



## ZONE 3 ADVISORY COMMITTEE

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San Luis Obispo County Flood Control and Water Conservation District

### AGENDA

Thursday, July 19, 2018 6:30 P.M.  
Oceano Community Services District  
1655 Front Street, Oceano, California 93445

- 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. OFFICER ROTATIONS
  - A. Committee Chair rotating from agriculture member to City of Arroyo Grande representative
  - B. Committee Vice-Chair rotating from at large member to City of Grover Beach representative
- IV. APPROVAL OF MEETING MINUTES OF MAY 17, 2018
- V. OPERATIONS REPORT
  - A. Water Plant Operations, Reservoir Storage, Downstream Releases
  - B. Projected Reservoir Levels
  - C. May & June Monthly Operations Report
- VI. INFORMATION ITEMS
  - A. Climate Update
  - B. Lopez Spillway Assessment Update
- VII. CAPITAL PROJECTS UPDATE
  - A. Bi-Monthly Update
- VIII. ACTION ITEMS (No Subsequent Board of Supervisors Action Required)
- IX. ACTION ITEMS (Board of Supervisors Action is Subsequently Required)
  - A. Cloud Seeding Update
- X. FUTURE AGENDA ITEMS
  - A. Lopez Reservoir Safe Yield
  - B. Cloud Seeding
  - C. Strategy for Use of District Designated Reserves
  - D. Revisions to the Low Reservoir Response Plan (LRRP)
- XI. COMMITTEE MEMBER COMMENTS



## ZONE 3 ADVISORY COMMITTEE

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San Luis Obispo County Flood Control and Water Conservation District

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Next Regular Meeting is Tentatively Scheduled for  
Thursday, September 20, 2018 at 6:30 PM at City of Grover Beach Council Chambers  
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 MAY 17, 2018**

- I. Call to Order and Roll Call** -- The Zone 3 Advisory Committee Meeting was called to order at 6:33 PM at the City of Pismo Beach Council Chambers by Committee Chair and Agriculture Representative, Brian Talley.

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
- Kristen Barneich, City of Arroyo Grande
- Andrew Brunet, Oceano Community Services District
- Marcia Guthrie, City of Pismo Beach
- Brian Talley, Chair and Agriculture Representative
- Jeff Lee, City of Grover Beach

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

- III. Approval of Meeting Minutes of March 22, 2018** -- Member Hagemann motioned approval; Member Lee second. Members Barneich, Brunet and Guthrie abstained due to absences from the March 22 meeting. Roll call was made, quorum was met, motion passed.

No public comment was given.

**IV. Operations Report**

**A. Water Plant Operations, Reservoir Storage, Downstream Releases** -- Ms. Montes indicated she did not have the water plant operations, reservoir storage, and downstream releases statistics and would email them to the Committee the following day. The statistics were as follows: Lopez Lake elevation was 490.53 feet; storage was 25,272 acre-feet (AF), which is 51% capacity; rainfall to date, since July 1, 2018, was 13.23 inches; plant production was 4.6 million gallons per day (MGD); downstream release was 2.7 MGD; and State Water was 0.7 MGD.

No public comment was given.

**B. Projected Reservoir Levels** -- Jill Ogren, County Public Works Utilities Division Hydraulic Engineer, presented the Lopez Storage Projection and pointed out that since April 2015, the County has been tracking water saved by Zone 3 Agencies. As of March 31, 2018 (the end of the Lopez Water Year), Flood Control Zone 3 Agencies left the Low Reservoir Response Plan (LRRP). She further indicated the Projected Reservoir Levels will no longer present a "worst case scenario" but rather reservoir projections based of figures from LongRangeWeather.com.

No public comment was given.

**C. March & April Monthly Operations Report** -- Ms. Ogren indicated at the end of the Lopez Water Year, 1,176 AF of State Water was stored. Overall usage by Flood Control Zone 3 Agencies was 5,040 AF of Lopez Water, which included water that Oceano Community Services District and City of Pismo Beach stored and used respectively. Ms. Ogren indicated 3,400 AF of water was released downstream during the Water Year.

According to Ms. Ogren "Entitlement Water" is used first by Zone 3 Agencies, and "Surplus Water" is used second. As the year progresses, if an agency has used its "Entitlement Water", it will then begin using its "Surplus Water". Because Zone 3 Agencies are no longer under the LRRP, any unused "Surplus Water" at the end of the water year (April 1 - March 31) will be returned to the reservoir and will not be carried over by Zone 3 Agencies into the next water year.

No public comment was given.

**V. Information Items**

**A. Climate Update** -- Ms. Montes indicated that according to the United States Drought Monitor, San Luis Obispo County was experiencing abnormally dry, moderate drought and severe drought conditions. According to National Oceanic and Atmospheric Administration, the temperature forecast for May was above average. There were equal chances of below average, average and above average rainfall forecasted for May.

Member Garing suggested the County begin tracking cumulative rainfall deficits since 2005 and indicated a cumulative deficit is climbing, relative to average rainfall. Ms. Ogren indicated she will bring numbers back to the Committee at the July 19 meeting.

