



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

AGENDA

Thursday, March 21, 2019 6:30 P.M.

City of Arroyo Grande Council Chambers

215 East Branch Street, Arroyo Grande, California 93420

- I. CALL TO ORDER AND ROLL CALL
- II. PUBLIC COMMENT
This is an opportunity for members of the public to address the Committee on items that are not on the Agenda
- III. APPROVAL OF MEETING MINUTES
 - A. January 17, 2019 - [Attachment](#)
- IV. OPERATIONS REPORT
 - A. Water Plant Operations, Reservoir Storage, Downstream Releases - [Verbal Update](#)
 - B. Projected Reservoir Levels - [Attachment](#)
 - C. January & February Monthly Operations Report - [Attachment](#)
- V. INFORMATION ITEMS
 - A. Climate Update - [Attachment](#)
 - B. Present 2nd Quarter FY 2018/19 Budget Status - [Attachment](#)
- VI. CAPITAL PROJECTS UPDATE
 - A. Lopez Spillway Assessment Update - [Verbal Update](#)
 - B. Floating Solar at Terminal Reservoir - [Attachment](#)
 - C. Bi-Monthly Update - [Attachment](#)
- VII. ACTION ITEMS (No Subsequent Board of Supervisors Action Required)
- VIII. ACTION ITEMS (Board of Supervisors Action is Subsequently Required)
 - A. Present Fiscal Year 2019/20 Budget and Recommend Endorsement - [Distributed at Meeting](#)
 - B. Estimated Surplus Water for Water Year 19/20 - [Attachment](#)
- IX. FUTURE AGENDA ITEMS
 - A. Contract Changes
 - B. Cloud Seeding
 - C. Low Reservoir Response Plan (LRRP)
- X. COMMITTEE MEMBER COMMENTS

Next Regular Meeting is Tentatively Scheduled for
May 16, 2019 at 6:30 PM at City of Pismo Beach Council Chambers
Agendas accessible online at SLOCountyWater.org

**SAN LUIS OBISPO COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
ZONE 3 ADVISORY COMMITTEE
DRAFT MEETING MINUTES
THURSDAY JANUARY 17, 2019**

- I. Call to Order and Roll Call** -- The Zone 3 Advisory Committee Meeting was called to order at 6:30 PM at the City of Grover Beach Council Chambers by Committee Chair and Member at Large Representative, Jim Garing.

County Public Works Utilities Division Program Manager and Secretary to the Advisory Committee, Andrea Montes, called roll. Members in attendance were:

- Brad Hagemann, Avila Beach Community Services District
- Kristen Barneich, City of Arroyo Grande
- Marcia Guthrie, City of Pismo Beach
- Jim Garing, Member at Large
- Shirley Gibson, Oceano Community Services District
- Brian Talley, Agriculture Representative

- II. Public Comment** -- No public comment given

III. Approval of Meeting Minutes

A. November 15, 2018 Regular Meeting -- Member Barneich motioned approval; Member Talley second. All approved; quorum was met, and motion passed.

B. November 29, 2018 Special Meeting -- Member Talley motioned approval; Member Barneich second. All approved and motion passed.

IV. Operations Report

A. Water Plant Operations, Reservoir Storage, Downstream Releases -- Ms. Montes indicated: Lopez Lake elevation was 480.08 feet; storage was 19,730 acre-feet (AF), which is 40% capacity; rainfall to date, since July 1, 2018, was 10.9 inches; plant production was 2.3 million gallons per day (MGD); downstream release was 1.9 MGD; and State Water was 0.736 MGD.

No public comment was given.

B. Projected Reservoir Levels -- Jill Ogren, Senior Engineer with the Public Works Utilities Division, indicated the Lopez reservoir was at the 19,000 acre-foot mark. No public comment was given.

C. November & December Monthly Operations Report -- Ms. Ogren indicated the total water deliveries, including State Water for the month of November was 430 AF. The total water deliveries for the month of December was 373 AF.

Downstream releases were tapered due to rainfall. Enough water flowed for compliance reasons.

No public comment was given.

V. Information Items

A. Climate Update -- Ms. Montes indicated according to the United States Drought Monitor, the County continued to experience moderate and severe drought conditions. According to National Oceanic and Atmospheric Administration, there was a 33% chance of above average temperatures when compared to the month of January in prior years. The rainfall forecasted for January was 33% above average for the month.

No public comment was given.

B. Low Reservoir Response Plan – Criteria for Enactment -- Ms. Ogren indicated the Zone 3 Technical Advisory Committee (TAC) developed criteria to ask the County Board of Supervisors (BOS) to enter the Low Reservoir Response Plan (LRRP). The LRRP was developed in 2014 in order to manage low Lopez Lake reservoir levels. A level of 20,000 AF or lower, along with a declaration of a “Local Drought Emergency” by the BOS, triggers the LRRP. The TAC recommended if the reservoir level is below 20,000 AF in June 2019, to then ask the BOS to declare a “Local Drought Emergency” to enter the LRRP, which would reduce downstream releases by 10% if the reservoir levels fall between 15,000 and 20,000 AF; and reduce water deliveries to municipalities by 10% if the reservoir levels fall below 15,000 AF and so on.

Member Barneich motioned an endorsement of the TAC’s recommendation to ask the BOS in June 2019 to enter the LRRP by declaring a “Local Drought Emergency” if reservoir levels are below 20,000 AF; member Guthrie second. All members approved the endorsement.

No public comment was given.

C. Distribute Proposed FY 19/20 Budget -- County Public Works Finance Division and Flood Control Zone 3 Accountant, Kristi Smith, distributed the Fiscal Year 2019-20 Proposed Budget for Flood Control Zone 3. According to Ms. Smith, the TAC discussed and finalized Non-Routine Operations and Maintenance, and Capital sections.

Ms. Smith indicated she would mail copies of the proposed budget to Zone 3 agencies within the week and all Zone 3 participants on the TAC and Advisory Committee would receive PDF copies. Ms. Smith further indicated she was meeting with Zone 3 agencies’ finance staff in February to discuss the proposed budget before returning to the Zone 3 Advisory Committee March 21, 2019 meeting for the Committee’s endorsement. Following the Committee’s endorsement, the budget will go the County Board of Supervisors in mid-June for approval.

Ms. Smith pointed out that agency billings had increased by 3.1% which is standard practice. A \$300 thousand budget for cloud seeding was included in the budget.

VI. Capital Projects Update

A. Lopez Spillway Assessment Update -- Ms. Ogren gave an update of the Department of Water Resources (DWRs’) Division Safety of Dams’ (DSODs’) required assessment of the Lopez Spillway in response to the Oroville Dam failure.

Ms. Ogren stated GEI Consultants completed the visual assessment of the spillway and report which indicated minor concrete and drainage issues. The report will be submitted to the DSOD for approval, along with a plan to repair the minor issues. The next step would then be to perform a more in-depth assessment of the spillway conditions, followed by repairs.

No public comment was given.

