



FALLBROOK PUBLIC UTILITY DISTRICT  
MEETING OF THE ENGINEERING & OPERATIONS COMMITTEE

AGENDA

PURSUANT TO WAIVERS TO CERTAIN BROWN ACT PROVISIONS UNDER EXECUTIVE ORDERS ISSUED BY GOVERNOR NEWSOM RELATED TO THE COVID-19 STATE OF EMERGENCY, THIS MEETING WILL BE CONDUCTED VIA TELECONFERENCE USING THE BELOW INFORMATION, AND THERE WILL BE NO PHYSICAL LOCATION FROM WHICH MEMBERS OF THE PUBLIC MAY PARTICIPATE.

INSTEAD MEMBERS OF THE PUBLIC ARE ENCOURAGED TO PARTICIPATE IN THE COMMITTEE MEETING VIA TELECONFERENCE USING THE BELOW CALL-IN AND WEBLINK INFORMATION

MEMBERS OF THE PUBLIC MAY ALSO SUBMIT PUBLIC COMMENTS AND COMMENTS ON AGENDA ITEMS IN ADVANCE IN ONE OF THE FOLLOWING WAYS:

- BY EMAILING TO OUR BOARD SECRETARY AT LECKERT@FPUD.COM
- BY MAILING TO THE DISTRICT OFFICES AT 990 E. MISSION RD., FALLBROOK, CA 92028
- BY DEPOSITING THEM IN THE DISTRICT’S PAYMENT DROP BOX LOCATED AT 990 E. MISSION RD., FALLBROOK, CA 92028

ALL COMMENTS SUBMITTED BY WHAT EVER MEANS MUST BE RECEIVED AT LEAST ONE HOUR IN ADVANCE OF THE MEETING. ALL COMMENTS WILL BE READ TO THE BOARD DURING THE APPROPRIATE PORTION OF THE MEETING. PLEASE KEEP ANY WRITTEN COMMENTS TO 3 MINUTES. THESE PUBLIC COMMENT PROCEDURES SUPERSEDE THE DISTRICT’S STANDARD PUBLIC COMMENT POLICIES AND PROCEDURES TO THE CONTRARY.

AUDIO CALL-IN +1 (408) 418-9388  
ACCESS CODE 126 405 0150  
AUDIO PASSWORD 62245338

<https://fallbrookpublicutilitydistrict.my.webex.com/fallbrookpublicutilitydistrict.my/j.php?MTID=me6b1d1e6a6b2fb3cf7254a48e810d616>

MONDAY, OCTOBER 19, 2020  
10:00 A.M.

FALLBROOK PUBLIC UTILITY DISTRICT  
990 E. MISSION RD., FALLBROOK, CA 92028  
PHONE: (760) 728-1125

*If you have a disability and need an accommodation to participate in the meeting, please call the Secretary at (760) 999-2704 for assistance so the necessary arrangements can be made.*

**I. PRELIMINARY FUNCTIONS**

CALL TO ORDER / ROLL CALL

PUBLIC COMMENT

**II. ACTION / DISCUSSION -----(ITEMS A – C)**

- A. SMRCUP GAC TREATMENT SYSTEM EQUIPMENT PROCUREMENT
- B. AWARD OF 2.8 MG RESERVOIR PAINTING AND COATING PROJECT
- C. CMMS PRESENTATION

**III. ADJOURNMENT OF MEETING**

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**DECLARATION OF POSTING**

I, Lauren Eckert, Executive Assistant/Board Secretary of the Fallbrook Public Utility District, do hereby declare that I posted a copy of the foregoing agenda in the glass case at the entrance of the District Office located at 990 East Mission Road, Fallbrook, California, at least 72 hours prior to the meeting in accordance with Government Code § 54954.2.

I, Lauren Eckert, further declare under penalty of perjury and under the laws of the State of California that the foregoing is true and correct.

October 16, 2020  
Dated / Fallbrook, CA

/s/ Lauren Eckert  
Executive Assistant/Board Secretary

**MEMO**

**TO:** Engineering and Operations Committee  
**FROM:** Aaron Cook, Senior Engineer  
**DATE:** October 19, 2020  
**SUBJECT:** SMRCUP GAC Treatment System Equipment Procurement

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Description

Award of the SMRCUP Granular Activated Carbon Treatment System Equipment.

