

# ENGINEERING COMMITTEE

## AGENDA

Tuesday, September 6, 2022  
2:00 p.m.

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

**The following alternatives are available to members of the public to watch these meetings and provide comments to the Board before and during the meeting:**

### **Microsoft Teams meeting**

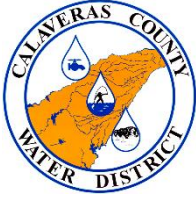
Join on your computer or mobile app [Click here to join the meeting](#)  
Or call in (audio only) [+1 689-206-0281,167550195#](#) United States, Orlando  
Phone Conference ID: 167 550 195#

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at (209) 754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility for this meeting. Any documents that are made available to the Committee before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for public review.

## ORDER OF BUSINESS

### CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. **PUBLIC COMMENT:** Comments limited to three minutes per person.
2. **APPROVAL OF MINUTES:** For the meeting of June 16, 2022
3. **NEW BUSINESS**
  - a. Potential Bulk Water Program Expansion
  - b. Regional Biosolids Composting Facility\*
4. **OLD BUSINESS**
  - a. Capital Improvement Updates
  - b. Other Project Updates
5. **GENERAL MANAGER COMMENTS**
6. **DIRECTOR COMMENTS**
7. **FUTURE AGENDA ITEMS**
8. **NEXT COMMITTEE MEETING:** Tuesday, November 1, 2022 at 2:00 p.m.
9. **ADJOURNMENT**



# CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

**MINUTES**  
**June 16, 2022**

Directors/Committee Members present:

Jeff Davidson  
Russ Thomas

Staff present:

Michael Minkler	General Manager
Matt Weber Esq	General Counsel
Kate Jesus	Engineering Coordinator
Damon Wyckoff	Director of Operations
Charles Palmer	District Engineer
Kevin Williams	Senior Civil Engineer
Sam Singh	Senior Engineering Technician
Jared Gravette	Senior Supervisor Construction & Inspection
Jesse Hampton	Plant Operations Manager
Pat Burkhardt	Construction and Maintenance Manager
John Griffin	Senior Civil Engineer
Tiffany Burke	Administrative Technician Sr.
Rebecca Hitchcock	Executive Assistant/Clerk to the Board
Jessica Self	External Affairs Manager

Others present:

Bertha Underhill	Member of the Public
Cindy Secada	Member of the Public
Scott Ratterman	Member of the Public
Dean Copans	Member of the Public
Michelle Wilson	Member of the Public
Ralph Copeland	Member of the Public
Jeffrey Meyer	Hilltop Securities

**CALL TO ORDER / PLEDGE OF ALLEGIANCE**

Director Davidson called the meeting to order at 2:09 p.m.

**1. PUBLIC COMMENT:**

There was no public comment.

**2. APPROVAL OF MINUTES:**

The April 26, 2022 minutes were approved by a motion from Director Davidson and seconded by Director Thomas.

### **3. NEW BUSINESS**

#### **a. Commercial Meter Policy Discussion and Review**

Mr. Wyckoff gave a follow up presentation from a previous Board meeting on how other agencies compare to CCWD's handling of commercial accounts which included capacity fees, possibly pausing monthly service charges, and consolidating multiple meters/accounts. He also reviewed the District's current Ordinances, including the Variance Policy, in relation to the commercial accounts. The Committee discussed the current policies and possible policy revisions and gave direction to staff for potential solutions, which will come before the full Board at a future meeting. Tom Hix addressed the Committee regarding the Copper Town Square commercial buildings. Dean Copans addressed the Committee regarding his commercial building in Arnold and Michelle Wilson addressed the Committee regarding a commercial building in Copperopolis. Ralph Copeland commented on the master meter option.

#### **b. Accessory Dwelling Unit (ADU) Policy Discussion and Review**

Mr. Wyckoff reviewed the different local agency's policies regarding accessory dwelling units for both water and wastewater, capacity fees, and size limitations. Staff has participated in an ADU Breakout Group with Calaveras Public Utility District, City of Angels, Union Public Utility District, and Murphys Sanitary District to discuss the State government code and other aspects related to water and wastewater impacts. The group will meet with Calaveras County Building and Planning Departments in August to discuss impacts on the agencies and further coordination efforts. Further information will be brought to the Board.

#### **c. West Point & Wilseyville WWTP Consolidation Project Update**

Mr. Palmer stated the District had received four bids ranging from \$8.5 million to \$9.4 million with the lowest bidder being K.W. Emerson, Inc. at \$8,573,362 which is \$4 million higher than the Consulting Engineer's Construction Cost Estimate and the approved 100% SRF grant funds. Staff worked with the Contractor to reduce construction costs and request additional funding from SRF. While the District is waiting for Final Budget Approval (FBA) from SRF, Staff recommendation is to proceed with bid award to K.W. Emerson, Inc. at the next Board meeting with assurance of 100% grant funds. The Committee provided a favorable recommendation.

#### **d. Corp Yard Site Improvements Discussion and Review**

Mr. Williams explained that Plummerbuilt, Inc. completed Phase 1 of the project which included building pad, building shell and some site improvements. Phase 2 includes electrical, tenant improvements, and the remaining site improvements and should be done by the end of this construction season. Staff approached Plummerbuilt, Inc. to provide a Change Order for the remaining site improvements which came back at \$475,600, which is included in the CIP budget. This work includes earthwork/grading, paving, drainage, and the installation of fencing/gates. Staff recommendation is to proceed with the proposed Change Order and present to the full Board at the July meeting. The Committee provided a favorable recommendation.

#### **e. Cell Tower Lease Updates**

Mr. Williams stated that T-Mobile Communications and AT&T Mobility have requested to co-locate equipment on the existing Verizon Cellular Tower located on District property at the Big Trees Tank 4 site and the West Point Water Treatment Plant. Staff continues to work with the communications companies for favorable terms and will present to the full Board.

