



CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

OUR MISSION

Protect, enhance, and develop Calaveras County's water resources and watersheds to provide safe, reliable, and cost-effective services to our communities.

2021-2026 Strategic Plan, Adopted April 28, 2021, can be viewed at this [link](#)

Engineering Committee
Tuesday, June 27, 2023
2:00 p.m.

Calaveras County Water District
120 Toma Court
San Andreas, California 95249

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ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL
2. PUBLIC COMMENT
3. APPROVAL OF MINUTES: For the meeting of April 13, 2023
4. NEW BUSINESS
5. OLD BUSINESS

COMMITTEE MEMBERS

Director Davidson, Chair

Russ Thomas, Director

5b Capital Improvement Updates
(Engineering Department)

5c Other Updates
(Engineering Department)

6.* GENERAL MANAGER COMMENTS

7.* DIRECTOR COMMENTS OR FUTURE AGENDA ITEMS

8. NEXT COMMITTEE MEETING: September 5, 2023

9. ADJOURNMENT



CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

MINUTES
April 13, 2023

Directors/Committee Members present:

Russ Thomas
Jeff Davidson

Staff present:

Michael Minkler	General Manager
Kate Jesus	Engineering Coordinator
Damon Wyckoff	Director of Operations
Charles Palmer	District Engineer
Kevin Williams	Senior Civil Engineer
Sam Singh	Senior Engineering Technician
Jesse Hampton	Plant Operations Manager
Pat Burkhardt	Construction and Maintenance Manager

Others present:

Ralph Copeland Member of the Public

CALL TO ORDER / PLEDGE OF ALLEGIANCE.

1. ROLL CALL

Director Davidson called the Engineering Committee to order at 2:01 p.m. and led the Pledge of Allegiance.

2. PUBLIC COMMENT

There was no public comment.

3. APPROVAL OF MINUTES

The February 28, 2023 minutes were approved by a motion from Director Thomas and seconded by Director Davidson.

4. NEW BUSINESS

**4a Fire Hydrant Meter Service Discussion
(Damon Wyckoff, Director of Operations)**

Mr. Wyckoff reviewed the current Temporary Water Service policy with the Committee including the costs associated with the use, which was last updated in September 2021 and the current process to apply for a hydrant meter. Director Davidson inquired about the definition of unauthorized use and the 90-day limitations when renting a hydrant meter. Mr. Wyckoff suggested a future agenda

item that goes into more detail on the allowable and unallowable uses, the transfer of water from one watershed to another, timeline limitations, and proposed updates. The Committee discussed the comparative costs between the average water hauler and a residential customer. There was also discussion of a possible fill station in the Copperopolis service area.

5. OLD BUSINESS

5a FY 2023-24 Update to District's Five-Year Capital Improvement Program (Damon Wyckoff, Director of Operations)

Mr. Wyckoff reviewed the updated Capital Improvement Program (CIP) which includes revisions since the previous presentations at the February 28th Engineering Committee meeting and the March 8th Board meeting. Staff incorporated more projects related to the improvement of the La Contenta Wastewater Treatment Plant and Collections System and tulle removal projects in the White Pines and West Point areas. The other revisions are related to the recent changes to the U.S. Army Corps funding for the Copper Cove Wastewater projects. The Engineering staff have taken the upcoming Rate Study into consideration and the impact the CIP costs would have on customers. The District will continue to look for other funding sources such as grants and loans to help fund these projects. The Committee recommends presenting the CIP to the full Board. Mr. Copeland inquired about the possibility of radio read options for the hydrant meters, clarification on the specific funds being used for the Copper Cove Wastewater projects, and update to the Copper Cove B-C Transmission project pipe size. Mr. Wyckoff and Mr. Palmer clarified.

5b Capital Improvement Project Updates (Engineering Department)

- Forest Meadows Wastewater Plant/UV System Replacement (CIP 15106) – The District has purchased the equipment and the Construction Crew completed the necessary site work to begin the remainder of the project which includes installation of the UV system and associated site improvements. A sole source construction contract with Cole Tiscornia Construction will be presented to the full Board for approval at the April 26th meeting. The Engineering Committee gave their concurrence.

