



## ZONE 3 ADVISORY COMMITTEE

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San Luis Obispo County Flood Control and Water Conservation District

### AGENDA

Thursday, May 18, 2017 6:30 p.m.  
City of Pismo Beach

- 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 16, 2017
- IV. OPERATIONS REPORT
  - A. Water Plant Operations, Reservoir Storage, Downstream Releases
  - B. Projected Reservoir Levels
- V. INFORMATION ITEMS
  - A. 3<sup>rd</sup> Quarter Budget Status
  - B. Climate Update
  - C. ECORP Habitat Conservation Plan Contract
  - D. Castenada Request Rescinded
- 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. Consideration of Board of Supervisors Action to Rescind the Local Drought Proclamation and How the Low Reservoir Response Plan (LRRP) will be affected
- IX. FUTURE AGENDA ITEMS
  - A. LRRP
  - B. Funding Groundwater Modeling
  - C. Cloud Seeding
  - D. Contract Renegotiation Discussions
- X. COMMITTEE MEMBER COMMENTS

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Next Regular Meeting is Tentatively Scheduled for  
Thursday, July 20, 2017 at 6:30 PM at Oceano Community Services District  
Agendas accessible online at [SLOCountyWater.org](http://SLOCountyWater.org)

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**SAN LUIS OBISPO COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT  
ZONE 3 ADVISORY COMMITTEE  
DRAFT MEETING MINUTES  
THURSDAY March 16, 2017**

- I. Call to Order/Roll Call** -- The Meeting was called to order at 6:35 PM at the Oceano Community Services District (Oceano CSD) by Zone 3 Advisory Committee Chairman and Avila Beach Community Services District (Avila Beach CSD) General Manger, Brad Hagemann.

County Public Works Department Utilities Senior Engineer, Jill Ogren called roll. Members in attendance were:

- Kristen Barneich, City of Arroyo Grande
- Brad Hagemann, Chairman/Avila Beach CSD
- Jeff Lee, City of Grover Beach
- Jim Garing, Member at Large
- Andrew Brunet, Oceano Community Services District
- Brian Talley, Vice-Chairman/Agriculture Delegate
- Marcia Guthrie, City of Pismo Beach

Chairman Hagemann noted that Andrew Brunet and Marcia Guthrie's appointments had not yet been approved by the County of San Luis Obispo Board of Supervisors (BOS) and would not be able to vote on meeting items requiring action by the BOS.

Quorum was established and the meeting continued.

- II. Public Comment** -- Patty Walsh from Arroyo Grande expressed concern by recent news (from *SLO Tribune*) of costs rising for rate payers. She urged the Committee to speak with the Board of Supervisors to encourage public input.
- III. Approval of Meeting Minutes of January 19, 2017**-- Member Lee, noted that *Item II. Public Comment*, of the minutes was missing the word "update": "*County of San Luis Obispo Public Works Deputy Director, Mark Hutchinson, presented a brief State Water [update] as the Lopez distribution pipeline is used to deliver State Water to participating Zone 3 agencies.*"

No public comment was given. Member Lee motioned to approve the minutes as amended. Member Garing second and noted on Page 3, *Item V.A. Distribute Fiscal Year 2017-18 Proposed Budget*, paragraph eight should read “*City of Grover Beach, ‘Gayla’ Chapman*” rather than “*Gayle*”. Member Barneich abstained as she was not present at the January Zone 3 Advisory Committee Meeting. Members Guthrie and Brunet abstained as their appointments had not yet been approved by the BOS. All other members motioned to approve the minutes.

#### **IV. Operations Report**

##### **A. Water Plant Operations, Reservoir Storage, Downstream Releases --**

Ms. Ogren indicated the Lopez Lake elevation was 496.78 feet. Storage was 29,132 acre-feet (AF), which is 59% capacity. Rainfall to date was 29.8 inches. Plant production was 2 million gallons per day (MGD). Downstream release was 1.9 MGD. State Water was 1.9 MGD.

No public comment was given.

**B. Projected Reservoir Levels --** Ms. Ogren reviewed the projected Lopez reservoir levels, which had increased since the January Zone 3 Advisory Committee Meeting.

No public comment was given.

#### **V. Information Items**

**A. Present 2<sup>nd</sup> Quarter FY 16/17 Budget Status --** Kristi Smith, County Public Works Finance Division and Zone 3 Accountant, presented the 2<sup>nd</sup> Quarter Fiscal Year (FY) 2016/17 Budget Status for Flood Control Zone 3 for the period of October 1 through December 31, 2016. Expenses through December 31, 2016 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 47% of the OM budget had been spent, resulting in an available balance of \$1.8 million for the remainder of the FY, ending June 30, 2017.
- The second graph displayed Non-Routine O&M costs and demonstrated 17% of the Non-Routine O&M budget had been spent, resulting in an available balance of \$688,000 for the remainder of the FY. Ms. Smith indicated the available balance is due to the Habitat Conservation Plan

project on hold temporarily. However, in December there were some increased budgets associated with Non-Routine O&M. Per Ms. Smith, these costs were not known but will be during the 3<sup>rd</sup> and 4<sup>th</sup> Quarters and were further discussed in the Capital Projects staff report.

- The third graph displayed Capital Outlay costs and demonstrated at 50% of the year, 9% of the budget had been spent, resulting in an available balance of \$756,000 for the remainder of the FY. Ms. Smith indicated the majority of the budget was available for the upcoming Lopez Water Treatment Plant (LWTP) PH Suppression and Control Project.

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

No public comment was given.

**B. Climate Update** -- Ms. Ogren indicated San Luis Obispo County has moved to moderate/abnormally dry conditions. There is a 30 to 40% chance of above normal temperatures for March. Rainfall is expected to be less than normal.

No public comment was given.

**C. Low Reservoir Response Plan (LRRP)** – Ms. Ogren indicated that every year, the San Luis Obispo County Water Conservation and Flood Control District (District) is contractually obligated to declare Surplus Water even if Flood Control Zone 3 (Zone 3) is under the Low Reservoir Response Plan (LRRP). Ms. Ogren explained the two triggers signaling the LRRP: 1.) at 20,000 AF; and 2.) Declaration of Water Emergency by the County BOS. Although the Lopez Reservoir was at 29,000 AF, the BOS has not lifted the Declaration of Water Emergency. Until the Water Emergency is lifted, Zone 3 will remain under the LRRP.

Regarding the Declaration of Surplus Water, Ms. Ogren indicated Surplus Water refers to any difference in water from what Zone 3 Agencies are entitled to and what was actually delivered, and what the downstream entitlement is. This difference this year is 2,921 AF, and is considered “Surplus Water” but is not considered “extra water”.

Regarding the LRRP, Ms. Ogren indicated the District will recommend to the BOS to stay under the LRRP because we are only 9,000 acre-feet over the LRRP trigger and because of uncertain drought conditions and groundwater recovery. Well measurements will be taken during the months of April and October. Ms. Ogren indicated as County Public Works continues to meet with the Zone 3 Technical Advisory Committee (TAC), the group will determine what evidence will be used to demonstrate Zone 3 is out of the drought. When that is determined, a recommendation can be made as to when Zone 3 is no longer under the LLRP.

Mark Hutchinson, County Public Works Deputy Director, indicated the County Drought Task Force, composed of a number of public agencies, meets monthly and speaks with State agencies. This group will ultimately make a recommendation to the BOS with regard to lifting the BOS drought declaration and is waiting to hear what the State will do following the rain season and measurements of groundwater. The TAC has indicated they will bring this discussion to their respective agencies and will formulate a recommendation for the Advisory Committee. However, Mr. Hutchinson indicated a recommendation from the County Drought Task Force could be made to the BOS in May without bringing it to the Zone 3 Advisory Committee.

Member Talley asked what would be the most significant change in operations between the LRRP (Low Reservoir Response Plan (LRRP) (drought contingency plan)) and the standard operating procedure. Mr. Hutchinson indicated if the LRRP goes away, the Zone 3 agencies' water savings accounts go away as well.

Public Member, Ms. Walsh asked if any thought has been put into expanding Lopez so we have more water storage.

Mr. Hutchinson indicated two (2) engineering projects looked at scenarios of raising the dam and the spillway to see if Lopez could generate a higher safe yield. The results showed potential, but as Member Garing indicated, the lake needs to fill up before benefits are realized. In addition, Mr. Hutchinson indicated drawbacks like environmental policies could raise the costs.

No further public comments were made.

## **VI. Capital Projects Update**

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

The Turnout Systems Control and Data Acquisition (SCADA) Project is in process and focuses on radio communications to Oceano. This project will enable each agency will be able to monitor the amount of water flowing through their meters from their computers rather than manually reading the meters, and should be completed in April.

Ms. Ogren indicated the Membrane Strainer Replacement Project, the 6<sup>th</sup> Rack Addition Project, and the Programmable Logic Controller (PLC) Replacement & Programming Project area all on hold pending the temporary fix to the PH Suppression. The PLC Replacement and Programming Project contract will need to go to the BOS in April.

The Parking & Roadway Resurfacing Project is moving forward with construction in May or June. Ms. Ogren indicated the projects moving forward

will have an impact on the budget when Public Works Finance and Zone 3 Accountant, Ms. Smith, returns with the fourth quarter reporting.

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. Declaration of Surplus Water** – Ms. Ogren indicated the District was seeking endorsement to move forward with the recommendation to declare 2,921 AF of Surplus Water and to take a recommendation to the Board of Supervisors that we will remain under the LRRP. No public comment was given. Member Barneich motioned; Member Garing second. Motion passed.

**B. Present Proposed FY 17/18 Budget and Endorse** – Ms. Smith presented the Budget Review Process, Billable Variances, and Labor Hours. Ms. Smith indicated:

- In December 2016, Capital Outlay projects were identified and prioritized with the TAC.
- In January 2017, budgets were distributed to the Advisory Committee.
- In February, budgets were distributed to the TAC and she met with the Zone 3 Finance Committee comprised of representatives from Zone 3 agencies.
- Ms. Smith further indicated, the budget would go to the Board of Supervisors in June for review and approval, following the Advisory Committee's endorsement.

Per Ms. Smith, the overall billings for next year will increase 2.7% from FY 16/17 Budget.

- Routine O&M increased by 8% due to approximately \$126,000 for chemicals needed for the PH Suppression Project and \$164,000 for an additional Engineer in the Public Works Department Utilities Division to oversee the LWTP's needs.
- Non-Routine O&M decreased by 51.8% due to cost reductions in the Habitat Conservation Plan and equipment contributions.
- Capital Outlay remained flat at the customary \$550,000 level. This amount includes a \$15,000 contribution to Contractor Funded Reserves.
- Debt Service remains flat 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 LWTP. She indicated labor hours should continue to remain stable moving forward.

Ms. Smith asked for the Committee's endorsement of the proposed FY17/18 Budget.

No public comment was given.

Member Garing motioned; Member Barneich second. Motion passed. The proposed Fiscal Year (FY) 17/18 Budget received its endorsement.

**IX. Future Agenda Items –**

**A. LRRP**

**B. Funding Groundwater Modeling**

**C. Cloud Seeding**

**D. Contract Renegotiation Discussions**

- X. Committee Member Comments –** Member Brunet asked if there any specifics with funding the groundwater modeling. Ms. Ogren indicated she did not have any information related to this but said she would get back with the Committee on this.