#### **4. OLD BUSINESS**

##### **a. Capital Improvement Project Updates**

Mr. Wyckoff gave brief updates on the following projects:

- AMI/AMR Project (CIP 11096) – Mueller is currently installing meters and has approximately 200 meters remaining. The network is complete and functional. Due to supply chain issues, there has been a delay on a portion of the meter box lids.
- Copper Cove Lift Stations 6, 8, 15, 16 and Force Main Project (CIP 15076/15080) – The project was advertised for bids on February 4<sup>th</sup> with a bid opening date rescheduled to June 30<sup>th</sup> due to delays from PG&E electrical plans. Mr. Copeland mentioned the upcoming paving by Calaveras County Public Works in Copperopolis in relation to the project. Mr. Palmer would follow up with Public Works.
- Ebbetts Pass Redwood Tanks Project (CIP 11095) – Big Trees Tank 8 is complete and online and the existing redwood tank has been demolished. Work continues on Tank 4 and 5.

##### **b. Other Project Updates**

Mr. Wyckoff gave brief updates on the following:

- Jenny Lind Elementary School Force Main Project – Staff has participated in multiple meetings with the project consultant, KASL Engineering, and Collections staff and continue to discuss the progress of the project including the lift station property.

#### **5. GENERAL MANAGER COMMENTS**

None.

#### **6. DIRECTOR COMMENTS**

None.

#### **7. FUTURE AGENDA ITEMS**

None.

#### **8. NEXT COMMITTEE MEETING**

September 6, 2022 at 2:00 p.m. which will most likely be rescheduled with updates to follow.

#### **9. ADJOURNMENT**

There being no further business, the meeting adjourned at approximately 4:05 p.m.

Respectfully submitted,

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Kate Jesus  
Engineering Coordinator



# Agenda Item

DATE: September 6, 2022

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

FROM: Engineering Department

RE: CCWD Service Area Water Use Update

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## **RECOMMENDED ACTION:**

Receive and discuss information regarding possible plans to develop and construct Bulk Water Stations (BWSs) around CCWD's water service areas, to supplement existing in-County options for small water suppliers, contractors, and other uses. This is an information-only item, and no action is required.

## **KEY POINTS:**

1. Calaveras County Water District (CCWD) has been made aware of several local and in-County small water suppliers who are struggling to maintain their water supplies and/or are dealing with water quality and infrastructure issues. There are few and likely very expensive options to intertie with existing CCWD systems. One option that presently exists is to supplement existing in-County Bulk Water Station (BWSs) by installing new CCWD fill stations to facilitate treated water filling and hauling to these areas. CCWD is working with Calaveras County staff to engage with these suppliers to better understand their conditions and desire for potential CCWD BWSs.
2. The BWSs would be similar in size and scope to existing Calaveras Public Utility District (CPUD) facilities, typically a 3" bottom-loading outlet capable of around 280 gallons per minute, depending on distribution systems pressure and line connection. Each station has a solar panel and customer pay and measurement options. Their cost was around \$100,000 to \$150,000 per station (total), depending on location.
3. CCWD has identified 10 preliminary locations spread across CCWD's water service areas (see Attachment B), which could also be useful to local contractors and for other CCWD operations (e.g., water quality flushing operations). The total for all stations developed under this effort is anticipated to be \$1.0 to \$1.5 Million, CCWD would aim to secure grant funding to cover all associated costs for this effort.

## **SUMMARY:**

Calaveras County Water District (CCWD) is investigating the installation of 'Bulk Water Stations' (BWSs) in CCWD's water service areas around Calaveras County (County), to provide a treated water option for local struggling small water suppliers, for local construction contractors, and to provide additional outlets for water distribution systems maintenance (e.g., in-system water quality management via flushing). The BWSs contemplated by CCWD would likely be similar in size and scope to other common water

supplier bulk water fill stations, such as those owned and operated by the Calaveras Public Utility District (CPUD). The BWSs would ideally provide upsized and more permanent treated water fill stations versus CCWD's current "Lancha Plana Program" options. Additional BWS information is provided below:

- CPUD's BWSs are in north and central portions of the County, with one notably near CCWD's San Andreas office on George Reed Drive. CCWD would aim to cover parts of the County not currently within a 10-minute radius of CPUD stations.
- The BWSs typically have a 3" bottom-loading outlet capable of around 280 gallons per minute, depending on distribution systems pressure and line connection.
- CPUD used Johlin Measurement, Ltd. to provide all components for the BWSs, including solar panels and customer card readers. CCWD understands that all components and staff time (e.g., concrete pad and tie-in construction) likely cost around \$100,000 to \$150,000 per station, depending on its location.

More information regarding specific water systems tie-in infrastructure and locations are needed to determine exact CCWD staff times and costs to install specific BWSs. If pursued, CCWD would aim to secure available drought grant funding to cover all initial design, administrative, engineering, and construction costs associated with the BWSs installation. Future operations and maintenance, and administrative costs associated with an expanded "bulk water program" would likely need to be covered by CCWD going forward. It is unclear how these expenses would differ from the current CCWD Lancha Plana Program.

#### *Bulk Water Station Needs and Benefits*

With the worsening drought conditions in 2022, CCWD has been made aware of several local and in-County small water suppliers who are struggling to maintain their water supplies and/or are dealing with water quality and infrastructure issues. A list of all water suppliers in Calaveras County is provided in Attachment A, for reference – CCWD is withholding the names of those who have reached out with issues, until additional information can be verified. Several of these water suppliers are remotely located outside of larger supplier intertie opportunities and rely on few (or volunteer) employees to manage their supply and distribution infrastructure. CCWD staff are working with the Calaveras County Environmental Management Agency (EMA) to reach out to these in-County water suppliers to better understand recent drought impacts and if they have interest in CCWD installing BWSs to complement CPUD's stations in a way that could facilitate water hauling or other options. CCWD staff anticipates direct engagement with these groups and select County residents and business – located outside of established supplier service areas (e.g., Burson and Southworth areas) - over the coming months. These data will be used to establish the need for CCWD BWSs in any drought grant applications.