B. Bi-Monthly Update -- Ms. Ogren presented a brief update of the Capital Projects listed below.

- **Lopez Dam and Terminal Dam Hazard Classification** -- DSOD required agencies that have a “high hazard” classified dam based on the number of downstream residents, to complete inundation maps and emergency action plans (EAPs). The Lopez Dam and Terminal Dam are both classified as “high hazard” classified dams. The inundation maps were completed and submitted to DSOD. Minor scale changes will be made and resubmitted to DSOD in March 2019 along with the EAPs.
- **Fault Zone Assessment – Dam Left Abutment** -- This project focuses on a risk assessment rather than a costly repair of an area that may be geologically unstable over the left abutment of the dam.
- **Domestic and Fire Flow Tanks Repair at Lopez Water Treatment Plant** -- \$100 thousand was budgeted to repair the Domestic Tank. The Fire Flow Tank at the Lopez Water Treatment Plant is in more dilapidated condition. Staff is working with a Fire Engineer to identify repairs needed to that tank. More information will be provided at the March 21, 2019 meeting.
- **Lopez Water Treatment Plant Leach Field Repair/Replacement** -- Progress is being made on this project.
- **Existing Bypass Pipeline Condition Assessment** -- A report will be distributed to the TAC regarding the condition of an existing backup pipeline that could potentially be used to deliver State Water directly to the Lopez Water Treatment Plant.

No public comment was given.

VII. Action Items (No Subsequent Board of Supervisors Action Required)

No Action Items discussed.

VIII. Action Items (Board of Supervisors Action is Subsequently Required)

Cloud Seeding Update -- A Zone 3 Advisory Committee Special Meeting was held on November 29, 2018 to discuss cloud seeding. At that time, the Committee unanimously voted to approve a cloud seeding program via aircraft only to begin as soon as winter 2019. Ms. Ogren indicated due to a tight Public Hearing and 30-day challenge schedule, review by the BOS of the California Environmental Quality Act (CEQA) document would not occur in time for Zone 3 agencies to take full cost advantage of the cloud seeding program to begin in winter 2019. Instead, the Zone 3 TAC recommended preparing the aircraft only cloud seeding program to be ready for late 2019. This will allow time to gain support from District 4 and 5 Supervisors, conduct the CEQA document Public Hearing on May 21, 2019, coordinate logistics of the five-month aircraft only program to begin in November and bring it to a seasonal end.

Flood Control District Easement Request – Goodman -- Member Garing indicated the company he works for represents the applicants’ easement request and recused himself from the discussion and vote. Ms. Ogren indicated the applicants, Scot and Debby Goodman, are requesting an easement across approximately 1.6 miles of

Flood Control Zone 3 District property to access a landlocked parcel they've purchased. Ms. Ogren indicated before the applicants can move forward with the County land use planning process, they must receive a Consent of Landowner from the Flood Control District. Ms. Ogren indicated if the Advisory Committee recommends the easement request be taken to the BOS to receive Consent of Landowner, the applicants will be able to move forward with the land use planning process and will return to the Advisory Committee pending approval of the County Planning Commission. According to Ms. Ogren, the TAC recommended the applicants move forward with the Consent of Landowner request from the BOS sitting as the BOS to the Flood Control District. After discussion with the applicants' representative, Member Guthrie motioned to take the Consent of Landowner agreement to the Board of Supervisors for approval; Member Hagemann second. All approved and motion passed.

IX. Future Agenda Items

A. Contract Changes

B. Cloud Seeding

C. Revisions to the Low Reservoir Response Plan (LRRP)

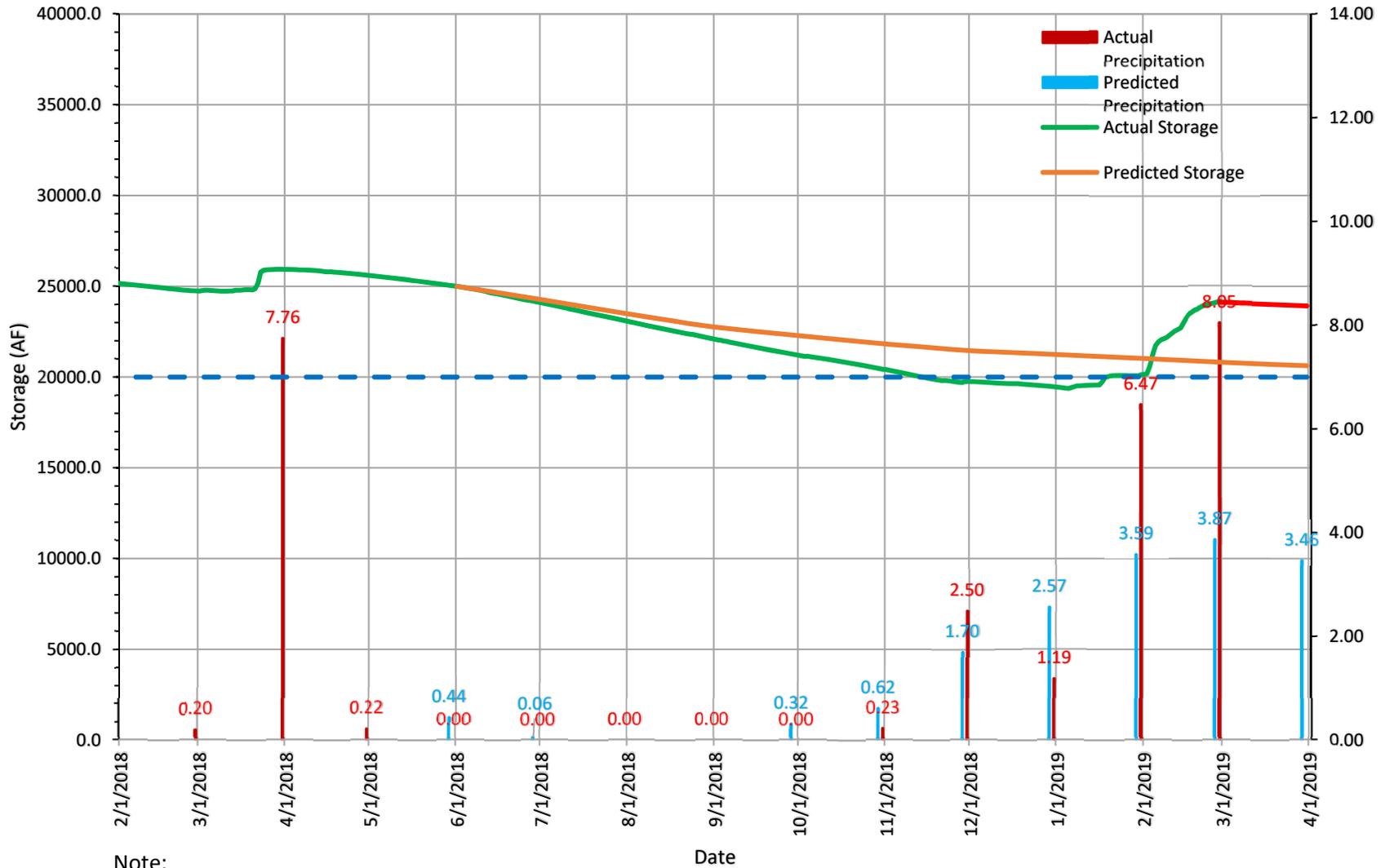
X. Committee Member Comments -- No comments made.