Member Lee indicated the City of Grover Beach voted on prop 218 and approved a rate increase in the 25% range effective as of July 1, 2017 and backfilled the water fund. A recommendation to do another rate increase in October was approved with a requirement that staff brings back the recommendation to City Council for review before implementation.

Member Barneich indicated citizens are asking if we are out of the drought and if the City of Arroyo Grande restrictions can be lifted. She expressed concern if the LLRP and restrictions are lifted citizens could return to pre-drought habits and that we could be in a drought even if we are currently in a wet year.

**Meeting Adjourned at 7:50 PM**

**Next Regularly Scheduled Meeting**

Next Regular Meeting is Tentatively Scheduled for Thursday, July 20, 2017 at 6:30 PM at Oceano Community Services District.

Respectfully Submitted,

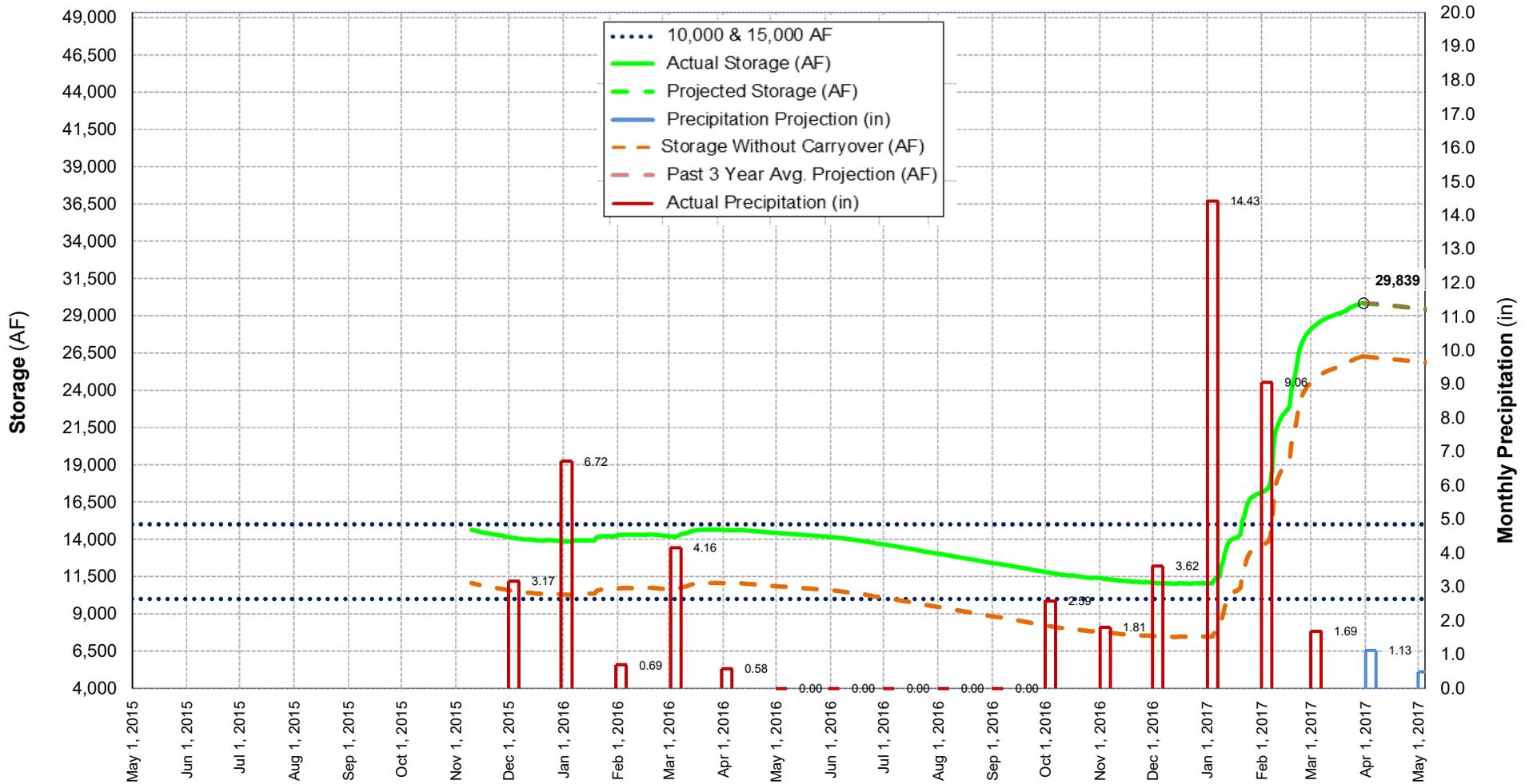
Andrea M Montes

County of San Luis Obispo Public Works Department

## Lopez Reservoir Storage Projections

(precipitation scenario source: www.LongRangeWeather.com)

Revised: 3/31/2017



**Notes:**

- For "Dry Months" (April - October), projected increases and/or decreases in storage estimated to mimic conditions from 2015.
- For "Wet Months" (November - March), projected storage declines assume LRRP annual downstream release of 3,800 AFY and deliveries of 4,077 AFY.
- For "Wet Months", projected storage increases based on historic trends from actual storm data for the period of 12/1993 through 6/2011.
- Storage projection for "Wet Months" assume that unsaturated conditions exist.
- Rainfall projection provided by www.LongRangeWeather.com, and updated 2/1/2017. Evaporation included in storage projection.
- Past 3 Year Avg. Projection uses historic daily capacity changes averaged from 2014, 2015, 2016
- Actual precipitation is the total of the previous month.
- Actual precipitation is the rainfall measured by FRM at Lopez Rec Area.



**May 18, 2017**

**MEMORANDUM**

**TO:** Flood Control Zone 3 Advisory Committee  
**FROM:** Kristi Smith, Accountant  
**SUBJECT:** Flood Control Zone 3, Third Quarter Budget Status, Fiscal Year 2016/17

**Recommendation**

The item to be received and filed.

**Summary**

Attached please find the third quarter budget versus actual results for the fiscal year 2016/17. The \$5.1 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 approximately 55% of the annual budget.

Total Budget	Expenses through Q3	Balance Available	% of Budget Expended
5,168,546	2,865,877	2,302,669	55%

**Routine O&M** annual budget is approximately \$3.5 million dollars. At 75% of the fiscal year, expenses were 67% of the annual budget, which results in approximately \$1.1 million dollars of available balance for the remainder of the year.

Total Budget	Expenses through Q3	Balance Available	% of Budget Expended
3,506,162	2,351,376	1,154,786	67%

Expenses for the third quarter are slightly under the budgeted levels in this category.

**Non Routine O&M** annual budget is approximately \$828,000 dollars. At 75% of the fiscal year, expenses were 42% of the annual budget, which results in approximately \$483,000 dollars of available balance for the remainder of the year. For most of the 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
828,477	345,119	483,358	42%

The majority of the balance available in this category is due to the Lopez Water Rights/Habitat Conservation Plan (HCP). The contract issue was resolved in early May, and work will begin to move forward again.

**Capital Outlay** annual budget is approximately \$834,000 dollars. At 75% of the fiscal year, expenses were 20% of the annual budget, which results in approximately \$664,000 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
833,908	169,383	664,525	20%

The majority of the balance available in this category is due to the pH Suppression & Scaling Control project.

**Other Agency Involvement/Impact**

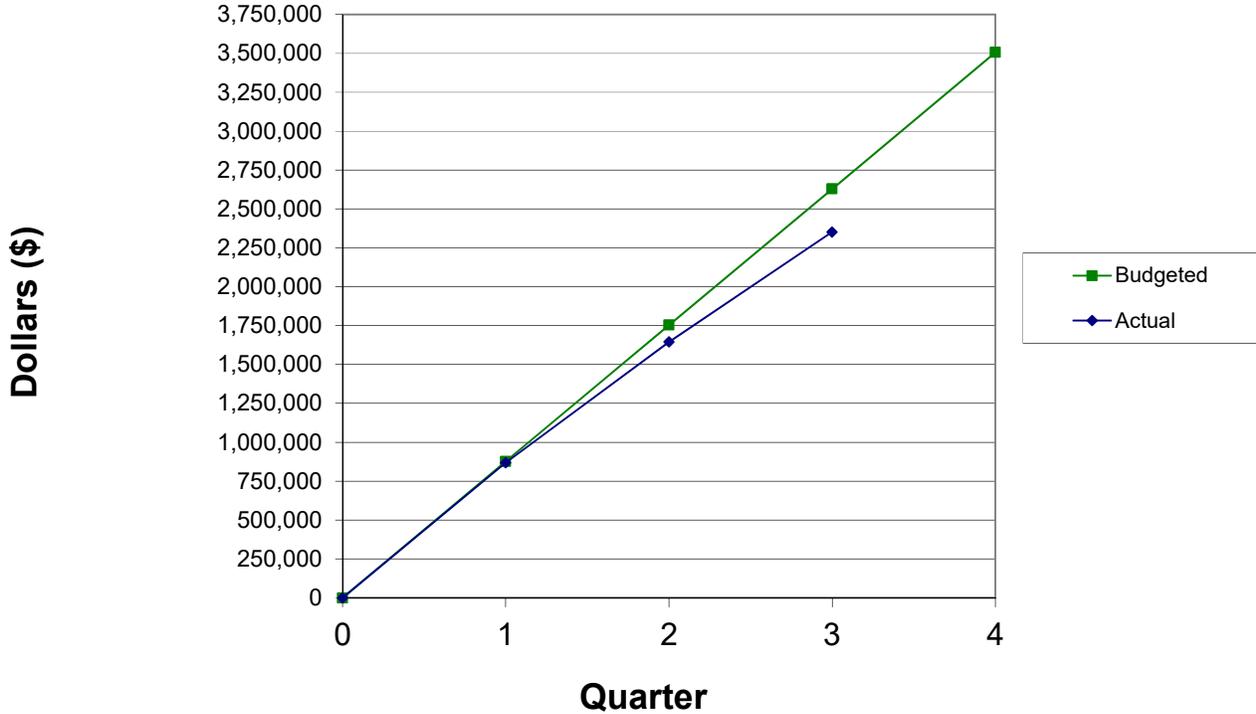
The agencies involved are: City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, Oceano Community Services District, and County Service Area 12. Subcontractors of CSA 12 include Port San Luis Harbor District and Avila Beach Community Services District.

**Financial Consideration**

All agencies are current on their payments. The 1<sup>st</sup> installment billings for FY 2017/18 will be mailed this month, and payments are due July 1, 2017.