Purpose

Design and installation of additional treatment to the SMRCUP facilities to treat RO bypass flows was approved in January 2020. Granular Activated Carbon (GAC) treatment was identified as the best option to remove a wide range of potential emerging contaminants. This, coupled with the RO treatment, will provide the best available groundwater treatment technology. The GAC treatment system consists of three pairs of large vessels (12-foot diameter by approximately 20-foot height), which currently require about 9 months to acquire. To keep the project on schedule and accelerate the procurement, District staff, with the assistance of the project design engineer, prepared a bid package for the procurement of the additional treatment equipment. The bid opening was on October 8, 2020 and two bids were received. A summary of the bid results is below:

	<b>Company Name</b>	<b>Bid Amount</b>
1	Calgon Carbon Corporaton	\$1,254,578
2	AqueoUS Vets	\$1,565,333.99

Calgon Carbon was the apparent low bidder at \$1,254,578. On October 15, a formal bid protest was submitted by AqueoUS Vets claiming that Calgon Carbon did not adequately address the Disadvantage Business Enterprise requirements of the contract, which are required to receive Drinking Water State Revolving Funds. The protest is under review and is expected to be resolved before the October 26 Board Meeting. Both bidders are qualified from a technical standpoint.

Budgetary Impact

The necessary funds, regardless of the results of the protest review, will come from the contingency included in the SRF Loan Agreement. The current anticipated breakdown of contingency funds is as follows:

Total SRF Loan Agreement Contingency	\$5,440,000
IEC DSDC Amendment	(\$733,655)
GAC Treatment Equipment (worst case)	(\$1,565,334)
*Estimated GAC Treatment Yard Piping and Installation Costs	(\$2,500,000)
Estimated Remaining Funds for Potential Additional Construction Costs	\$641,011

\*Note that the yard piping and installation costs shown are an estimate. The actual cost should be confirmed within the next two months.

Recommended Action

That the Committee recommend to the Board authorization to award the SMRCUP GAC Treatment System Equipment Procurement to the lowest responsive, responsible bidder upon completion of the protest review and determination.

**M E M O**

**TO:** Engineering & Operations Committee  
**FROM:** Aaron Cook, Senior Engineer  
**DATE:** October 19, 2020  
**SUBJECT:** 2.8MG Reservoir Painting & Coating Project

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Description

Award of the 2.8MG Reservoir Painting & Coating Project.

Purpose

The District has a program in place to ensure the long-term integrity of steel water storage tanks that are critical components of the drinking water system. This program requires periodic recoating on the interior and exterior of the tanks to protect the steel from corrosion. The 2.8 MG Tank is the last of the District's steel reservoirs to be recoated in the current program. District staff prepared a bid package for the recoating and repair of the reservoir. The Bid opening was on October 13, 2020 and five bids were received. A summary of the bid results is below:

	<b>Company Name</b>	<b>Bid Amount</b>
1	Simpson Sandblasting	\$648,274
2	Capital Industrial Coatings	\$745,000
3	Paso Robles Tank	\$763,750
4	AMP United	\$772,700
5	AIS	\$860,900

Simpson Sandblasting was the apparent lowest responsible bidder at \$648,274. Simpson Sandblasting has successfully completed work for the District in the past.

Budgetary Impact

The approved capital budget for FY2020/21 included \$654,000 for this project. The bid is over that budgeted value, and there will be internal administration and construction management costs so the total project will likely end up costing closer to \$690,000. The budget also included \$80,000 set aside for miscellaneous capital pipeline replacement needs. Approximately \$40,000 of these funds will be allocated to cover the additional anticipated costs to complete the 2.8MG Reservoir Painting & Coating Project.

Recommended Action

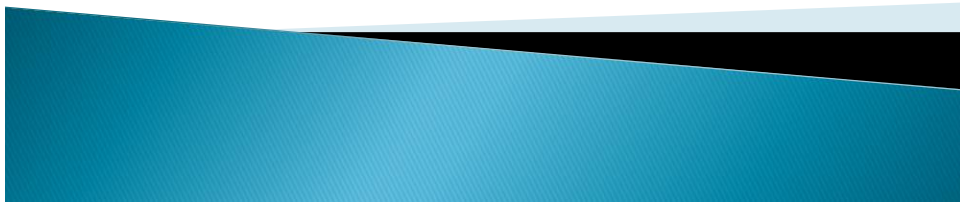
That the Committee recommend to the Board authorization to award the 2.8MG Reservoir Painting & Coating Project to the lowest responsible bidder, Simpson Sandblasting, for \$648,274.