Meeting Adjourned at 8:01 PM

Respectfully Submitted,

Andrea M Montes
County of San Luis Obispo Public Works Department

LOPEZ RESERVOIR STORAGE PROJECTION



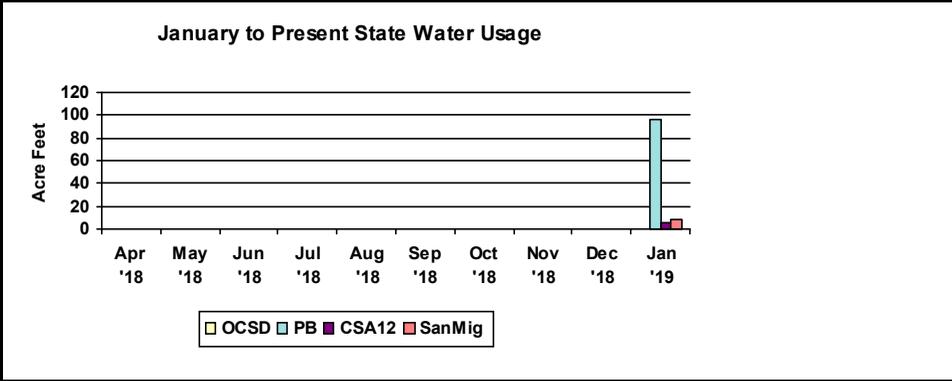
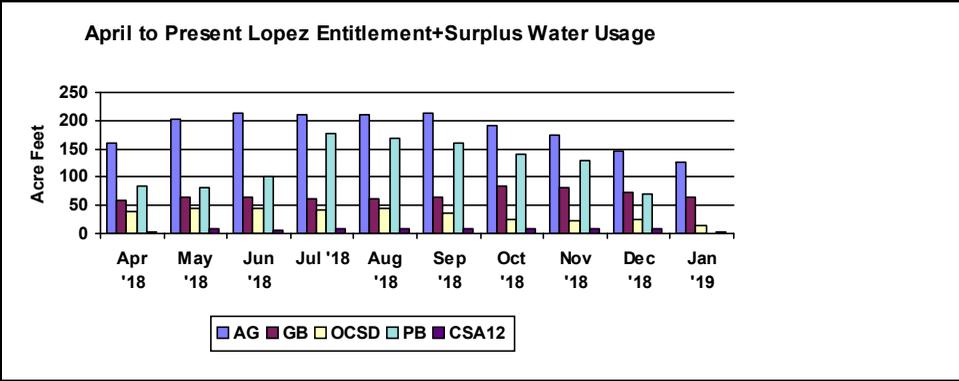
- Note:
- Storage projection is based on predicted rainfall from longrangeweather.com, historic inflow based on predicted rainfall, 18-19 downstream release requests, and municipal usage.
 - Municipal Usage is based on 2010-2017 average monthly deliveries.

San Luis Obispo County Flood Control and Water District

Zone 3 - Lopez Project - Monthly Operations Report

January, 2019

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	127.44	5.6%	0.00	0.0%	1848.70	80.7%	0.00	0.0%	1848.70	64.8%							127.44			
Oceano CSD	303	75.00	378.00	0.00	0.0%	13.01	17.3%	303.00	100.0%	37.77	50.4%	340.77	90.2%	0	0.00	0.0%		0.00	0.0%		13.01		
Grover Beach	800	197.00	997.00	64.14	8.0%	0.00	0.0%	681.96	85.2%	0.00	0.0%	681.96	68.4%							64.14			
Pismo Beach	892	220.00	1112.00	0.00	0.0%	0.00	0.0%	892.00	100.0%	220.00	100.0%	1112.00	100.0%	608	96.07	15.8%		96.07	15.8%		96.07		
CSA 12	245	60.00	305.00	3.37	1.4%	0.00	0.0%	67.97	27.7%	0.00	0.0%	67.97	22.3%	97	5.77	5.9%		5.77	5.9%		9.14		
San Miguelito														120	7.68	6.4%		7.68	6.4%		7.68		
Total	4530	1116.00	5646.00	194.95	4.3%	13.01	1.2%	3793.63	83.7%	257.77	23.1%	4051.40	71.8%	825	109.52	13.3%	62	-47.52		109.52	13.3%	62.00	317.48
												Last Month Stored State Water		1387.52			This Month Stored State Water		1340.00				



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.

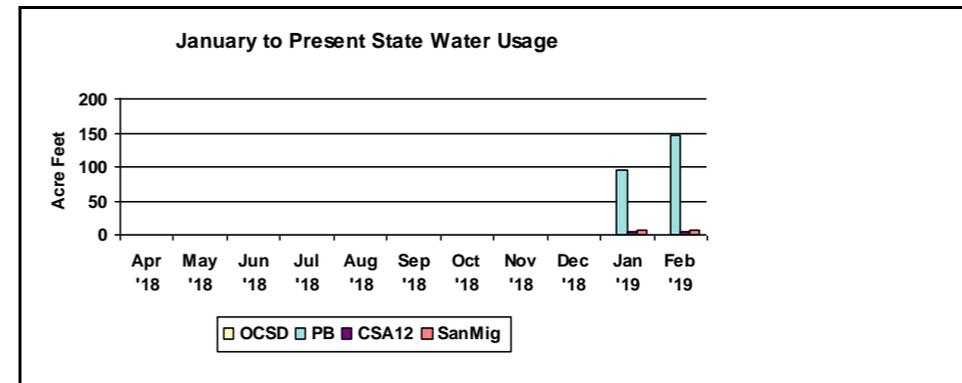
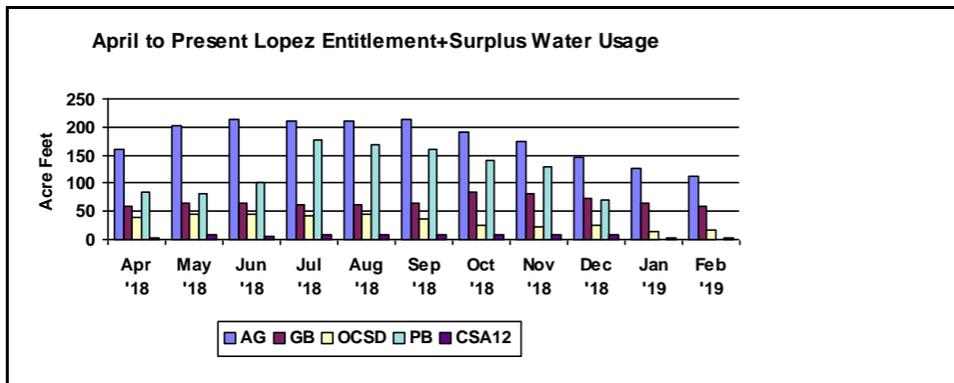
Lopez Dam Operations	This Month	Year to Date		
Lake Elevation (full at 522.37 feet)	480.89		Difference (feet)	-41.48
Storage (full at 49200 acre feet)	20119		% Full	40.9%
Rainfall	7.45	12.47		
Downstream Release (4200 acre feet/year)	213.9	3464.77		
Spillage (acre feet)	0	0.00		

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 1.10 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.10 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 February, 2019

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	110.96	4.8%	0.00	0.0%	1959.66	85.6%	0.00	0.0%	1959.66	68.7%								110.96	
Oceano CSD	303	75.00	378.00	0.00	0.0%	17.61	23.5%	303.00	100.0%	55.38	73.8%	358.38	94.8%	227	0.00	0.0%		0.00	0.0%			17.61
Grover Beach	800	197.00	997.00	60.33	7.5%	0.00	0.0%	742.29	92.8%	0.00	0.0%	742.29	74.5%								60.33	
Pismo Beach	892	220.00	1112.00	0.00	0.0%	0.00	0.0%	892.00	100.0%	220.00	100.0%	1112.00	100.0%	1120	145.36	13.0%		241.43	21.6%			145.36
CSA 12	245	60.00	305.00	3.36	1.4%	0.00	0.0%	71.33	29.1%	0.00	0.0%	71.33	23.4%	27	4.46	16.5%		10.23	37.9%			7.82
San Miguelito														127	7.05	5.6%		14.73	11.6%			7.05
Total	4530	1116.00	5646.00	174.65	3.9%	17.61	1.6%	3968.28	87.6%	275.38	24.7%	4243.66	75.2%	1501	156.87	10.5%	67	-89.87	266.39	17.7%	129.00	349.13
											Last Month Stored State Water		1340			This Month Stored State Water		1250.13				



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.

