



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

AGENDA

Thursday, May 17, 2018 6:30 P.M.
City of Pismo Beach Council Chambers
760 Mattie Rd., Pismo Beach, CA 93449

- 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 OF MARCH 22, 2018
- IV. OPERATIONS REPORT
 - A. Water Plant Operations, Reservoir Storage, Downstream Releases
 - B. Projected Reservoir Levels
 - C. March & April Monthly Operations Report
- V. INFORMATION ITEMS
 - A. Climate Update
 - B. Santa Maria Groundwater Basin Modeling Update
 - C. Lopez Spillway Assessment Update
 - D. 3rd Quarter FY 17/18 Budget Status Update
- VI. CAPITAL PROJECTS UPDATE
 - A. Bi-Monthly Update
- VII. ACTION ITEMS (No Subsequent Board of Supervisors Action Required)
- VIII. ACTION ITEMS (Board of Supervisors Action is Subsequently Required)
 - A. Stormwater Resources Planning Grant – Cost sharing Agreement with City of Arroyo Grande
 - B. Cloudseeding Letter of Support - DRAFT
- IX. FUTURE AGENDA ITEMS
 - A. Lopez Lake Safe Yield
 - B. Cloud Seeding
- XI. COMMITTEE MEMBER COMMENTS

Next Regular Meeting is Tentatively Scheduled for
Thursday, July 19, 2018 at 6:30 PM at Oceano Community Services District
Agendas accessible online at SLOCountyWater.org

**SAN LUIS OBISPO COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
ZONE 3 ADVISORY COMMITTEE
DRAFT MEETING MINUTES
THURSDAY MARCH 22, 2018**

- I. Call to Order and Roll Call** -- The Zone 3 Advisory Committee Meeting was called to order at 6:35 PM at the City of Arroyo Grande Council Chambers by Committee Chair and Agriculture Representative, Vard Ikeda.

County Public Works Department Utilities Division Program Manager and Secretary to the Zone 3 Advisory Committee, Andrea Montes, called roll. Members in attendance were:

- Jim Garing, Representative at Large
- Brad Hagemann, Avila Beach Community Services District
- Jim Hill, City of Arroyo Grande
- Vard Ikeda, Chair and Agriculture Representative
- Jeff Lee, City of Grover Beach

- II. Public Comment** -- Ms. Montes introduced County Department of Public Works' new Utilities Division Manager, Ron Munds, who has experience working with the City of San Luis Obispo Utilities Department as well as Water Systems Consulting (WSC). Ron expressed his excitement in bringing his years of experience of working with the City and water related issues to the County and Zone 3.

- III. Approval of Meeting Minutes of January 18, 2018** -- Member Garing motioned approval; Member Hill second. All approved the minutes.

IV. Operations Report

A. Water Plant Operations, Reservoir Storage, Downstream Releases -- Ms. Montes indicated the Lopez Lake elevation was 490.79 feet. Storage was 25,428.80 acre-feet (AF), which is 51.5% capacity. Rainfall to date, since July 1, 2018, was 11.03 inches. Plant production was 3.5 million gallons per day (MGD). Downstream release was 2.5 MGD. State Water was 0.725 MGD.

No public comment was given.

B. Projected Reservoir Levels -- Jill Ogren, County Public Works Utilities Division Hydraulic Engineer, indicated a total of 44 AF of State Water was received during the month of February due in part to tule plant removal of the Lopez Terminal Reservoir, which required the Lopez Water Treatment Plant to be shut down and State Water to be delivered in lieu of Lopez Water.

Ms. Ogren indicated the Lopez Dam received a total of 4.0 inches of rainfall from March's storm, which equated to 1.22 feet, which is 738 AF.

Ms. Ogren further indicated the Lopez Reservoir level was at 25,500 AF and the Lopez Reservoir level could hit 20,000 AF in January or February of 2019 without rainfall between now and then.

No public comment was given.

V. Information Items

A. Climate Update -- Ms. Montes indicated that according to the United States Drought Monitor, the abnormally dry conditions San Luis Obispo County is experiences has spread throughout southern California. According to National Oceanic and Atmospheric Administration, the temperature forecast for March was below average. There was above average rainfall forecasted for March.

No public comment was given.

B. Groundwater Levels -- County Public Works Water Resources Division Engineer, Ray Dienzo, presented an overview of the website, <https://WR.SLOCountyWater.org/home.php> which displays rainfall, streams, reservoir and groundwater levels. Mr. Dienzo highlighted the “dashboard” features that displays running 24-hour data specifically for the South San Luis Obispo County area. Mr. Dienzo indicated the groundwater levels are measured only during the months of April (after seasonal rain) and October (after seasonal irrigation). Although property owners’ groundwater levels are confidential, the data is aggregated into geographical areas, such as groundwater basins or sub-basins.

C. Cloud Seeding Update -- Mr. Dienzo presented a brief update on proposed cloud seeding for Lopez Reservoir and Salinas Reservoir to produce additional water for both. He indicated a 30-day public review of the Draft Mitigated Negative Declaration summarizing cloud seeding closed on March 20, 2018. The Final Mitigated Negative Declaration to the County Board of Supervisors (BOS) will be presented to the BOS at the June 19, 2018 BOS Meeting. If approved, further recommendations will be presented to the BOS on how to move forward, including a budget and detailed operations plan. The Draft Mitigated Negative Declaration can be viewed at: <https://www.slocounty.ca.gov/Departments/Public-Works/Current-Public-Works-Projects/Winter-Cloud-Seeding-Program-for-Lopez-Lake-and-Sa.aspx>

If the BOS approves cloud seeding, Mr. Dienzo indicated the cloud seeding program could begin via ground and air as soon as next rain season, producing an estimated 10 to 15% (or 3,000 to 6,000 AF) more water in the Lopez Lake and Salinas Reservoirs, as well as water added to streams and groundwater.

D. LRRP (Low Reservoir Response Plan) Update -- The Low Reservoir Response Plan (LRRP) is implemented when the amount of water in storage within the Lopez Reservoir drops below 20,000 AF. Ms. Ogren indicated the San Luis Obispo County Flood Control Zone 3 Water Contractors have been operating under the LRRP since April 2015. However, in spring 2017, the Lopez Reservoir level was above 20,000 AF and for a brief period, Zone 3 Contractors did not operate under the LRRP. In August 2017, Zone 3 Contractors desired to retroactively remain under the LRRP due to continuing drought concerns and concerns the reservoir storage would fall to or below the 20,000 AF trigger. The BOS agreed to this and discussion has focused on what should determine whether the LRRP is triggered, how water storage is calculated under the LRRP and how to best move forward with the LRRP or leave it to meet Zone 3 Contractors’ water needs. Ms. Ogren indicated Water Systems Consulting (WSC) has been hired to discuss ideas and proposed changes related to the LRRP. According

to Ms. Ogren, any changes will be brought to the Flood Control Zone 3 Advisory Committee for recommendation to take to the BOS.

E. Update on the Lopez Spillway Assessment -- Ms. Ogren gave an update of the Department of Water Resources (DWRs') Division Safety of Dams (DSODs) required assessment of the Lopez Spillway.

Ms. Ogren indicated the Request for Proposal was completed and put out to bid. According to Ms. Ogren, seven (7) firms were present at the job walk-thru and the contract will be awarded in May 2018. She further indicated the final assessment report could be completed in December 2018.

F. 2nd Quarter FY 17/18 Budget Status Update -- County Public Works Finance Division and Flood Control Zone 3 Accountant, Kristi Smith, distributed the 2nd Quarter Fiscal Year 2017/18 (FY 17/18) Budget for Flood Control Zone 3 for the period of July 1 through December 31, 2017. Expenses through December 31, 2017 totaled 36% of the annual FY budget.

Ms. Smith reviewed graphs and indicated at 50% of the FY:

- the first graph displayed Routine Operations and Maintenance (O&M) costs and demonstrated 46% of the OM budget had been spent, resulting in an available balance of \$2.0 million for the remainder of the FY, ending June 30, 2018;
- the second graph displayed Non-Routine O&M costs and demonstrated 15% of the Non-Routine O&M budget had been spent, resulting in an available balance of \$507,000 for the remainder of the FY; and
- the third graph displayed Capital Outlay costs and demonstrated at 50 percent of the year, 13% of the budget had been spent, resulting in an available balance of \$1 million for the remainder of the FY.

Ms. Smith indicated all Zone 3 agencies are current with payments.

No public comment was given.

VI. Capital Projects Update

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

Equipment Audit & Replacement Project -- This is an ongoing project as part of Public Works' 20-year outlook which allows staff to be proactive rather than reactive and includes regular inspections and replacement of equipment.

Spillway Assessment -- The Draft Request for Proposal was distributed.

Lopez Dam & Terminal Dam Hazard Classification -- The draft inundation maps for the both dams were submitted to the DSOD for review.

Structural Assessment of Terminal Reservoir -- Contract was with consultant.

Fault Zone Assessment Left Abutment -- Contract was with consultant.