5b* Other Updates (Engineering Department)

- La Contenta WWTP Septage Receiving Station – Director Davidson asked for project details and Mr. Wyckoff gave a description of the project design and construction.

6. GENERAL MANAGER COMMENTS

There were no comments.

7. DIRECTOR COMMENTS OR FUTURE AGENDA ITEMS

There were no comments.

8. NEXT COMMITTEE MEETING

To be determined.

9. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 2:48 p.m.

Respectfully submitted,

Kate Jesus
Engineering Coordinator

Agenda Item

DATE: June 27, 2023

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Engineering Department

RE: Capital Improvement Project Updates

District Corp Yard (CIP 11101)

Plummerbuilt has completed construction of interior improvements and staff has moved into the new Building. The District is working with Public Works to address concerns about additional stormwater storage capacity onsite. The natural gas standby generator ordered in March 2022 is scheduled to be shipped in August.

AMI / AMR Project (CIP 11096)

Mueller Systems is substantially complete and has a crew onsite to complete the remaining punchlist items. Mueller's Network Operations Center or NOC is working on setting leak detection parameters and completing review of data within the online portal. District Staff is continuing to go back through meter installation to complete quality checks. Staff have been working with Mobile MMS and Mueller to integrate the meter information into the existing work order system to eliminate redundant data entry. Mueller released a new Apple iPhone application that allows use of apps instead of handheld devices for field installation of meters. Ultimately Mobile MMS will be pulling water consumption information from Mueller and production information from water treatment plants to determine water losses by Service Area.

Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088)

This project includes replacing 20,000-ft of water transmission pipeline to improve conveyance from the Tank A to Tank B sites. The pipeline will be aligned along Hartvickson, Baldwin, Usher and Wind River Court. It consists of approximately 13,400-ft of 14-inch diameter pipe and 6,500-ft of 12-inch diameter pipe. The piping material will be ductile iron. The consultant, Coleman Engineering, is designing the project. Coleman will complete the 100% design deliverable pending additional data from a utility potholing effort. CCWD issuing a request for proposals to perform 40 potholes and received a quote from Mzingo Construction for \$115,000. Staff recommends a contract with Mzingo to perform the potholing. This will be brought to the full Board on June 28 for approval. Also, ECORP consulting has completed a draft environmental document (IS/MND) for CEQA compliance, which is ready for filing a notice of intent (NOI) with the

State. The project is anticipated to go to bid this summer, and construction to start early 2024 and finish in FY 2024-2025.

West Point Water Supply Reliability Improvements (CIP 11106)

CCWD received Prop 1 Grant funds through UMRWA and DWR to supplement the cost of purchasing and installing a backup water filter at the West Point Water Treatment Plant. K.W. Emerson (KWE) mobilized to the site in July 2022 and started work on underground piping installation and potholing existing piping within the foundation subgrade for a new metal building. All underground piping and concrete foundations for the filter and metal building were in-place by February 10, 2023. The pre-purchased treatment filter unit was delivered by WesTech on April 3, 2023 to the West Point Water Treatment Plant. As of June 2023, KWE has set the filter on its foundation, erected the metal building, and began installation of the process piping.

West Point and Wilseyville Wastewater Consolidation Project (CIP 15091)

The Water Board staff completed the Final Budget Approval (FBA), which was then executed by the General Manager. Staff continue to review and approve material submittals. K.W. Emerson (KWE) completed the mass grading/earthwork, raised the pond levees, replaced fencing around ponds, relocated the 8-inch FE line and started working on the mass grading for the sludge basins and sludge drying beds. KWE has returned to the site and is resuming work on the project. As of June 7, 2023, groundwater in deeper excavations has impeded work. CCWD has asked KWE for a cost to install dewatering pits/wells if necessary to resume work. To date, KWE progress payments total \$1.19 million and balance of work remaining to finish is \$7.49 million. Construction will continue through the end of this year.