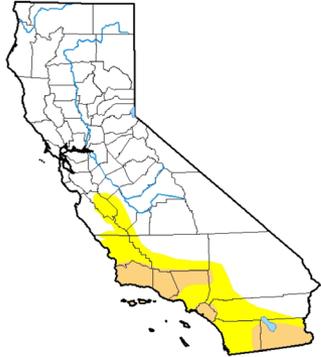
Lopez Dam Operations	This Month	Year to Date		
Lake Elevation (full at 522.37 feet)	488.69		Difference (feet)	-33.68
Storage (full at 49200 acre feet)	24214		% Full	49.2%
Rainfall	8.45	20.92		
Downstream Release (4200 acre feet/year)	168.94	3633.71		
Spillage (acre feet)	0	0.00		

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

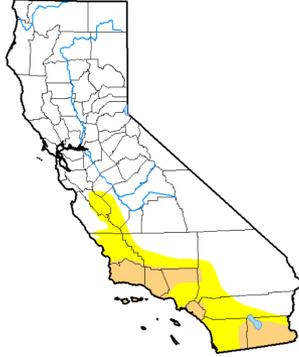
1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 0.98 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 0.98 AF was subtracted from Arroyo Grande's usage this month.

U.S. DROUGHT MONITOR

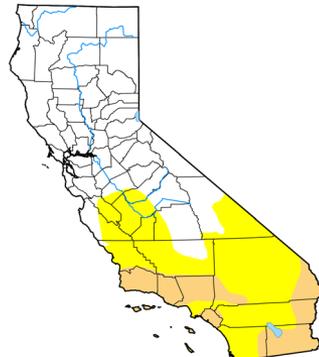
September 2017



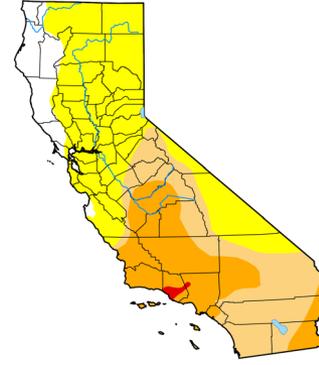
November 2017



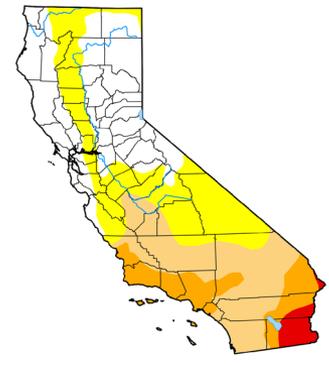
January 2018



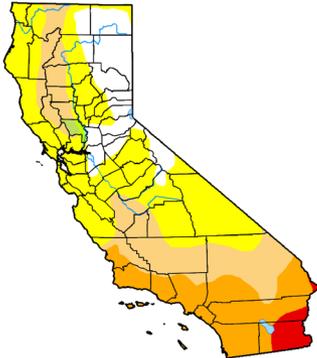
March 2018



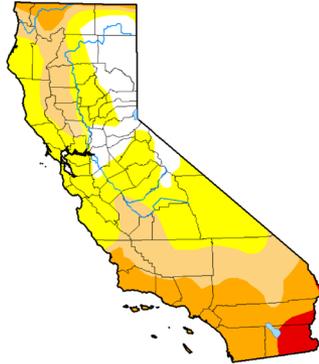
May 2018



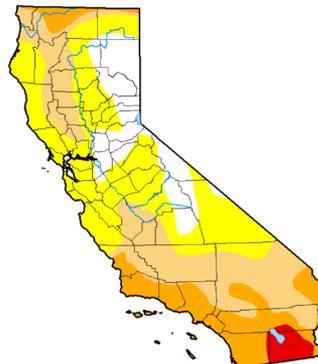
July 2018



September 2018



November 2018



January 2019



March 2019



Intensity:

- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought

- D3 - Extreme Drought
- D4 - Exceptional Drought

Permission to reproduce the map

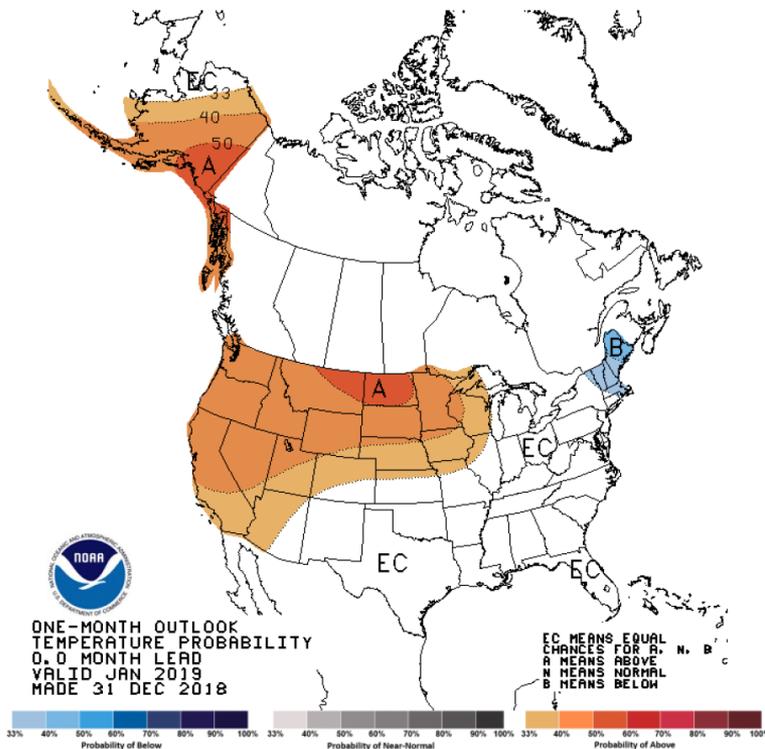
If you reproduce the U.S. Drought Monitor map, please use this wording:

The U.S. Drought Monitor is jointly produced by the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. Map courtesy of NDMC-UNL.
Item V.A.