Equipment Storage at Lopez Water Treatment Plant -- Quotes were requested.

Lopez Water Treatment Plant Safety Upgrades -- Upgrades were made in response to a 2016 safety assessment at the Plant.

Domestic and Fire Tanks Repair at Lopez Water Treatment Plant -- Quotes were received.

Ammonia Analyzer -- Purchased and awaiting delivery.

Rebuild Membrane Feed Pumps -- Coordinating pump removal.

Turnout Meter Replacement -- Meters were ordered and installation date is being scheduled.

Tule Removal -- Project was completed in February 2018.

No public comment was given.

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

None discussed.

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

A. Endorse Fiscal Year 18/19 Proposed Budget -- Ms. Smith presented the Budget Review Process detailed below.

- In December 2017, Non-Routine and Capital Outlay projects were identified and prioritized with the Flood Control Zone 3 Technical Advisory Committee (TAC).
- In January 2018, budgets were distributed to the Zone 3 Advisory Committee.
- In February, budgets were distributed to the TAC and Ms. Smith met with the Zone 3 Finance Committee comprised of representatives from Zone 3 agencies.
- Ms. Smith further indicated, the budget would go to the BOS in June for review and approval, following the Advisory Committee's endorsement.

Per Ms. Smith, the overall billings for next year will increase 2.9% from FY 17/18 Budget.

- Routine O&M increased by 4.3% due to several reasons. Approximately \$81,000 was budgeted for a new Public Works Department Automation Specialist III to work on Supervisory Control and Data Acquisition (SCADA) issues. There was a \$30,000 increase in staff time due to separation of water and wastewater duties. Lopez Water Treatment Plant Staff is now able to focus on water only, therefore labor costs will increase. \$25,000 was included for consultant work on the Quagga Mussel Response Plan Update.
- Non-Routine O&M and Capital Outlay combined increased by 8.6%. The Non-Routine O&M's increase was due to a lower than normal number of items included in the FY 16/17 budget.
- Capital Outlay was reduced to \$505,000 from \$550,000. This is due to the TAC's prioritization of Non-Routine projects versus Capital Outlay.
- No contractor funded reserves were included in the FY 18/19 budget.
- Debt Service dropped by 4% and remains consistent until the bonds are paid off or refinanced. Ms. Smith indicated she would send a five-year plan to the Zone 3 agencies.

In reviewing labor hours charged to Zone 3 for the last 10 years, Ms. Smith noted labor hours for FY 07/08 were the highest due to startup of the Lopez Water Treatment Plant

(LWTP). She indicated labor hours have recently increased since LWTP staff is able to focus only on Lopez Water versus Lopez Water and wastewater operations.

No public comment was given.

Ms. Smith asked for the Committee's endorsement of the proposed FY18/19 Budget.

Member Garing motioned endorsement of the budget; Member Hill second. All approved. Motion passed. The proposed Fiscal Year 18/19 Flood Control Zone 3 Budget received endorsement from the Advisory Committee.

B. Declaration of Surplus Water -- Ms. Ogren indicated each year surplus water is declared in accordance with the Zone 3 Water Supply Contract. She explained "surplus water" is based on the difference between what Zone 3 agencies *actually* took and their respective water entitlements; and the difference between the downstream releases of 4,200 AF and what was *actually* released. The estimated surplus water total, not including March deliveries, was 1,160 AF. The cost of the water was \$66.71 per AF. The estimated 1,160 AF of surplus water is made available to Zone 3 agencies based on their percentage written in the Water Supply Contract and comes in the form of a credit.

Ms. Ogren indicated she planned to take the Declaration of Surplus Water to the BOS on May 15, 2018 and asked for a recommendation from the Advisory Committee that the BOS declare surplus water. Member Hill motioned endorsement of the recommendation. Member Lee second. All approved. Motion passed.

IX. Future Agenda Items

A. Lopez Lake Safe Yield -- "Safe Yield" is the amount of water that can be safely used each year without the Lopez Reservoir going below the minimum pool. By utilizing rainfall and hydrology history since 1969, modeling is currently being configured and will demonstrate what the Reservoir will look like if all water entitlements were distributed to participating agencies. Committee will receive update following model completion.

B. Cloud Seeding -- Will receive update following June BOS date.

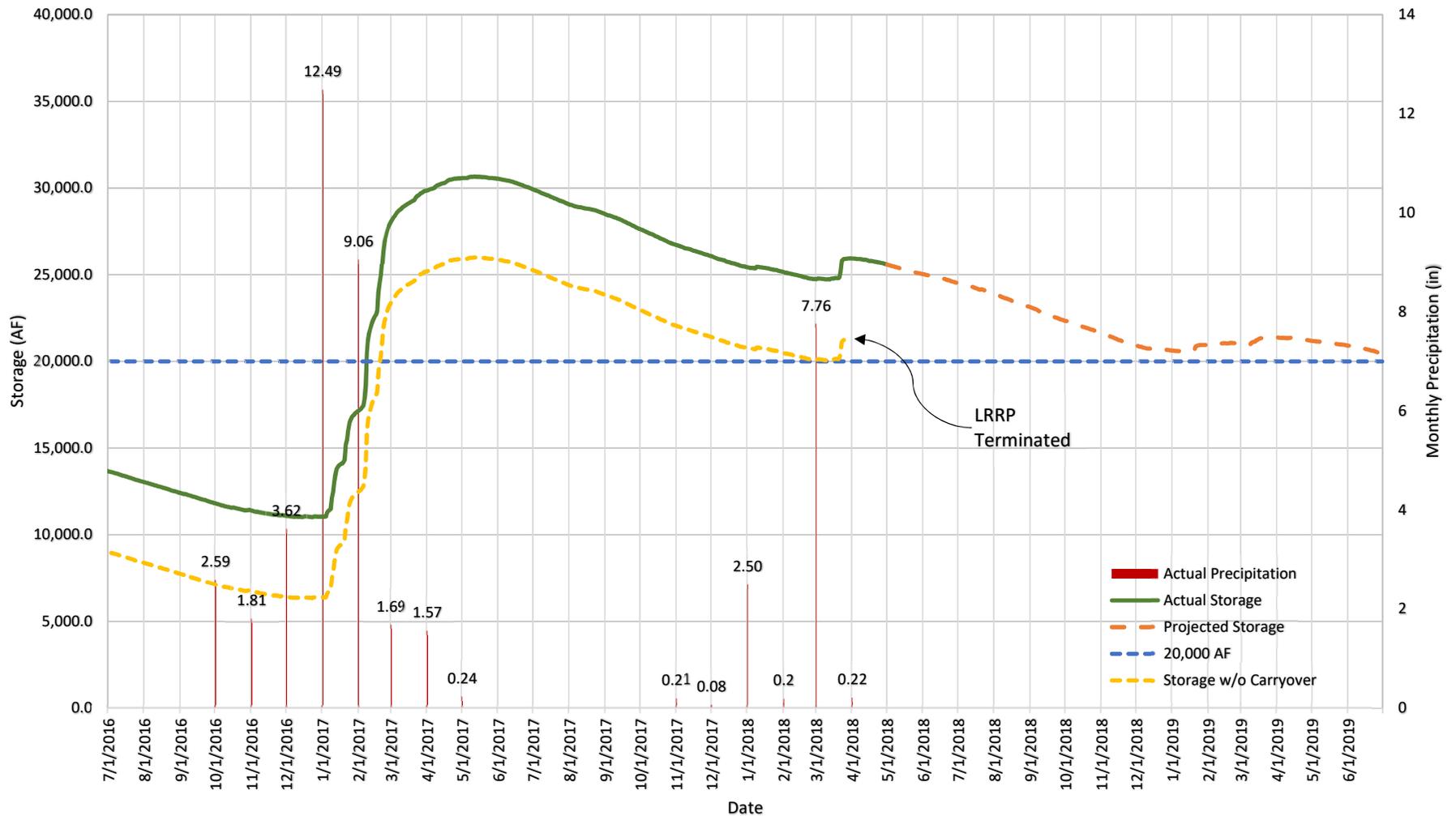
XI. Committee Member Comments -- Chairman Ikeda asked for Santa Maria Groundwater Basin Modeling to be placed under "Future Agenda Items". Ms. Montes indicated she would reach out to Dan Heimel with WSC for an update at the May 17, 2018 Zone 3 Advisory Committee meeting.