No public comment was given.

**B. Santa Maria Groundwater Basin Modeling Update** -- Dan HeimeI with Water Systems Consulting (WSC) presented an update on the Santa Maria Groundwater Basin Modeling. The Zone 3 Advisory Committee Designated Reserve Funds funded portions of current Phase 1B Groundwater Model which was developed to identify the correlation between changes in groundwater levels and support the design of the injection field for the Central Coast Blue regional recycled water project. Mr. HeimeI indicated Phase 1B was also funded with South San Luis Obispo County Sanitation District State Water Project State Emergency Plan settlement fees.

Phase 1B is an expansion of the previously developed Phase 1A Model. The Phase 1A model was expanded to Phase 1B to provide more accurate model results of the Northern Cities Management Area. Phase 1B was built on geologic data obtained from over 400 wells drilled within the Santa Maria Groundwater Basin. Within each well, the soil types were characterized at different depths. The data was then aggregated into a 3-D model.

Mr. HeimeI indicated the Phase 1B Groundwater Model extends to the Santa Maria River. It covers portions of the Santa Maria Groundwater Basin, from the northwest corner of the Northern Cities Management Area, and includes the Nipomo Mesa Management Area (the portion of the Santa Maria Valley Management Area north of

the Santa Maria River). Phase 1B Groundwater Model covers the entire Santa Maria Groundwater Basin within San Luis Obispo County.

According to Mr. Heimel, the next step in Phase 1B includes: finalizing the model calibration to develop groundwater modeling scenarios to evaluate baseline yield; identifying potential pathways for sea water intrusion; developing configuration for injection well field for the Central Coast Blue regional recycled water project; and updating project yield of how much water the Central Coast Blue project will provide.

No public comment was given.

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

According to Ms. Ogren, the Request for Proposal was completed and put out to bid. Seven (7) firms were present at the job walk-thru which resulted in three (3) bids under review by County staff.

Ms. Ogren indicated a contract would likely be awarded by June 2018 with December 2018 as the estimated completion date of the final assessment report.

No public comment was given.

**C. 3<sup>rd</sup> Quarter FY 17/18 Budget Status Update** -- County Public Works Finance Division and Flood Control Zone 3 Accountant, Kristi Smith, distributed the 3<sup>rd</sup> Quarter Fiscal Year 2017/18 (FY 17/18) Budget for Flood Control Zone 3 for the period of July 1 through March 31, 2018. Expenses through March 31, 2018 totaled 55% of the annual FY budget.

Ms. Smith reviewed graphs and indicated at 75% of the FY:

- Routine Operations and Maintenance (O&M) costs demonstrated 72% of the OM budget had been spent, resulting in an available balance of \$1.0 million for the remainder of the FY, ending June 30, 2018;
- Non-Routine O&M costs demonstrated 30% of the Non-Routine O&M budget had been spent, resulting in an available balance of \$418,000 for the remainder of the FY; and
- Capital Outlay costs demonstrated at 75% percent of the year, 15% of the budget had been spent, resulting in an available balance of \$1 million for the remainder of the FY.

Ms. Smith indicated unspent project balances within the Non-Routine O&M costs and Capital Outlay costs categories will be carried over at the end of FY 17/18 for continued work into FY 18/19.

Ms. Smith further indicated \$516,000 of the remaining budget in Capital Outlay costs was earmarked for the Lopez Water Treatment Plant PH Suppression Project, which is completed. Of the \$516,000, she proposed to replace \$48,000 spent from the Contractor Reserves back to Contractor Reserves; and replace \$280,500 to Zone 3 Flood Control District Designated Reserves. These funds were originally spent to fund the PH Suppression Project while deferring some budgeted projects.

According to Ms. Smith, the Zone 3 Technical Advisory Committee (TAC) comprised of technical staff from Zone 3 technical agencies, recommended the remaining balance not spent on the PH Suppression Project should be spread across Zone 3 Agencies to cover unbudgeted costs to Zone 3 Agencies for Lopez Water Treatment Plant facility costs, rather than the agencies receiving fiscal year-end bills for these costs.

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 contract will be awarded in June; cost unknown.

**Lopez Dam & Terminal Dam Hazard Classification** -- The draft inundation maps for the both dams were submitted to the DSOD for approval. Completed Emergency Action Plans will be submitted once the inundation maps are approved.

**Structural Assessment of Terminal Reservoir** -- Assessment was completed. County staff is collecting geologic data to have consultant review the assessment with the data.

**Fault Zone Assessment Left Abutment** -- Erosion at the left abutment occurred and was assessed. County staff is awaiting assessment report.

**Equipment Storage at Lopez Water Treatment Plant** -- Quotes were requested. Project was temporarily placed on hold and will continue in FY 18/19.

**Lopez Water Treatment Plant Safety Upgrades** -- Upgrades are ongoing in response to a 2016 safety assessment at the Plant.