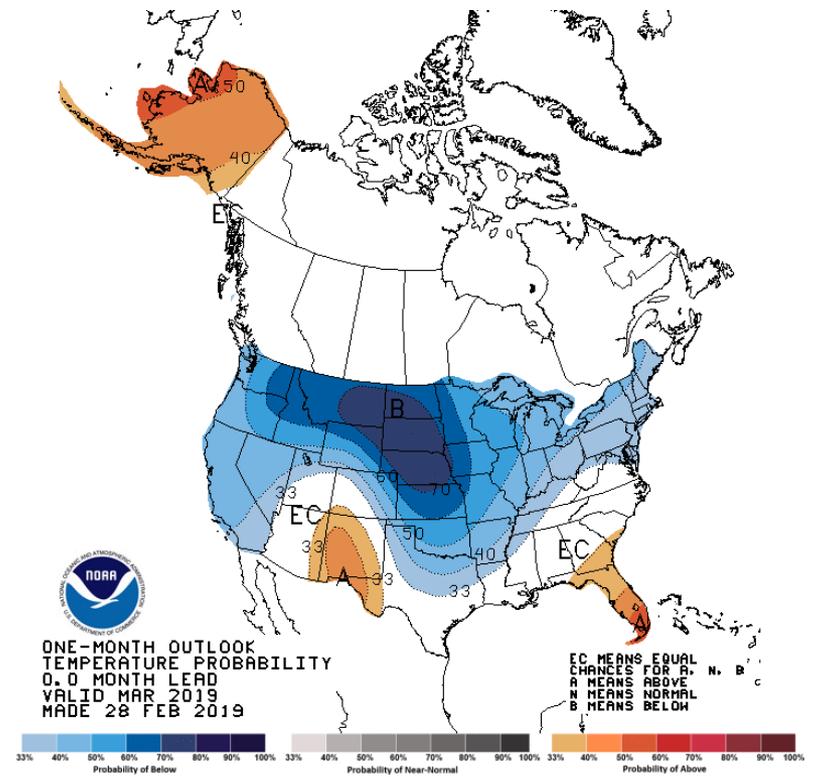
NOAA TEMPERATURE FORECAST

January

March



January Meeting

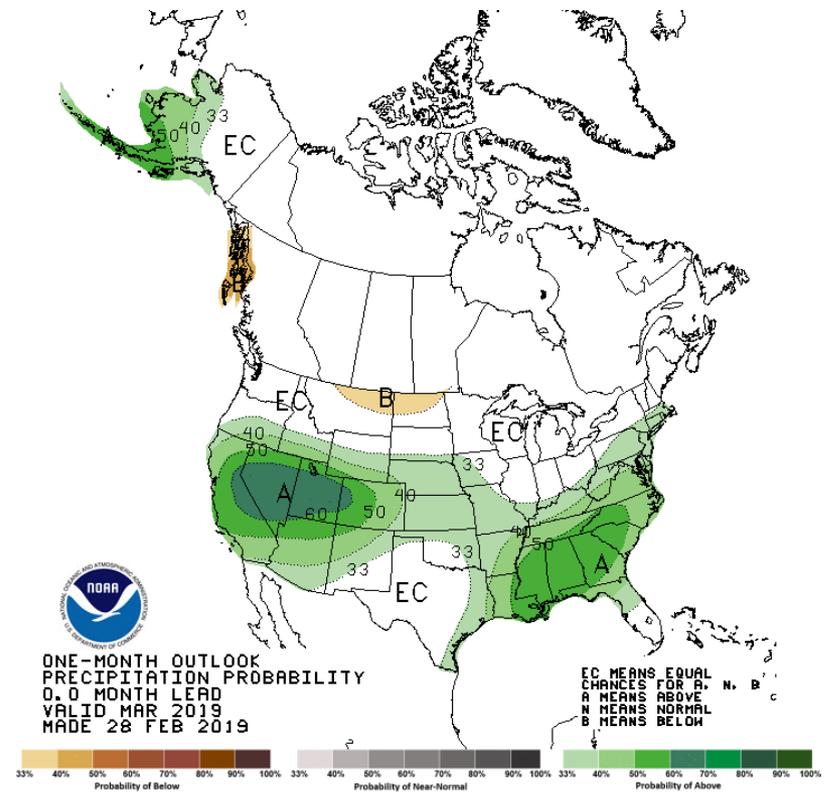
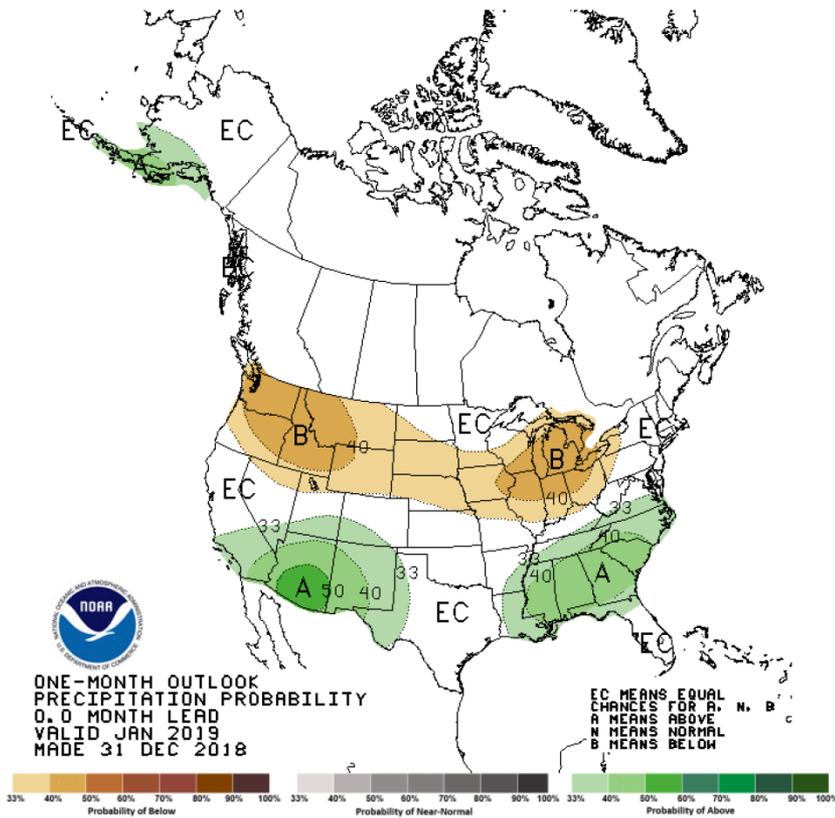


March Meeting

NOAA PRECIPITATION FORECAST

January

March



January Meeting

March Meeting



March 21, 2019

MEMORANDUM

TO: Flood Control Zone 3 Advisory Committee
FROM: Kristi Smith, Accountant
SUBJECT: Flood Control Zone 3, Second Quarter Budget Status, Fiscal Year 2018-19

Recommendation

The item to be received and filed.

Summary

Attached please find the comparison of the budget to actual expenses for the second quarter of fiscal year 2018-19. The \$5.4M budget is broken into three categories: Routine Operations & Maintenance, Non-Routine Operations & Maintenance, and Capital Outlay. At the end of the second quarter, 34% of the annual budget has been expended.

Total Budget	Expenses through Q2	Balance Available	% of Budget Expended
5,476,793	1,902,291	3,574,502	34%

Routine O&M: This category has a budget of just under \$4M dollars. At the end of the second quarter, 45% of the annual budget has been expended, resulting in approximately \$2.1M available for the remainder of the year. Expenses in this category are on target with budgeted levels.

Total Budget	Expenses through Q2	Balance Available	% of Budget Expended
3,961,768	1,783,623	2,178,145	45%

Non-Routine O&M: This category has a budget of \$762,377. At the end of the second quarter, 16% of the annual budget has been expended, resulting in an available balance of \$643,815 for the remainder of the year. The majority of the available balance is budget that has been carried forward from prior years for the Lopez Water Rights/Habitat Conservation Plan (HCP) and Pigging.

Total Budget	Expenses through Q2	Balance Available	% of Budget Expended
762,377	118,562	643,815	16%

Capital Outlay: This category has a budget of \$752,648. There were no changes from the prior quarter. Expenses were essentially 0% of the annual budget, resulting in \$752,541 available for the remainder of the year. Unspent budget from the prior year has been carried forward for many projects and accounts for roughly a third of the available balance.