Zone 3 Budget Status  
2nd Quarter FY16/17

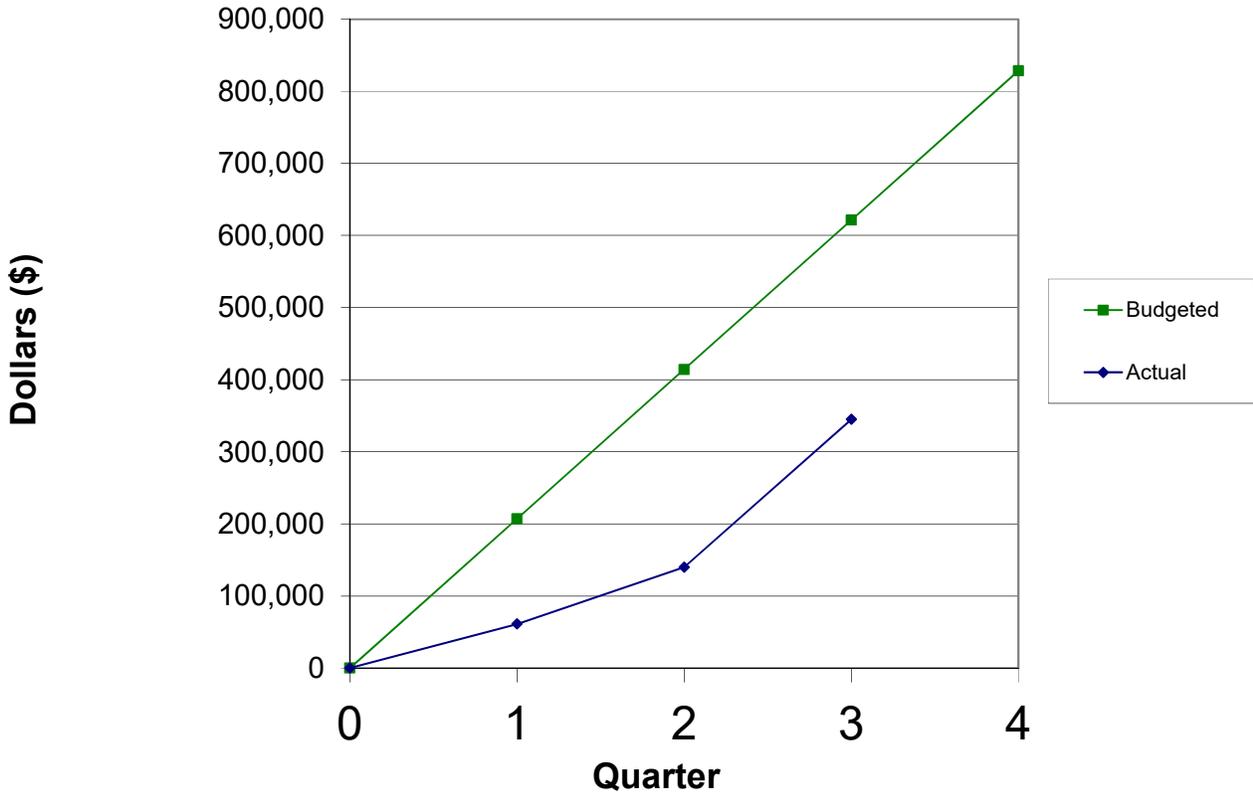
### Routine Operation and Maintenance



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	22,367	5,679	4,773	5,683	-	16,135	72%	
Chemicals - Water Treatment Plant	306,952	73,341	54,500	83,029	-	210,870	69%	96,082
Utilities - Water Treatment Plant	172,875	50,665	41,667	36,043	-	128,375	74%	44,500
All Other Costs - Water Treatment Plant	1,882,980	506,004	478,981	394,263	-	1,379,249	73%	503,731
Terminal	157,803	24,851	24,620	23,006	-	72,478	46%	85,325
Main Dam	208,334	96,559	4,489	40,871	-	141,918	68%	66,416
Other	777,218	117,342	172,815	128,329	-	418,485	54%	358,733
<b>Expenses</b>		<b>868,762</b>	<b>777,072</b>	<b>705,541</b>	<b>-</b>	<b>2,351,376</b>	<b>67%</b>	<b>1,154,786</b>
<b>Budget</b>	<b>3,506,162</b>	<b>876,540</b>	<b>876,540</b>	<b>876,540</b>	<b>876,540</b>	<b>3,506,162</b>		
<b>Variance (over)/under</b>		<b>7,778</b>	<b>99,468</b>	<b>170,998</b>	<b>876,540</b>	<b>1,154,784</b>		
<b>% Variance</b>		<b>1%</b>	<b>11%</b>	<b>20%</b>	<b>100%</b>			

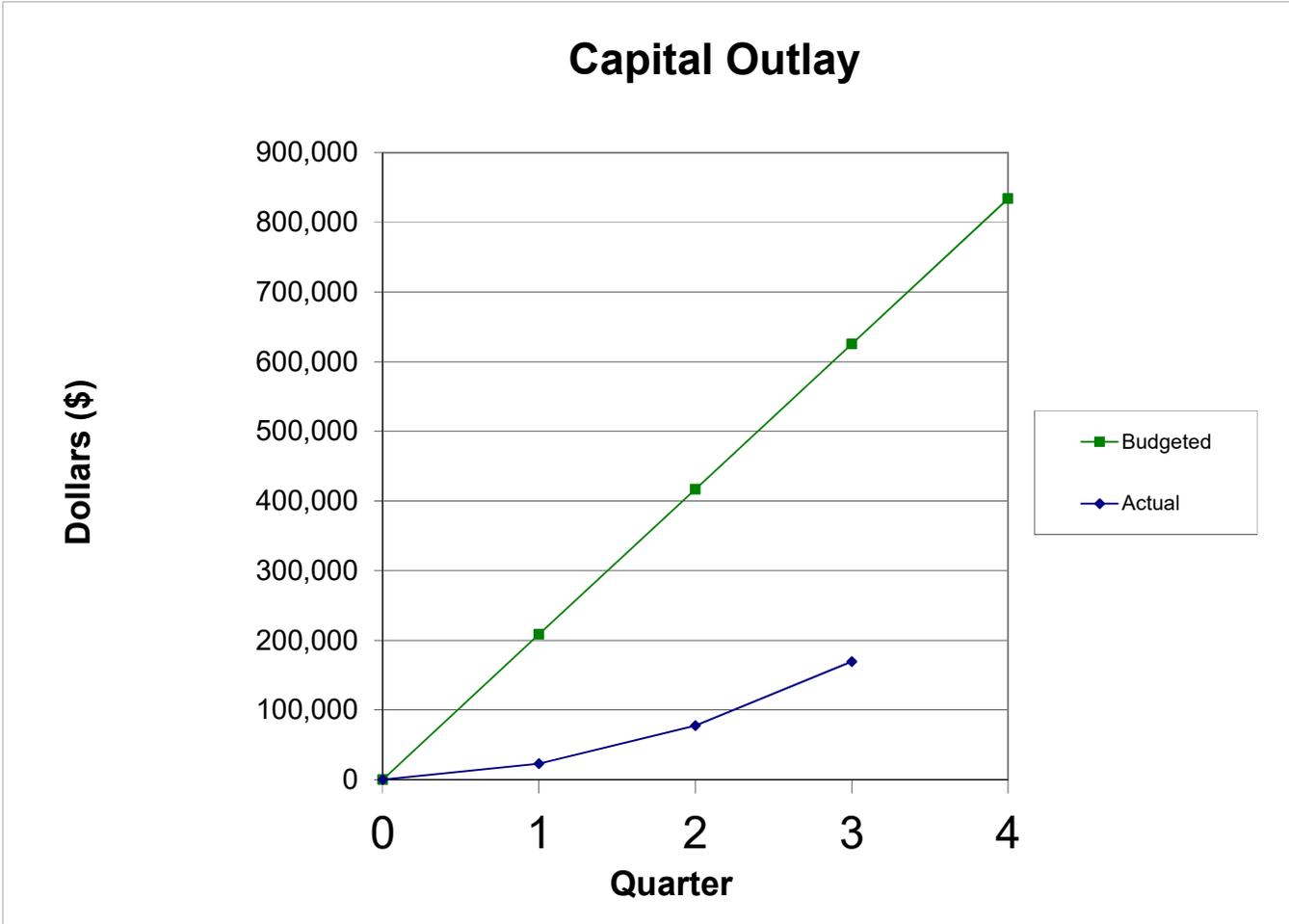
Zone 3 Budget Status  
3rd Quarter FY16/17

## 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	294,026	10,045	7,028	6,506	-	23,578	8%	270,448
Cathodic Protection Maint	14,172	-	-	-	-	-	0%	14,172
Terminal Resvr Intake Repair	28,953	39,813	-	-	-	39,813	138%	(10,860)
Dam Intake Fac & Ops Assessment	25,000	-	-	4,101	-	4,101	16%	20,899
Structural Assessment Term Resv Dam	-	-	-	-	-	-	0%	-
Equip Storage Garage Design	-	-	-	-	-	-	0%	-
Meadow Creek Diversion Channel	6,946	(9,138)	13,553	-	-	4,415	64%	2,531
Pressure Transducers	-	-	-	-	-	-	0%	-
Pigging-Unit B	117,195	-	-	-	-	-	0%	117,195
PLC Replacement & Programming	94,227	2,126	1,804	10,563	-	14,493	15%	79,734
Replace Membrane Strainers	175,000	-	4,502	152,403	-	156,905	90%	18,095
Existing Bypass Pipeline Condition Asmt	-	-	7,274	21,293	-	28,567	0%	(28,567)
Other	72,958	18,429	44,796	10,021	-	73,247	100%	(289)
<b>Expenses</b>		<b>61,275</b>	<b>78,957</b>	<b>204,888</b>	<b>-</b>	<b>345,119</b>	<b>42%</b>	<b>483,358</b>
<b>Budget</b>	<b>828,477</b>	<b>207,119</b>	<b>207,119</b>	<b>207,119</b>	<b>207,119</b>	<b>828,477</b>		
<b>Variance (over)/under</b>		<b>145,844</b>	<b>128,163</b>	<b>2,232</b>	<b>207,119</b>	<b>483,358</b>		
<b>% Variance</b>		<b>70%</b>	<b>62%</b>	<b>1%</b>	<b>100%</b>			

Zone 3 Budget Status  
3rd Quarter FY16/17



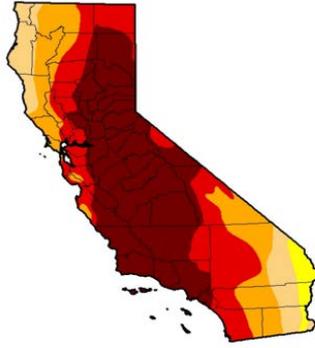
Capital Outlay Projects	Total Budget	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	Total Exp as % of Budget	Total Balance Avail
Lopez Turnouts SCADA System	50,367	14,633	14,115	7,242	-	35,990	71%	14,377
WTP 6th Membrane Filtration Module Addit	30,403	1,405	1,897	2,650	-	5,952	20%	24,451
VFD Replacement Project	9,188	174	6,859	3,369	-	10,402	113%	(1,214)
Power Monitoring Project	3,328	3,278	51	-	-	3,328	100%	(0)
Lopez Dam Repair V-Ditch Adjacent to Spi	45,629	3,023	29,682	231	-	32,936	72%	12,693
WTP Resurface Parking Lot	44,993	421	586	4,182	-	5,189	12%	39,804
Improved Boat Access at Term Resv	-	-	-	-	-	-	0%	-
Ammonia Analyzer Equip Repl	-	-	-	-	-	-	0%	-
pH Suppression & Scaling Control	625,000	-	1,410	74,175	-	75,585	12%	549,415
<b>Capital Equipment</b>								
Coagulant Feed Alarm System	-	-	-	-	-	-	0%	-
Water Purify System Milli-Q Double DI	-	-	-	-	-	-	0%	-
Water Treatment Barge	-	-	-	-	-	-	0%	-
Various Equipment Replacement	25,000	-	-	-	-	-	0%	25,000
<b>Expenses</b>		22,934	54,599	91,850	-	169,383	20%	664,525
<b>Budget</b>	833,908	208,477	208,477	208,477	208,477	833,908		
<b>Variance (over)/under</b>		185,543	153,878	116,627	208,477	664,525		
<b>% Variance</b>		89%	74%	56%	100%			

