

**ZONE 3
TECHNICAL ADVISORY COMMITTEE
Wednesday December 13, 2022
9:00 - 11:00 am**

Agenda

Join on your computer, mobile app or room device

Meeting ID: 261 220 685 070

Passcode: pjuWGG

Or call in (audio only)

[+1 831-296-4487,420020900#](tel:+18312964487420020900) United States, Salinas

Phone Conference ID: 420 020 900#

1. Announcements	All
2. General Operations and Water Report <ul style="list-style-type: none">• Summary Notes – November• Monthly Operations Report – November• Lopez Storage Projections – November	David
3. Current Reservoir Conditions	Kyle (Verbal)
4. Capital Projects Update	David
5. DAF Building Repairs ~\$95k needed	David
6. Future Agenda items? <ul style="list-style-type: none">• Project Updates• HCP/Instream Studies• Zone 3 Boundary Change	All

Attachments:

- A. Summary Notes - November
- B. Lopez Monthly Operations Report - November
- C. Lopez Storage Projections Chart - November
- D. Capital Projects Update

***Happy Holidays!
Next Meeting Date: January 10, 2024***



ZONE 3

TECHNICAL ADVISORY COMMITTEE

WEDNESDAY November 8, 2023 (9:00-11:00 AM)

Via Microsoft Teams

SUMMARY NOTES

Attendees via Microsoft Teams: Shannon Sweeney, Gabriel Munoz-Morris (Arroyo Grande), Will Clemens (OCSD), Vard Ikeda (Ag), Shane Taylor (Arroyo Grande), Jim Garing (Grover Beach), Steve Kahn (Grover Beach), John Wallace (Ag), David Spiegel (PW Dept), Francesca Devlin (PW Dept), Jeromy Caldera (PW Dept), Kyle James (PW Dept), Megan Schotborgh (PW Dept).

1. Announcements

- Will Clemens- retiring December 30, 2023.

2. General Operations and Water Report

- **David Spiegel (PW) reviews the October 11, 2023, Meeting Summary Notes.**

John Wallace "Did you find out the size of the fire tank?" David Spiegel replied that the replacement will be 180,000 gallons reduced from 300,000-gallon tank.

- **David Spiegel (PW) reviews the Monthly Operations Report.**

- Please refer to agenda packet Graphs.

Will Clemens "Looks good but looks like we will be running out of our entitlement, and we will be switching to state water."

Shane Taylor "If someone were to ask how much stored water, we have what would the answer be?" David Speigle replied "the answer would be zero" Shane Taylor "We wouldn't declare stored water until March 30th, 2024."

3. David Spiegel (PW) reviews the Lopez Storage Projections.

- Lopez reservoir storage projection chart uses the exact rain data from last year. If we can get some new updated info, it will impact the line.

4. Current Reservoir Conditions

- **David Spiegel (PW) reports the following data:**

- Current elevation 519.90 ft
- Storage capacity 95.1% @ 46,945 AF
- SWP 2.5 MGD
- WTP 2.3 MGD
- Rainfall total .17 Inches
- Downstream releases 3.2 MGD

- John Wallace inquired "Were the downstream releases reduced for Shane Taylor project?" David Speigle states "They were, we made proactive flow changes ahead of that. Shane Taylor stated that they did not have an impact/they could not tell the difference, but the project is complete.

- Gabriel Munoz-Morris "Is state water back up to full capacity?" David Speigle replied that the explosion at the devil's den affected units 1, 2

& 3 but they were able to get units 4, 5 & 6 back online and our able to make full deliveries.

5. Financial – 1st Quarter Budget

- Summary of overall expended budget is 16%
- Routine O&M: expended budget is 26%
- Non-Routine O&M: expended budget is 5%
- Capital Outlay: expended budget is 1%
 - We are capped at \$750,000 a year for the CIP projects which includes non-routine O&M and Capital Outlay. Routine is on track. Non-Routine O&M has a lot of “big ticket” projects that are coming up or slow to start We will see what we asked for vs what we have spent catch up to our budget in the later quarters of this year.

6. 5 Year CIP

- Annual Target is \$750,000
- Refer to second page notes for budget outline.