Meeting Adjourned at 8:02 PM

Respectfully Submitted,

Andrea M Montes
County of San Luis Obispo Public Works Department

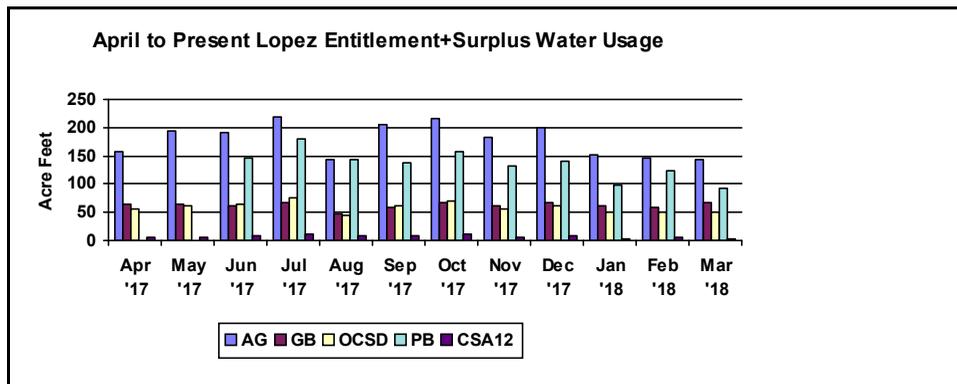
LOPEZ RESERVOIR STORAGE PROJECTION



Note: Storage Projection is based on Water Years 14/15 and 15/16 municipal and downstream releases, rainfall, and evaporation.

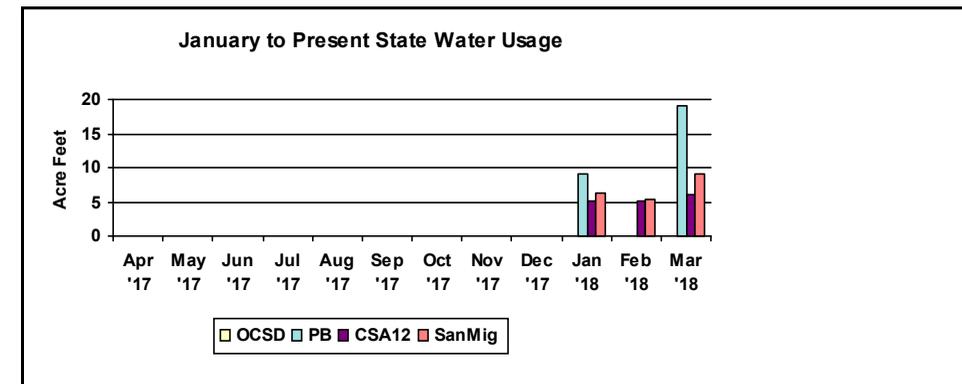
San Luis Obispo County Flood Control and Water District Zone 3 - Lopez Project - Monthly Operations Report March, 2018

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
Total	4530	4663.70	9193.70	213.40	4.7%	142.42	3.1%	4178.19	92.2%	862.56	18.5%	5040.75	54.8%	1501	34.01	2.3%	67	32.99	64.67	4.3%	111.00		389.83
												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.

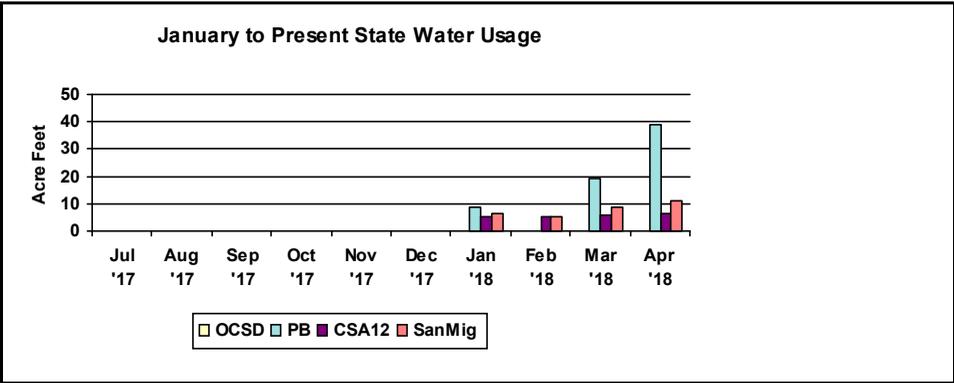
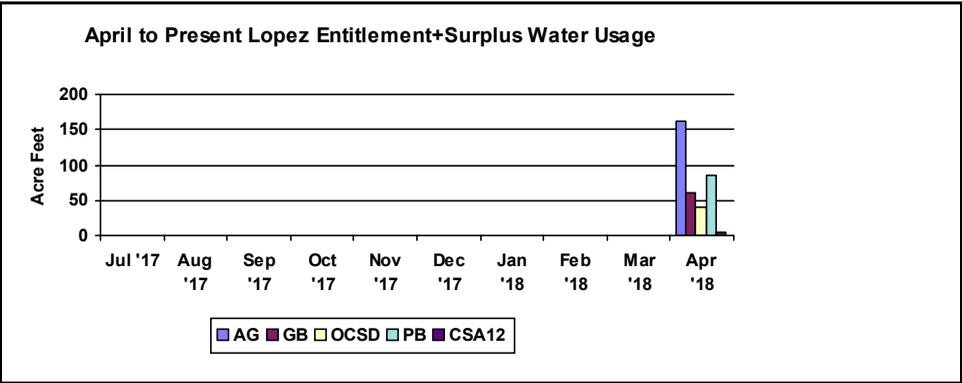
Comments: Reservoir is currently operated under the Low Reservoir Response Plan. Reservoir is above 20,000 AF therefore no reduction in entitlements.

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.

San Luis Obispo County Flood Control and Water District
 Zone 3 - Lopez Project - Monthly Operations Report
 April, 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	161.15	7.0%	0.00	0.0%	161.15	7.0%	0.00	0.0%	161.15	5.6%							161.15				
Oceano CSD	303	75.00	378.00	40.35	13.3%	0.00	0.0%	40.35	13.3%	0.00	0.0%	40.35	10.7%	0	0.00	0.0%					40.35			
Grover Beach	800	197.00	997.00	59.99	7.5%	0.00	0.0%	59.99	7.5%	0.00	0.0%	59.99	6.0%								59.99			
Pismo Beach	892	220.00	1112.00	84.68	9.5%	0.00	0.0%	84.68	9.5%	0.00	0.0%	84.68	7.6%	608	39.00	6.4%					67.00	11.0%	123.68	
CSA 12	245	60.00	305.00	4.13	1.7%	0.00	0.0%	4.13	1.7%	0.00	0.0%	4.13	1.4%	84	6.22	7.4%					22.34	26.6%	10.35	
San Miguelito														120	11.05	9.2%					31.60	26.3%	11.05	
Total	4530	1116.00	5646.00	350.30	7.7%	0.00	0.0%	350.30	7.7%	0.00	0.0%	350.30	6.2%	812	56.27	6.9%	64	7.73			120.94	14.9%	175.00	406.57
												Last Month Stored State Water		1176.08				This Month Stored State Water		1183.81				



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)	491.07		Difference (feet)	-31.30
Storage (full at 49200 acre feet)	25590		% Full	52.0%
Rainfall	0.57	13.24		
Downstream Release (4200 acre feet/year)	358.14	358.14		
Spillage (acre feet)	0	0.00		

Comments: Zone 3 is no longer operating under the LRRP as of March 31, 2018 per Resolution 2017-218.

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

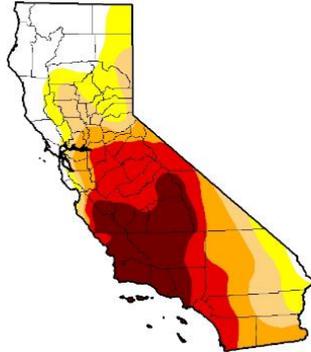
1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 1.76 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.76 AF was subtracted from Arroyo Grande's usage this month.

U.S. DROUGHT MONITOR

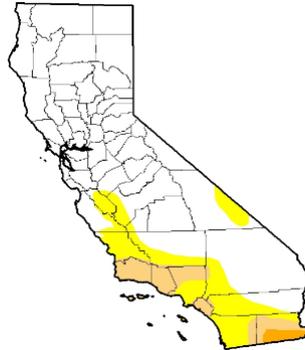
November 2016



January 2017



March 2017



May 2017



July 2017



September 2017



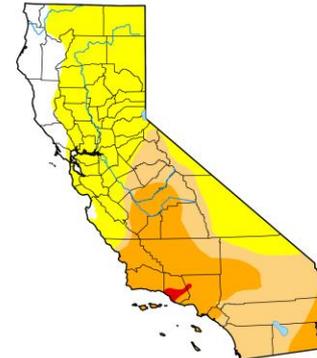
November 2017



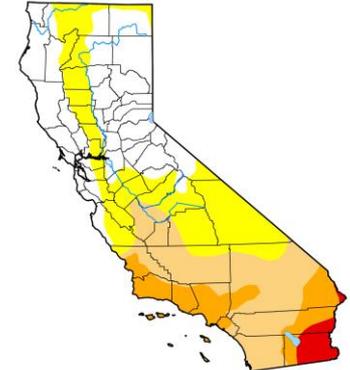
January 2018



March 2018



May 2018



Intensity:



Permission to reproduce the map

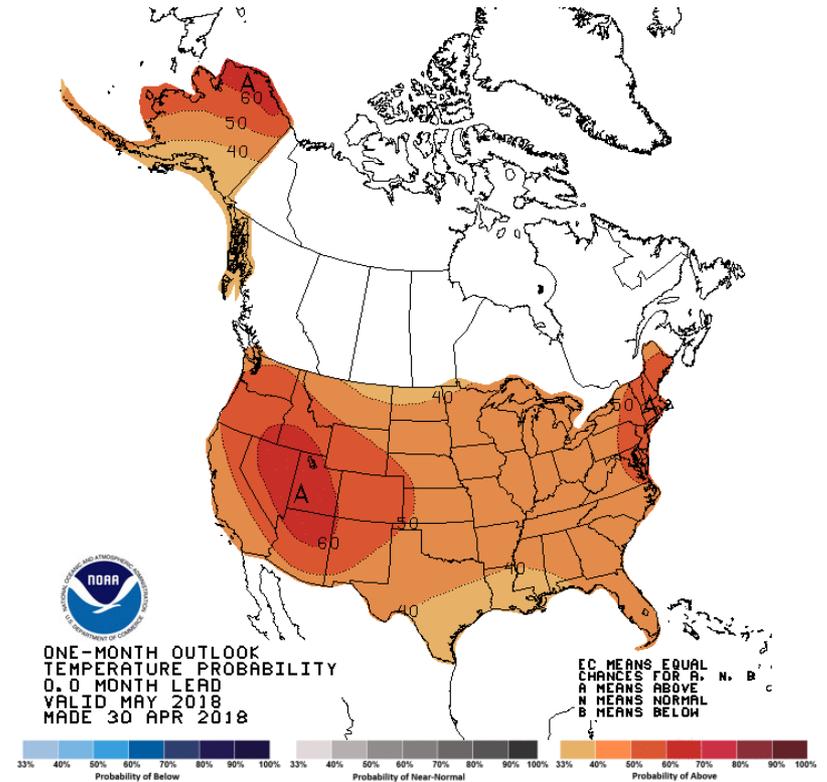
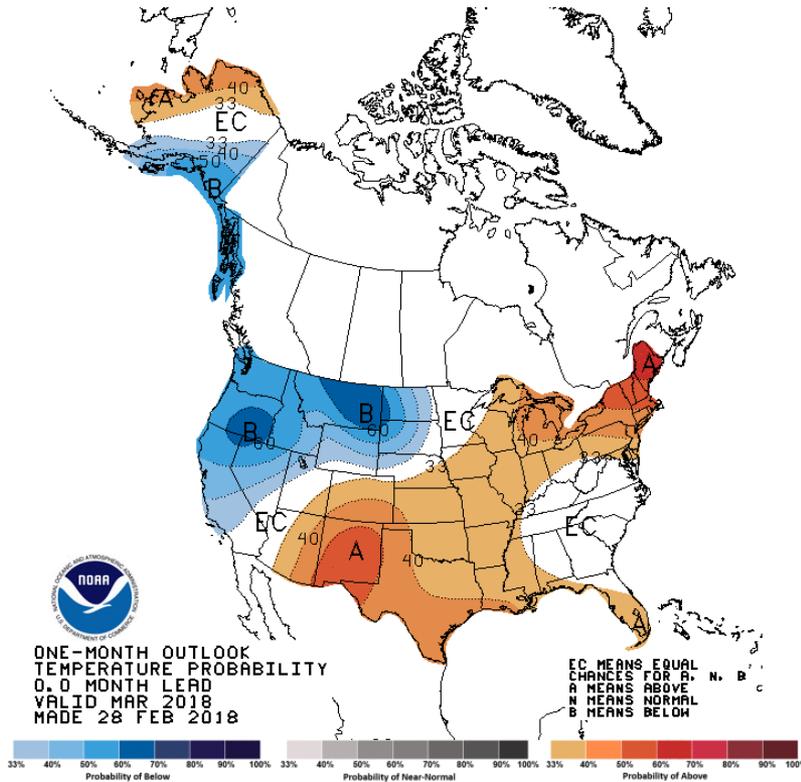
If you reproduce the U.S. Drought Monitor map, please use this wording:

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.

NOAA TEMPERATURE FORECAST

March

May



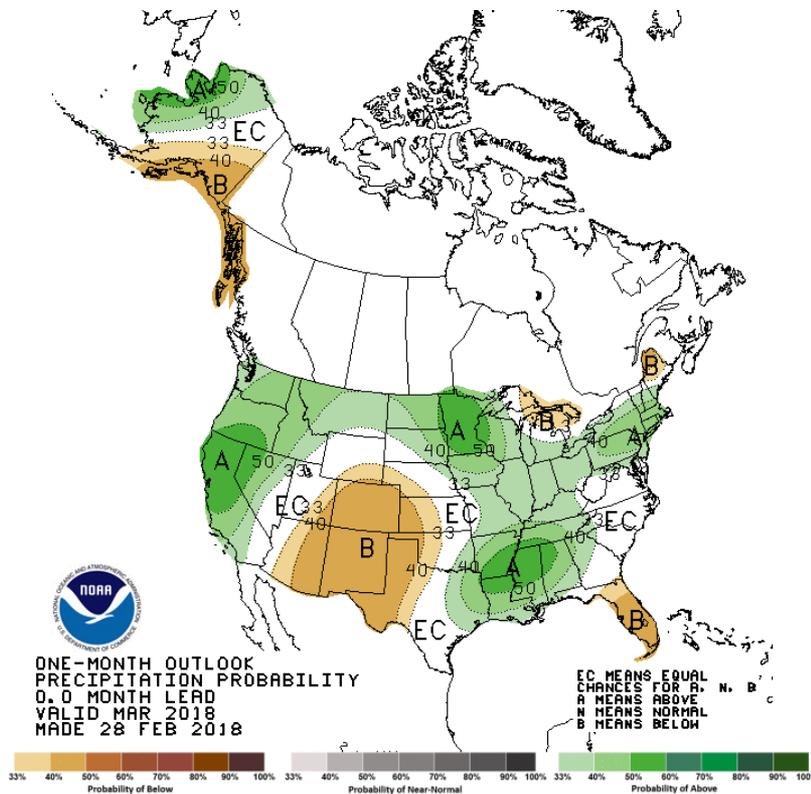
March Meeting

May Meeting

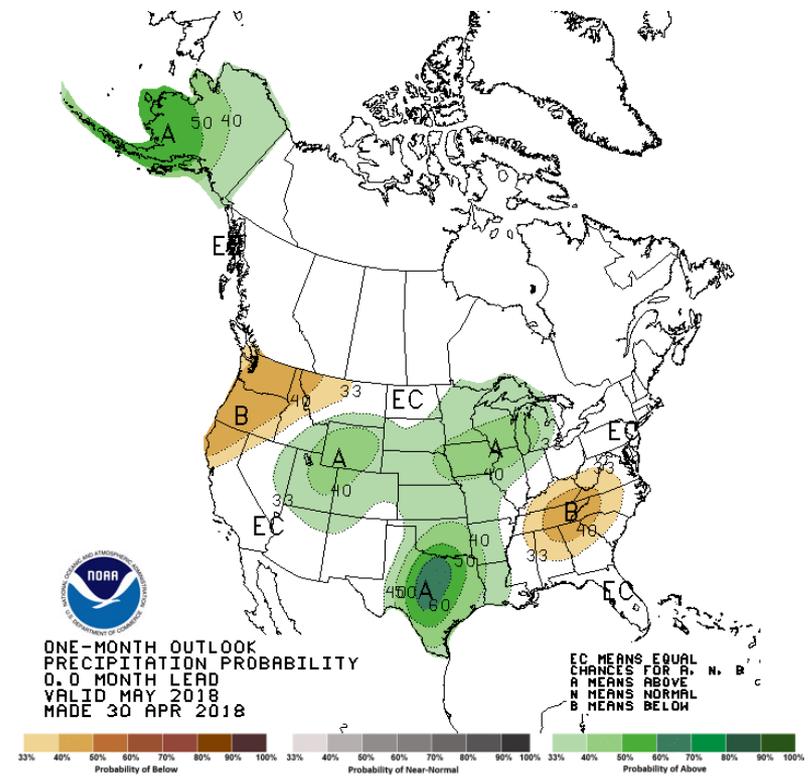
NOAA PRECIPITATION FORECAST

March

May



March Meeting



May Meeting



May 17, 2018

MEMORANDUM

TO: Flood Control Zone 3 Advisory Committee

FROM: Kristi Smith, Accountant

SUBJECT: Flood Control Zone 3, Third Quarter Budget Status, Fiscal Year 2017-18

Recommendation

The item to be received and filed.

Summary

Attached please find the third quarter budget versus actual results for the fiscal year 2017-18. The \$5.5 million dollar budget is broken into three categories: Routine O&M expenses, Non-Routine O&M expenses, and Capital Outlay expenses. At 75% of the fiscal year, expenses totaled 55% of the annual budget.

Total Budget	Expenses through Q3	Balance Available	% of Budget Expended
5,586,112	3,070,640	2,515,472	55%

Routine O&M annual budget is approximately \$3.8 million dollars. At 75% of the fiscal year, expenses were 72% of the annual budget, which results in approximately \$1 million dollars of available balance for the remainder of the year.