Total Budget	Expenses through Q2	Balance Available	% of Budget Expended
752,648	107	752,541	0%

Other Agency Involvement/Impact

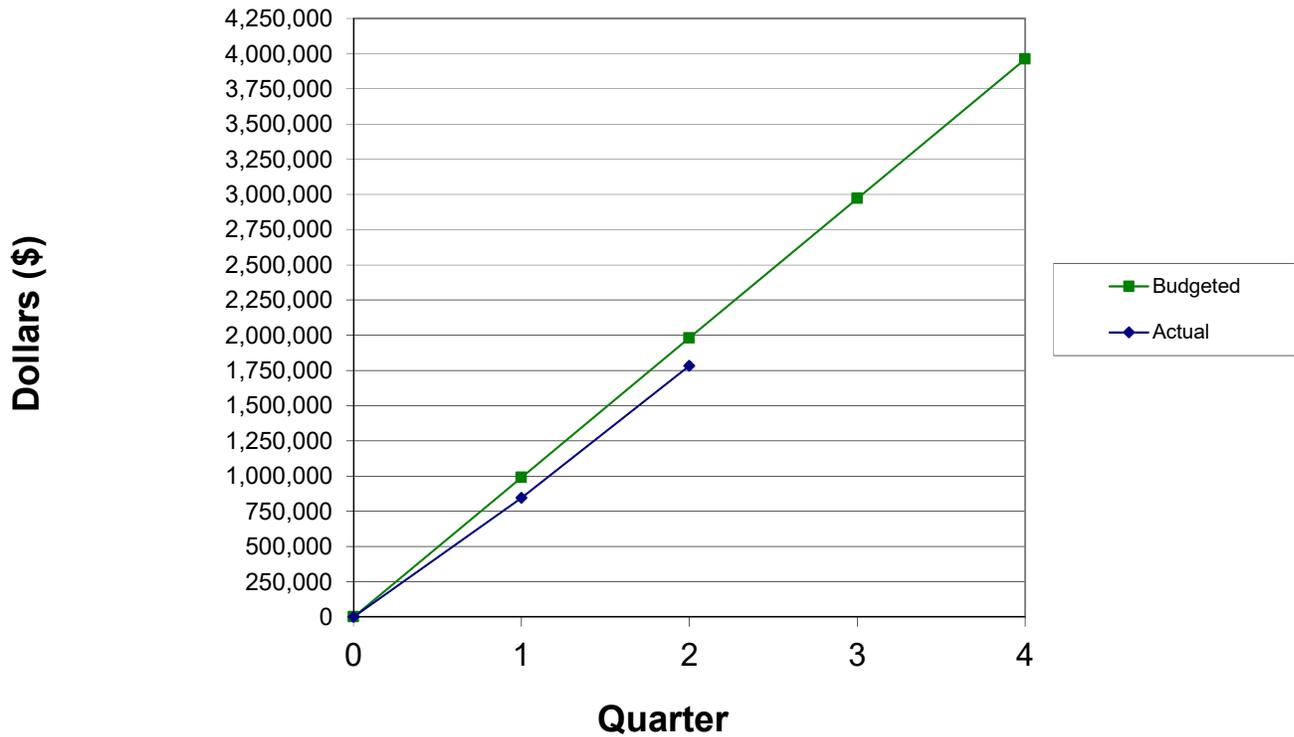
The agencies involved are: City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, Oceano Community Services District, and County Service Area 12. Subcontractors of CSA 12 include Port San Luis Harbor District and Avila Beach Community Services District.

Financial Consideration

Revised billings for FY 2017-18 were mailed along with the 2nd installment of the FY 2018-19 billings due January 1, 2019. All agencies are current on their payments.

Zone 3 Budget Status
2nd Quarter FY18/19

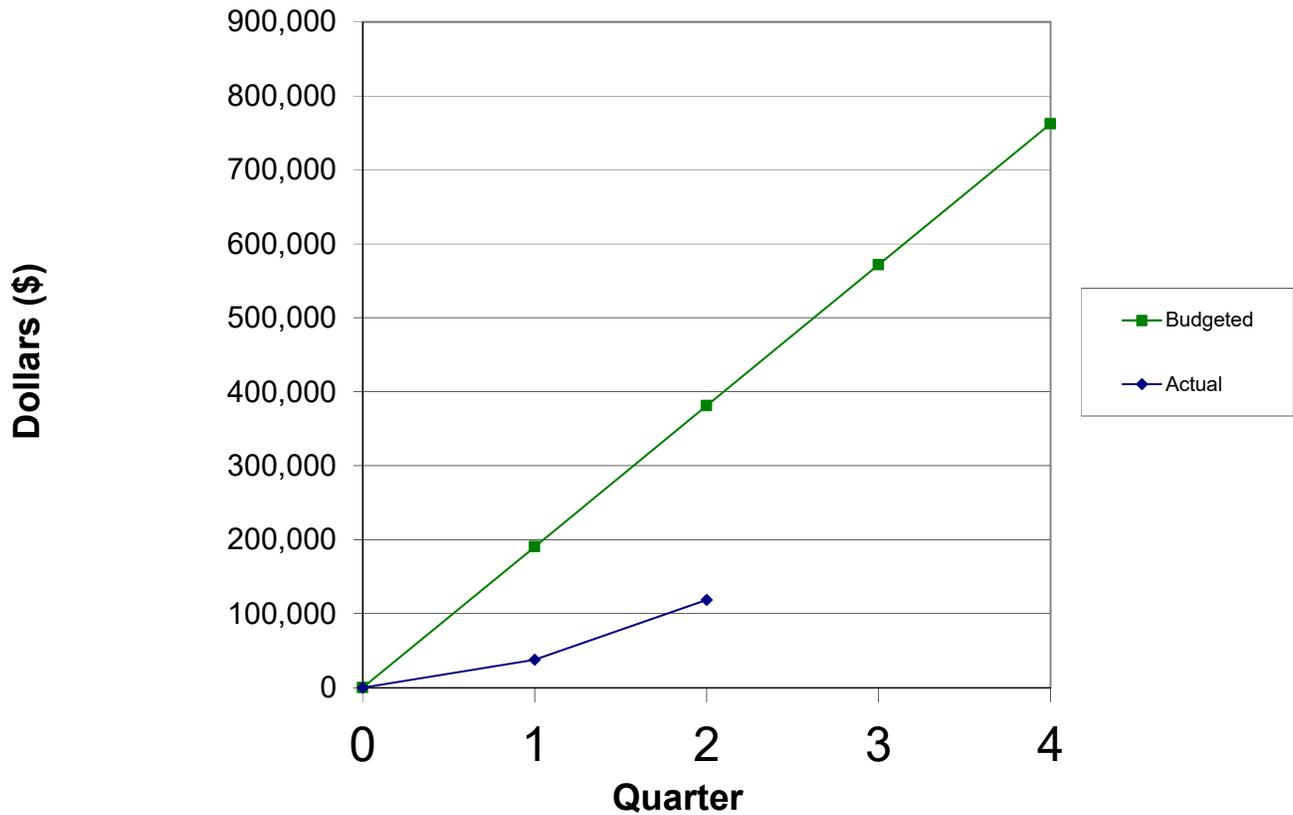
Routine Operation and Maintenance



O&M Routine Category	Total Budget	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	Total Exp as % of Budget	Total Balance Avail
Labor Hours	24,926	4,902	4,853	-	-	9,755	39%	
Chemicals - Water Treatment Plant	\$ 232,174	\$ 104,864	\$ 128,785	\$ -	\$ -	\$ 233,648	101%	\$ (1,474)
Water Quality Testing - Treatment Plant	56,120	12,439	17,525	-	-	29,964	53%	26,156
Electricity - Water Treatment Plant	128,898	83,921	66,369	-	-	150,290	117%	(21,392)
All Other Costs - Water Treatment Plant	2,019,164	388,885	494,076	-	-	882,961	44%	1,136,203
Terminal	156,872	37,295	27,148	-	-	64,443	41%	92,429
Main Dam	301,828	60,538	38,527	-	-	99,065	33%	202,763
Other	1,066,712	157,459	165,793	-	-	323,252	30%	743,460
Expenses		845,401	938,222	-	-	1,783,623	45%	2,178,145
Budget	3,961,768	990,442	990,442	990,442	990,442	3,961,772		
Variance (over)/under		145,041	52,220	990,442	990,442	2,178,145		
% Variance		15%	5%	100%	100%			

