



MEMORANDUM

TO: CITY COUNCIL

FROM: BILL ROBESON, PUBLIC WORKS DIRECTOR

BY: SHANE TAYLOR, UTILITIES MANAGER

SUBJECT: MONTHLY WATER SUPPLY AND DEMAND UPDATE

DATE: FEBRUARY 25, 2020

SUMMARY OF ACTION:

The update reports the water supply and demand for January 2020. 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On April 25, 2017, the City Council, by resolution, rescinded the Stage 1 Water Shortage Emergency along with related emergency water conservation measures and restrictions.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 saving measures were to remain in effect.

In January 2020, the City's water use was 135.9 acre-feet with a per capita use of 81 gallons per day/per person. There was a total of 0.6" of rainfall in January 2020. The water use for the current "rolling" water year from February 2019 to January 2020 was 2,146 acre-feet, which equates to a per capita use of 109 gallons per day/per person. There was a total of 18.0" of rain fall for this period.

ANALYSIS OF ISSUES:

The United States Drought Monitor, as of February 13, 2020 shows San Luis Obispo County in an abnormally dry condition. Rainfall to date (July 1, 2018 to January 31, 2020) is 7.1 inches at the Corporation Yard rain gauge. Lopez Lake, as of February 13, 2020 is at 51.5% capacity (25,417 acre-feet of storage).

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MONTHLY WATER SUPPLY AND DEMAND UPDATE
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The new water year began on April 1, 2019 and the current total available supply from Lopez is 2,290 acre-feet, our normal entitlement. 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 2019/20 is 2,200 acre-feet. In conclusion, based on average rainfall for the next two years, the current supply will meet the projected demand.

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:

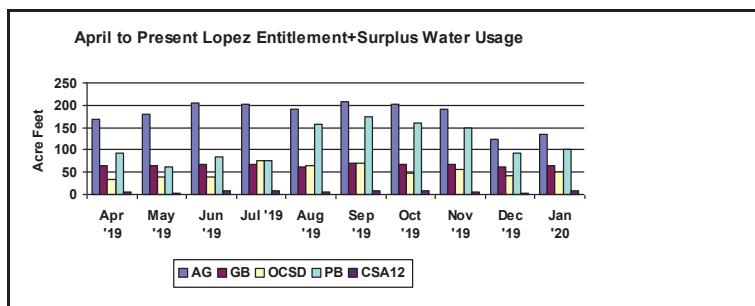
The Agenda was posted at City Hall and on the City's website in accordance with Government Code Section 54954.2.

Attachment:

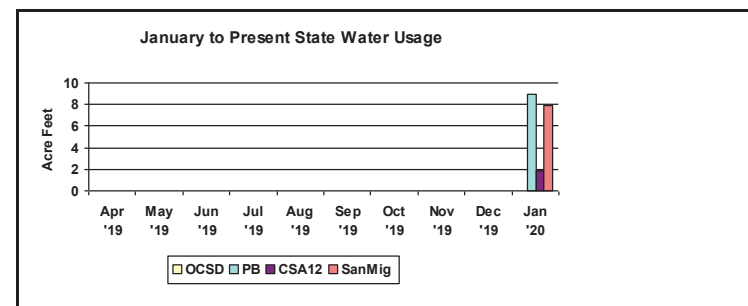
1. Lopez Monthly Operations Report for January 2020
 - 1a. Lopez Monthly Operations Report for August 2019
2. Lopez Reservoir Storage Projection
3. Monthly Water Use Comparison

San Luis Obispo County Flood Control and Water District Zone 3 - Lopez Project - Monthly Operations Report January, 2020

Contractor	Lopez Water Deliveries											State Water Deliveries						Total Water Deliveries This Month							
	Entl.	Surplus Water Declared	Surplus Requested	Total Available Water	This Month				April to Present				Annual Request	This Month			January to Present								
					Usage	%	Usage	%	Usage	%	Usage	%		Usage	%	Usage	% of Annual Request		SWP Deliveries	Change in Storage	Usage	% of Annual Request	SWP Deliveries		
Arroyo Grande	2290	378.00	0.00	2668.00	135.90	5.9%	0.00	0.0%	1807.17	78.9%	0.00	0.0%	1807.17	78.9%										135.9	
Oceano CSD	303	50.00	400.00	353.00	0.00	0.0%	50.54	12.6%	303.00	100.0%	218.80	54.7%	521.80	74.2%	227	0.00	0.0%				0.00	0.0%			50.54
Grover Beach	800	132.00	20.00	932.00	65.59	8.2%	0.00	0.0%	655.89	82.0%	0.00	0.0%	655.89	80.0%										65.59	
Pismo Beach	892	147.00	200.00	1039.00	0.00	0.0%	100.22	50.1%	892.00	100.0%	256.09	128.0%	1148.09	105.1%	1120	9.00	0.8%				9.00	0.8%			109.22
CSA 12	245	40.00	0.00	285.00	8.57	3.5%	0.00	0.0%	68.39	27.9%	0.00	0.0%	68.39	27.9%	27	1.82	6.7%				1.82	6.7%			10.39
San Miguelito															127	7.93	6.2%				7.93	6.2%			7.93
Total	4530	747.00	620.00	5277.00	210.06	4.6%	150.76	24.3%	3726.45	82.3%	474.89	76.6%	4201.34	81.6%	1501	18.75	1.2%				18.75	1.2%	0.00		379.57
											Last Month Stored State Water						This Month Stored State Water			1437.50					