**Domestic and Fire Tanks Repair at Lopez Water Treatment Plant** -- Staff was in the process of finding out how much water is needed for fire flow. Findings will determine whether one or two tank(s) is/are needed.

**Rebuild Membrane Feed Pumps** -- One pump per year is being replaced. A pump was in the process of being rebuilt.

**Turnout Meter Replacement** -- Meters were installed and the project is complete.

**Pressure Transducers** -- Pressure transducers were being installed the following week.

Ms. Ogren indicated upcoming projects that were budgeted for FY 17/18 and were delayed and/or will take place during FY 18/19 include:

- **Cathodic Protection Survey** -- Taking place in FY 18/19
- **Sludge Bed Cleanout Repair -- Four (4) total** -- Two (2) have been repaired; the remaining two will be repaired in FY 18/19.
- **Static Mixer Replacement** -- In process
- **Lopez Water Treatment Plant Leach Field Repair/Replacement** -- Taking place in FY 18/19.

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. Stormwater Resources Planning Grant -- Cost Sharing Agreement with City of Arroyo Grande** -- Ms. Ogren indicated the Zone 3 Advisory Committee decided to fund money towards a Stormwater Resources Planning Grant cost sharing agreement with the City of Arroyo Grande through the Zone 3 Designated Reserves.

Funding from the Committee towards the Santa Maria Groundwater Basin Modeling Update leveraged the cost sharing of the grant effort, bringing Zone 3's cost share for the Stormwater Resources Planning Grant to \$92,000. The model findings will be used to evaluate how the stormwater can be put into the ground. Ms. Ogren asked the Committee for a recommendation to take to the BOS to fund the \$92,000 amount along with a reimbursement agreement between County Flood Control District Zone 3 and the City of Arroyo Grande.

No public comment was given.

Member Garing motioned to support the recommendation; Member Lee second. All approved. Motion passed.

**B. Cloudseeding Letter of Support -- DRAFT** -- Ms. Montes indicated County Water Resources Staff Engineer, Ray Dienzo, drafted a letter of support to send to County Board of Supervisors (BOS) on behalf of the Committee for cloudseeding efforts to accompany the June 19, 2018 cloudseeding Final Mitigated Negative Declaration presentation to the BOS.

No public comment was given.

Member Barneich motioned in support of the letter; Member Brunet second; All approved, with Member Guthrie reluctantly approving. Motion passed.

**IX. Future Agenda Items**

**A. Lopez Reservoir 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** -- Schedule to receive update following the June BOS date.