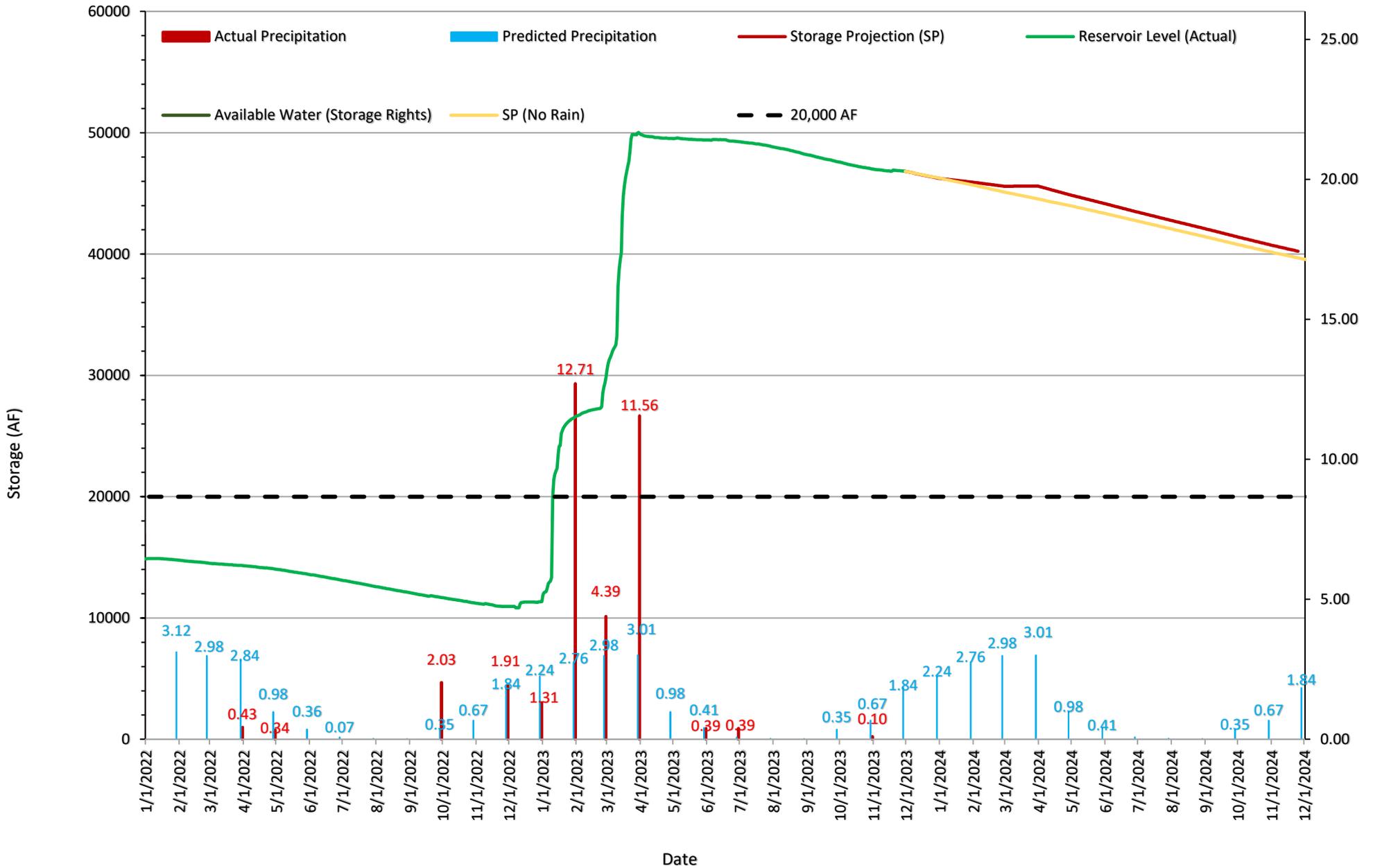
7. Project Updates

- **Fireflow Tank Replacement**
 - Starting project execution plan
 - Preparing RFP for tank design
 - Budget ~\$800,000
- **Membrane Module Replacement**
 - Purchasing 2 racks of modules
 - PO created to purchase 2 racks. One (1) rack to be purchased early 2024 and the second rack in late 2024.
 - Budget ~\$600,000
- **Spillway Assessment and Investigation (No Change)**
 - Performed Electrical Resistivity Test – We have received data from this test, if anyone would like to see it is available.
 - Developing Scope and schedule for Non-destructive Testing- We received the GEI comments as response to DSOD and hoping this is the final round that will allow us to get a permit to do additional testing at the spillway.
 - Remainder of project ~ minimum of \$300,000
- **Geotechnical Testing & Seismic Alternatives Study of Terminal Reservoir Dam (No Change)**
 - Draft Seismic Hazard TM has been prepared.
 - Waiting on DSOD for comment
 - GEI is working on Geotechnical Engineering Report
 - Budget ~\$500,000
- **Cathodic Protection Repair Project**
 - We are in the field installing new test stations.