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)	490.96		-31.41	
Storage (full at 49200 acre feet)	25525			51.9%
Rainfall	0.58	8.94		
Downstream Release (4200 acre feet/year)	268.22	2333.58		
Spillage (acre feet)	0	0.00		

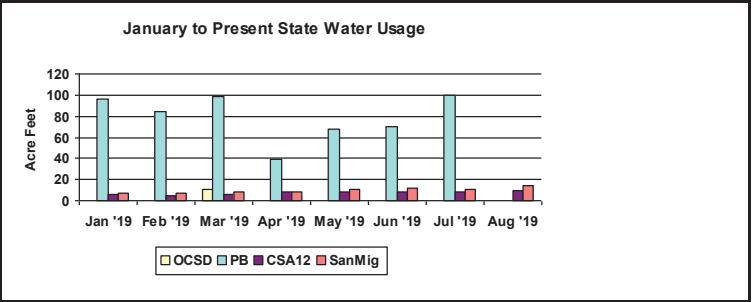
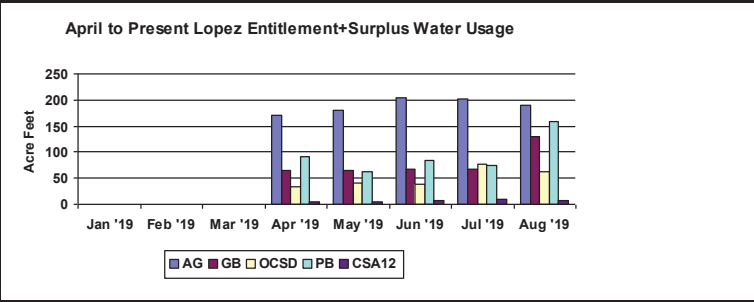
Comments: Available Surplus Water is shown and as designated per BOS May 14, 2019 Declaration of Surplus Water. Beginning with July report, Surplus water shown will be amount purchased by each agency.

1) Oceano supplied water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 1.3 AF delivered to Canyon Crest was added to Oceano's water usage this month and 1.3 AF was subtracted from Arroyo Grande's usage this month.

Surplus water calculations are based on "Surplus Requested" not "Surplus Water Declared"

San Luis Obispo County Flood Control and Water District
 Zone 3 - Lopez Project - Monthly Operations Report
 August, 2019

Contractor	Lopez Water Deliveries												State Water Deliveries							Total Water Deliveries This Month	
	Entl.	Surplus Water Declared	Surplus Requested	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	378.00	0.00	2668.00	189.73	8.3%	0.00	0.0%	945.36	41.3%	0.00	0.0%	945.36	35.4%	227	0.00	0.0%	10.98	4.8%	189.73	
Oceano CSD	303	50.00	400.00	353.00	63.32	20.9%	0.00	0.0%	252.23	83.2%	0.00	0.0%	252.23	71.5%						63.32	
Grover Beach	800	132.00	20.00	932.00	129.73	16.2%	0.00	0.0%	392.31	49.0%	0.00	0.0%	392.31	42.1%						129.73	
Pismo Beach	892	147.00	200.00	1039.00	157.96	17.7%	0.00	0.0%	470.86	52.8%	0.00	0.0%	470.86	45.3%	1120	0.00	0.0%	555.55	49.6%	157.96	
CSA 12	245	40.00	0.00	285.00	6.46	2.6%	0.00	0.0%	31.77	13.0%	0.00	0.0%	31.77	11.1%	27	9.58	35.5%	58.36	216.1%	16.04	
San Miguelito															127	13.71	10.8%	77.64	61.1%	13.71	
Total	4530	747.00	620.00	5277.00	547.20	12.1%	0.00	0.0%	2092.53	46.2%	0.00	0.0%	2092.53	39.7%	1501	23.29	1.6%	702.53	46.8%	483.00	
												Last Month Stored State Water			This Month Stored State Water			1167.99			