Total Budget	Expenses through Q3	Balance Available	% of Budget Expended
3,790,051	2,716,291	1,073,760	72%

Expenses for the third quarter are on target with budgeted levels in this category.

Non Routine O&M annual budget is approximately \$598,000 dollars. At 75% of the fiscal year, expenses were 30% of the annual budget, which results in approximately \$418,000 dollars of available balance for the remainder of the year. For most of the budgeted efforts in this category, the unspent balances at year end will be carried into the following fiscal year for continued work.

Total Budget	Expenses through Q3	Balance Available	% of Budget Expended
598,656	180,526	418,130	30%

Capital Outlay annual budget is approximately \$1.2 million dollars. At 75% of the fiscal year, expenses were 15% of the annual budget, which results in approximately \$1 million dollars of available balance for the remainder of the year. Unspent balances at year end will be carried into the following fiscal year to continue the projects through completion.

Total Budget	Expenses through Q3	Balance Available	% of Budget Expended
1,197,405	173,823	1,023,582	15%

The majority of the balance available in this category is due to the pH Suppression & Scaling Control project, which has been completed. The remaining budget of approximately \$516,000 will be used, in part, to replace the \$48,000 Contractor Reserves and the \$280,500 District Funded Designated Reserves that were used to help fund the project (budget adjustment approved by Board of Supervisors in December 2016). After replacing these reserves, there will be an estimated \$187,000 of budget remaining that the Technical Advisory Committee is recommending be used to offset FY 2017-18 billings to the Agencies.

Other Agency Involvement/Impact

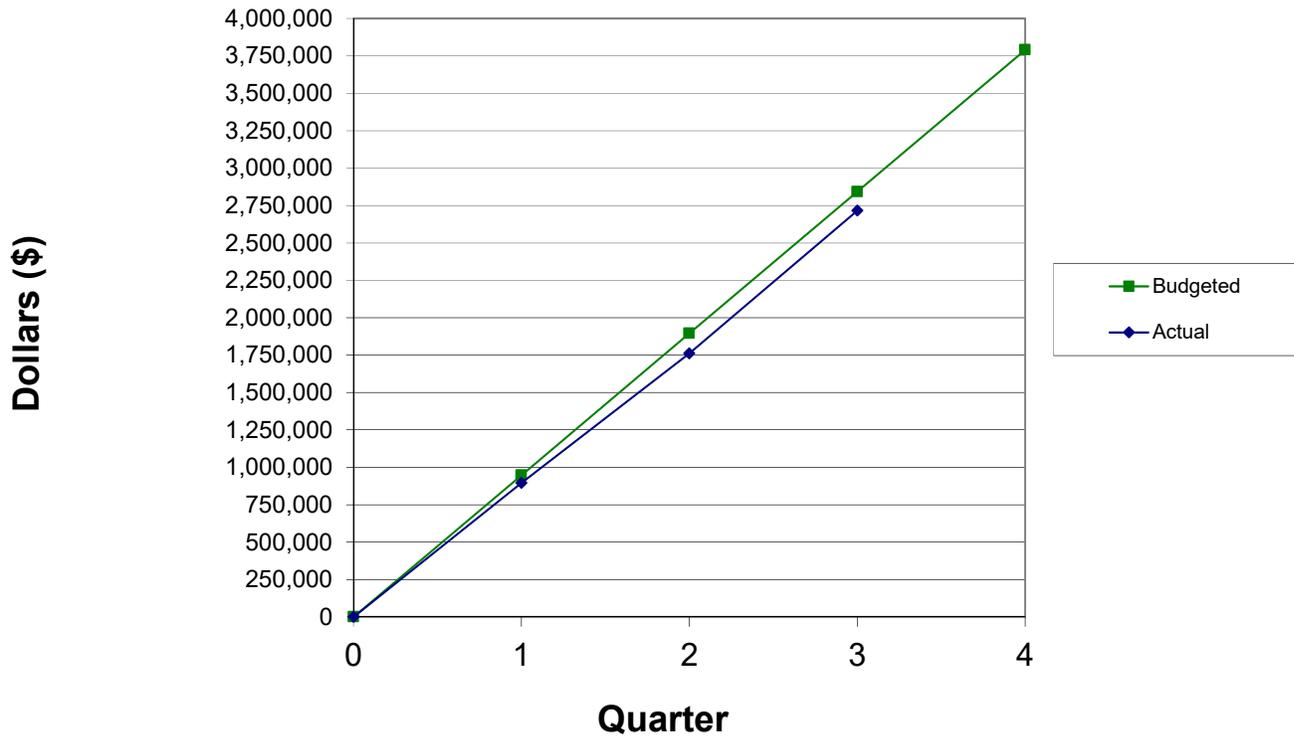
The agencies involved are: City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, Oceano Community Services District, and County Service Area 12. Subcontractors of CSA 12 include Port San Luis Harbor District and Avila Beach Community Services District.

Financial Consideration

All agencies are current on their payments. The 1st installment billings for FY 2018-19 will be mailed this month, and payments are due July 1, 2018.

Zone 3 Budget Status
3rd Quarter FY17/18

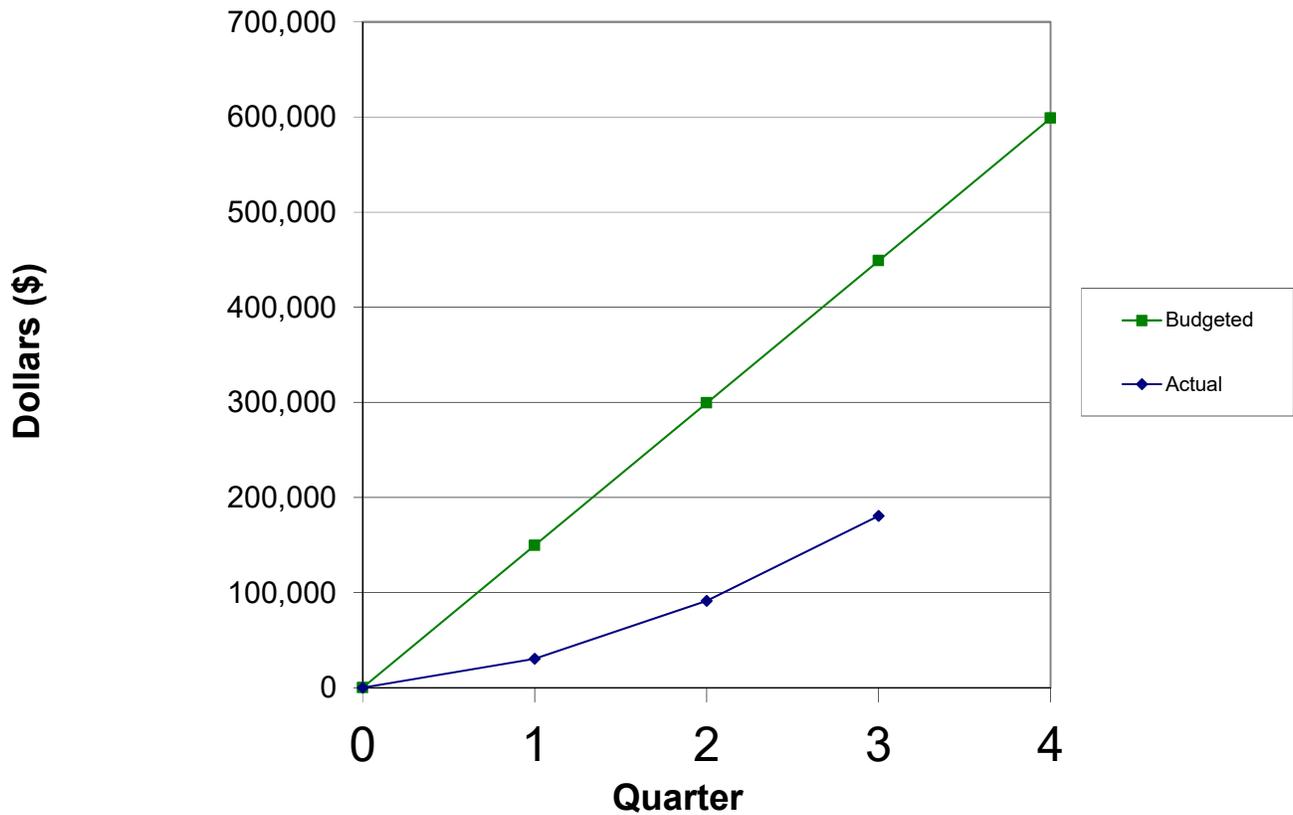
Routine Operation and Maintenance



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	23,704	6,068	5,304	5,995	-	17,367	73%	
Chemicals - Water Treatment Plant	310,770	115,338	110,530	120,170	-	346,037	111%	(35,267)
Water Quality Testing - Treatment Plant	59,930	16,204	12,774	20,780	-	49,758	83%	10,172
Utilities - Water Treatment Plant	187,432	69,156	70,632	55,960	-	195,748	104%	(8,316)
All Other Costs - Water Treatment Plant	1,930,735	475,236	447,487	508,219	-	1,430,943	74%	499,792
Terminal	129,597	31,433	15,162	20,266	-	66,862	52%	62,735
Main Dam	251,808	60,829	39,329	32,716	-	132,874	53%	118,934
Other	919,779	127,392	169,446	197,232	-	494,069	54%	425,710
Expenses		895,589	865,360	955,342	-	2,716,291	72%	1,073,760
Budget	3,790,051	947,512	947,512	947,512	947,512	3,790,051		
Variance (over)/under		51,924	82,153	(7,829)	947,512	1,073,759		
% Variance		5%	9%	-1%	100%			