**C. Strategy of District Funded Reserves**

**D. Revisions of Low Reservoir Response Plan**

**XI. Committee Member Comments** -- No comments made.

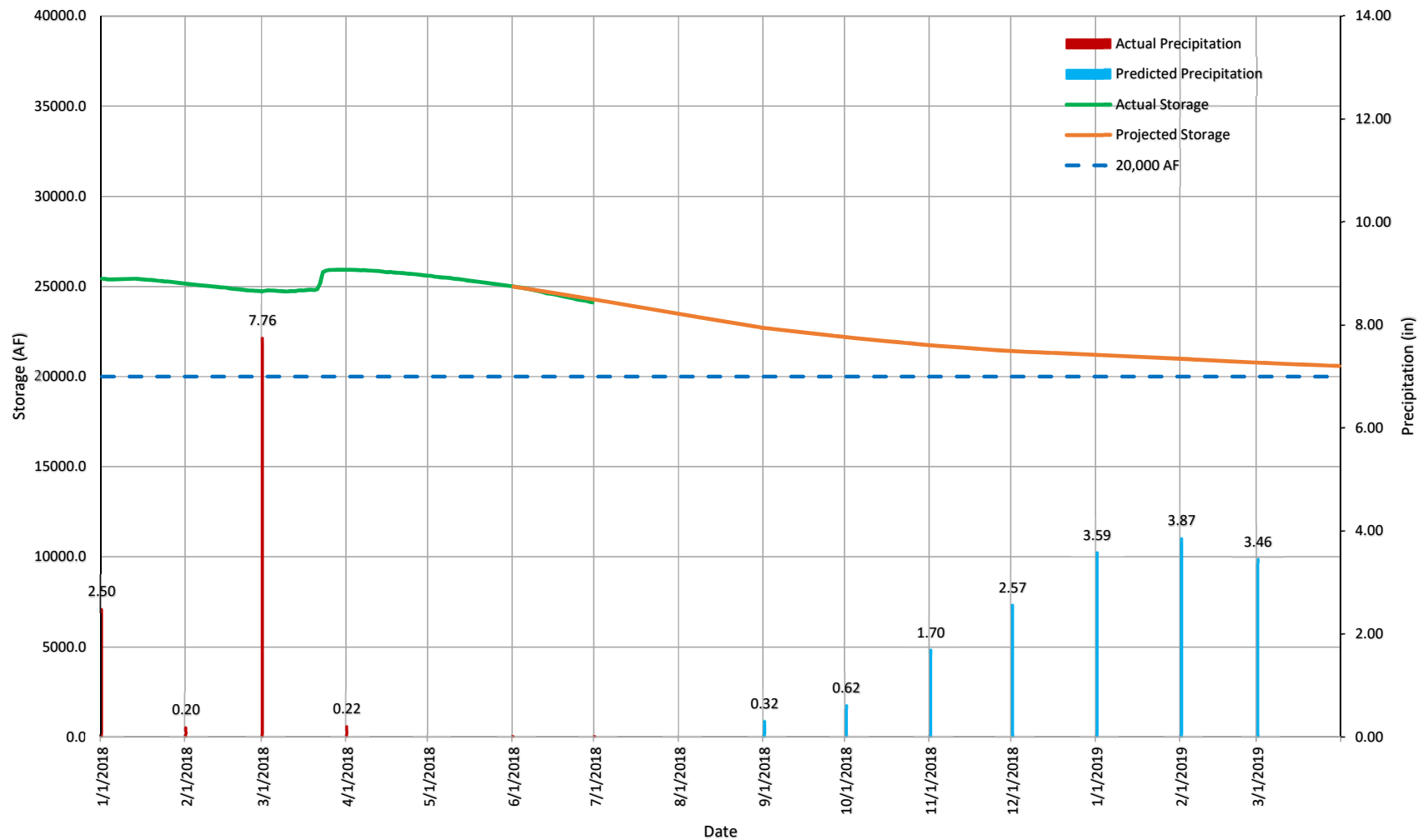
**Meeting Adjourned at 7:28 PM**

Respectfully Submitted,

Andrea M Montes

County of San Luis Obispo Public Works Department

### LOPEZ RESERVOIR STORAGE PROJECTION



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

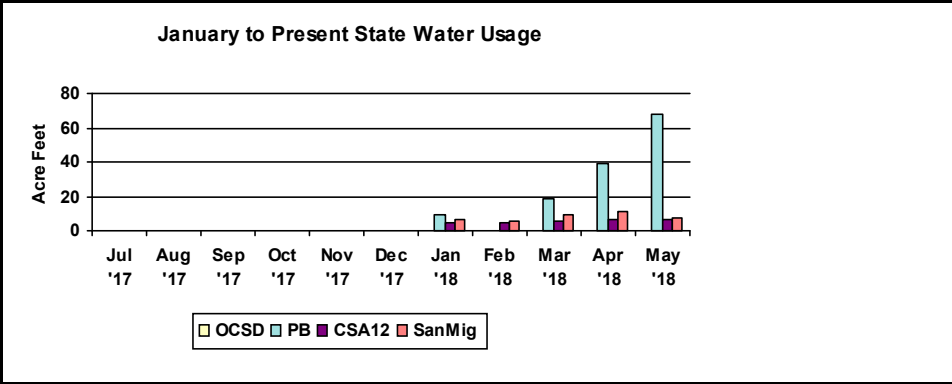
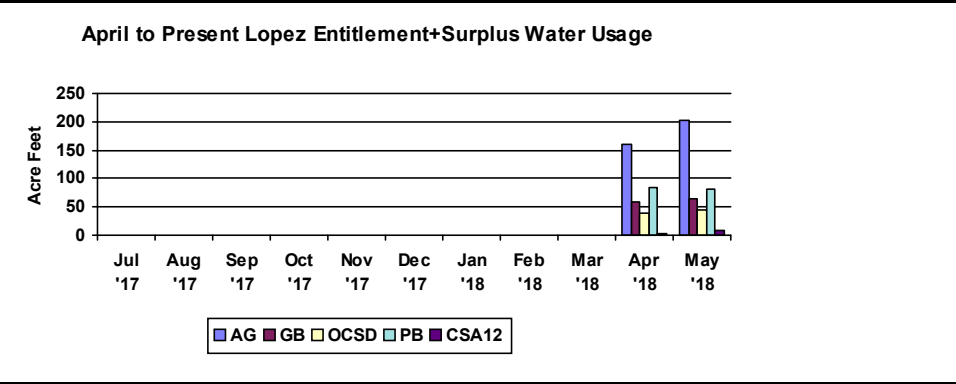