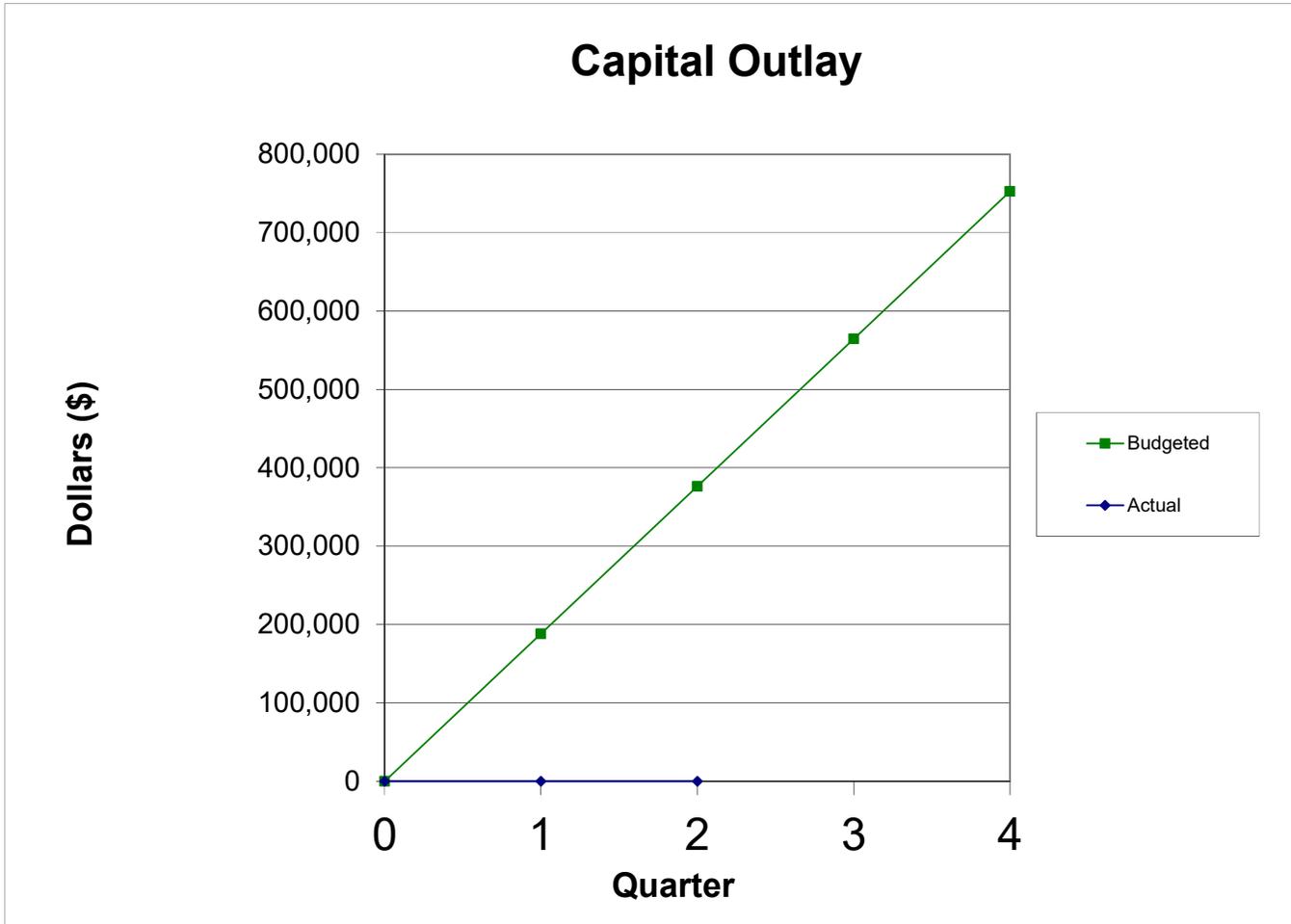
Zone 3 Budget Status
2nd Quarter FY18/19

Non-Routine Operation and Maintenance



O&M Non Routine Category	Total Budget	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	Total Exp as % of Budget	Total Balance Avail
Lopez Water Rights IHCP	\$ 324,482	\$ 864	\$ 6,010	\$ -	\$ -	\$ 6,874	2%	\$ 317,608
Pigging-Unit B	89,503	-	-	-	-	-	0%	89,503
Contribution to ISF for Shared New Equip	23,867	-	9,961	-	-	9,961	42%	13,906
Santa Maria Groundwater Basin Modeling	70,311	-	-	-	-	-	0%	70,311
Spill Prevention Valve #5 & #11 Replc	40,000	-	-	-	-	-	0%	40,000
5 Cities Stormwater Resource Plan	99,875	-	-	-	-	-	0%	99,875
Other	114,339	37,061	64,665	-	-	101,727	89%	12,612
Expenses		37,925	80,637	-	-	118,562	16%	643,815
Budget	762,377	190,594	190,594	190,594	190,594	762,377		
Variance (over)/under		152,669	109,957	190,594	190,594	643,815		
% Variance		80%	58%	100%	100%			

Zone 3 Budget Status
2nd Quarter FY18/19



Capital Outlay Projects	Total Budget	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	Total Exp as % of Budget	Total Balance Avail
Cathodic Protection Maint	154,172	-	-	-	-	-	0%	154,172
Dam Intake Fac & Op Assessment	20,899	-	-	-	-	-	0%	20,899
Pressure Transducers	1,250	107	-	-	-	107	9%	1,143
Geologic Assessment Fault Zn Lft Abtmt	12,691	-	-	-	-	-	0%	12,691
Domestic & Fireflow Tank Assessment	48,114	-	-	-	-	-	0%	48,114
Safety Upgrades to WTP	30,000	-	-	-	-	-	0%	30,000
Rebuild Membrane Feed Pumps	44,064	-	-	-	-	-	0%	44,064
Power Monitoring	30,000	-	-	-	-	-	0%	30,000
Improved Boat Access at Term Res	50,000	-	-	-	-	-	0%	50,000
Ammonia Analyzer Equip Repl	36,609	-	-	-	-	-	0%	36,609
Repair Fault Zone Left Dam Abutment	180,000	-	-	-	-	-	0%	180,000
Equip Storage Bldg 4-Bay PreFab	89,849	-	-	-	-	-	0%	89,849
Various Equipment Replacement	55,000	-	-	-	-	-	0%	55,000
Expenses		107	-	-	-	107	0%	752,541
Budget	752,648	188,162	188,162	188,162	188,162	752,648		
Variance (over)/under		188,055	188,162	188,162	188,162	752,541		
% Variance		100%	100%	100%	100%			



March 21, 2019

TO: Zone 3 Advisory Committee

FROM: David Spiegel, P.E., County Public Works, Utilities Engineer

SUBJECT: Water Quality and Algae Control Recommendation

Project Background and Description

The Lopez Water Treatment Plant (Lopez WTP) has a history of seasonal taste and odor issues related to algae blooms at Lopez Reservoir and the Terminal Reservoir. Currently, Lopez WTP uses Powder Activated Carbon (PAC) to control taste and odor issues and treats the Terminal Reservoir with Copper Sulfate and Peroxide for algae control. The PAC system has been problematic in its ability to control taste and odor as well as mechanical issues that have plagued the system in recent years.