Beyond water supplier support, it is anticipated construction contractors and other water haulers would utilize the BWSs like their current use of CCWD hydrant fill meters. The BWSs offer a more direct form of fill, monitoring, and payment for these users, although CCWD anticipates the hydrant fill meters would still be available for certain locations and uses. It is likely there could also be additional water distribution systems maintenance

benefit for these BWSs by having the ability to flush and empty systems regularly (e.g., in-system water quality management via flushing). More information is needed to assess these potential benefits by installing the BWSs.

### *Preliminary BWS Locations*

CCWD staff have begun coordinating to identify preliminary locations for BWSs that: 1) line up with existing distribution pipeline infrastructure (6-inch or greater lines), 2) are within CCWD properties or potentially accessible properties, and 3) could provide the most benefit to the struggling small water systems and/or contractor and CCWD operations uses (e.g., least driving distance). CCWD has identified 10 preliminary locations spread across CCWD's water service areas, as shown in Attachment B. The total for all stations developed under this effort is anticipated to be \$1.0 to \$1.5 Million.

### *Drought Grant Opportunities*

In response to the ongoing drought, both the California Department of Water Resources (DWR) and State Water Resources Control Board (SWRCB) have established drought grant funding opportunities aimed at providing funds to direct projects that assist water suppliers with ensuring adequate supplies to meet their demands. Several of the small water suppliers in Calaveras County also coincide with "economically-disadvantaged communities (DACs)" which open them to full funding opportunities. A few grant opportunities that CCWD plan to target for this contemplated BWS installation, aimed at securing enough funds to cover the entire 10-station cost, are as follows:

- DWR 2021 Small Community Drought Relief Program for \$190 Million made available on a non-competitive first come, first-serve basis. A first round of \$25 Million was already announced in August 2011, with the largest project receiving \$9.8 Million in funding with no cost-match.
- SWRCB 2022 County-Wide and Regional Funding Programs with unspecified amount made available for DAC interim and long-term water supply solutions, such as well repairs/replacements, tanks and hauled water, filling stations, etc.
- Others include DWR Integrated Regional Water Management (IRWM) Round 2 grant program, which would require Tuolumne-Stanislaus IRWM (T-Stan) and/or Mokelumne-Amador-Calaveras IRWM (MAC) group engagement, or DWR's 2022 Urban Community Drought Relief Funding opportunity.

### **Attachments:**

- A. Calaveras Public Water Suppliers List
- B. Potential CCWD BWS Locations



**Attachment A**  
**Review of Calaveras County Water Suppliers**

<b>Agency/Organization</b>	<b>PWSID(s)</b>	<b>PWSID Pop Served Est<sup>1</sup></b>	<b>Estimated Connects<sup>3</sup></b>
Blue Lake Springs Mutual Water Co.	CA0510009	4,600	2,035
City of Angels Camp	CA0510003	3,836	1,697
Calaveras County Water District (CCWD)	CA0510017, CA0510016, CA0510006, CA0510004, CA0510019, CA0510005	27,954	12,369
Calaveras Public Utility District (CPUD)	CA0510002	6,286	2,781
Lili Valley Water Co.	CA0500027	99	44
Mineral Mountain Mutual Water Co.	CA0500019	125	55
Rite of Passage/ Sierra Ridge Academy	CA0500091	150	1 <sup>4</sup>
Snowshoe Springs Association	CA0510011	596	263
Toyon Park Water System	CA0500085	200	22 <sup>5</sup>
Union Public Utility District (UPUD)	CA0510001	4,620	2,044
Utica Water & Power Authority (UWPA)		8,456 <sup>2</sup>	3,741 <sup>2</sup>
Valley Springs Public Utility District (VSPUD)	CA0510010	900	398

Note: Number of connections shown are estimates based on limited available data.

- <sup>1</sup> Estimated population served defined for available PWSID data from US EPA Local Drinking Water Information website.
- <sup>2</sup> UWPA is wholesale raw water supplier to City of Angels Camp and UPUD. As such, population and connections *indirectly* served estimates are sums of City of Angels Camp and UPUD figures.
- <sup>3</sup> Estimated number of service connections based on limited available data; estimate uses CCWD system-wide average of 2.26 persons/connection from 2020 Urban Water Management Plan (UWMP).
- <sup>4</sup> Known that population served for Rite of Passage is based on Sierra Ridge Academy attendance figures, for large complex located near Sheep Ranch.
- <sup>5</sup> Toyon Park Water System number of connections approximate based on available information. Known that population served is based on Toyon Middle School attendance figures (single connection), and for nearby industrial park facility.

**Attachment B**  
**Calaveras County Water District**  
**Proposed Bulk Water Stations (BWSs): Update 8/24/2022**

STA	Property APN	Owner	Power Source	Service Area	Est. Nearby Main	Location	Note(s)
1	025-003-036	Ebbetts Pass Fire District	Solar	Ebbetts Pass	10" Ductile	38.320372, -120.251875	Assumed near Highway 4 intersection with Meko Drive.
2	030-019-015	Private (Unknown)	Solar	Ebbetts Pass	12"	38.205442, -120.369116	Assumed near Highway 4 intersection with Avery Sheep Ranch Road.
3A	061-040-008	Private (Unknown)	Solar	Copper Cove	12" PVC	37.939966, -120.605249	Opt1: Assumed near O'Byrnes Ferry Road intersection with Copper Cove Dr.
3B	054-012-042	Private (Unknown)	Solar	Copper Cove	12" DIP	37.978908, -120.638979	Opt2: Assumed on O'Byrnes Ferry Rd. near CalFire Copperopolis Station.
4	054-015-006	Private (Shell Gas Station)	Solar	Copper Cove	12" DIP	37.973603, -120.651429	Assumed Reeds Turnpike near turnout behind Copper Town Square.
5	N/A	Calaveras County	Solar	Jenny Lind	6"	38.096071, -120.872252	Along Jenny Lind/Milton Road, near intersection with Main Street.
6	072-044-003	CCWD	CCWD Facility	Jenny Lind		38.151485, -120.832078	Along Silver Rapids Road at CCWD Jenny Lind WTP property.
7	046-019-036	CCWD	CCWD Facility	Jenny Lind	12" DIP	38.176195, -120.814612	Assumed Hogan Dam Road near "F Tank" property (replace existing).
8	048-061-016	Private (Unknown)	Solar	Wallace	10" PVC	38.197904, -120.979847	Assumed Camanche Parkway South near USPS Wallace Post Office.
9	012-011-013	CCWD	CCWD Facility	West Point	6"	38.380140, -120.532494	Assumed along Highway 26, at West Point-Wilseyville WWTP property.
10	008-027-015	Private	Solar	West Point	6"	38.403584, -120.505943	Along Bummerville Road.