# San Luis Obispo County Flood Control and Water District

## Zone 3 - Lopez Project - Monthly Operations Report

### May, 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	201.61	8.8%	0.00	0.0%	362.76	15.8%	0.00	0.0%	362.76	12.7%									201.61	
Oceano CSD	303	75.00	378.00	46.18	15.2%	0.00	0.0%	86.53	28.6%	0.00	0.0%	86.53	22.9%	227	0.00	0.0%			0.00	0.0%			46.18
Grover Beach	800	197.00	997.00	64.51	8.1%	0.00	0.0%	124.50	15.6%	0.00	0.0%	124.50	12.5%										64.51
Pismo Beach	892	220.00	1112.00	81.13	9.1%	0.00	0.0%	165.81	18.6%	0.00	0.0%	165.81	14.9%	1120	68.00	6.1%			135.00	12.1%			149.13
CSA 12	245	60.00	305.00	7.86	3.2%	0.00	0.0%	11.99	4.9%	0.00	0.0%	11.99	3.9%	27	6.22	23.0%			28.56	105.8%			14.08
San Miguelito														127	7.89	6.2%			39.49	31.1%			7.89
<b>Total</b>	<b>4530</b>	<b>1116.00</b>	<b>5646.00</b>	<b>401.29</b>	<b>8.9%</b>	<b>0.00</b>	<b>0.0%</b>	<b>751.59</b>	<b>16.6%</b>	<b>0.00</b>	<b>0.0%</b>	<b>751.59</b>	<b>13.3%</b>	<b>1501</b>	<b>82.11</b>	<b>5.5%</b>	<b>66</b>	<b>-16.11</b>	<b>203.05</b>	<b>13.5%</b>	<b>241.00</b>		<b>483.40</b>
												Last Month Stored State Water		<b>1183.81</b>			This Month Stored State Water		<b>1167.70</b>				



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

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

Lopez Dam Operations	This Month	Year to Date		
Lake Elevation (full at 522.37 feet)	490.09	490.09	Difference (feet)	-32.28
Storage (full at 49200 acre feet)	25016	25016	% Full	50.8%
Rainfall	0.02	13.26		
Downstream Release (4200 acre feet/year)	246.74	604.88		
Spillage (acre feet)	0	0.00		

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

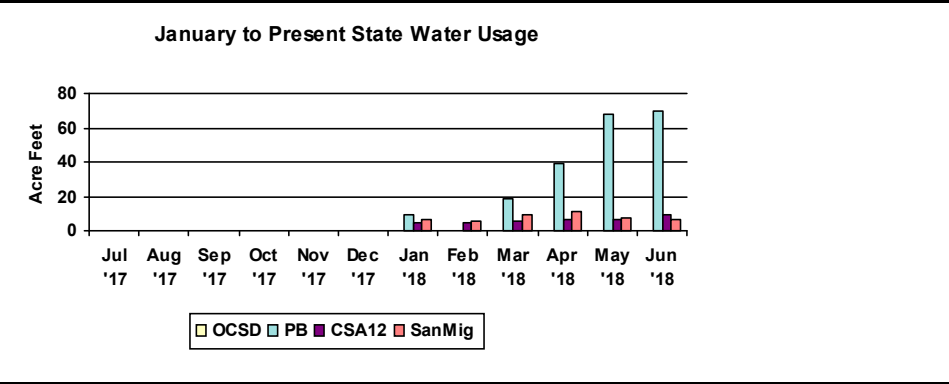
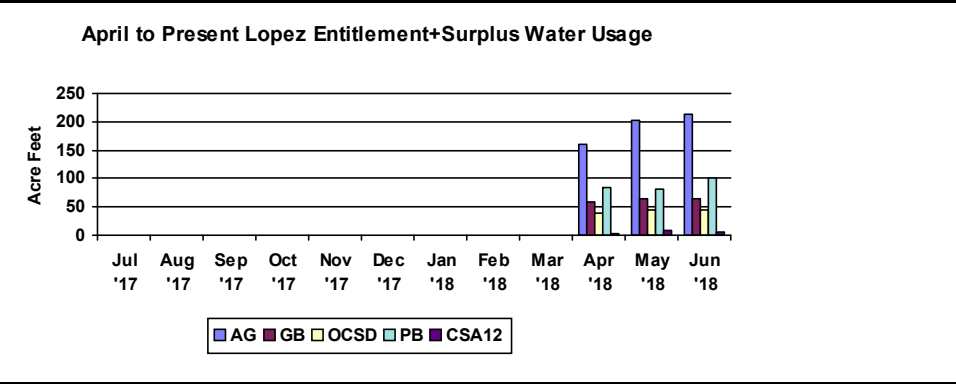
1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.20 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.20 AF was subtracted from Arroyo Grande's usage this month.

# San Luis Obispo County Flood Control and Water District

## Zone 3 - Lopez Project - Monthly Operations Report

### June, 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	213.18	9.3%	0.00	0.0%	575.94	25.2%	0.00	0.0%	575.94	20.2%									213.18	
Oceano CSD	303	75.00	378.00	44.73	14.8%	0.00	0.0%	131.26	43.3%	0.00	0.0%	131.26	34.7%	227	0.00	0.0%			0.00	0.0%			44.73
Grover Beach	800	197.00	997.00	64.35	8.0%	0.00	0.0%	188.85	23.6%	0.00	0.0%	188.85	18.9%										64.35
Pismo Beach	892	220.00	1112.00	99.99	11.2%	0.00	0.0%	265.80	29.8%	0.00	0.0%	265.80	23.9%	1120	70.00	6.3%			205.00	18.3%			169.99
CSA 12	245	60.00	305.00	6.80	2.8%	0.00	0.0%	18.79	7.7%	0.00	0.0%	18.79	6.2%	27	9.31	34.5%			37.87	140.3%			16.11
San Miguelito														127	6.45	5.1%			45.94	36.2%			6.45
<b>Total</b>	<b>4530</b>	<b>1116.00</b>	<b>5646.00</b>	<b>429.05</b>	<b>9.5%</b>	<b>0.00</b>	<b>0.0%</b>	<b>1180.64</b>	<b>26.1%</b>	<b>0.00</b>	<b>0.0%</b>	<b>1180.64</b>	<b>20.9%</b>	<b>1501</b>	<b>85.76</b>	<b>5.7%</b>	<b>67</b>	<b>-18.76</b>	<b>288.81</b>	<b>19.2%</b>	<b>308.00</b>		<b>514.81</b>
												Last Month Stored State Water		<b>1167.7</b>		This Month Stored State Water		<b>1148.94</b>					



