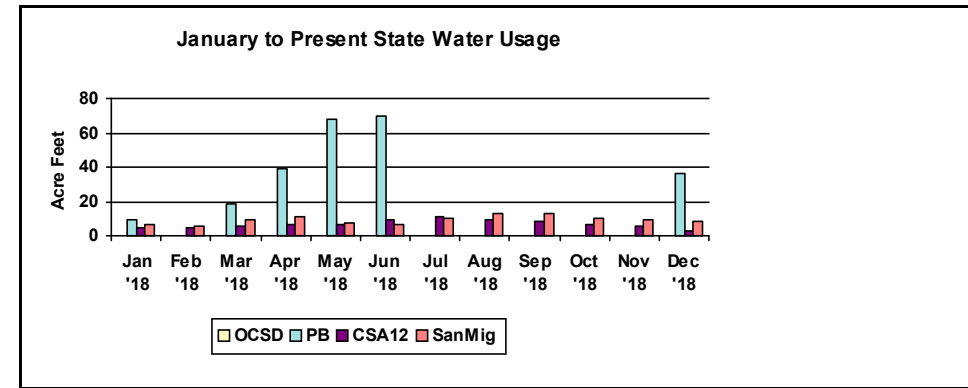
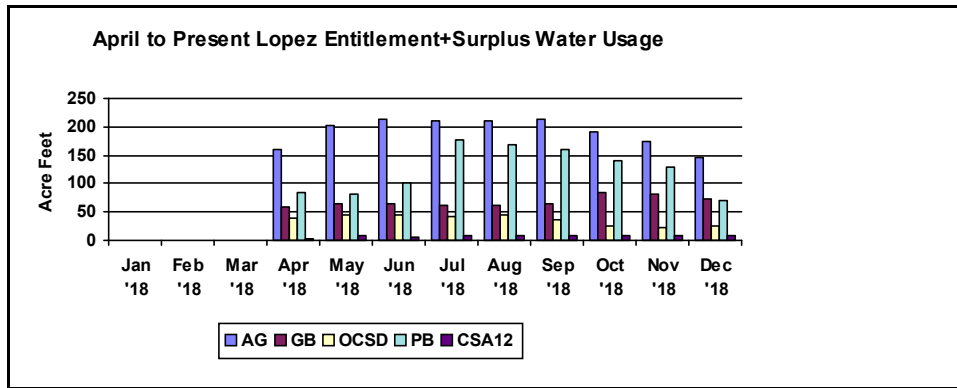
The Agenda was posted at City Hall and on the City's website in accordance with Government Code Section 54954.2.

Attachments:

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

## San Luis Obispo County Flood Control and Water District Zone 3 - Lopez Project - Monthly Operations Report December, 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	147.05	6.4%	0.00	0.0%	1721.26	75.2%	0.00	0.0%	1721.26	60.3%									147.05	
Oceano CSD	303	75.00	378.00	1.60	0.5%	24.76	33.0%	303.00	100.0%	24.76	33.0%	327.76	86.7%	0	0.00	0.0%				0.00	0.0%		26.36
Grover Beach	800	197.00	997.00	73.21	9.2%	0.00	0.0%	617.82	77.2%	0.00	0.0%	617.82	62.0%									73.21	
Pismo Beach	892	220.00	1112.00	0.00	0.0%	70.59	32.1%	892.00	100.0%	220.00	100.0%	1112.00	100.0%	205	36.50	17.8%				241.50	117.8%		107.09
CSA 12	245	60.00	305.00	7.76	3.2%	0.00	0.0%	64.60	26.4%	0.00	0.0%	64.60	21.2%	83.96	3.17	3.8%				81.83	97.5%		10.93
San Miguelito														120	8.83	7.4%				110.90	92.4%		8.83
<b>Total</b>	<b>4530</b>	<b>1116.00</b>	<b>5646.00</b>	<b>229.62</b>	<b>5.1%</b>	<b>95.35</b>	<b>8.5%</b>	<b>3598.68</b>	<b>79.4%</b>	<b>244.76</b>	<b>21.9%</b>	<b>3843.44</b>	<b>68.1%</b>	<b>408.96</b>	<b>48.50</b>	<b>11.9%</b>	<b>82</b>	<b>33.50</b>	<b>434.23</b>	<b>106.2%</b>	<b>692.00</b>		<b>373.47</b>
												Last Month Stored State Water			<b>1354.02</b>			This Month Stored State Water			<b>1387.52</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.

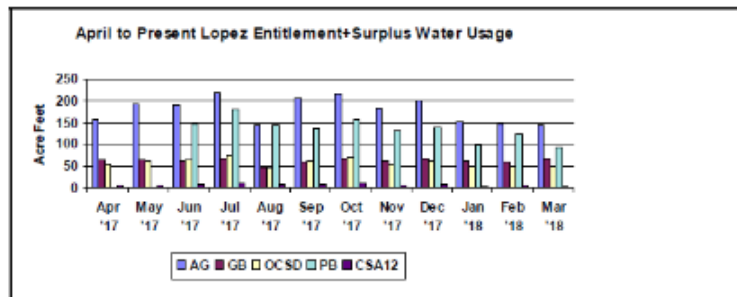
Lopez Dam Operations	This Month	Year to Date		
Lake Elevation (full at 522.37 feet)	479.5		Difference (feet)	-42.87
Storage (full at 49200 acre feet)	19457		% Full	39.5%
Rainfall	1.29	5.02		
Downstream Release (4200 acre feet/year)	320.08	3250.87		
Spillage (acre feet)	0	0.00		

**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 1.46 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.46 AF was subtracted from Arroyo Grande's usage this month.

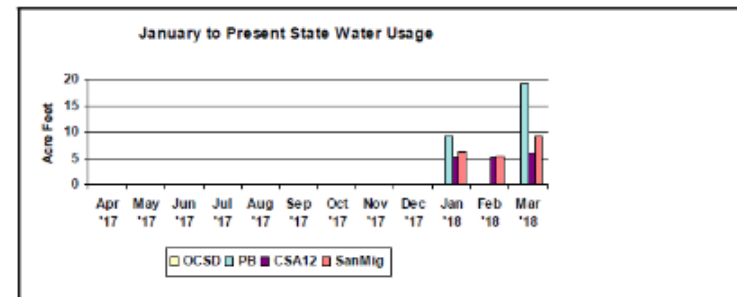
San Luis Obispo County Flood Control and Water District  
 Zone 3 - Lopez Project - Monthly Operations Report  
 March, 2018

Contractor	Lopez Water Deliveries												State Water Deliveries							Total Water Deliveries This Month			
	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	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.