Copper Cove Lift Stations 6, 8, 15 & 16 and Lift Stations 12 & 13 Force Main Bypass Project (CIP 15076/15080)

Mozingo Construction has completed the force main portion of the Project and is currently working on completing the final paving of the pipe trenches. Construction is planned to begin on the four (4) lift stations locations later this Summer. Mozingo is taking deliveries of precast wet well, grinder pumps and the P401 Lined Ductile Iron Pipe for construction of the wet wells. There have been some recent delays with fabrication of the Motor Controls Centers for the Lift Station Pumps. Mozingo will be providing an updated schedule, the new lift station pumps will not be able to operate without this equipment installed. Extended temporary bypassing of sewer flows while waiting for equipment is not desirable, the schedule may need to be paced to coincide with the delivery date of the equipment.

Copper Cove Wastewater Treatment Plant Tertiary Treatment Improvements and Facilities Plan (CIP 15094)

CCWD has made significant progress with USACE on the Section 219 Letter Report and Project Partnership Agreement (PPA). CCWD has retained HydroScience Engineers for engineering and design services and Dewberry for environmental services for CEQA and NEPA compliance. The project includes adding Dissolved Air Flootation (DAF) units and making tertiary filter improvements. CCWD's is working with USACE to sign-off an initial

increment of \$2 million to complete design, environmental and pre-purchase of the DAF equipment. Funds are not authorized until after USACE signs the Letter Report and PPA, which is expected to occur by August 2023; until then the project design is on-hold.

Copper Cove Wastewater Treatment Plant – Pond 6 Dam and Effluent Storage Reservoir Enlargement Project (CIP 15112)

This project is being coordinated with the tertiary treatment plant improvements through the Letter Report/Agreement between CCWD and USACE. The project will raise the dam by 10 feet and increase the capacity of the effluent storage reservoir (Pond 6) from 205 AF to 442 AF. Also, the project includes relocating a 10-inch raw water line, 8-inch sewer force main, pumps and other existing facilities in conflict with raising the dam. The estimated construction cost is \$11 million. The consultant, Wagner & Bonsignore, is designing the dam and has resubmitted a project application to the Division of Safety of Dams (DSOD). DSOD is starting its review. HydroScience Engineers is providing the design for relocating the existing pipelines, pumps and other facilities. Dewberry is providing environmental services for CEQA and NEPA. An updated version of the 2009 Environmental Impact Report (EIR) will likely be relied upon for the project. In May, staff met with an adjacent property owner regarding a prospective borrow site for material (earth) to raise the dam.

Copper Cove Water System Improvements Project (CIP 11111)

Peterson Brustad Inc. (PBI) was awarded a contract at the May 11, 2022 Board meeting. Since that time PBI has worked to complete multiple preliminary design memos for staff's review and comment. Phase 1 and 2 improvements include rehabilitating the existing clearwell and existing steel Tank-B, adding a new second clearwell, and replacing the existing redwood Tank-B. PBI has completed the construction bid package, which has been posted on our website (ccwd.org) as of June 15, 2023. The bid opening will be held on July 27, 2023 at 2:00PM. CCWD recommends awarding the Phase 1 and 2 improvements contract in August 2023. Staff anticipates the contractor will complete construction by December 2024. Also, PBI is currently working with staff evaluating alternatives for a critical project to replace the main pump station and transmission pipeline conveying treated water from the WTP to Tank C. This is a substantial project including construction of 12,000-ft of new 16 or 20-inch transmission pipeline, new high horsepower pumps and electrical upgrades.

Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103)

This project is a Hazard Mitigation Grant Project (HMGP) partly grant funded by Cal-OES/FEMA. CCWD with its consultant, Blackwater, has completed the Phase 1 portion of the design which included the 60% Design and the initial Environmental Studies. The Phase 1 Design has been under FEMA NEPA environmental review since April 2022. Since completion of the Phase 1 design, Blackwater Engineers has completed the 90% design. Blackwater is currently on hold until we receive comments back on the NEPA Environmental review. Cal-OES/FEMA tentatively expects to have the NEPA review completed by end of October 2023, this process has extended past the original schedule. Upon approval Blackwater will complete the bid ready Construction Plans, and the District will advertise the Construction Contract.