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

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

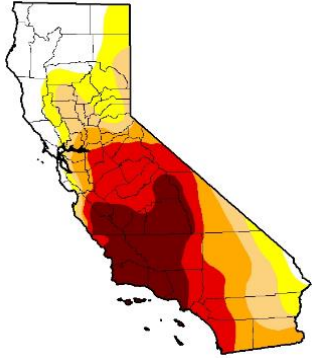
Lopez Dam Operations	This Month	Year to Date		
Lake Elevation (full at 522.37 feet)	488.52	-	Difference (feet)	-33.85
Storage (full at 49200 acre feet)	24118	-	% Full	49.0%
Rainfall	0.01	13.27		
Downstream Release (4200 acre feet/year)	367.96	972.84		
Spillage (acre feet)	0	0.00		

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

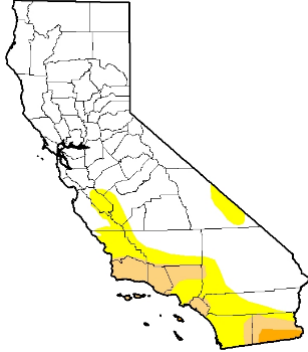
1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.34 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.34 AF was subtracted from Arroyo Grande's usage this month.

# U.S. DROUGHT MONITOR

January 2017



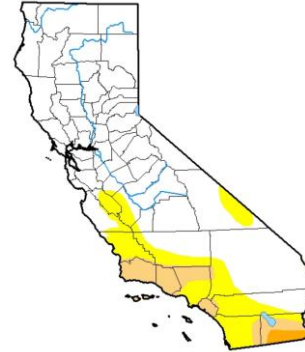
March 2017



May 2017



July 2017



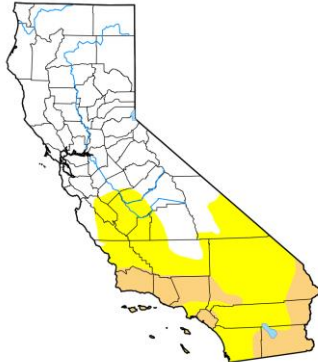
September 2017



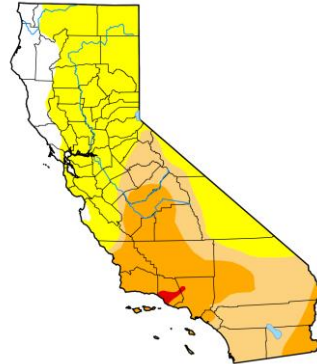
November 2017



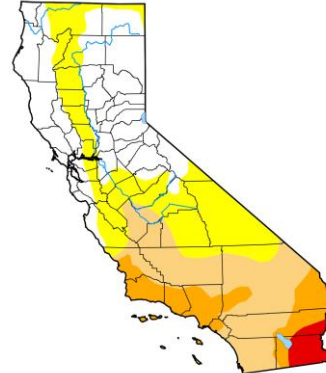
January 2018



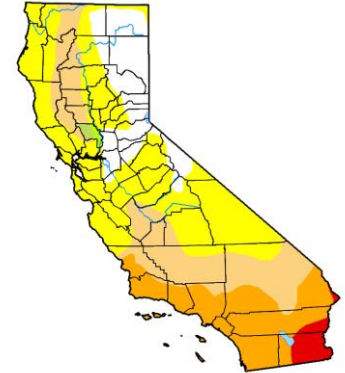
March 2018



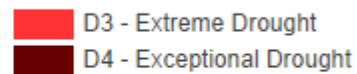
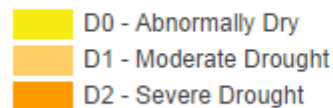
May 2018