CCWD-owned Property

Figure 1. CCWD Ebbetts Pass and Sheep Ranch Service Areas (Proposed BWSs)

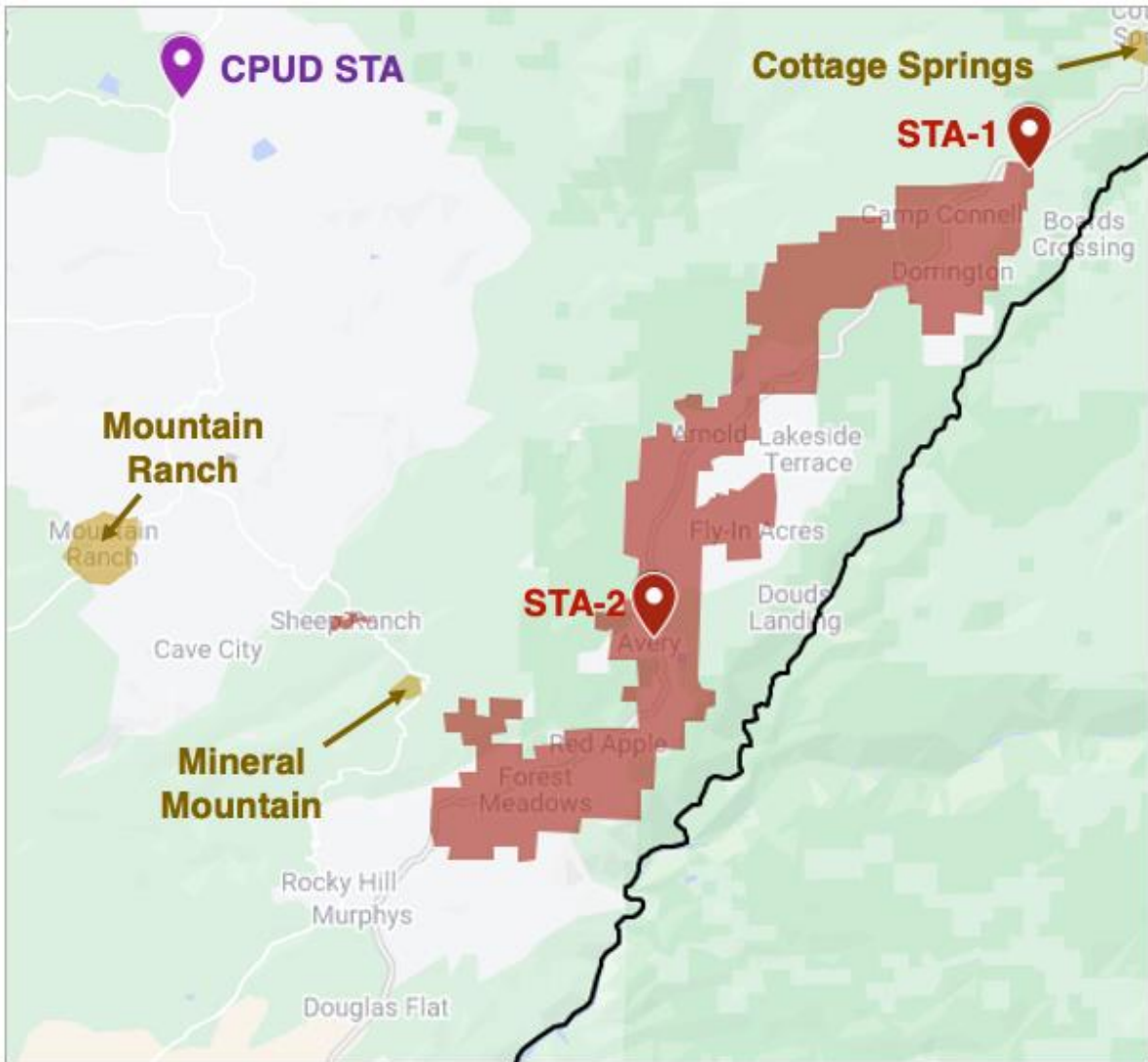


Figure 2. CCWD Copper Cove Service Area (Proposed BWSs)