Due to the ongoing taste and odor issues of the treated Lopez Water, the Zone 3 Technical Advisory Committee (TAC) requested that staff investigate aeration and shade structures (floating solar and shade balls) to mitigate taste and odor issues associated with the Terminal Reservoir's water condition and one alternative, Ozone, to mitigate taste and odor through an additional unit process.

Recommendation

The most cost-effective alternative is floating solar panels. They provide the needed shade to decrease algae growth, decrease water temperatures, and would offset the energy costs associated with running the treatment plant. The decrease in temperature and the lack of algae would reduce seasonal taste and odor issues associated with algae blooms. The solar panels would be installed under a Power Purchase Agreement (PPA) which has no capital outlay. They are installed, maintained, and, at the end of the agreement, removed by the solar company. The County would purchase the majority of energy from the solar energy company and the remainder from PG&E.

The current PPA proposal would generate approximately \$1.6 million in energy savings over the 25-year agreement by locking in a lower energy rate as compared to PG&E. The County is also looking at another site for floating solar and could potentially negotiate an even better rate, increasing savings to approximately \$4 million.

A PPA will be brought to the advisory committee at a later date for endorsement and a recommendation to take to the Board of Supervisors for approval.



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

TO: Zone 3 Advisory Committee

FROM: David Spiegel, PE

DATE: March 21, 2019

SUBJECT: Zone 3 Projects Update

Project Updates:

- Equipment Audit & Replacement – Ongoing (No Change)
 - Work proposed to continue in 2018/19
- Spillway Assessment
 - GEI's Final Report is being prepared for submittal to DSOD
- Lopez Dam and Terminal Dam Hazard Classification (No Change)
 - DSOD had minor edits to the maps, tentatively approved
 - Emergency Action Plans are in preparation for submittal in March
- Structural Assessment of Terminal Reservoir Dam – (No Change)
 - Received one quote for geological investigation
 - Budgeted for 19/20
- Fault Zone Assessment – Dam Left Abutment
 - TAC requested a risk assessment
 - Budgeted for 19/20
- Equipment Storage – (No Change)
 - On hold pending Terminal Reservoir Dam geotechnical investigation
- Domestic and Fire Tank
 - Collings and Associates has prepared a draft report and is under review
- Rebuild Membrane Feed Pumps (1 per year) (No Change)
 - Second pump is being scheduled for removal and rebuilding in the Fall after high demands subside
- Lopez Leach Field Replacement
 - Getting quotes for leach field replacement

Upcoming Projects (Requested FY 2018/19):

- Cathodic Protection Survey – Need additional quotes
- Ammonia Analyzer (2nd)
- Improved Boat Access

Completed Projects



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

- Lopez WTP Safety Upgrades to DAF
- Existing Bypass Pipeline Condition Assessment
- Sludge Bed Cleanout Repair – 4 total
- Turnout SCADA Project
- Ammonia Analyzer
- Sludge Repair on Bed 4A
- Pressure Transducers
- Turnout Flow Meters
- Static Mixer

TO: Board of Supervisors

FROM: Jill Ogren, Utilities Senior Engineer

VIA: Ron Munds, Utilities Division Manager

DATE: May 14, 2019

SUBJECT: Declaration of Surplus Water for Zone 3 (Lopez Water System) of the San Luis Obispo County Flood Control and Water Conservation District. Districts 3 and 4.

Recommendation

It is recommended that the Board, acting as the Board of Supervisors for the San Luis Obispo County Flood Control and Water Conservation District (District), declare surplus water as described in Article 4, Sections (C) and (D) of the Lopez Water Supply Contracts, in an estimated amount of 786 acre feet (AF).

Discussion

Declaration of Surplus Water

Every year the District declares surplus water per the water supply contracts for Zone 3 (Lopez Water System) of the District. The Zone 3 water supply contracts define surplus water as, *“The portion of the Safe Yield for Project water remaining after distributions of water during the said previous Water Year”* (Article 4 (D)). The declaration of surplus water does NOT mean that there is an amount of “excess” water in the reservoir; in short, surplus water is water that was saved from the previous year’s municipal entitlements and downstream releases. The water supply contracts specify that surplus water is offered to the Zone 3 contractors in proportion to their participation in the project; this year’s surplus is 786 AF as shown in Table 1 below and in further detail in Attachment 1.

TABLE 1: Zone 3 2018-19 Surplus Water

Contractor	Entitlement Acre-Ft (AF)	Entitlement Delivered AF	Surplus Generated (Unused Entitlement)	Entitlement %	Surplus Available	Cost per AF	Total Cost \$
					% (x 786 AF)		
Arroyo Grande	2290	2070	220	50.6%	397	\$ 36.36	\$ 14,446.66
Pismo Beach	892	1112	0	19.7%	155	\$ 36.36	\$ 5,627.20
Grover Beach	800	800	0	17.7%	139	\$ 36.36	\$ 5,047.04
Oceano CSD	303	378	0	6.7%	53	\$ 36.36	\$ 1,911.93
CSA 12 (Avila)	245	76	169	5.4%	43	\$ 36.36	\$ 1,546.12
Sub Totals	4530	4436	389	100%	786		\$ 28,578.96
Downstream Releases	4200	3803	397				
Total	8730	8239	786				

1. This is the Safe Yield of the project. (All amounts have been rounded to the nearest whole number)

Other Agency Involvement/Impact

At their March 21, 2019 meeting, the Zone 3 Advisory Committee adopted the recommendation that the Board of Supervisors:

- “Declare Surplus Water as described in Article 4 Sections (C) and (D) of the Water Supply Contracts, in the estimated amount of 786 AF, or as adjusted by final year-end water accounting.” (Vote was unanimous – Note the final water accounting for water year ending March 31, 2019 resulted in an actual final amount of 786 AF of surplus water)

The recommended actions today are consistent with the Zone 3 Advisory Committees’ recommended actions.

Financial Considerations

Today’s item has no financial impact to the Zone 3 Lopez Water System. The contracts provide that surplus water be offered at the cost of treatment and delivery only (not including capital costs of the system). This year’s surplus water cost was calculated based on estimates of the cost to treat and deliver water in Lopez water year 19-20 and is offered at \$36.36 per acre foot. All revenues from the sale of surplus water are returned to the Zone 3 budget then applied as a credit to the Zone 3 contractors, per the water contracts. As result, when all the agencies agree to “take” all of their share of surplus, the costs to each agency are equal to the revenue credited back to the agency.

Results

Declaration of surplus water, per the Lopez water supply contracts, insures that the communities served by the Lopez Water System can manage their water supplies effectively resulting in healthy, livable and well-governed communities.

Attachments: Vicinity Map
Lopez Water - Surplus Water Available 2019/2020 by Contract

File: CF 340.101.01

Reference: 19MAY14-?-?

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