# U.S. DROUGHT MONITOR

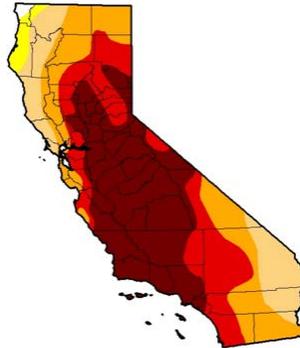
November 2015



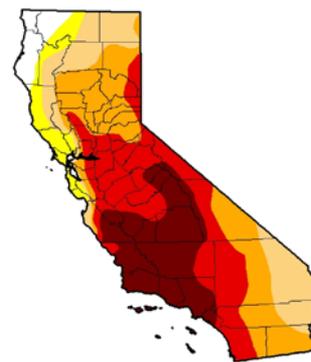
January 2016



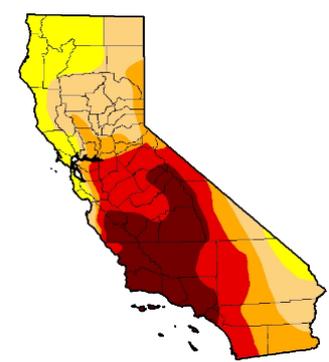
March 2016



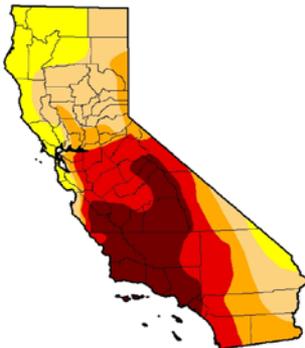
May 2016



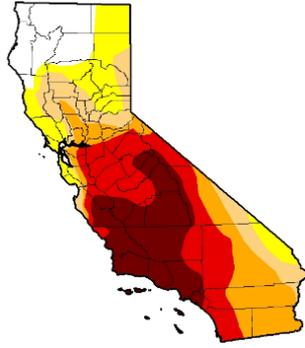
July 2016



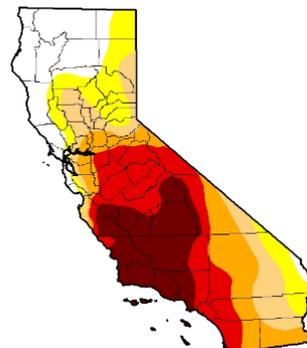
September 2016



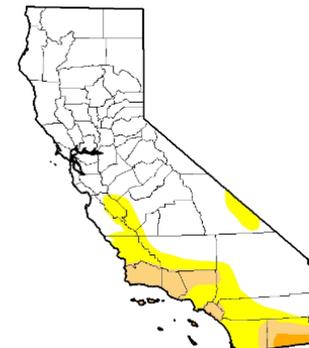
November 2016



January 2017



March 2017



May 2017



## Intensity:

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

- D3 - Extreme Drought
- D4 - Exceptional Drought

Permission to reproduce the map

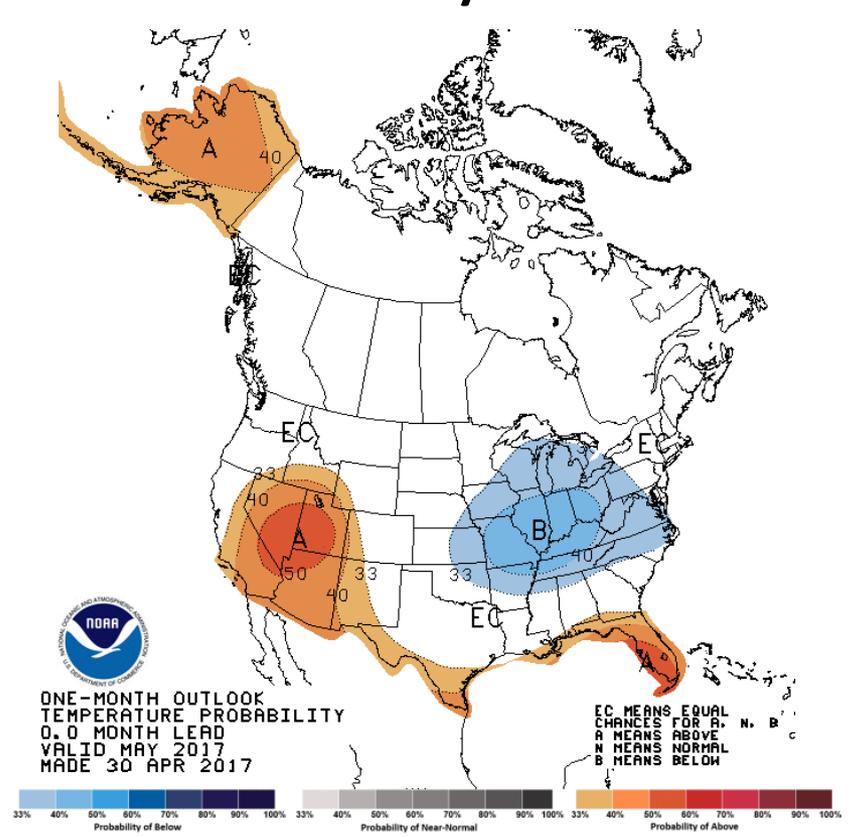
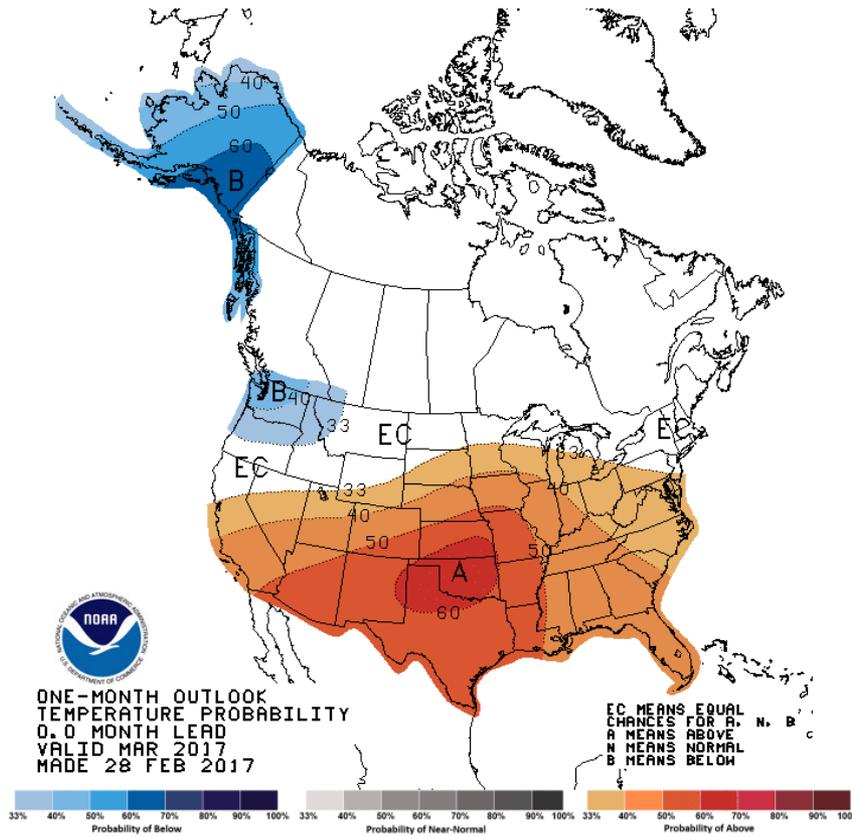
If you reproduce the U.S. Drought Monitor map, please use this wording:

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.

# NOAA TEMPERATURE FORECAST

## March

## May



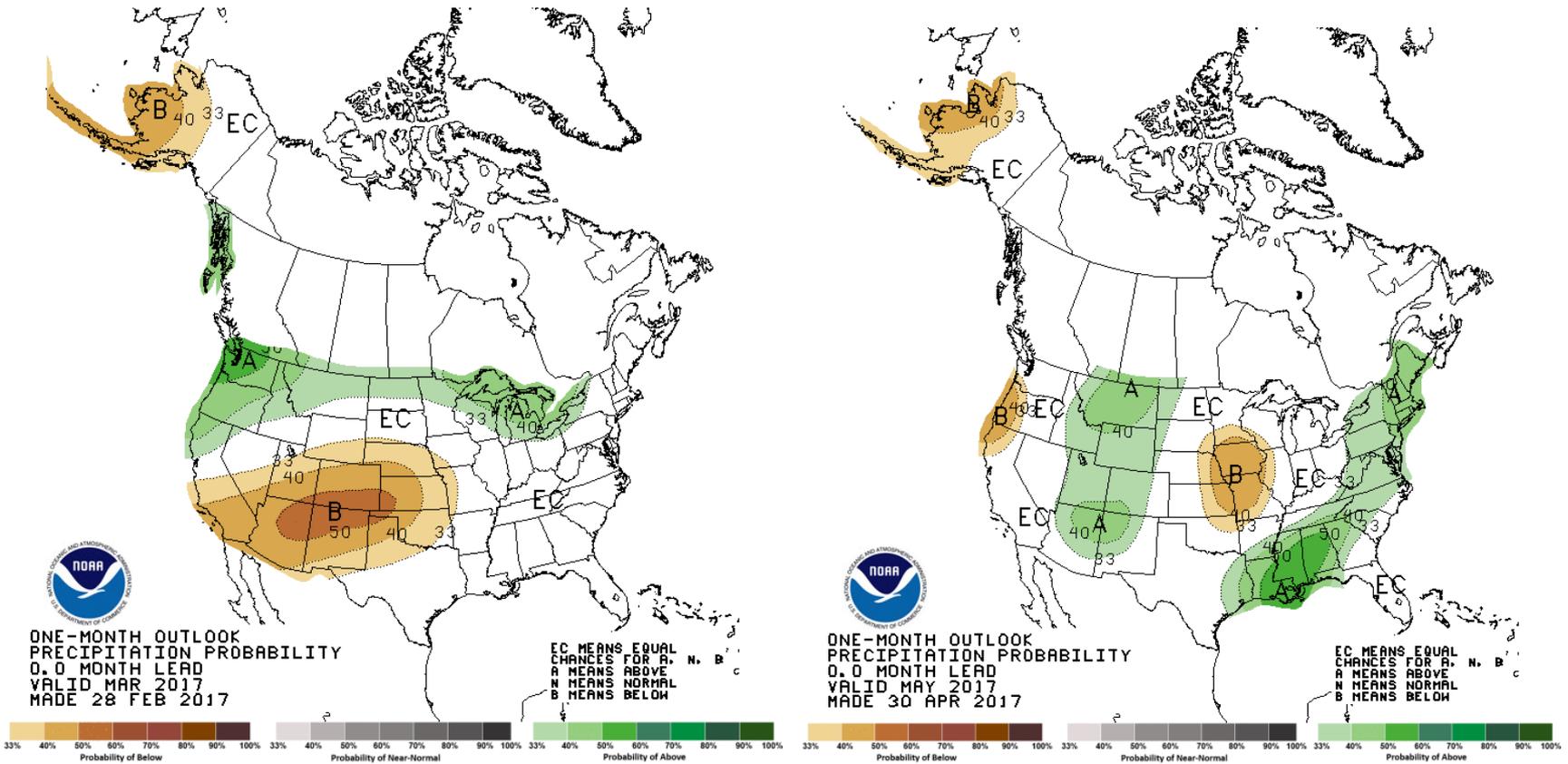
## March Meeting

## May Meeting

# NOAA PRECIPITATION FORECAST

## March

## May



## March Meeting

## May Meeting



May 18, 2017

**MEMORANDUM**

To: Flood Control Zone 3 Advisory Committee

From: Katie Drexhage, Environmental Resource Specialist

Subject: Contract with ECORP Consulting to Conduct Modeling of Potential Water Supply Contract Changes

**DISCUSSION**

At your November 17, 2016 meeting, you approved and agreed to fund a contract with ECORP Consulting for \$113,545 to provide modeling information about the interplay between the water supply contracts and HCP efforts. The original contract with ECORP expired on January 1, 2017. A new contract was created to include this modeling effort for water supply contracts, continued work on the HCP, and future coordination with regulatory permitting agencies. This contract was approved by the San Luis Obispo County Board of Supervisors on May 2, 2017. Enclosed is the cost break-down, and scope and cost estimate provided by ECORP Consulting for your reference. ECORP Consulting anticipates beginning coordination with the TAC in late May.