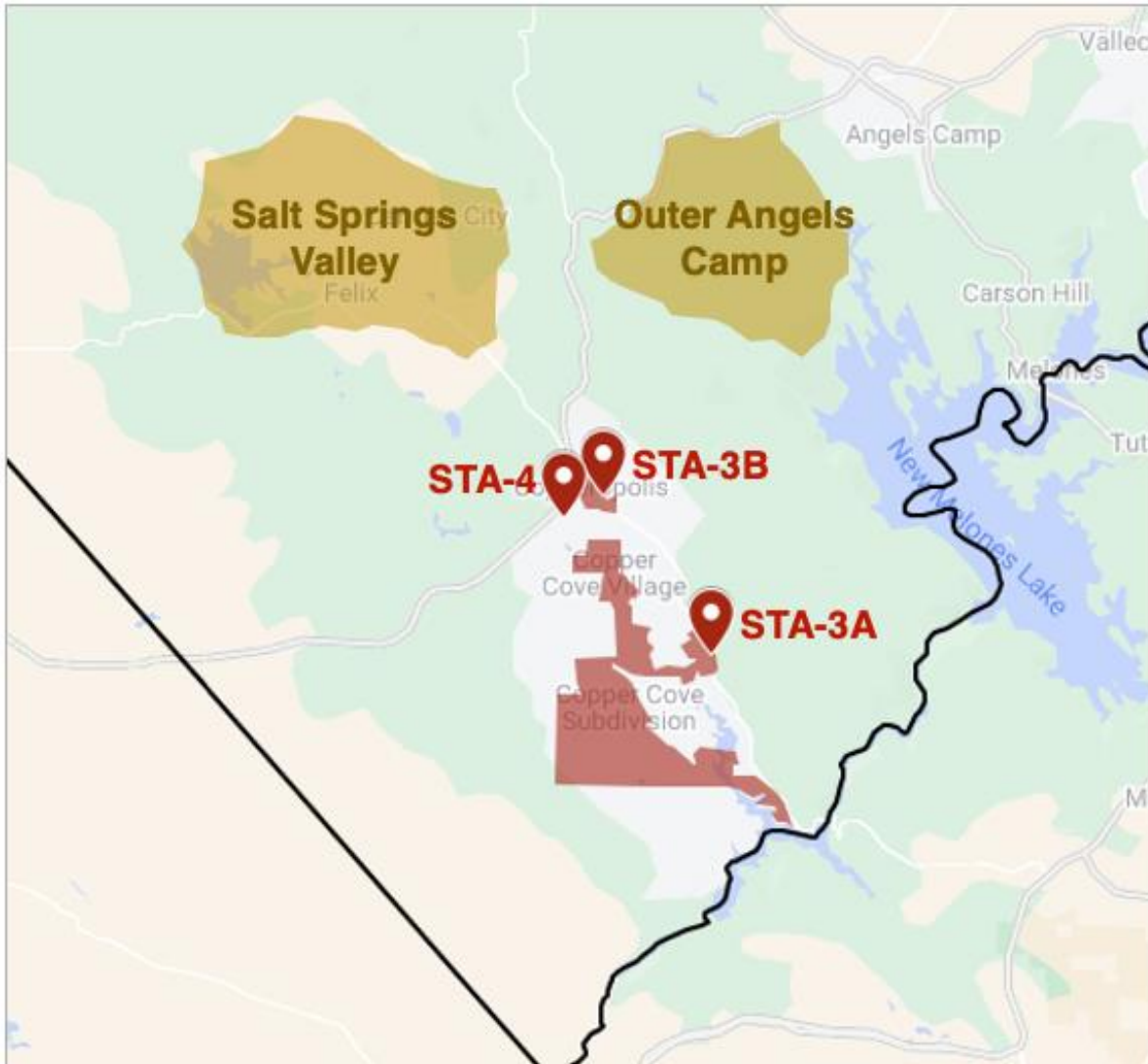


Figure 3. CCWD Jenny Lind and Wallace Service Areas (Proposed BWSs)