July 2018



## Intensity:



Permission to reproduce the map

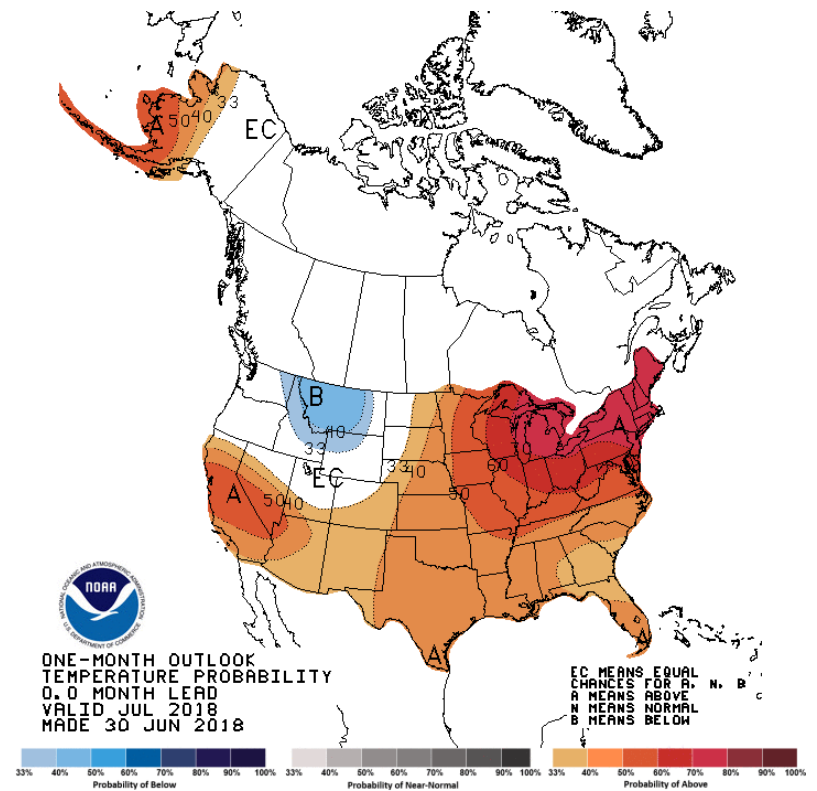
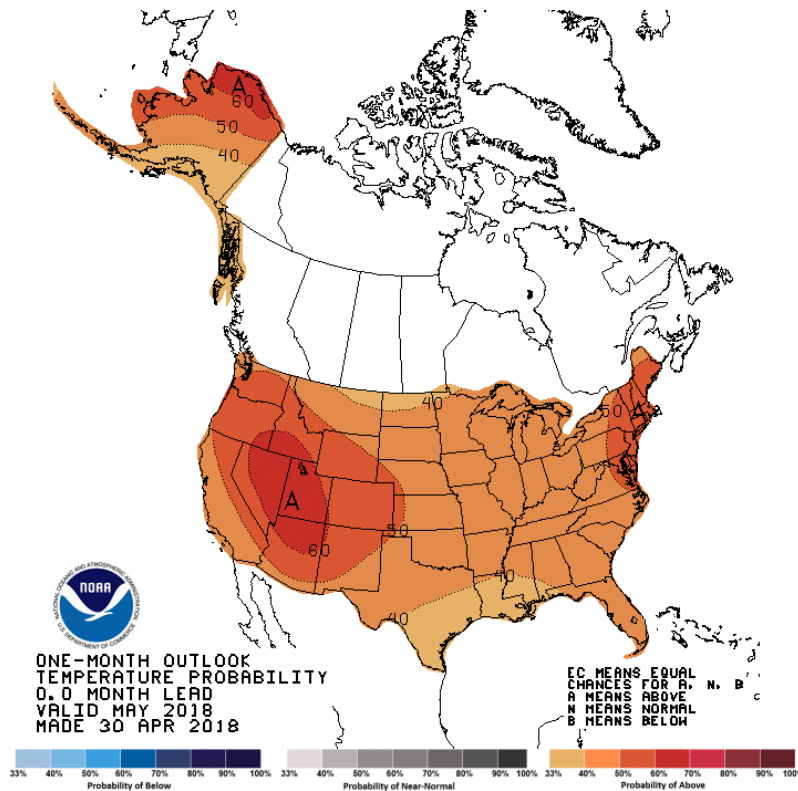
If you reproduce the U.S. Drought Monitor map, please use this wording:

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

## May

## July



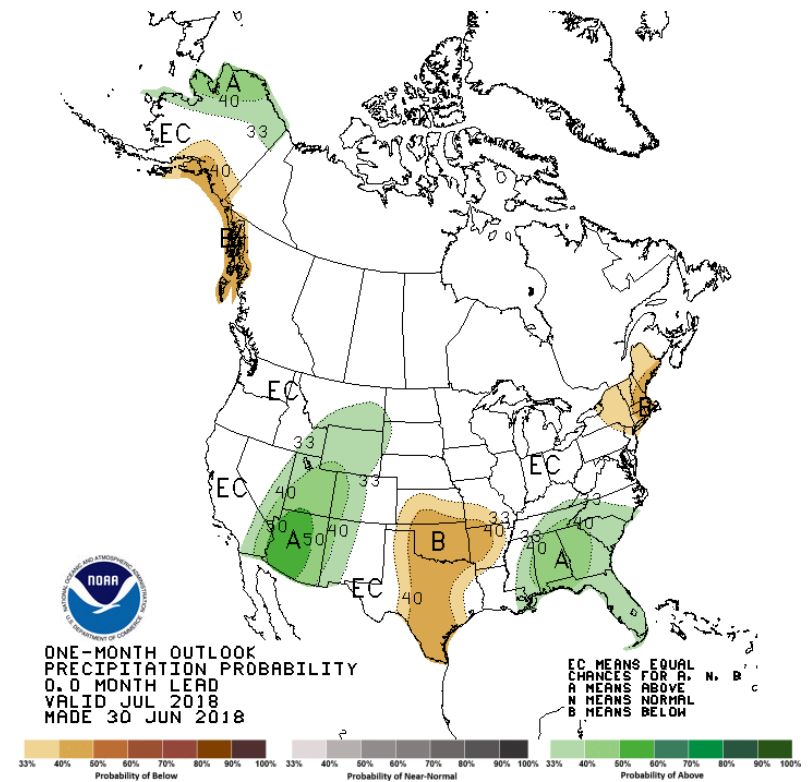
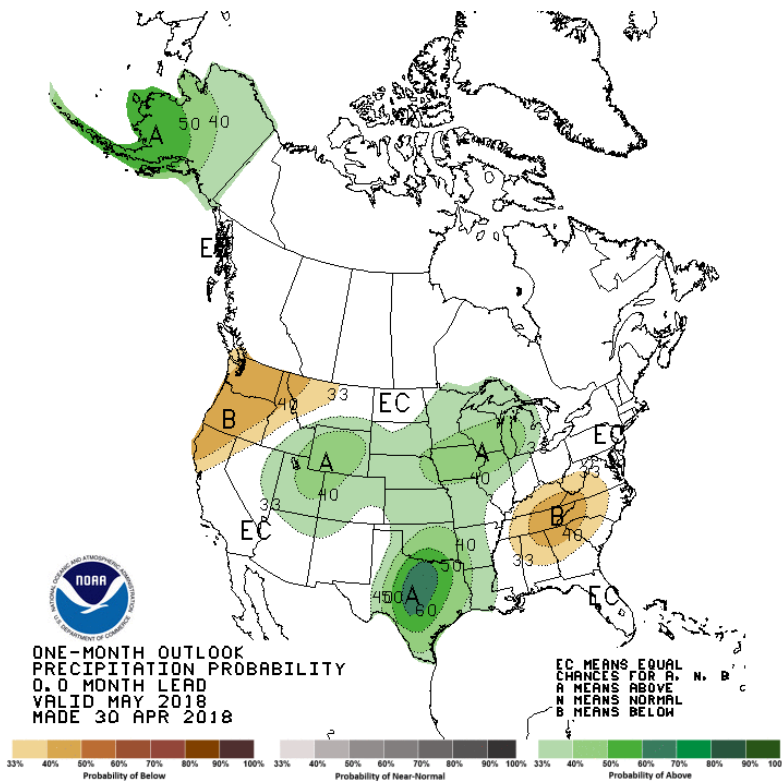
## May Meeting

## July Meeting

# NOAA PRECIPITATION FORECAST

## May

## July



## May Meeting

## July Meeting



## ZONE 3 ADVISORY COMMITTEE

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San Luis Obispo County Flood Control and Water Conservation District

**TO:** Zone 3 Technical Advisory Committee  
**FROM:** David Spiegel, PE  
**DATE:** July 19, 2018  
**SUBJECT:** Zone 3 Projects Update

### Project Updates:

- Equipment Audit & Replacement - Ongoing
  - Work proposed to continue in 2018/19
- Spillway Assessment – Due to be completed February 2019
  - GEI Consultants, Inc has been awarded the contract
- Lopez Dam and Terminal Dam Hazard Classification – Due to be completed 18/19
  - Inundation Maps have been submitted to DSOD for review
  - Emergency Action Plans are in preparation
- Fault Zone Assessment – Dam Left Abutment
  - Final Report is complete and available for review
- Equipment Storage
  - Preparing Scope of Work for Plans and Specs
- 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
- 2<sup>nd</sup> Ammonia Analyzer
  - Location for 2<sup>nd</sup> analyzer is being investigated
- Rebuild 2<sup>nd</sup> Membrane Feed Pumps (1 per year)
  - 2<sup>nd</sup> pump is being scheduled for removal

### Upcoming Projects:

- Cathodic Protection Survey (Budgeted)
- Lopez Water Treatment Plant Leach Field Repair/Replacement (unbudgeted)



## ZONE 3 ADVISORY COMMITTEE

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San Luis Obispo County Flood Control and Water Conservation District

- Geotechnical Investigation of the Terminal Dam (unbudgeted)

### **Completed Projects**

- Static Mixer
- 1<sup>st</sup> Membrane Feed Pump
- 1<sup>st</sup> Ammonia Analyzer
- Structural Assessment of Terminal Reservoir
  - Final Draft available for review
- Turnout Meter Replacement
- Pressure Transducers