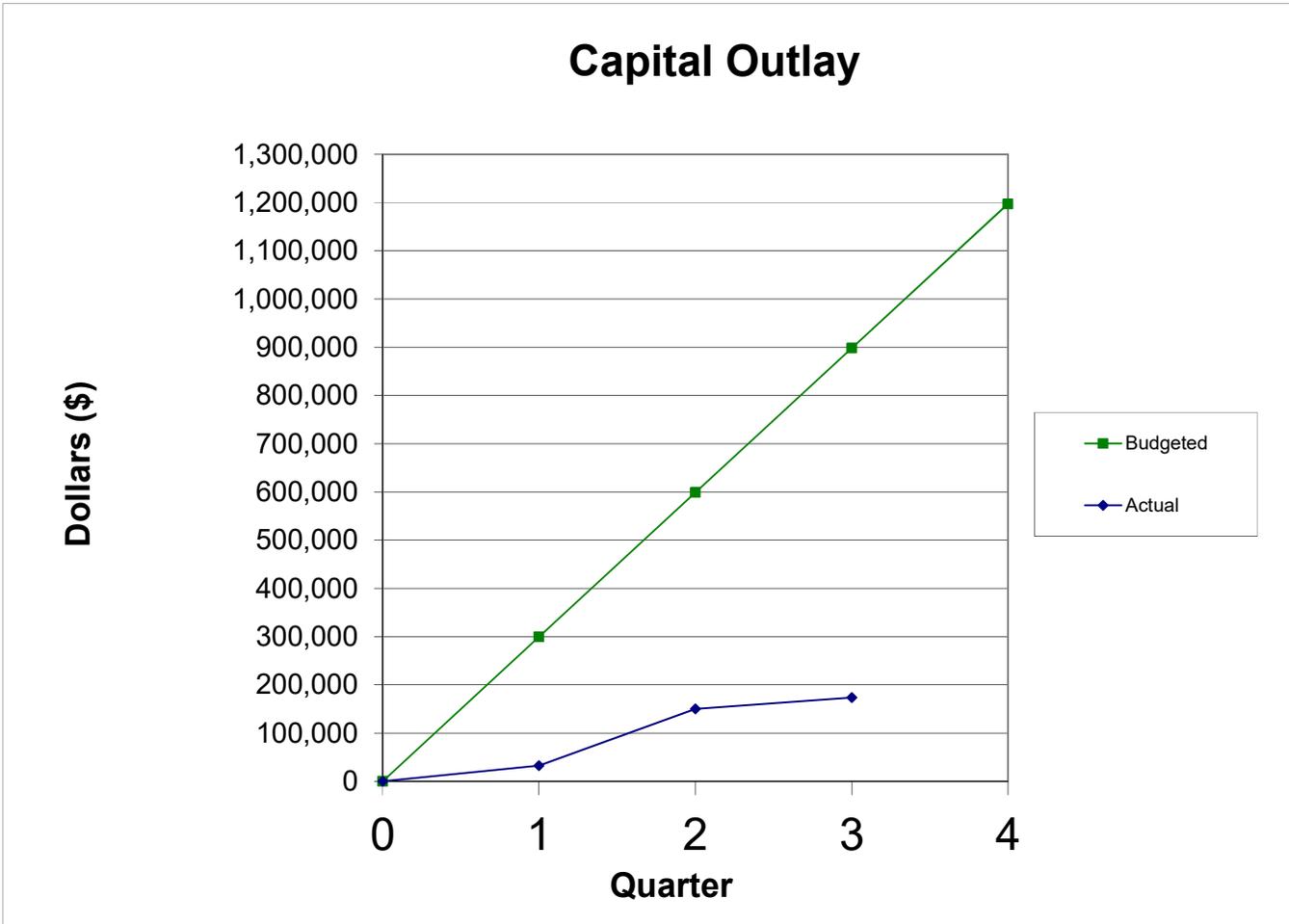
Zone 3 Budget Status
3rd Quarter FY17/18

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 /HCP	292,743	1,742	9,910	5,058	-	16,709	6%	276,034
Pigging-Unit B	117,195	-	-	-	-	-	0%	117,195
Lopez Dam Environmental Monitoring	7,191	1,860	1,706	4,953	-	8,519	118%	(1,328)
Contribution to ISF for Shared New Equip	39,348	-	-	-	-	-	0%	39,348
Equipment Audit/Replacement Plan	15,000	-	-	-	-	-	0%	15,000
Rodriguez Bridge Environmntl Monitoring	9,920	2,857	2,187	3,471	-	8,515	86%	1,405
Santa Maria Groundwater Basin Modeling	117,259	-	-	-	-	-	0%	117,259
Other	-	24,061	47,077	75,645	-	146,783	0%	(146,783)
Expenses		30,520	60,880	89,127	-	180,526	30%	418,130
Budget	598,656	149,664	149,664	149,664	149,664	598,656		
Variance (over)/under		119,144	88,784	60,537	149,664	418,130		
% Variance		80%	59%	40%	100%			

Zone 3 Budget Status
3rd Quarter FY17/18



Capital Outlay Projects	Total Budget	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	Total Exp as % of Budget	Total Balance Avail
WTP 6th Membrane Filtration Module Addit	19,437	4,923	5,487	319	-	10,729	55%	8,708
WTP Resurface Parking Lot	24,728	1,523	19,046	103	-	20,672	84%	4,056
Ammonia Analyzer Equip Repl	30,000	-	-	22,053	-	22,053	74%	7,947
pH Suppression & Scaling Control	503,220	(12,915)	-	-	-	(12,915)	-3%	516,135
Cathodic Protection Maint	109,172	-	-	-	-	-	0%	109,172
Dam Intake Fac & Op Assessment	20,899	-	-	-	-	-	0%	20,899
Structural Assessment Term Resv Dam	50,000	1,390	3,013	-	-	4,403	9%	45,597
Equip Storage Garage Design	25,000	151	-	-	-	151	1%	24,849
Pressure Transducers	35,000	-	-	979	-	979	3%	34,021
Geologic Assmt Fault Zone Left Abutment	50,000	893	3,872	56	-	4,821	10%	45,179
Domestic & Fireflow Tank Assessment	50,000	397	1,489	-	-	1,886	4%	48,114
Safety Upgrades to WTP	15,000	-	-	-	-	-	0%	15,000
Replace Membrane Feed Pumps	35,000	-	-	-	-	-	0%	35,000
PLC Replacement & Programming	69,763	3,959	85,136	-	-	89,095	128%	(19,332)
Replace Membrane Strainers	10,186	31,950	-	-	-	31,950	314%	(21,764)
Vac Trailer	95,000	-	-	-	-	-	0%	95,000
Various Equipment Replacement	55,000	-	-	-	-	-	0%	55,000
Expenses		32,271	118,043	23,510	-	173,823	15%	1,023,582
Budget	1,197,405	299,351	299,351	299,351	299,351	1,197,405		
Variance (over)/under		267,080	181,309	275,842	299,351	1,023,582		
% Variance		89%	61%	92%	100%			



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

TO: Zone 3 Advisory Committee
FROM: David Spiegel, PE
DATE: May 17, 2018
SUBJECT: Zone 3 Projects Update

Project Updates:

- Equipment Audit & Replacement - Ongoing
 - Work proposed to continue in 2017/18
- Spillway Assessment
 - Reviewing Proposals
- Lopez Dam and Terminal Dam Hazard Classification
 - Inundation Maps have been submitted to DSOD for review
 - Emergency Action Plans are in preparation
- Structural Assessment of Terminal Reservoir
 - Draft Assessment is in Review
- Fault Zone Assessment – Dam Left Abutment
 - In progress by RIZZO International, Inc
- Equipment Storage
 - Requesting Quotes from Local Metal Building Suppliers
- Lopez WTP Safety Upgrades
 - Working on implementing changes to DAF and Membrane Building
- Domestic and Fire Tank
 - Getting quotes for repair work and estimated life span
- Rebuild Membrane Feed Pumps (1 per year)
 - Pump has been removed and is being rebuilt
- Turnout Meter Replacement
 - Meters have been installed
- Pressure Transducers
 - Parts have been ordered, getting quotes for SCADA connection

Upcoming Projects (Requested FY 2017/18):