Ebbetts Pass Redwood Tanks Hardening (CIP 11095)

This project is receiving significant hazard mitigation grant program (HMGP) funding from Cal-OES/FEMA. The District has been concentrating on completing the four tank locations covered under the Cal-OES/FEMA grant. The four tanks that are part of the grant have been completed. Larkspur Tank is currently being erected by California Aquastore. The ground underneath the existing tank at Larkspur was soft and did not have sufficient capacity to support the tank. The foundation design had to be changed to Mat Foundation in lieu of the ringwall design.

Forest Meadows Wastewater Plant / UV System Replacement (CIP 15106)

A construction contract with Cole Tiscornia Construction (CTC) was executed on April 26th for \$197,510. CTC has finished demolition of the existing channel, CTC is currently working on forming/pouring the new concrete UV Channel. Rotten siding on the existing filter building has been replaced with new siding. Once CTC completes the concrete channel Staff will be installing new electrical, new controls, flow meter and UPS batteries.

Arnold Wastewater Secondary Clarifier Improvements Project (CIP 15095)

The project will provide upgrades to the Arnold Wastewater Treatment Plant. It will add a new secondary clarifier, RAS/WAS pump station, two additional aerobic digesters, and replace the plant's electrical motor controls, backup generator, PLC and SCADA systems. Staff requested to add air blowers and extend air piping for the new aerobic digesters (versus mechanical aerators). The estimated construction cost is \$6.5 million. Staff have progress meetings with the design consultant, HydroScience, on a bi-weekly basis. HydroScience has completed the 100% design plans. Staff has submitted a pre-application to the State Water Board for possible grant funding of this project. As of June 7, 2023, the pre-application is being actively reviewed by State Water Board staff to evaluate eligibility for grants. The schedule for bidding for construction will be contingent upon the project's ultimate funding source.

CALAVERAS COUNTY WATER DISTRICT CAPITAL IMPROVEMENT PROGRAM (CIP) SCHEDULE FOR FY23/24

LEGEND

Scoping	Project Delay
Planning/Funding	Construction Complete and/or Notice of Completion
Design/Permit/Environmental	Goes into next Fiscal Year
Bid	Completed Project
Construction/Procurement	Gantt Chart Revision Date
Shovel Ready/Awaiting Funds	

						FY 23/24 CIP SCHEDULE																								
						JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		
						1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
WATER PROJECTS																														
1	11106	West Point Backup Filter	\$2.38M	22%	SS/JG/JK	Construct	X																							
2	TBD	West Point Regulator Repair/Tule Removal	\$200k	100%	OPS	Construct																								
3	11103	Hunters Raw Water Pumps (Hazard Mitigation)	\$2.4M	83%	KW	Construct																								
4	11109	White Pines Lake - Tule Removal	\$97K	100%	OPS/PB	Construct																								
5	11083C	Copper Cove Tank B/Clearwell	\$8.6M	58%	CP	Construct	>																							
6	11122	Copper Cove B-C Transmission Pipeline & Pump Station	\$9M	33%	CP	Construct	>																							
7	11083J	Jenny Lind Clearwell #2	\$350K	100%	OPS	Construct	>																							
8	11088	Jenny Lind A-B Transmission Main	\$13.5M	59%	CP/SS	Design & Construct	>																							
9	11131	Jenny Lind WTP Rehab Filters 1 & 2	\$960K	50%	OPS/JH	Construct	X																							
WASTEWATER PROJECTS																														
10	15091	West Point/Wilseyville Consolidation Project	\$10M	50%	CP/JG/JK	Construct	X																							
11	15095	Arnold Secondary Clarifier/WWTP Improvements	\$8M	28%	CP	Construct	>																							
12	15106	Forest Meadows UV Disinfection System Replacement	\$500K	60%	KW/JG/JK	Construct	X																							
13	15076	Copper Cove Lift Stations 6, 8 & Force Main Bypass	\$5.5M	45%	KW/JG/JK	Construct	X																							
14	15080	Copper Cove Lift Stations 15 & 16 Rehab/Replacement	\$3.6M	72%	KW/JG/JK	Construct	X																							
15	15094	Copper Cove Tertiary, DAF, & UV Improvements (CCWD Share)	\$1.8M	39%	CP	Design & Construct	>																							
16	15112	Copper Cove Pond 6 Dam Raise (CCWD Share)	\$4.38M	8%	CP	Design & Construct	>																							
17	15109	Collections System Rehab and I&I Mitigation	\$850K	18%	OPS	Construct	>																							