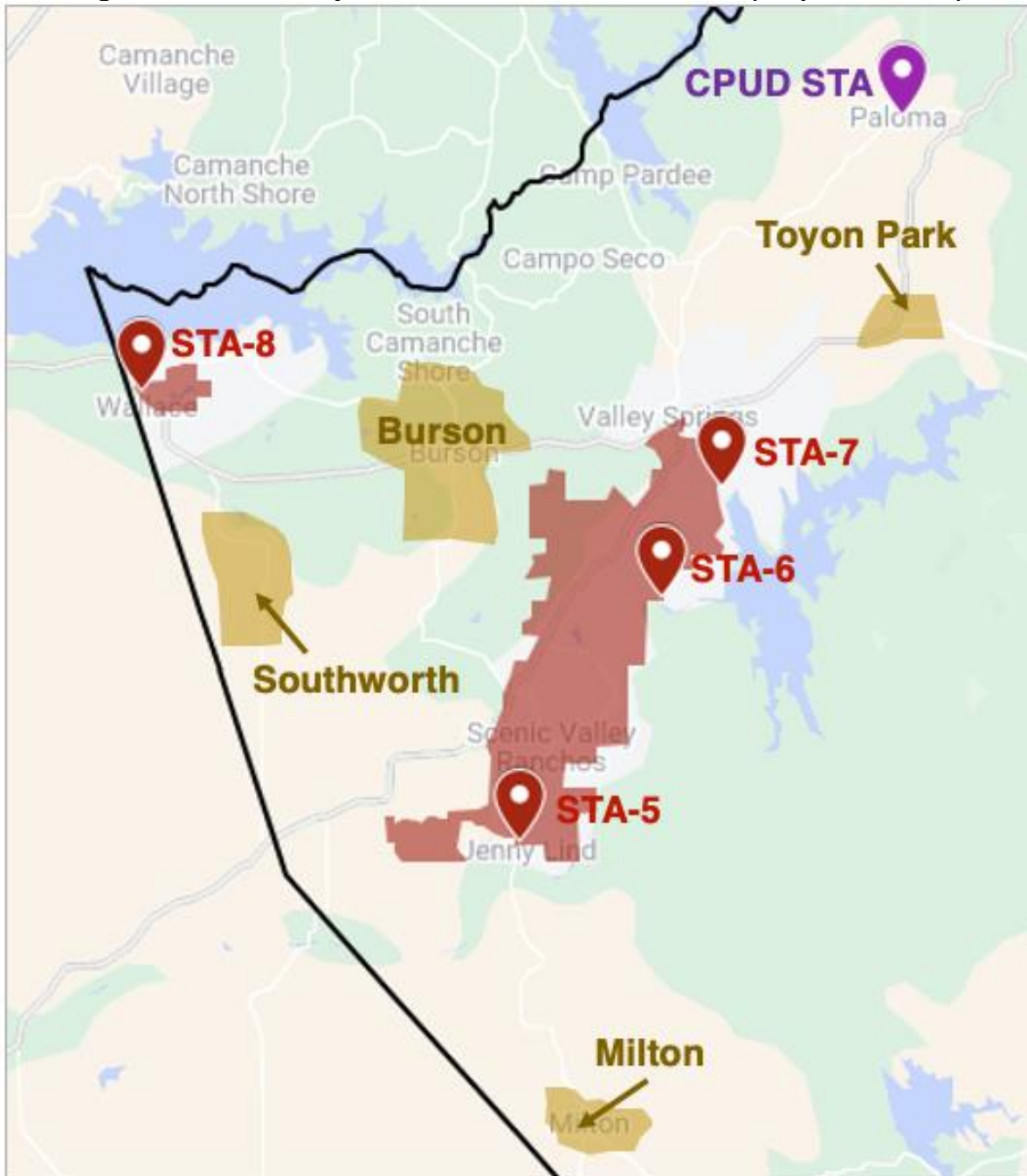
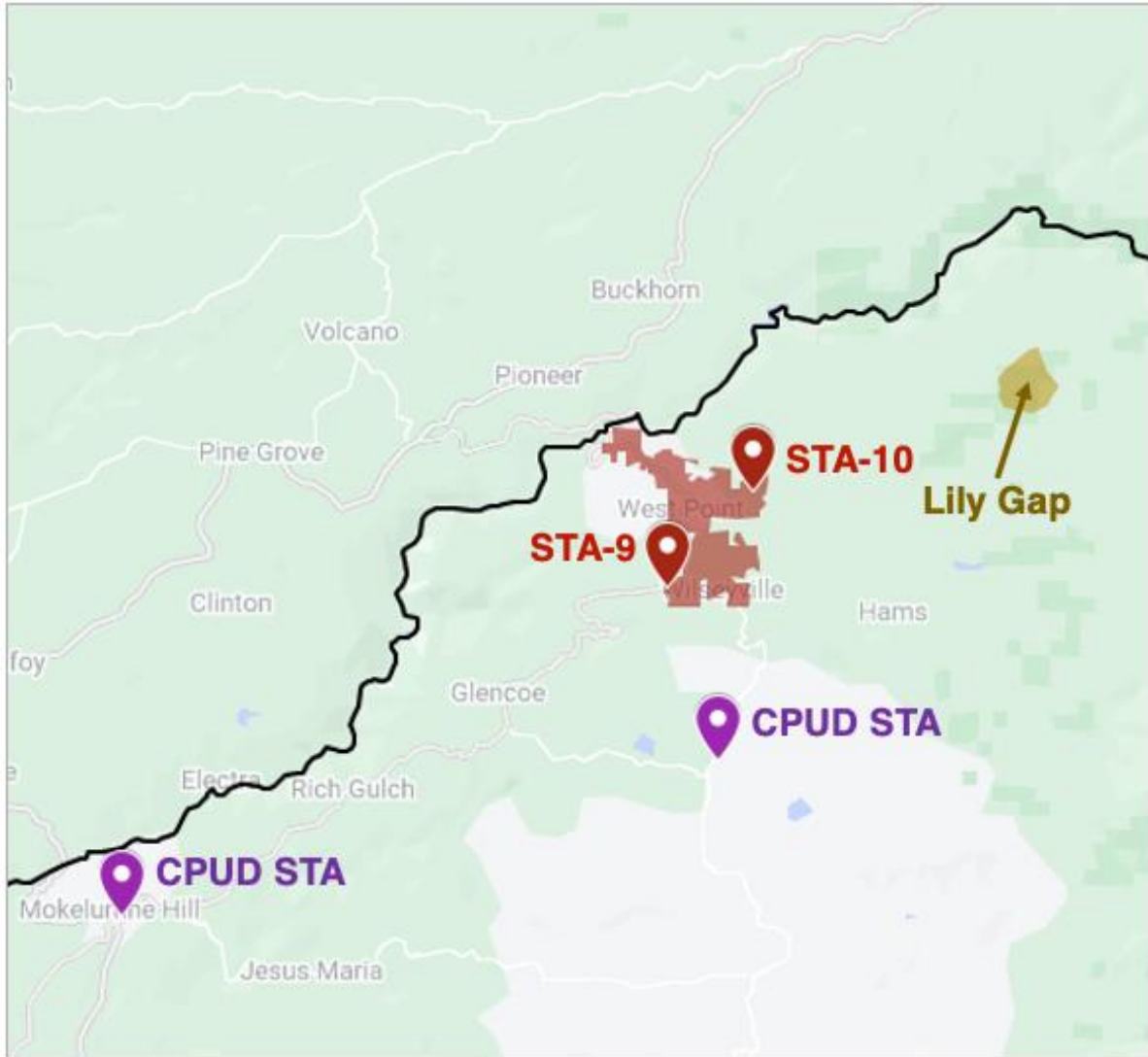


Figure 4. CCWD West Point Service Area (Proposed BWSs)





# Agenda Item

DATE: September 6, 2022

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

FROM: Engineering Department

RE: Capital Improvement Project Updates

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## **District Corp Yard (CIP 11101)**

Plummerbuilt Construction is currently working on Phase 2 Site Improvements for the Maintenance Building which should be completed by the end of October. The Phase 2 improvements include finish grading, paving, drainage, and fencing. Additionally, the District has advertised the Interior Tenant Improvement Portion of the Project for construction. The County Building Department has provided comments on the Tenant Improvement Plans with only one small item outstanding so we should receive the final approval very soon. Preconstruction meeting was held with PG&E for both gas and electric service. The new services can be installed once the backordered electrical switchgear arrives. Staff continues to work on the installation of electrical and lighting inside the main shop areas.