- Rectifiers to be done next and the project should be done in a month.
 - Budget ~\$449,933
 - **CO2 Injection System**
 - CO2 Tank and Carbonic Acid Skid has been delivered.
 - Waiting on one PLC
 - Long lead items are finally here, awaiting installation.
 - Budget ~\$256,000
 - **Chemical Tank Replacement (No Change)**
 - Ordering tanks.
 - Project scheduled for mid-January into February
 - Budget ~\$350,000
 - **Sludge Bed Curtain Wall Rehabilitation**
 - PO was just approved for investigation/repair of sledge bed exterior wall and should start in the next couple of weeks.
 - **Bathymetric Study**
 - Boat survey complete
 - Awaiting report
 - ~\$90,000
8. John Wallace “Did we ever figure out the savings on the solar project?” David Spiegel explains that we are waiting for more electrical bills to come in to compare costs. Shane Taylor “Confirmation that we will not be doing a free chlorine burn this year. Shane states they will flush without free chlorine.
9. **Future Agenda Items**
- Shane Taylor “At the cloud seeding station on the tank site do they do maintenance since we it will not be in use. David Speigel replied that equipment is usually taken down each season.
 - Kyle James “Regarding John’s question earlier on the Tesla project, we have just learned that Tesla gives monthly progress reports for the battery so the reports have been requested and will be shared.

Next Meeting Wednesday: December 13, 2023

LOPEZ RESERVOIR STORAGE PROJECTION



Notes:

Reservoir Storage = Current Storage + Inflow - Outflow

Outflow = Agency Usage + Downstream Releases

Agency Usage: is based on 2010-2021 average monthly deliveries

Predicted Inflow: is dependent on the predicted rainfall obtained from longrangeweather.com

Inflow is affected by antecedent soil conditions and factored into the model. Rainstorms will produce less inflow during the dry months than during the rainy season when the soil is saturated.

The **Storage Projection Model** is based on a polynomial regression (concave in shape). The (concave) **Storage Projection Graph** will fall below the (linear) **Storage Projection with No Rain Graph** during months of low predicted rainfall.

**San Luis Obispo County Flood Control and Water District
Zone 3 - Lopez Project - Monthly Operations Report
November, 2023**

PROJECT WATER																								
AVAILABLE WATER (APR-MAR)					DELIVERIES																			
CONTRACTOR	ENTITLEMENT	STORED PW*	SURPLUS WATER AVAILABLE	TOTAL AVAILABLE PW	THIS MONTH						APRIL TO PRESENT													
					ENTITLEMENT		STORED PW		SURPLUS PW		DELIVERIES DURING SPILL	TOTAL			ENTITLEMENT		STORED PW		SURPLUS PW		DELIVERIES DURING SPILL	TOTAL USAGE		
					USAGE	%	USAGE	%	USAGE	%	USAGE	USAGE	USAGE	%	USAGE	%	USAGE	%	USAGE	%	USAGE	USAGE	USAGE	%
AG	2290	0	0	2290	163.57	7%	0.0	0%	0.0	0%	0.00	163.57	7%	962.9	42%	0.0	0%	0.0	0%	405.05	1367.99	60%		
OCSD	303	0	0	303	22.07	7%	0.0	0%	0.0	0%	0.00	22.07	7%	303.00	100%	0.0	0%	0.0	0%	96.60	399.60	132%		
GB	800	0	0	800	64.85	8%	0.0	0%	0.0	0%	0.00	64.85	8%	365.3	46%	0.0	0%	0.0	0%	164.17	529.51	66%		
PB	892	0	0	892	0.87	0%	0.0	0%	0.0	0%	0.00	0.87	0%	138.2	15%	0.0	0%	0.0	0%	275.16	413.40	46%		
CSA 12	245	0	0	245	6.28	3%	0.0	0%	0.0	0%	0.00	6.28	3%	42.5	17%	0.0	0%	0.0	0%	19.90	62.43	25%		
SM	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
TOTAL	4530	0	0	4530	257.64	5.7%	0.0	0%	0.0	0%	0.00	257.64	5.7%	1812.1	40.0%	0	0.0%	0.0	0%	960.88	2772.93	61%		

STATE WATER PROJECT WATER													
CONTRACTOR	ANNUAL REQUEST**	CUMULATIVE SSWPW ***	DELIVERIES										
			THIS MONTH						JANUARY TO PRESENT				
			ALLOCATION			DIE	AIE	TOTAL	ALLOCATION		DIE	AIE	TOTAL
			REQUEST	USAGE	%	USAGE	USAGE	USAGE	USAGE	%	USAGE	USAGE	USAGE
AG	N/A	0.0	N/A	N/A	N/A	0.0	0.0	0.00	N/A	N/A	0	0	0.00
OCSD	187.5	0.0	0.0	30.67	16.4%	0.0	0.0	30.67	125.3	67%	0	0	125.30
GB	N/A	0.0	N/A	N/A	N/A	0.0	0.0	0.00	N/A	N/A	0	0	0.00
PB	1070.0	0.0	120.0	120.00	11%	0.0	0.0	120.00	947.5	89%	0	0	947.45
CSA 12	96.0	0.0	7.5	7.50	8%	0.0	0.0	7.50	82.9	86%	0	0	82.94
SM	90.0	0.0	7.0	12.43	14%	0.0	0.0	12.43	71.2	79%	0	0	71.23
TOTAL	1443.5	0.0	134.5	170.60	12%	0.0	0.0	170.60	1226.9	85%	0	0	1226.92