Zone 3 - Proportionate share of cost for ECORP modeling contract

Estimated cost of ECORP contract = \$113,545

	Arroyo Grande	Grover Beach	Pismo Beach	CSA 12	Oceano CSD	Other State Water Users	Totals
Contract % of Water Supply	50.55%	17.66%	17.66%	7.44%	6.69%		100.00%
15/16 Final Credit/(Billing):	101,711.80	33,939.33	36,117.89	(16,923.92)	13,089.39	3,143.50	171,077.99
Allocation of ECORP contract cost:	(57,397.00)	(20,052.05)	(20,052.05)	(8,447.75)	(7,596.16)	-	(113,545.00)
Credit Memo/(Bill) to be issued:	44,314.80	13,887.28	16,065.84	(25,371.67)	5,493.23	3,143.50	57,532.99



## **MEMORANDUM**

**TO:** Katie Drexhage, San Luis Obispo Flood Control & Water Conservation District

**CC:** Mark Hutchinson and Jill Ogren

**FROM:** Michael Preszler

**DATE:** 19 September 2016

**RE:** ***San Luis Obispo County Water Supply Evaluation Work Plan***

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### **Work Plan**

ECORP Consulting, Inc. (ECORP) will initiate the San Luis Obispo County Water Supply Evaluation to support Zone 3 of the San Luis Obispo Flood Control & Water Conservation District (District) by carrying out the tasks described below. This scope of work and accompanying cost proposal is in response to the District's request on behalf of agencies that contract with Zone 3 for water supplies from the Lopez Project. The Scope of Work and Cost Proposal is based on our developed understanding of water supply assets in the Arroyo Grande Creek watershed, directions provided by the District, our professional assessment of the most effective approach based on our experience, and our existing work on developing a habitat conservation plan for Arroyo Grande creek. We have thoroughly considered many critical issues associated with this project and have integrated that understanding into our proposed comprehensive analysis for this work effort.

The fundamental objective of the evaluation described here is to identify potential opportunities to modify Lopez Water Project operational provisions to establish storage rights for Zone 3 Contracting Agencies that obtain supplies from the Lopez Project, which will help ensure multi-year water resource planning, in contrast to the historical/existing contracts which encourage a "use it or lose it" annual approach to water resource planning. Water supply improvements could include increased reliability, certainty, and delivery. Potential options will be determined based on review of past studies, discussions with District staff and representatives from the Zone 3 Contracting Agencies, and by employing an over-arching consideration of dependent elements including, existing and potential project operational flexibility, contracts, demands, water rights, hydrology, etc. as well as potential future threats to water supply reliability such as increased regulatory constraints and climate change.

### **Task 1.0 Program Oversight and Coordination**

The ECORP Project Manager will, over the duration of the project, undertake ongoing management and oversight of all project activities. This will require detailed coordination with

the project team, the District, and representatives of the Zone 3 Contracting Agencies. Activities under this task are assumed to include; schedule development and review, progress monitoring, technical collaboration, personnel/staff planning, budgetary oversight, and ongoing liaison with the District and the other agencies.

The Project Manager and key project team members will prepare for and attend a project kick-off meeting with the District and representatives of the Zone 3 Contracting Agencies. This meeting is intended to officially initiate the project and will address matters such as; project approach, key project issues, preliminary project schedule, immediate activities, lines of communication/reporting, key milestones, confidentiality, and contract administration.

Over the duration of the project assignment, the Project Manager and key staff will prepare for and attend up to two (2) two-hour coordination meetings with the District and representatives of the Zone 3 Contracting Agencies. These meetings would be scheduled to provide a forum for discussion on topics including, but not necessarily limited to the project approach, status, key findings, project definition, and project technical evaluation. These would be informal ad hoc meetings, and scheduled as specific needs arise.

ECORP will perform quality assurance/quality control reviews of technical memos, technical reports, and major work projects. The Project Manager will perform QA/QC reviews of all deliverables.

The Project Manager will prepare progress reports for submittal to the District and the Zone 3 Contracting Agencies. These reports will capture the activities of the project team. They will include summaries of meetings, technical progress, status of work effort, and a summary of anticipated activities.

**Task 1.0 Deliverables:** Meeting agendas, meeting notes, and project progress reports.

## **Task 2.0 Develop Basic Information and Project Approach**

ECORP is familiar with hydrologic and operational aspects of the Lopez Water Project through previous work efforts. This task is for ECORP to review information including existing water contracts, water demand projections, and additional pertinent information deemed necessary to inform development of the project approach. Similar projects with multiple demand accounting utilizing storage will be reviewed and elements considered for inclusion in this analysis. This task includes development of a project approach needed to assure results of the technical evaluation will support the goals and objectives of the District and the Zone 3 Contracting Agencies. This task includes working with the District and the agencies to fully develop over-arching project objectives. Representative scenarios to quantify water supply availability under three (3) alternative scenarios that reflect differing storage rights for the Zone 3 Contracting Agencies will be determined based on water availability (storage volume, hydrology conditions, acceptable curtailments, etc.). The 2014/15 Water Supply Production and Delivery Plan will be reviewed and used to assured all aspects of the system are simulated appropriately. This task also includes updating the hydrologic record by extending the study period through 2015 to incorporate this critically dry condition.

### **Task 3.0 Technical Evaluation**

As part of the Lopez Water Project Habitat Conservation Plan work effort, ECORP developed an operational simulation model of the District's Zone 3. The work effort described by this proposal is to use the model to evaluate each Zone 3 contractor's allocation based on contract concepts developed in Task 2. Based on our experience, we feel that all contract concepts should be thoroughly evaluated to identify advantages and any unanticipated impacts to contractor water availability through a full range of anticipated hydrologic conditions. The simulation model will be utilized and expanded as required to investigate system constraints and opportunities to determine effects of alternative operational scenarios to best meet the goals and objects of this effort. This simulation model of the Lopez Water Project will be used to evaluate storage scenarios developed under Task 2.0. The simulation model will be used to determine each Zone 3 contractor's water supply allocation under differing contract storage concepts. This will allow definition of how each Zone 3 contractor is affected by potential modifications to contracts terms.

### **Task 4.0 Develop Recommendations**

A purpose of this evaluation is to identify feasible modifications to the Lopez Water Project operation that would result in an increased and more reliable water supply under new contract storage scenarios. Ultimately, we will identify suggested modifications to water supply contracts and operating policy. Our goal is to provide the District and Zone 3 Contracting Agencies with an informed evaluation aimed at maximizing water available to meet demand and reliability to the system. Project operational scenarios and associated operational strategies will be considered to meet these objectives. Recommendations for project operation that could be implemented and/or warrant additional evaluation will be developed. Recommendations will include detailed operational strategies and expected results of each project operational scenario.

### **Task 5.0 Prepare Draft and Final Memorandum**

ECORP will summarize the approach, methodology and findings of this evaluation into a technical memorandum. A draft memorandum will be prepared and submitted in Microsoft Word format to the District for review with the Zone 3 Contracting Agencies. Comments received on the draft memorandum will be incorporated into the final memorandum. The final memorandum will be provided to the District in .PDF format. All tables, charts, graphs and supporting data will be provided in original file format.

**Task 5.0 Deliverables:** One (1) copy of the Draft Memorandum in Microsoft Word format and one (1) electronic copy of the Final Memorandum in .PDF format.

### **Task 6.0 Zone 3 Coordination**

It is assumed that ECORP will participate in three (3) Zone 3 meetings to be held in association with this work effort. The first meeting will be held after review of basic information and development of the project approach (Task 2.0). This meeting is to present over-arching goals and objectives of this effort and to solicit input in a timely manner to be included in the study. The second meeting will be held once significant information has been developed describing project findings as well as draft proposed recommendations. This final meeting is to be held near the end of the project.

**Task 6.0 Deliverables:** Meeting agendas, presentation material and meeting notes.

**COST PROPOSAL – September 19, 2016**  
**SAN LUIS OBISPO COUNTY WATER SUPPLY EVALUATION**  
**SUBMITTED TO SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT**  
**BY ECORP CONSULTING, INC.**

	Team Member	Role on Project	Michael Preszler	Jeff Meyer	Jared Emery	Holly McClure	Brian Fedrow	Toni Clark	Graphics / GIS Specialist	Hours Per Subtask	Cost Per Subtask		
												Rate per hour	
<b>\$15,150</b>		<b>Task 1.0 - Program Oversight and Coordination</b>											
		1.1 Project Management and Coordinate Task Activities	12			12		2		26	\$ 4,590		
		1.2 Team Kick-Off Meeting with District	8	8						16	\$ 3,520		
		1.3 Up to 2-2 hour Coordination Meetings with District	16	16						32	\$ 7,040		
<b>\$17,040</b>		<b>Task 2.0 - Develop Basic Information and Project Approach</b>											
		2.1 Review available information	12	8	4					24	\$ 5,080		
		2.2 Develop Project Approach	24	16	8					48	\$ 10,160		
		2.3 Extend Hydrology to include water year 2015	2		8					10	\$ 1,800		
<b>\$33,360</b>		<b>Task 3.0 - Technical Evaluation</b>											
		3.1 Develop conceptual allocation scenarios (contract concepts)	24	24	8					56	\$ 11,920		
		3.2 Incorporate scenarios in simulation model	4	16	32					52	\$ 9,840		
		3.3 Evaluate allocation scenarios	12	16	32					60	\$ 11,600		
<b>\$11,240</b>		<b>Task 4.0 - Develop Recommendations</b>											
		4.1 Determine recommendations	24	24	4					52	\$ 11,240		
<b>\$19,720</b>		<b>Task 5.0 - Prepare Draft and Final Memorandum</b>											
		5.1 Prepare Draft Memorandum	32	16	6	8	4		16	82	\$ 15,140		
		5.2 Incorporate and Address Changes	4	4	2	4			4	18	\$ 3,120		
		5.3 Prepare Final Memorandum	2	2		2	2			8	\$ 1,460		
<b>\$15,010</b>		<b>Task 6.0 - Zone 3 Coordination</b>											
		6.1 Zone 3 coordination activities	8	4		8			6	26	\$ 4,450		
		6.2 Up to 3 Zone 3 meetings	24	24						48	\$ 10,560		
		Total Hours	208	178	104	34	6	2	26	558			
		Total Labor	\$45,760	\$39,160	\$17,680	\$4,760	\$900	\$270	\$2,980				
										Sub Total =	\$ 111,520		
										Direct Expenses (3,750 miles X \$0.54) =	\$ 2,025		
										<b>Total Budget =</b>	<b>\$ 113,545</b>		