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

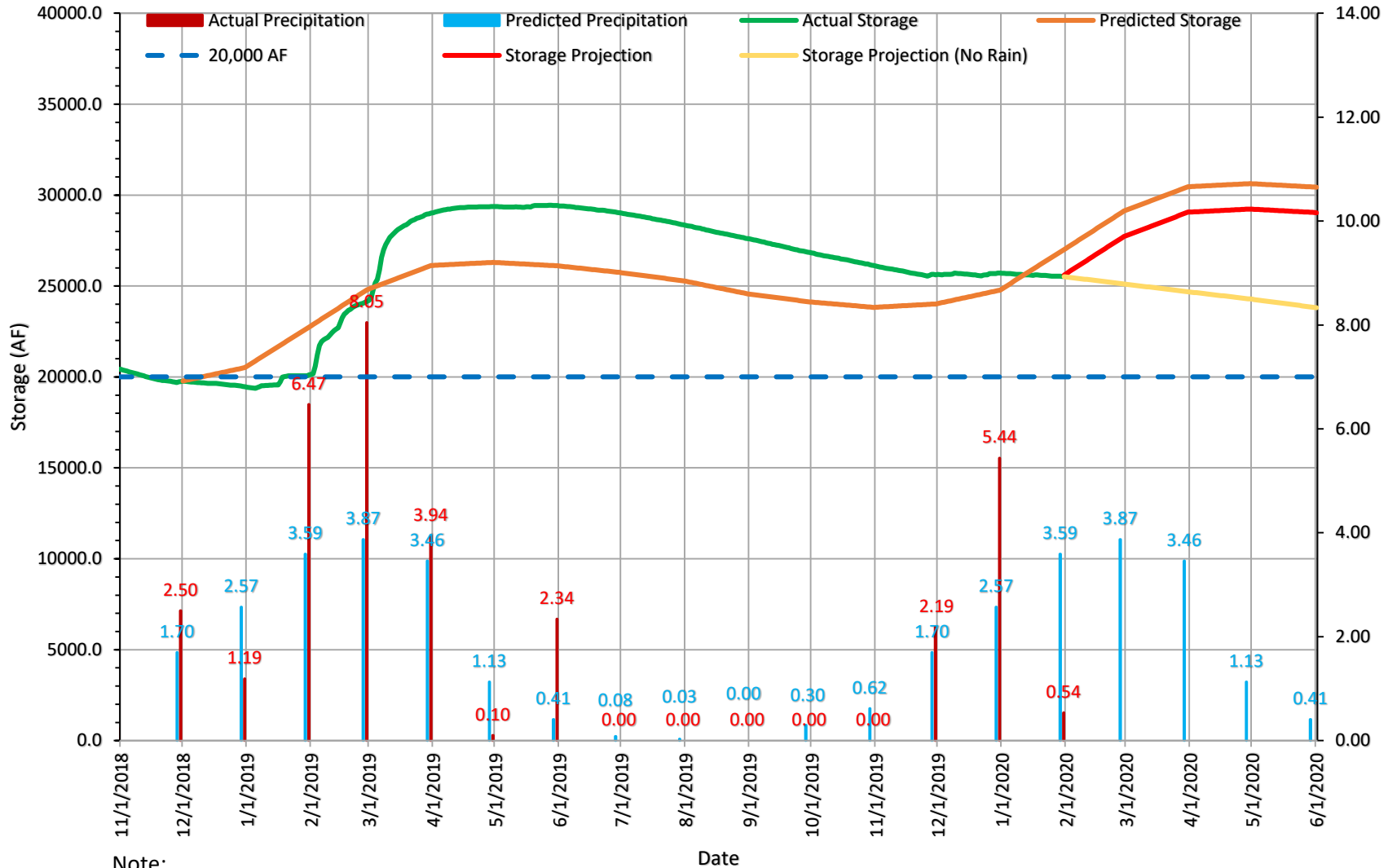
"Year to Date" is January to present for State water, April to present for Lopez deliveries, and July to present for rainfall.

Lopez Dam Operations	This Month	Year to Date	Difference (feet)	% Full
Lake Elevation (full at 522.37 feet)	494.42		-27.95	
Storage (full at 49200 acre feet)	27626			56.2%
Rainfall	0	0.00		
Downstream Release (4200 acre feet/year)	237.22	986.64		
Spillage (acre feet)	0	0.00		

Comments: Available Surplus Water is shown and as designated per BOS May 14, 2019 Declaration of Surplus Water. Beginning with July report, Surplus water shown will be amount purchased by each agency.

1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.72 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.72 AF was subtracted from Arroyo Grande's usage this month.

LOPEZ RESERVOIR STORAGE PROJECTION



Note:

1. Storage projection is based on predicted rainfall from longrangeweather.com, historic inflow based on predicted rainfall, 18-19 downstream release requests, and municipal usage.