- Cathodic Protection Survey

Item VI.A



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

- Sludge Bed Cleanout Repair – 4 total
- Static Mixer Replacement
- Lopez Water Treatment Plant Leach Field Repair/Replacement

Completed Projects

- Turnout SCADA Project
- Membrane Strainer Replacement
- 6th Rack Addition
- PLC Replacement and Programming
- Parking and Roadway Resurfacing
- Plant Network Upgrade
- Ammonia Analyzer
- Sludge Repair on 4A



**SAN LUIS OBISPO COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT**
Department of Public Works
Colt Esenwein P.E., *Director*

TO: Zone 3 Advisory Committee

FROM: Jill Ogren, Senior Utilities Engineer

VIA: Zone 3 Technical Advisory Committee

DATE: May 17, 2018

SUBJECT: Arroyo Grande Creek Watershed Stormwater Resource Plan - Funding Request

Recommendation

1. Recommend that the Board of Supervisors of the San Luis Obispo County Flood Control and Water Conservation District (District) approve funding a portion of the Arroyo Grande Creek Watershed Stormwater Resource Plan (SWRP) utilizing Zone 3 District Designated Reserves and approve a corresponding budget adjustment of \$99,875 for FY 2018-19.
2. Recommend that the Board of Supervisors of the San Luis Obispo County Flood Control and Water Conservation District (District) execute a Cost Sharing Agreement with the City of Arroyo Grande in the amount of \$99,875 to support the Arroyo Grande Creek Watershed Storm Water Resource Plan.

Discussion

On March 17, 2016, the Zone 3 Advisory Committee endorsed the FY 2016/17 Budget which included a recommendation to earmark a portion of the Zone 3 District Funded Designated Reserves for specific projects and initiatives. The specific projects/initiatives identified, and their current funding and status are shown in the table below.

Reserves on 3/17/2016	~ \$1,038,729	
<i>Designated Projects</i>	<i>Estimated Funding Level</i>	<i>Status</i>
Carpenter Creek Bridge	\$30,000	Completed
Cloud Seeding Feasibility Study	\$10,000	Completed
Santa Maria Groundwater Basin Model (Phase 1B Model) Est. \$250,000	\$117,259	Funding provided via Cost Sharing Agreement with City of Pismo in the amount of \$117,259 (FY 2017-18)
Arroyo Grande Creek Watershed Storm Water Resource Plan (Prop 1 Grant Match) Est. \$250,000	\$99,875	Pending request for cost share is \$99,875 (FY 2018-19) via Cost Sharing Agreement with City of Arroyo Grande
Public Safety Related to Water Quality and Quantity Est. \$498,000	\$192,500	~\$280,500 allocated for pH suppression project; ~ \$25 K for spillway condition assessment work plan
Estimated Remaining District Funded Designated Reserves	~ \$589,095	

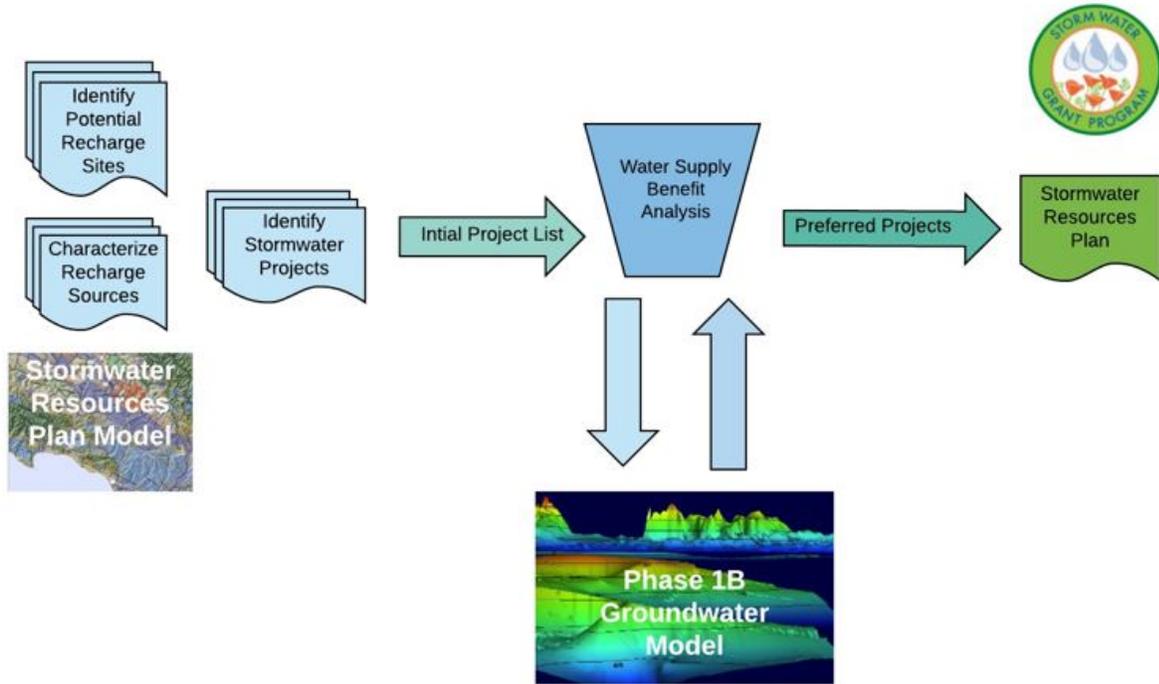
Arroyo Grande Creek Watershed Stormwater Resources Plan

The City of Arroyo Grande is currently taking the lead in developing the SWRP and obtained a Prop 1 Stormwater Program Grant to fund a majority of the SWRP. The Prop 1 Grant requires matching funds of \$189,376. Approximately \$117,259 of the \$189,376 of required match funds were provided by Zone 3 this year through a cost sharing agreement with the City of Pismo Beach to develop the Phase 1B Groundwater model. This model will be used in part to support the Central Coast Blue project as well as support the SWRP by evaluating the effectiveness of proposed stormwater capture and recharge projects in the Arroyo Grande and Pismo Creek watersheds. The remaining required matching funds, \$72,117, are proposed to be provided by Zone 3 through a cost sharing agreement with the City of Arroyo Grande (the lead agency), to specifically fund the development of the SWRP. In addition, the City of Arroyo Grande is requesting an additional \$27,758 to fund an Enhanced Recharge Evaluation that will become part of the overall SWRP bringing the total request today to \$99,875.

The Enhanced Recharge Evaluation will include analysis of other potential sources of water for artificial recharge including recycled water and imported water. The findings from the Enhanced Recharge Evaluation project will allow Arroyo Grande and its Zone 3 partners to identify potential promising projects for stormwater capture and recharge and position them to pursue grant funding or low-interest loans for design and implementation.

The following schematic outlines how the Phase 1B Groundwater model and Stormwater Resources Plan model will work together to evaluate potential water supply benefits from stormwater and other artificial recharge sources and support the development of the SWRP.

Arroyo Grande Creek Watershed Stormwater Resources Plan



Funding

Approximately \$117,259.44 of the \$189,000 of required match funds were previously funded by Zone 3 through a cost sharing agreement with the City of Pismo Beach to develop the Phase 1B Groundwater model. Today's item requests Zone 3 to fund an additional \$99,875 to cover the remaining required Prop 1 grant matching funds and to provide for an Enhanced Recharge Evaluation as part of the overall SWRP. The funding will be provided via a Cost Sharing Agreement with the City of Arroyo Grande. Upon endorsement of today's recommendation, the agreement would go before the Board of Supervisors for approval and execution in June or July of 2018. Per the Zone 3 Advisory Committee action in FY 16-17 all funding will come from the Zone 3 District Designated Reserves.

Phase 1B Groundwater Model (Zone 3 Reserves)	\$117,259	Approved by BOS on 10/17/2017
SWRP with Enhanced Recharge Evaluation	\$99,875	Zone 3 AC recommends that BOS fund \$99,875 with Zone 3 District Reserves
Total Zone 3 District Designated Reserves	\$217,134	
Prop 1 Match Requirement	\$189,376	

Attachments:

Attachment 1 - WSC's Proposal for SWRP with Enhanced Recharge Evaluation

5/9/2018

City of Arroyo Grande
214 E. Branch Street
Arroyo Grande, CA 93420

SUBJECT: ENHANCED RECHARGE EVALUATION PROPOSAL

Dear Patrick Holub,

Water Systems Consulting, Inc. (WSC) is pleased to provide this proposal to assist the City of Arroyo Grande (Arroyo Grande) and its Zone 3 partner agencies in evaluating the potential to increase groundwater recharge and groundwater supply reliability through enhanced stormwater capture. Arroyo Grande is currently taking the lead in developing a Stormwater Resources Plan (SRP) and is looking to enhance the evaluation of the water supply benefit from the proposed stormwater projects being evaluated in the SRP through the use of the groundwater model being developed for the northern portions of the Santa Maria Groundwater Basin (Phase 1B Groundwater Model).