SAN LUIS OBISPO COUNTY  
**DEPARTMENT OF PUBLIC WORKS**

Wade Horton, Director

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County Government Center, Room 206 • San Luis Obispo CA 93408 • (805) 781-5252

Fax (805) 781-1229

email address: pwd@co.slo.ca.us



**TO:** Zone 3 Advisory Committee  
**FROM:** David Spiegel, PE  
**DATE:** May 18, 2017  
**SUBJECT:** Zone 3 Capital Projects Update

**Project Updates:**

- Turnout SCADA Project
  - Scheduling County IT SCADA User Read Only Integration
    - Data Screen complete, Log In process in development
    - GOAL June TAC
- Parking & Roadway Resurfacing
  - Prep Work Complete
  - Construction – May/June 2017
- PLC Replacement & Programming
  - Contract has been signed and PO issued
  - Working with PALL for work plan and schedule
  - Plan to install with strainers and 6<sup>th</sup> Rack completion
- Membrane Strainer Replacement Project -Unchanged
  - New strainers are on-site & ready to install
  - Contracting with Cushman for installation and flushing
  - Flush and inspect downstream piping
  - Adding 20" Valve Replacement
- 6<sup>th</sup> Rack Addition-Unchanged
  - Construction 80% complete
  - Completion has been delayed until Membrane strainers have been replaced
  - Approximately 2 weeks required to complete install
- Equipment Audit & Replacement
  - Work proposed to continue in 2017/18

**Upcoming Projects (Requested FY 2017/18):**

- Lopez WTP Safety Upgrades
- Pressure Transducers
- Structural Assessment of Terminal Reservoir
- Cathodic Protection Survey
- Replace Membrane Feed Pumps (1 per year)
- Fault Zone Repair – Dam Left Abutment
- Repair Domestic & Fire Tanks
- Equipment Storage
- Replace Ammonia Analyzer

**Deferred Projects**

- Improve Boat Access (FY 2018/19)
- Power Monitoring (FY 2018/19)



**COUNTY OF SAN LUIS OBISPO**  
**Department of Public Works**  
Wade Horton, *Director*

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**TO:** Zone 3 Advisory Committee

**FROM:** Jill Ogren, Senior Utilities Engineer

**VIA:** Mark Hutchinson, Deputy Director

**DATE:** May 18, 2017

**SUBJECT:** Rescinding of County-Wide Emergency Drought Proclamation and the Zone 3 Low Reservoir Response Plan (LRRP)

#### Discussion

On March 11, 2014, the County of San Luis Obispo issued a Proclamation of Local Emergency due to ongoing drought conditions. This proclamation, along with a Lopez reservoir capacity of 20,000 acre-feet or less, are the two triggers necessary to implement the LRRP. The Zone 3 water project has been operating under the LRRP since April 2015 based on the above two triggers.

At this time, the reservoir is above the 20,000 acre-foot level (~30,650 AF) and the Board of Supervisors is considering rescinding the drought emergency proclamation on May 23, 2017. If the Board rescinds the proclamation, then the two triggers are not met and the LRRP is no longer in effect. Under this scenario, Zone 3 would return to normal operations meaning Contractors water supplies including available surplus water for 2017/18 would be calculated per the water supply contracts and retro-actively to April 1, 2017. At the May 2, 2017 Board of Supervisors meeting, agencies water supplies under this scenario were presented. Table 1 provides a summary of each agencies supplies under this scenario (as presented to the Board).

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Table 1.

## Agency Water Supplies for 2017/18

Contractor	Entitlement	Surplus Available Total Surplus by percent of Entitlement <sup>2</sup>	Total Water Supply Available by Agency Entitlement + Surplus
Arroyo Grande	2,290	1,497	3,787
Pismo Beach <sup>1</sup>	892	583	1,475
Grover Beach	800	523	1,323
Oceano CSD	303	198	501
CSA 12	245	160	405
<b>Sub Totals</b>	<b>4,530</b>	<b>2,961</b>	<b>7,491</b>
Downstream	4,200	0	4,200
<b>Total</b>	<b>8,730</b>	<b>2,961</b>	<b>11,691</b>

**NOTES:**

1. Includes subcontract for 92 AF from CSA 12
2. Surplus water as declared on 5/02/2017 at BOS

The LRRP allows Contractors to “bank” any of their own unused entitlement water and carry it over to the next year to extend the time that they may have water delivered while the Board of Supervisors Drought Emergency is in effect. Since 2015 Contractors through conservation and utilizing other sources of water have cumulatively banked water in amounts shown in Table 2. If Zone 3 remains under the LRRP their water supplies for 2017/18 are shown below in Table 2.

Table 2.

## Agency Water Supplies While Under the LRRP for 2017/18

Contractor	Entitlement	Total Cumulative Carryover	Total Water Supply Available by Agency Entitlement + Carryover
Arroyo Grande	2,290	1,249	3,539.2
Pismo Beach	892	1,834	2,726.2
Grover Beach	800	240	1,040.2
Oceano CSD	303	840	1,143.5
CSA 12	245	500	744.6
<b>Sub Totals</b>	<b>4,530</b>	<b>4,664</b>	<b>9,194</b>
Downstream	4,200	0	4,200
<b>Total</b>	<b>8,730</b>	<b>4,664</b>	<b>13,394</b>

Zone 3 Technical Advisory Committee is recommending that your Advisory Committee send a letter to the Board of Supervisors requesting that Zone 3 remain under the Drought Emergency Proclamation thereby remaining under the LRRP. Zone 3 Technical Advisory Committee has prepared a staff report and *draft* letter to the Board of Supervisor's supporting their recommendation, see next item in your agenda packet.

**May 18, 2017**

**MEMORANDUM**

**TO:** Flood Control Zone 3 Advisory Committee

**FROM:** Flood Control Zone 3 Technical Advisory Committee

**SUBJECT: Zone 3 Emergency Drought Proclamation**

**Recommendation**

The Zone 3 Technical Advisory Committee (TAC) has reviewed the current water supply conditions for the Zone 3 agencies and recommends that the Zone 3 Advisory Committee (Advisory Committee) submit a letter to the San Luis Obispo County Flood Control and Water Conservation District (District) Board of Supervisors (BOS) requesting that the Emergency Drought Proclamation for Zone 3 remain until the Zone 3 agencies have had the opportunity to better understand the impact of the 2016/17 rainfall on their water supply portfolio and specifically groundwater levels in the Northern Cities Management Area (NCMA) of the Santa Maria Groundwater Basin (SMGB). A draft letter to the BOS is attached for your review and consideration.

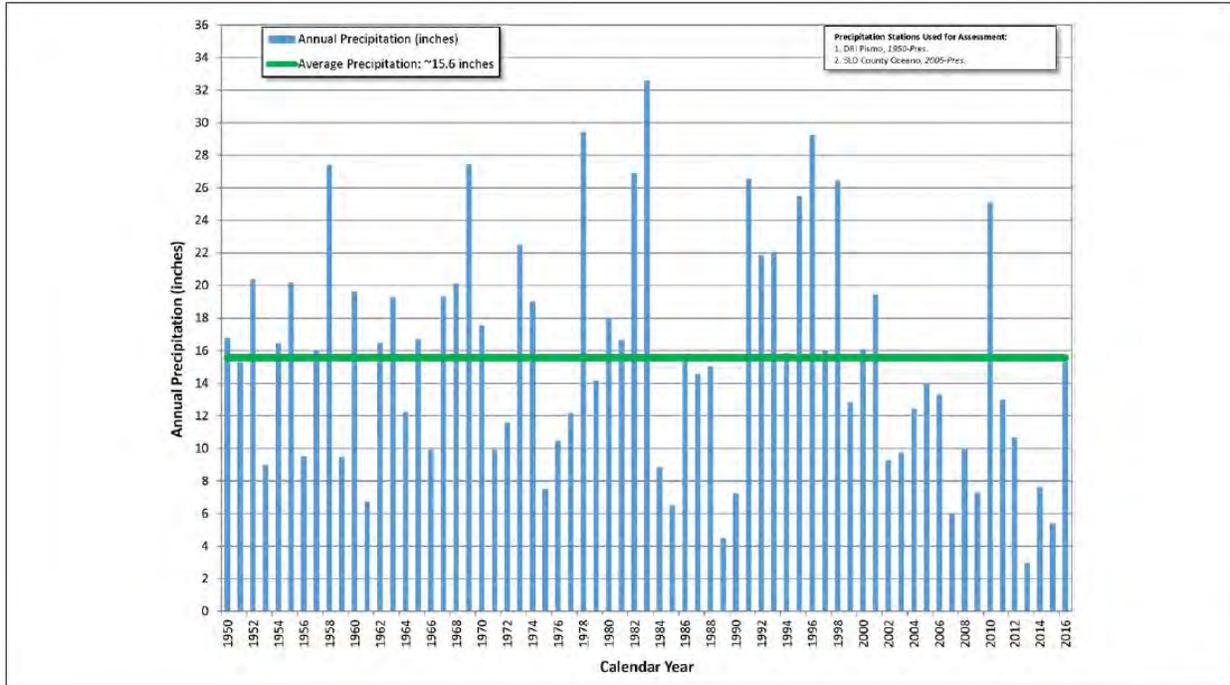
**Discussion**

Improved hydrologic conditions in 2016 and 2017 have greatly improved the water supply forecast for the Zone 3 agencies, however, the Zone 3 TAC believes that additional evaluation of the current status of their water supply portfolio is needed before rescinding the Emergency Drought Proclamation for the Zone 3 agencies. The Zone 3 TAC has identified the following reasons why the Emergency Drought Proclamation should remain in place for Zone 3 for the near future.

**Groundwater Supply Recovery** – While the impact of the recent rain events on surface water supplies are relatively easy to measure it takes additional time to understand the benefit to groundwater supplies. The Zone 3 agencies have not had the opportunity to evaluate the County of San Luis Obispo’s Spring 2017 groundwater monitoring data to determine what impact the additional rainfall has had on groundwater levels throughout the NCMA. Compared to surface water supplies, groundwater supplies typically require additional time to recover from extended drought conditions and due to the threat of seawater intrusion in the NCMA it is critical the Zone 3 agencies have the opportunity to evaluate the health of their groundwater basin before declaring

the end of the Drought Emergency.

**Extended Drought** – As shown below in the Annual Precipitation graph from the 2016 NCMA Annual Report, the Zone 3 Agencies have seen below-average rainfall in fourteen (14) of the last fifteen (15) years and this extended drought has significantly impacted their surface and groundwater supplies. Even with above average rainfall in 2017, there is still a significant cumulative rainfall deficit over the last 15 years and one year of above-average rainfall may not be sufficient to restore surface and groundwater levels to pre-drought conditions.