CONTRACTOR	TOTAL MONTHLY DELIVERIES [AF]
AG	163.57
OCSD	52.74
GB	64.85
PB	120.87
CSA 12	13.78
SM	12.43
TOTAL	428.24

DAM & OTHER OPERATIONS			
	THIS MONTH	WY TO DATE	MAX CAPACITY
LAKE ELEVATION (ft)	519.76	N/A	522.6
STORAGE [AF]	46998	N/A	49200
MONTHLY RAINFALL [in] (Annual: July 1- June 30)	0.10	0.10	N/A
DOWNSTREAM RELEASES [AF]	321.01	1970.3	4200.0
LAKE TO TERMINAL [AF]	400.5	2608.6	N/A
SPILLAGE [AF] (WY)	0.00	8968.1	N/A
AG WHEELING OCEANO WATER	1.48	N/A	N/A

GLOSSARY
AIE: Agency Initiated Exchange
DIE: District Initiated Exchange
N/A: Not Applicable
PW: Project Water aka Lopez Water
Surplus Water: Carry Over Water (LRRP)
SWP: State Water Project
SSWPW: Stored SWP Water
* Stored PW includes Surplus water declared
** Actual amount available is dependent on the State's (DWR) delivery %
*** Stored SWP water resulting from AIE

NOTES
1) New Contract Changes effective October 1, 2022
2) On 12/31/22 there was an estimated 655.5 AF of District SSWPW remaining including approximately 46 AF of water lost to evaporation in 2022.
3) In March 2023, 5489 AF of water spilled resulting in loosing all of the District SSWPW, Agency SSWPW, and Stored PW.
4) 44.53 AF of March Project Water Deliveries will be credited to Stored PW at the end of the 2022//2023 water year (WY) due to March spill event.
5) End of WY water credit of 44.53 AF was added to Stored PW. 44.53 AF of Stored PW was lost due to April spill event.
6) 364.03 AF of April Project Water Deliveries are reported in the "Deliveries During Spill" column due to April spill event.
7) 426.5 AF of May Project Water Deliveries are reported in the "Deliveries During Spill" column due to May spill event.
8) 170.38 AF of June Project Water Deliveries are reported in the "Deliveries During Spill" column due to June spill event.



ZONE 3 Lopez Project

San Luis Obispo County Flood Control and Water Conservation District

TO: Zone 3 Technical Advisory Committee

FROM: David Spiegel, PE

DATE: December 13, 2023

SUBJECT: Zone 3 Projects Update

Project Updates:

- Fireflow Tank Replacement
 - Working on 60% design plans
 - Budget ~\$800,000
- Membrane Module Replacement
 - Waiting for delivery of modules
 - PO Created to purchase 2 racks
 - Budget ~\$600,000
- Spillway Assessment and Investigation (No Change)
 - Performed Electrical Resistivity Test
 - Scope and schedule for Non-destructive testing in Review by District
 - Remainder of project ~ minimum of \$300,000
- Geotechnical Testing & Seismic Alternatives Study of Terminal Reservoir Dam (No Change)
 - Draft Seismic Hazard TM has been prepared
 - Sending to DSOD for comment
 - GEI is working on Geotechnical Engineering Report
 - Budget ~\$500,000
- Cathodic Protection Repair Project
 - Installing new test stations
 - Budget ~\$449,933
- CO2 Injection System (No Change)
 - CO2 Tank and Carbonic Acid Skid has been delivered
 - Long lead items are finally here, awaiting install
 - Budget ~\$256,000
- Chemical Tank Replacement (No Change)
 - Ordering tanks
 - Project Scheduled for mid-January into February
 - Budget ~\$350,000



ZONE 3 Lopez Project

San Luis Obispo County Flood Control and Water Conservation District

- Sludge Bed Curtain Wall Rehabilitation
 - Filling bed for leak investigation
 - ~\$50,000 per initial quote
- Bathymetric Study
 - Final reports and maps are being completed
 - ~\$90,000
- DAF Building Repairs
 - DAF building has rust damage in multiple girders and roll up doors
 - Rafters support safety tether for maintenance of DAF equipment
 - ~\$95,000

Completed Projects

- Lopez Water Treatment Plant Rack 1 Membrane Replacement
- Tesla Battery Storage
- Lopez WTP Safety Upgrades (Cancelling)
- Equipment Storage Building (Cancelling)
- Chlorine Dioxide Bulk Storage Tank