WSC reviewed the currently projects being proposed for evaluation in the SRP and held a conference call with Stillwater Sciences, the lead consultant developing the SRP, and determined that the projects listed for the Arroyo Grande and Pismo Creek Watersheds do not represent a comprehensive list of the potential stormwater capture and recharge projects that could be implemented.

As a result, WSC is proposing to perform an initial evaluation of the stormwater capture and recharge projects in the Arroyo Grande and Pismo Creek watersheds. This evaluation will include assessment of new potential stormwater capture and recharge sites and enhanced operation of existing stormwater systems and infiltration basins. The projects identified in the assessment will then be evaluated using the Phase 1B Groundwater Model and ranked based on their potential water supply benefits.

In addition to evaluating stormwater recharge, WSC proposes to evaluate other potential sources of water for artificial recharge including recycled water and imported water. WSC will leverage its experience working with the City and its Zone 3 partner agencies on other water supply planning projects (e.g. Central Coast Blue) to complete this work efficiently.

The findings from the Stormwater Recharge Evaluation project will allow the City and its Zone 3 partners to identify potential promising projects for stormwater capture and recharge and position them to pursue grant funding or low-interest loans for design and implementation. This letter outlines WSC's proposed scope of services and budget for this effort.

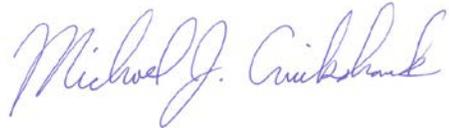
Thank you for the opportunity to provide you with this proposal. Please feel free to contact us if you have any questions or would like to discuss any aspect of our proposal in greater detail. Daniel can be reached at (805) 457-8833 ext. 104 or Michael at (909) 483-3200 at ext. 206. We look forward to hearing from you.

Sincerely,

Water Systems Consulting, Inc.

A handwritten signature in black ink that reads "Daniel Heimel". The signature is written in a cursive style with a light blue background behind it.

Daniel Heimel, PE
Project Manager

A handwritten signature in blue ink that reads "Michael J. Cruikshank". The signature is written in a cursive style.

Michael Cruikshank, PG, CHG
Senior Hydrogeologist

Enhanced Recharge Evaluation Scope

TASK 0.0 DATA COLLECTION AND PROJECT COORDINATION

0.1 Project Management

- Progress Reports
 - (1) Prepare progress reports to be submitted with each monthly invoice.
- Meetings
 - (1) Coordinate meetings to: present interim results; discuss project methodologies; and review draft and final deliverables. It is assumed that up to three meetings will be held throughout the project and will last up to two hours. Budget includes meeting preparation and travel time.
- QA/QC
 - (1) Perform comprehensive quality control of all work items being prepared for delivery to the County.

0.2 Data Collection

- Data Request & Review
 - (1) Review the data collected as part of the SRP. Prepare a data request or teleconferences including but not limited, to the following items:
 - (a) Reports and engineering drawings for existing stormwater infiltration basins
 - (b) Review Section 3.1 Annotated List of Reviewed Data and Report and Identified Data Gaps from the SRP
 - (c) Shapefiles developed as part of 2NDNATURE's stormwater model
 - (d) Review the results of 2NDNATURES's stormwater model to determine applicability of using the output in the groundwater flow model
 - (e) Consult with Oceano's consultant performing the Water Resources Reliability Program.
 - (f) Purchase parcel shapefiles from Parcel Quest for the Arroyo Creek Watershed
- Review requested items and evaluate the need for additional data.

0.3 Develop planning criteria for Recharge Sites

- Define the assumptions and criteria to be used in the investigation and obtain concurrence from the City and Zone 3 stakeholders. The following criteria will be developed:
 - (1) Design Criteria
 - (2) Regulatory Criteria
 - (3) Cost and Financial Criteria
 - (4) Siting and Ranking Criteria

TASK 1.0 SOURCE WATER CHARACTERIZATION

1.1 Characterize Potential Source Waters for Artificial Recharge

- Characterize the quantity, availability, water quality, and cost of the various source waters available to recharge the Northern Cities Management Area (NCMA) and evaluate the suitability of these waters for artificial recharge—individually or in combination. The source waters to be evaluated include storm water runoff, recycled water, and State Water Project water. The source waters will be described with respect to their:
 - (1) **Availability.** Availability is described based on existing information on the timing, rates, and volumes of water available for artificial recharge at specified locations.
 - (2) **Water Quality.** The water quality of each source is described from recorded measurements and discharge permits if available.
 - (3) **Cost.** Cost is the estimated cost to acquire the supply. Capital and Operations & Maintenance (O&M) costs for facilities to divert, convey, and recharge each water source. WSC will rely upon previously completed studies to develop estimates of supplemental water costs.
 - (4) **Institutional Constraints.** These include constraints related to the diversion, conveyance, recharge, recovery, and use of each source.
- It is assumed that stormwater availability will be evaluated using outputs from 2NDNATURE’s model performed as part of the SWRP.

TASK 2.0 IDENTIFY POTENTIAL SITES FOR RECHARGE

2.1 Universe of Potential Sites

- Develop the universe of potential sites for artificial recharge and the screening criteria used to reduce the universe to those sites that are most promising. Parcels will be characterized and ranked using criteria developed in Task 0.2 by current and future land use, underlying soil type, depth to groundwater, proximity to existing conveyance infrastructure.

TASK 3.0 DEVELOP, EVALUATE AND RANK RECHARGE ALTERNATIVES

3.1 Develop recharge projects

- Develop potential recharge projects to be included in the Enhanced Recharge Evaluation. Characterize the volume of recharge that could be accomplished under various combinations of source waters, facilities, facility performance, and operations.

3.2 Groundwater Model Simulations

- Evaluate the performance of the predictive simulations using the Phase 1B GW model. The results will be presented in graphical and tabular formats.
 - (1) Prepare Model Input Files

- (2) Implement and Run Stormwater Infiltration Pond Scenario (Based on proposed location and infiltration rate)
- (3) Post-Process and Analyze Scenario Results as Compared to the Baseline Scenario

3.3 Develop Cost Estimates for Ranking Projects

- Develop cost opinions associated with each potential recharge project, rank the various recharge projects, and demonstrate how a recharge project or series of recharge projects will benefit the NCMA.

TASK 4.0 TECHNICAL MEMORANDUM

4.1 Prepare Draft Technical Memorandum

- Develop a draft technical memorandum documenting the procedures and results which will equip the stakeholders with the necessary information to make informed decisions on investments in artificial recharge.

4.2 Prepare Final Technical Memorandum

- Update the draft technical memorandum to incorporate comments received from the draft technical memorandum. Deliver via PDF format.

Enhanced Recharge Evaluation Budget Estimate

Task No.	Task Description	WSC	Sub Consultants	Total
0	Data Collection and Coordination	\$18,330	\$3,570	\$21,900
1	Source Water Characterization	\$6,560	\$9,252	\$6,560
2	Identify Potential Sites for Recharge	\$10,560		\$10,560
3	Develop, Evaluate, and Rank Recharge Alternatives	\$14,900	\$18,800	\$23,474
4	Technical memorandum	\$9,500	\$8,404	\$17,904
Total				\$99,875



ZONE 3 ADVISORY COMMITTEE

San Luis Obispo County Flood Control and Water Conservation District

May 17, 2018

County of San Luis Obispo

Board of Supervisors

John Peschong, Chairperson

1055 Monterey St, Suite D430

San Luis Obispo, CA 93408

Subject: Zone 3 Advisory Committee Supports Proposed Cloud Seeding Program

Dear Supervisor Peschong,

The San Luis Obispo County Flood Control Zone 3 Advisory Committee supports the proposed Cloud Seeding Program the San Luis Obispo County Flood Control and Water Conservation District (District) is proposing at the June 19, 2018 County Board of Supervisor's Adoption Hearing on the "Winter Cloud Seeding Program for Lopez Lake and Salinas Reservoir – Mitigated Negative Declaration."

This proposed program of enhancing rain potential would potentially increase water supply storage to the Lopez Lake reservoir. Additional rain to the watershed would also increase flow volume to the creeks and streams, which would benefit our environmental resources as well as enhancing groundwater recharge.

Public Works Staff presented the Cloud Seeding Feasibility Study to the Zone 3 Technical Advisory Committee (TAC) on May 5, 2017. The TAC agreed the proposed Cloud Seeding method would effectively enhance precipitation in the Lopez Lake watershed. Public Works Staff also provided an update on Cloud Seeding and the CEQA process to the Zone 3 Advisory Committee at the March 22, 2018 Advisory Committee Meeting.

Understanding that the appropriate CEQA process was followed, the Zone 3 Advisory Committee fully supports the adoption of the "Winter Cloud Seeding Program for the Lopez Lake and Salinas Reservoir Mitigated Negative Declaration". We further support efforts to establish the Cloud Seeding Program as a viable option for the District's water supply portfolio.

Thank you for your consideration in approving the proposed Cloud Seeding Program.

Sincerely,

Chairperson, Zone 3 Advisory Committee