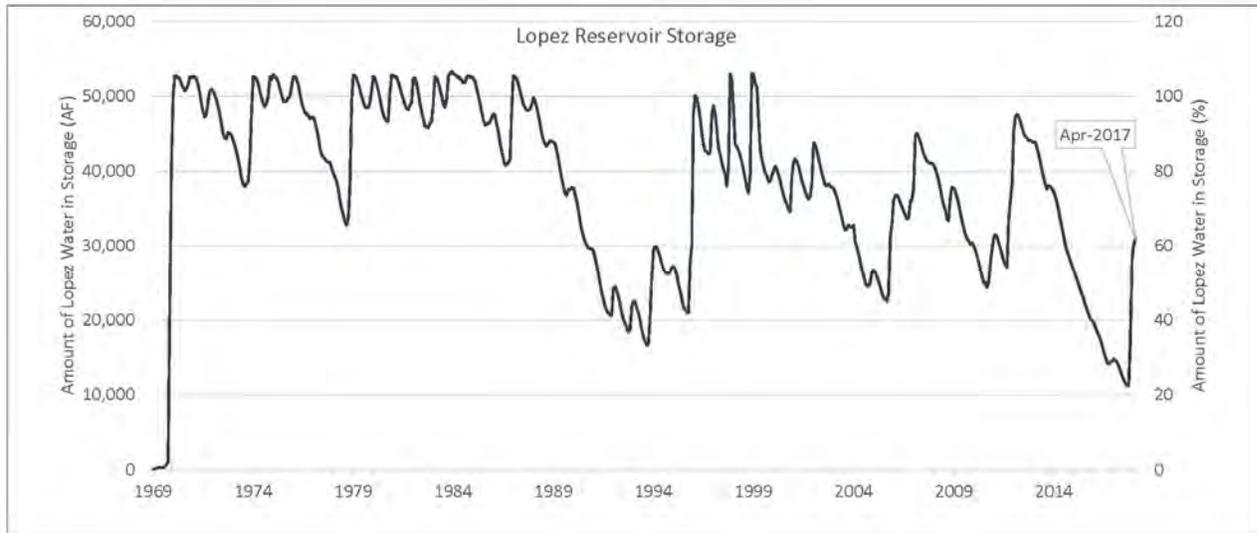


**FIGURE 3**  
Annual Precipitation 1950 to 2016  
Northern Cities Management Area  
San Luis Obispo County, California

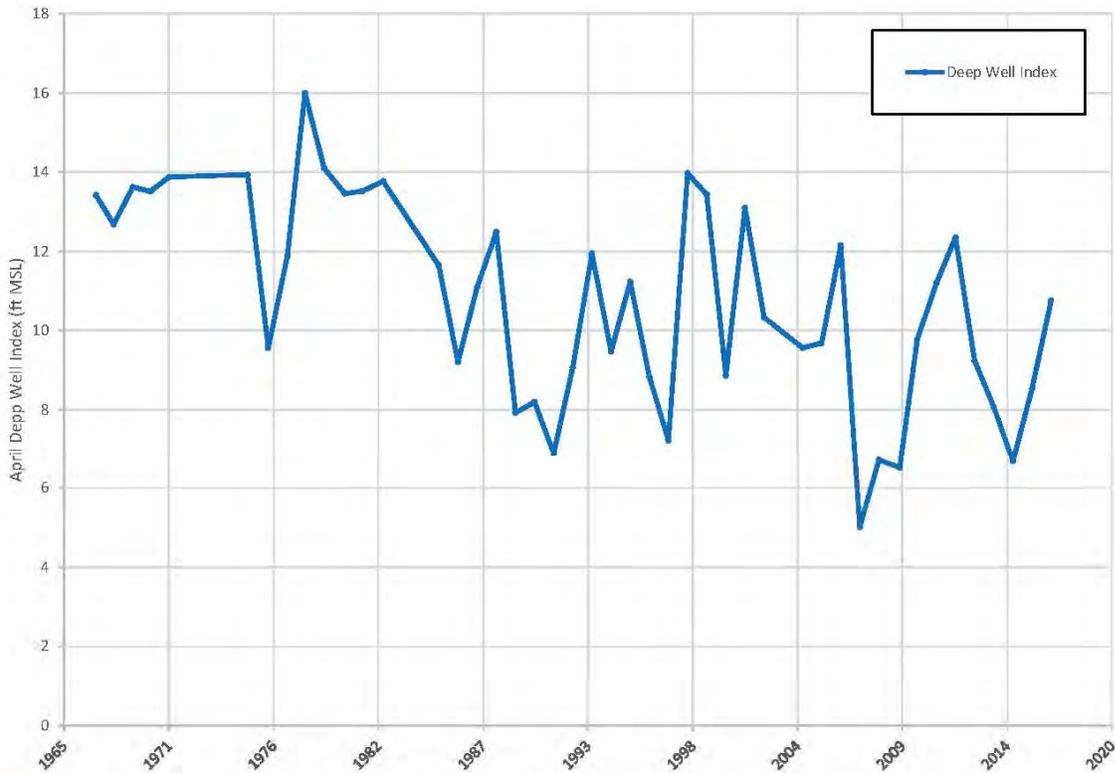


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**Local Conditions** - While many reservoirs in San Luis Obispo County and throughout California have filled and spilled in 2017, Lopez Reservoir has not and current storage is only 62% of capacity. As shown in the figure below, storage in Lopez Reservoir is still significantly below the amounts seen in 2011, which was the last above-average rainfall year before the last 6 years of the drought. If below-average rainfall conditions return next year, there is a significant probability that storage levels within Lopez Reservoir will drop below the 20,000 AFY threshold for the Low Reservoir Response Plan and thus warrants retaining the Emergency Drought Proclamation for Zone 3.



In addition, the NCMA Technical Group's monitoring results shown in the graph below indicate a recovery of groundwater levels along the coastline in the second Quarter of 2017, however these groundwater levels are still well below the levels seen in the 2011 and again warrants further evaluation before rescinding the Emergency Drought Proclamation for Zone 3 due to the risk of seawater intrusion in the NCMA.



Based on historic trends it is anticipated by Fall 2017 the groundwater levels will drop below the threshold (7.5 ft NAVD88) that the NCMA TG has identified as necessary to prevent seawater intrusion in the NCMA. Thus, indicating that while groundwater levels have improved with recent rainfall conditions, the impacts of the drought are still evident.

Due to the reasons presented above, the Zone 3 TAC is requesting that the Zone 3 Advisory Committee review the attached letter and if approved submit it to the BOS to request that the Emergency Drought Proclamation for Zone 3 be retained until additional information is available regarding the health of the Zone 3 agencies water supplies, specifically the groundwater basin. A draft letter to the BOS is included as Attachment 1 to this Staff Report.

ATTACHMENT 1

John Peschong, Chair  
Board of Supervisors  
San Luis Obispo County Flood Control & Water Conservation District

Subject: Recommendation from the Lopez Reservoir (Zone 3) Advisory Committee to defer rescinding the Emergency Drought Proclamation for Zone 3

Although the recent rains have improved water supplies throughout California and in San Luis Obispo County, impacts of the drought continue in certain regions of the State and within San Luis Obispo County. Because of uncertainties of the continuing impacts of the drought within Zone 3, and lack of evidence that the groundwater basin has recovered, it is imperative that drought response efforts continue.

On April 7, 2017, the Governor approved Executive Order B-40-17 terminating the Drought State of Emergency while continuing drought response requirements in four counties. In a similar manner, the Zone 3 Advisory Committee recommends that in the event your Board rescinds the drought emergency in San Luis Obispo County, that the emergency for Zone 3 is continued as well as the drought responses prescribed in the Lopez Low Reservoir Response Plan.

Hydrologic conditions in 2016 and 2017 have thankfully improved the water supply forecasts for the Zone 3 agencies and local agricultural. The Zone 3 contracting agencies include the cities of Arroyo Grande, Grover Beach, Pismo Beach, the Oceano Community Services District and County Service Area No. 12, which serves several residences in the Avila Valley as well as the Avila Beach Community Services District and the Port San Luis Harbor District. In addition, although the contracting agencies pay 100% of the operational costs, nearly 50% of the safe yield is allocated to downstream releases benefitting environmental habitat, groundwater recharge and agriculture. Altogether, the beneficiaries of Lopez water have a long-standing history of working through numerous issues and we are hopeful that the Board of Supervisors will recognize that our success and recommendations have been vital to all beneficiaries.

Specifically, the Low Reservoir Response Plan (LRRP) was adopted by the Zone 3 agencies in 2014 and by the Board of Supervisors on December 16<sup>th</sup>, 2014, with support of agricultural and at-large representatives on the Advisory Committee. The LRRP prescribes how Lopez reservoir supplies are managed during drought emergencies and it has proven to be an instrumental component supporting overall drought strategies. It has promoted multi-year drought efforts including maintaining storage in Lopez reservoir to preserve supplies, and it has promoted inter-agency coordination of groundwater pumping and utilization of other supplies.

The Zone 3 Advisory Committee strongly encourages the Board of Supervisors to retain the Emergency Drought Proclamation for Zone 3 and the LRRP for following reasons:

**Lopez Stored Water** - One of the provisions of the LRRP includes an extension of the time that the Zone 3 agencies can store water within Lopez Reservoir to allow agencies to preserve local supplies in the event of an extended drought. For water year 2017-18, that extension of time was approved by the Board of Supervisors on May 2, 2017 “while the drought was in effect” and the LRRP lacks clarity on the County’s ability to rescind extensions of time that have already been approved.

County staff has interpreted the LRRP language concluding that all stored water is lost immediately when the drought emergency is declared over. Under that interpretation, if the 2017-18 rainy season proves to be dry, we could find ourselves reinitiating the LRRP after agencies had already preserved but lost their stored water. This interpretation is not consistent with the facts and discussions that existed when the LRRP was adopted. A primary goal of the LRRP was to avoid terminating the LRRP, and then reinitiating the LRRP shortly thereafter. Understanding the continuing impacts of the drought is therefore imperative before terminating the LRRP. In short, until we understand the change of groundwater conditions, no change is warranted or prudent.

The amount of stored water that would be lost under County’s staff interpretation of the LRRP for each of the individual Zone 3 agencies is outlined in the following table. To generate stored water in Lopez Reservoir and preserve additional local supply for a potential extended drought, the Zone 3 agencies have made significant investments to import State Water Project water and enact extensive water conservation programs and losing access to that water would have a significant financial impact to these agencies.