## **AMI / AMR Project (CIP 11096)**

Mueller Systems has completed the fixed network equipment installations Districtwide. Meter installations have been completed Districtwide except for approximately 100 locations that needed repairs and larger commercial meters on backorder. Some of the meter box lid sizes were not available during the initial meter installation because of shortages in raw polymer materials. Mueller is currently going back to the skipped locations to replace existing meter box lids with new AMI lids. Once the lids are fully installed Mueller will perform quality checks to ensure all meters are transmitting to the network, additional network devices will be added as needed to reach all meters. As part of the Project Mueller will provide training for District Staff on Sentryx online platform. A training session will occur on August 30<sup>th</sup>. Sentryx online platform allows District Staff to complete real time meter reads, monitor water usage by area, and provide leak detection. Sentryx is the second generation platform that Mueller has just recently transitioned to. There have been software bugs that we have experienced as part of this transition and staff and Mueller continued working diligently to correct and reduce errors.

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

This project includes the design and construction of 20,000-ft of new water transmission pipeline to the Jenny Lind Water System 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 will consist of approximately 13,400-ft of 14-inch diameter pipe and 6,500-ft of 12-inch diameter pipe. The piping material may be either C900 PVC or ductile iron. CCWD retained a consultant, Coleman Engineering, to design the project. Staff is now reviewing a pre-design report submitted by Coleman on August 22<sup>nd</sup>. The project is anticipated to get into construction next July 2023.

#### **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 has mobilized to the site during the past month and started work on underground piping installation and potholing existing piping within the of the foundation pad for a new metal building. Peterson Brustad, Inc. has been working with staff and KW Emerson to resolve utility conflicts on the site. Pending completion of the underground piping and placement of the concrete foundation, delivery of the pre-purchased treatment filter unit from Westech has been re-scheduled from September 2022 to January 2023.

#### **West Point and Wilseyville Wastewater Consolidation Project (CIP 15091)**

The Water Board staff is still in-progress on its review of the Final Budget Approval (FBA). K.W. Emerson mobilized to the site to start work as of September 19<sup>th</sup>. CCWD has approved the project's Storm Water Pollution Prevention Plan (SWPPP) and certified/file it with the State. The contractor has implemented BMP's, started clearing and grubbing, and will begin mass grading/earthwork week of August 29<sup>th</sup>. Levees around effluent storage reservoir have been cleared and fencing removed in preparation of placement of additional fill to raise levee height. Staff have reviewed and approved critical material submittals for pipe and fittings that currently have long lead times.

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

The construction contract was awarded to Mozingo Construction in the amount of \$7,658,400.00 at the July 27<sup>th</sup> Board meeting. A Pre-Construction Kick-off Meeting with Mozingo, County Public Work and CCWD was held on August 11<sup>th</sup>. The District, Mozingo, and County are working together to coordinate construction of force main on O'Byrnes Ferry Road under a very short timeframe (August 12<sup>th</sup> – 17<sup>th</sup>). The County hired George Reed to pave the full length of O'Byrnes Ferry Road at this same time, and everyone is working to coordinate work on the two projects. CCWD expedited approval of critical piping materials to allow Mozingo to immediately ship these materials.

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

CCWD has continued a line of communication with the U.S. Army Corps of Engineer's staff regarding a Draft Letter Agreement for the project. The design consultant, Keller, submitted a draft of the Pre-Design Report (PDR) of the Phase 1 Tertiary Improvements on August 16<sup>th</sup> which is currently under review by staff. The assessment includes consideration of solids handling options, facility layout, and selection of tertiary filter units, UV disinfection units, and Dissolved Air Floatation (DAF) units. The PDR emphasizes the



priority to add DAF units ahead of the filters to provide pre-treatment for algae. In preparing the PDR, it was determined that the initial construction cost estimate would grossly exceed the District's budget. The design team looked at value engineering options to reduce costs within budget and keep the project viable. An interim solution may be that both the existing tertiary filter and UV disinfection system remain in operation. This is feasible but the filter is not a suitable technology for this application and needs extensive rehabilitation. The existing UV system is an older generation that may be phased out soon and no longer supported by the manufacturer. Keller has postponed work on other scope items including the facility plan and Pond 6 utility relocation plans. Given the significant scope of facility improvements for the Copper Cove Tertiary Treatment Facility and critical deadlines, staff is considering bringing a second consultant, Hydrosience, on board to help expedite work assignments and divide up the original scope of work between these two firms.

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

This project is to raise the dam by 10 feet and increase the capacity of the Copper Cove Effluent Storage Pond 6 from 205 AF to 442 AF. The estimated construction cost is \$9.6 million including engineering, inspection, and applicable fees. The consultant, Wagner & Bosignore, re-started this project and as of February 25, 2022 submitted a draft of updated project drawings, specifications, Division of Safety of Dams (DSOD) Application and estimate of the application fees, and project construction cost estimate. Staff has waited on resubmitting the application and fees to DSOD until making further progress on identifying a suitable borrow site, utility relocation plans, completing the acquisition of additional easements, and aligning funding sources.

### **Copper Cove Water System Improvements Project (CIP 11111)**

Peterson Brustad Inc. (PBI) was awarded a contract at the May 11<sup>th</sup> Board meeting and a project kickoff meeting was held on site on May 24<sup>th</sup>. As of August 18<sup>th</sup>, PBI completed a Phase 1 Pre-Design Memo that includes recommendations for a new 360,000-gallon welded steel tank to replace the existing redwood tank at the Tank B site. Also, the memo makes recommendations for construction of a new 300,000-gallon clearwell at the Water Treatment Plant to supplement the existing clearwell. Next, PBI is starting Phase 2 evaluations of condition and recommendations for rehabilitation of the existing welded steel tank at the Tank B site and existing clearwell.

### **Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103)**

This proposed 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. Cal-OES/FEMA is working on completing their evaluations of the Phase 1 plans in order to complete its NEPA Environmental Review. After competing Phase 1 approval, Phase 2 will authorize funding for implementation and construction of the project. CCWD plans to pre-purchase the pumps and electrical equipment once Cal-OES/FEMA authorizes Phase 2. Blackwater has been working on completing the 90% design drawings which includes the structural improvements to the pump house and mechanical

buildings to support the new pumps and relocate the electrical control to top side of the Reservoir.