Agenda Item

DATE: June 27, 2023

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Engineering Department

RE: Other Updates

Copper Valley Town Square

Staff continue to work with CV Development Partners LLC on key issues and proposed development. These include planned redevelopment of the Copper Valley Square complex. The discussion includes requirements for off-site facility improvements including a permanent sewer force main and new lift station on Little John Road to serve Copper Valley Square (convey sewer to the wastewater plant) as well as rehabilitation of the existing lift station within Town Square. Also, the pre-existing water booster pump station serving the Copperopolis Zone has never been upgraded and is limited to 100-gpm. A new water booster pump station is needed to increase potable water delivery to Copper Town Square. These required off-site improvements are part of the original facilities agreement approved for Copper Town Square. Recently, staff have reviewed an updated pre-design report for the off-site sewer force main, and CV Development Partners has retained Weber Ghio to provide final design for the lift station and water booster pump station. On May 4, 2023, the County made an initial routing for the Copper Valley Town Square Townhomes Phase A, application for land use development (TSTM 2023-008), which in response CCWD stated that a new concept review application and facilities agreement are needed for the project to be served by CCWD.

Gold Creek Subdivision Unit 3

The owner was notified on October 19th by letter with a list of outstanding punchlist items prior to project acceptance by CCWD. Punchlist items include furnishing of a 2-year warranty bond and resolution of a cost share for offsite improvements to increase the capacity of the Huckleberry Lift Station. Staff has estimated \$1,123,000 in necessary improvements to Huckleberry Lift Station with a cost share to Gold Creek Unit 3 of \$140,474. Once all punchlist items are corrected, staff can bring the project before the Board for final transfer and acceptance by CCWD.

Jenny Lind Elementary School Force Main Project

This project includes a 20,000-ft sewer force main from the Jenny Lind Elementary School to a connection point with CCWD existing sewer system near Vista Del Lago. The project is being funded by the Clean Water State Revolving Fund (CWSRF) and CCWD has entered into a prior Letter Agreement with the School Board. Staff and KASL continue to discuss the design of the sewer force main, primary lift station at the Jenny Lind Elementary School and possible locations for a secondary/intermediate lift station near

Berkeseey Drive and Silver Rapids Road. Properly locating the secondary lift station along the alignment is a key issue. The School District's representative, Hugh Logan, KASL and CCWD will continue to coordinate to ensure an effective project. The new facilities will provide a future ability to provide sewer service to some lots along Berkeseey Lane.

North Vista Plaza / LGI Homes

LGI Homes completed a sewer shed analysis as requested by the District. CCWD provided comments on design elements of LGI's plans and LGI completed amendments to those plans. Staff are reviewing the resubmitted plans and will be returning final comments. LGI Homes has retained Coleman Engineering to provide final design of the sewer lift stations. Staff discussed CCWD's design requirements with Coleman Engineering. The Water and Wastewater Facilities Agreement was approved by the Board at the December 14th meeting. At the March 22nd meeting, the Board authorized the District to participate in the Bond Opportunities for Land Development (BOLD) program, which will help facilitate new development including this project. Staff and LGI are evaluating alternatives solutions to correcting a bottleneck in the gravity sewer collection system near Vista Del Lago and Hwy 26, which must be resolved to serve the buildout of LGI's project.