Contractor	Available WY 2017/18 Lopez Water w/ the LRRP	Available WY 2017/18 Lopez Water w/o the LRRP	Difference
Arroyo Grande	3,539	3,787	248
Pismo Beach	2,726	1,475	-1,251
Grover Beach	1,040	1,323	283
Oceano CSD	1,144	501	-643
CSA 12	745	405	-340

As shown in the table, not all agencies would lose water by existing the LRRP, however, each of the Zone 3 agencies support retaining the Emergency Drought Proclamation and staying under the LRRP as it will provide the majority of the Zone 3 agencies with additional access to Lopez water and the ability to utilize this water to reduce their groundwater pumping and help prevent seawater intrusion into the Northern Cities Management Area (NCMA) of the Santa Maria Groundwater Basin

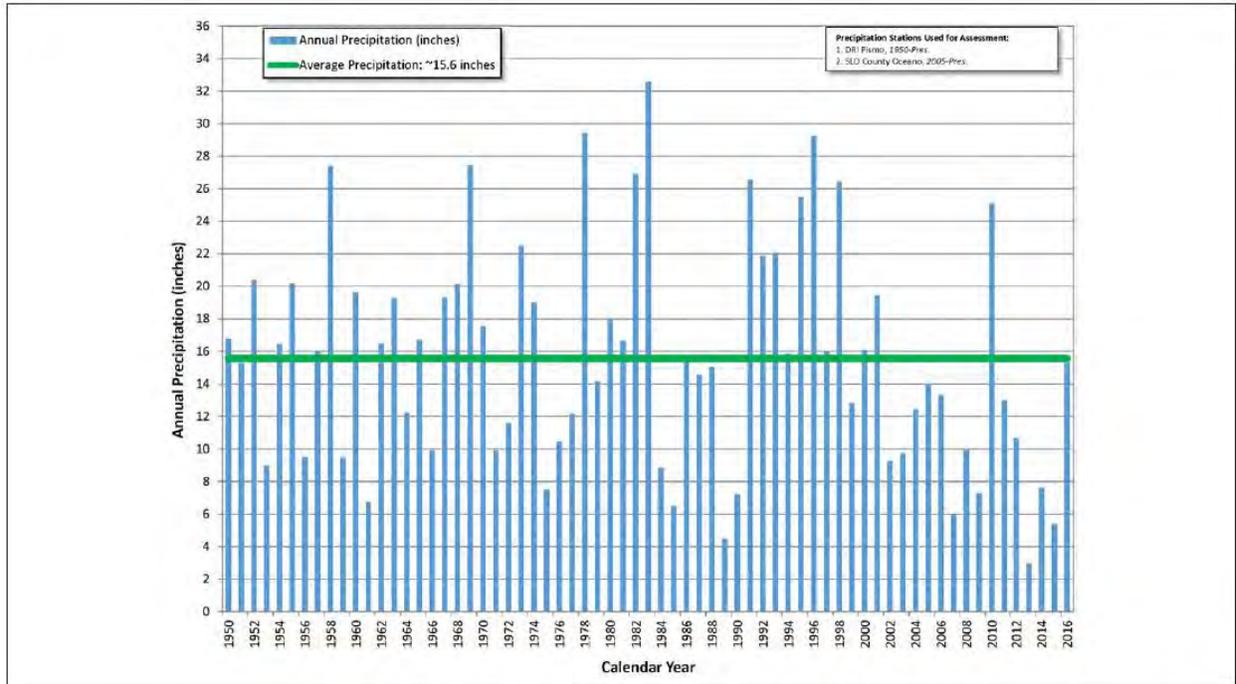
(SMGB). Doing so will also avoid language disputes and provide time for agencies to work with the County on clarifying language.

The NCMA agencies, which include the Cities of Arroyo Grande, Grover Beach and Pismo Beach and the Oceano Community Services District, have identified reducing their groundwater pumping as a critical objective for preventing seawater intrusion and protecting their groundwater basin. Through utilization of internal exchange agreements, the NCMA agencies intend to maximize delivery of their Lopez water supplies to reduce the overall demand on groundwater in the NCMA until they are able to implement the Regional Groundwater Sustainability Water Project (RGSP). The RGSP is a regional recycled water project that will provide advanced purified water for injection into the groundwater basin to prevent seawater intrusion.

**Groundwater Supply Recovery** – While the impact of the recent rain events on surface water supplies are relatively easy to measure it takes additional time to understand the benefit to groundwater supplies. The Zone 3 agencies have not had the opportunity to evaluate the County of San Luis Obispo’s Spring 2017 groundwater monitoring data to determine what impact the additional rainfall has had on groundwater levels throughout the NCMA. Compared to surface water supplies, groundwater supplies typically require additional time to recover from extended drought conditions and due to the threat of seawater intrusion in the NCMA it is critical the Zone 3 agencies have the opportunity to evaluate the health of their groundwater basin before declaring the end of the Drought Emergency.

**Reduced Subsurface Inflow** – As described in the 2016 NCMA Annual Report, the NCMA agencies are concerned about the impacts of reduced subsurface inflow from the Nipomo Mesa Management Area (NMMA) on groundwater conditions in the NCMA of the SMGB. Historic estimates of subsurface inflow from the NMMA have indicated that approximately 1,400 AFY of water flowed from the NMMA to the NCMA. However, as described in the 2009 NMMA Annual Report subsurface flows from the NMMA to the NCMA have been reduced to “something approaching no subsurface flow” and more recent NMMA Annual Reports describe a continued reduction in groundwater levels in the NMMA and a worsening condition.

**Extended Drought** – As shown below in the Annual Precipitation graph from the 2016 NCMA Annual Report, the Zone 3 Agencies have seen below-average rainfall in fourteen (14) of the last fifteen (15) years and this extended drought has significantly impacted their surface and groundwater supplies. Even with above average rainfall in 2017, there is still a significant cumulative rainfall deficit over the last 15 years and one year of above-average rainfall may not be sufficient to restore surface and groundwater levels to pre-drought conditions.

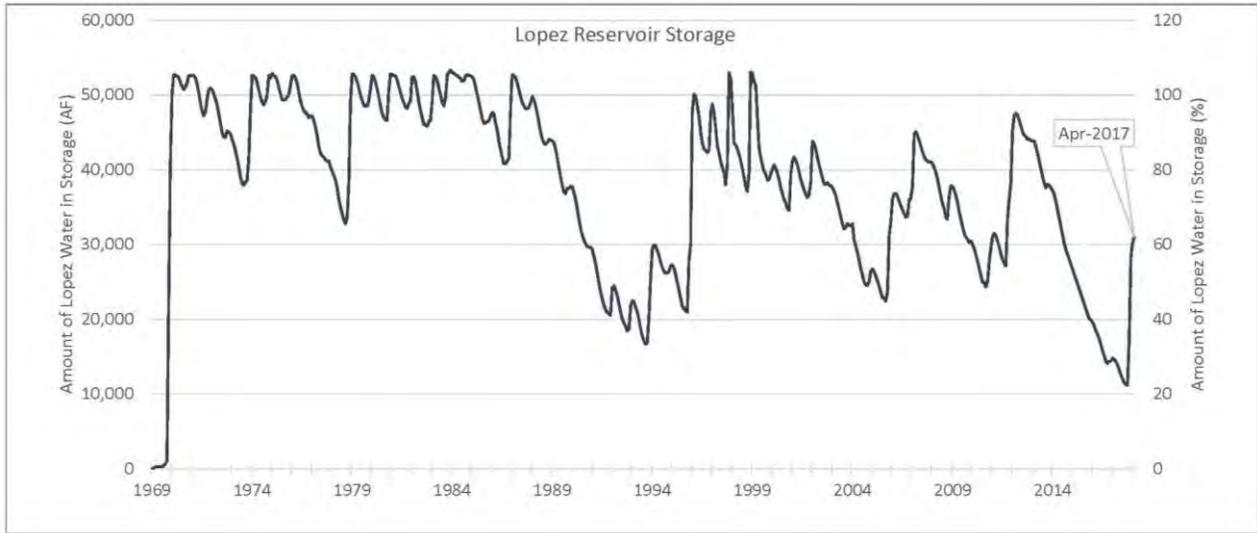


**FIGURE 3**  
**Annual Precipitation 1950 to 2016**  
 Northern Cities Management Area  
 San Luis Obispo County, California

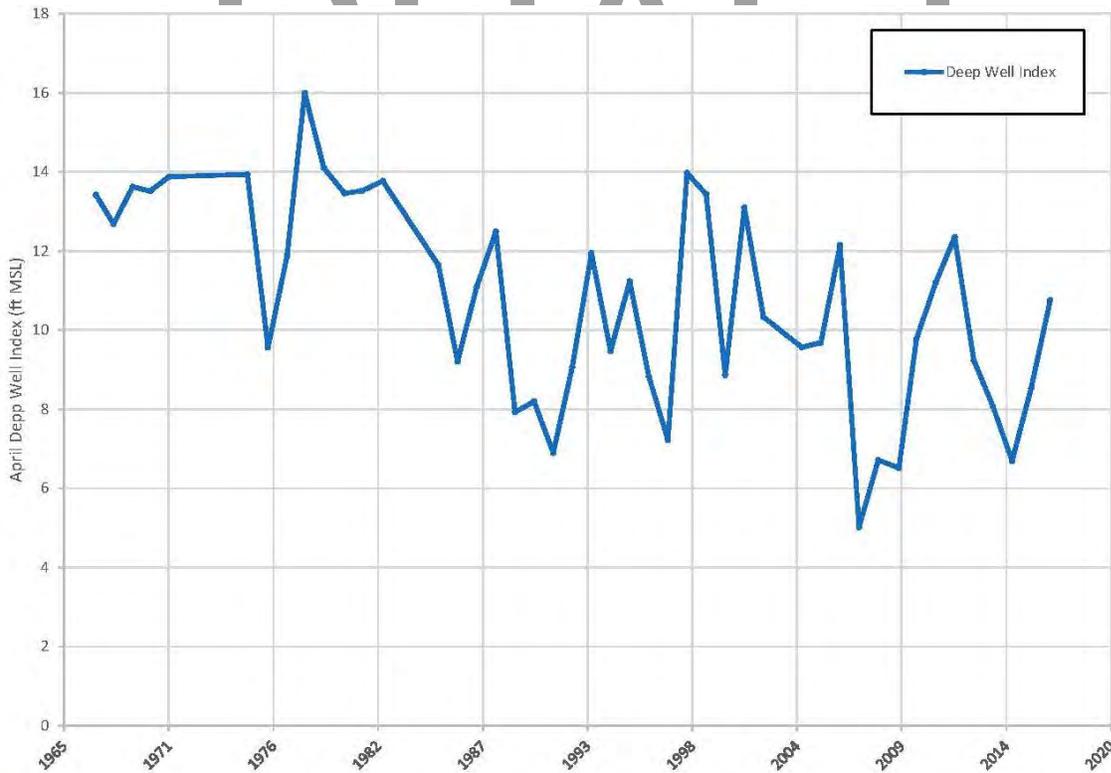


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**Local Conditions** - While many reservoirs in San Luis Obispo County and throughout California have filled and spilled in 2017, Lopez Reservoir has not and current storage is only 62% of capacity. As shown in the figure below, storage in Lopez Reservoir is still significantly below the amounts seen in 2011, which was the last above-average rainfall year before the last six years of the drought. If below-average rainfall conditions return next year, there is a significant probability that storage levels within Lopez Reservoir will drop below the 20,000 AFY threshold for the Low Reservoir Response Plan and thus warrants retaining the Emergency Drought Proclamation for Zone 3.



In addition, the NCMA Technical Group’s monitoring results shown in the graph below indicate a recovery of groundwater levels along the coastline in the second Quarter of 2017, however these groundwater levels are still well below the levels seen in the 2011 and again warrants further evaluation before rescinding the Emergency Drought Proclamation Zone 3 due to the risk of seawater intrusion in the NCMA.



Based on historic trends it is anticipated by Fall 2017 the groundwater levels in the NCMA sentry wells will drop below the threshold (7.5 ft NAVD88) that the NCMA TG has identified as necessary to prevent seawater intrusion in the NCMA. Thus, indicating that while groundwater levels have improved with recent rainfall conditions, the impacts of the drought are still evident.

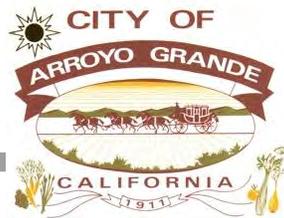
Based on the supporting data presented above, the Zone 3 Advisory Committee is recommending that the Board of Supervisors retain the Emergency Drought Proclamation for Zone 3 to allow the Zone 3 agencies retain their stored water under the LRRP and the flexibility to conjunctively utilize their water supplies to protect their groundwater basin from seawater intrusion.

Sincerely,

Zone 3 Advisory Committee



Avila Beach Community Services District



City of Arroyo Grande



City of Grover Beach



Oceano Community Services District



City of Pismo Beach

Agriculture Delegate

Member at Large

DRAFT