### **Ebbetts Pass Redwood Tanks Hardening (CIP 11095)**

This project is receiving significant hazard mitigation grant program (HMGP) funding from Cal-OES/FEMA. The project is in construction. However, the steel tank manufacturer has had significant raw material (aluminum, steel, sealer and glass coating) supply chain issues that have significantly impacted the construction schedule. The erection of the Heather Drive Tank in Forest Meadows was completed in July but during the initial filling a leak was found coming from underneath the tank. Aquastore is onsite this past week draining the tank and next week (8/29) will start to investigate and repair the leak. It is likely that the tank floor plates will have to be unbolted, pulled up, cleaned, and re-installed with new sealant. There are several other tanks in progress. At Flume Court and Big Tree 4 sites, K.W. Emerson has completed construction of tank foundations. Tank materials for Big Trees 4 arrived onsite and Flume Court Tank is scheduled to be delivered in the next couple of weeks. Larkspur Tank in Forest Meadows cannot be constructed until Heather Tank is fixed and placed into service.

### **Ebbetts Pass Hunter Reservoir Raw Water Pump Cal-OES Hazard Mitigation Project – Phase 1 Design and Environmental Review (CIP 11103)**

The District has completed the Phase 1 Portion of the design which included the 60% Design and the initial Environmental Studies. Cal-OES/FEMA is working on completing their evaluations of Phase 1 plans in order to complete NEPA Environmental Review, which takes 4-6 months. Phase 2 will authorize funding for construction of the project. The District plans to pre-purchase the pumps and electrical equipment once Cal-OES/FEMA authorizes Phase 2. Blackwater has been working on completing the 90% design drawings which includes the structural improvements to the pump house and mechanical buildings to support the new pumps and relocate the electrical control to top side of the Reservoir.

### **Forest Meadows Wastewater Plant / U.V. System Replacement (CIP 15106)**

The new U.V. system has been purchased, is being manufactured and will be delivered in January 2023. Staff have worked together to develop a conceptual design for the new installation. The Construction crew has cleared vegetation from the site and performed some rough grading of the project area. The existing UV System stainless-steel channel must be demolished and removed to make room for the new one. A new concrete channel must be constructed to house the new UV system. The construction of this new channel will be completed by a contractor. Staff will develop design plans for construction of the UV channel and installation of the new UV system components. The project will go into construction next summer of 2023.

### **Arnold Wastewater Secondary Clarifier Improvements Project (CIP 15095)**

The project will provide upgrades to the Arnold Wastewater Treatment Plant. The project will add a new secondary clarifier, RAS/WAS pump station, two additional aerobic digesters, and replace the plant's electrical motor controls, PLC and SCADA systems. The project will be advertised for bids at the end of this year. The construction cost estimate is \$5.6 million. Staff has progress meeting with the design consultant,

Hydroscience, on a bi-weekly basis. On July 15th, HydroScience provided 90% plans followed by a review meeting with staff. Also, Operations staff has had a sanitary sewer overflow condition occur at the last manhole upstream of the sewer plant and has asked HydroScience's to evaluate this problem.

# Agenda Item

DATE: September 6, 2022

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

FROM: Engineering Department

RE: Other Updates

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## **Copper Valley Town Square**

Staff have met with representatives of CV Development Partners LLC to continue on-going discussions on key issues. These include capacity fees, change of use applications, planned redevelopment of the Copper Valley Square complex, and future development of the Sawmill subdivision. The discussion includes requirements for facilities improvements including permanent sewer force main and new lift station to serve Copper Valley Square and upgrades to the Reeds Turnpike Water Booster Pump Station to increase potable water delivery to Copperopolis and Copper Valley Square. Staff has reviewed a pre-design report for a sewer force main and lift station to serve the project and provided comments back to the owner.

## **Copper Valley (Saddle Creek 7B)**

Finish work and punchlist items remain to be addressed and 2-year warranty bond secured before taking this to the Board of Directors for completion and acceptance.

## **Gold Creek Subdivision Unit 3**

Outstanding punchlist items remain to be resolved by Owner. The Owner has provided an easement for the relocated force main. Other punchlist items include furnishing of a 2-year warranty bond and resolution of a cost share for offsite improvements to increase the capacity of Huckleberry Lift Station. Once all punchlist items are corrected, staff can bring the project before the Board for final transfer and acceptance by CCWD.

## **Hogan Oaks I and II**

Staff had an onsite meeting with the representative of Hogan Oaks I & II to discuss the proposed developments. The has significant concerns in regard to the proximity of proposed Hogan Oaks I subdivision in relation to the La Contenta Wastewater Treatment Plant. Staff anticipates costly facility upgrades would be needed to mitigate odor and noise complaints from nearby residents.

## **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 on Berkesey Drive. Property acquisition for the secondary lift station will also be a key consideration. The School District's representative, Hugh Logan, KASL and CCWD are continuing discussions about how to proceed with this property acquisition. The new facilities will provide a future ability to provide sewer service to some lots along Berkesey Lane.

### **North Vista Plaza / LGI Homes**

As of August 18<sup>th</sup>, LGI Home and Rick Engineering have made a second submittal of development plans for North Vista Plaza. Also, at the request of staff, Rick Engineering submitted a sewer shed analysis showing impacts on the La Contenta wastewater collection system and bottleneck near Vista Del Lago Drive and Hwy 26. Staff will be reviewing this information and has a meeting scheduled with LGI Home and Rick Engineer on September 9<sup>th</sup>.

### **Tri-Dam Lake Tulloch Day Use Area**

Tri-Dam has requested water and sewer service to serve a new Lake Tulloch Day Use Area on O'Brynes Ferry Road west of the County Line. The District is working with Tri-Dam on the property easement for the utilities to be accepted by CCWD. In coordination with property owners, CCWD is wanting to replace some old, metered connections to adjacent properties

### **Wallace Ridge Estates**

District staff met up with Calaveras County Planning Department and Delta Engineering (owner representative) to coordinate work effort to get TSTM approval for the development. Owner to provide the District with a memorandum from hydrogeologist confirming underground well water capacity to meet the demand brought on by proposed development.