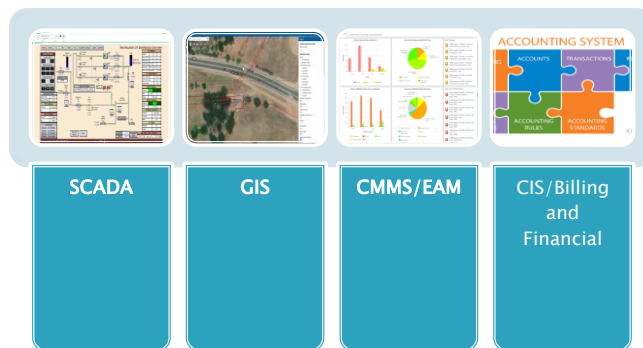
# Fallbrook Public Utility District

October 19, 2020

## Cost/Benefit Analysis of key Operational Software Systems



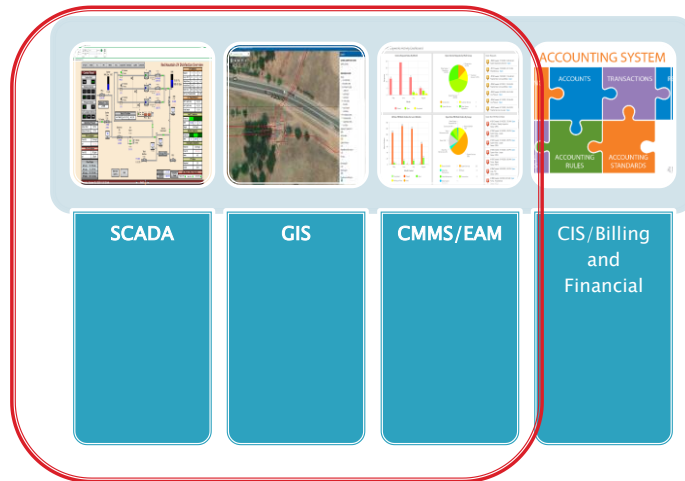
### Key District Software Systems



SCADA - Supervisory Control and Data Acquisition System  
GIS - Geographic Information System  
CMMS/EAM - Computerized Maintenance Management System/Enterprise Asset Management  
CIS - Customer Information System



# Key District Software Systems



## What does each of these Operational Software Systems Do?

- ▶ SCADA (Supervisory Control and Data Acquisition System)
  - Remote monitoring of water and wastewater system.
  - Remote control of facilities
  - Alarms and automation
- ▶ Necessary to eliminate 24/7 staffing for Operations of W/WW facilities





# What does each of these Operational Software Systems Do?

- ▶ GIS (Geographic Information System)
  - A spatial database of all District facilities.
  - Field access of locations and as-builts of all facilities.
  - Access to key data on District facilities
- ▶ System replaces staff constantly update and produce paper maps for field staff and to develop large database on facilities



# What does each of these Operational Software Systems Do?

- ▶ CMMS/EAM (Computerized Maintenance Management System/ Enterprise Asset Management)
  - A system to schedule and track all maintenance and repair needs of District facilities.
  - Field access to latest data on maintenance and outstanding infrastructure needs.
  - Access to key record data on District infrastructure
  - Assist with scheduling and tracking of field activities
- ▶ System replaces staff to constantly track, produce and assign field work orders for field staff and to develop and maintain large database on history of field activities.



# CityWorks (EAM/CMMS)

## Work Orders & Service Requests

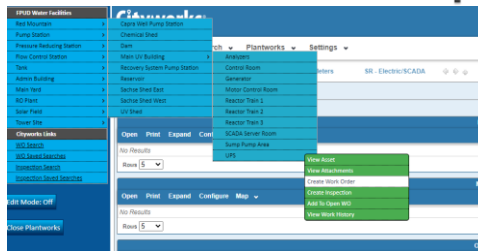
- ▶ 1572 Total Work Orders & Service Requests Created
- ▶ 285 Average Per Month
- ▶ 82,000 Assets



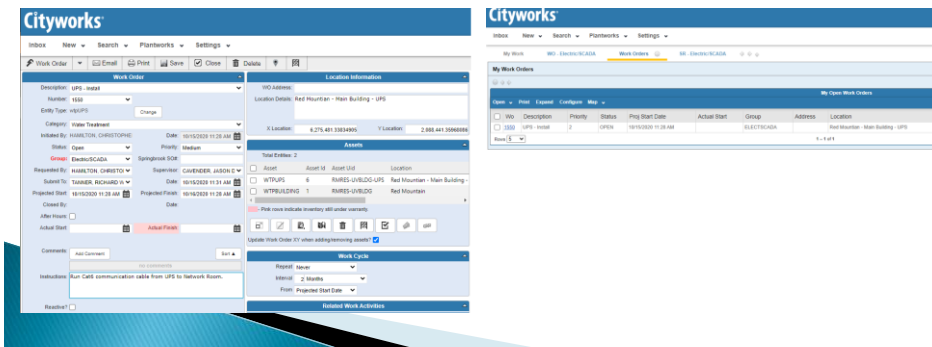
## CMMS Work Flow Example

1. Identify the asset and create a work order

2. Fill in the work order with the instructions



3. The work order will now be in the employees inbox



# CMMS Work Flow Example

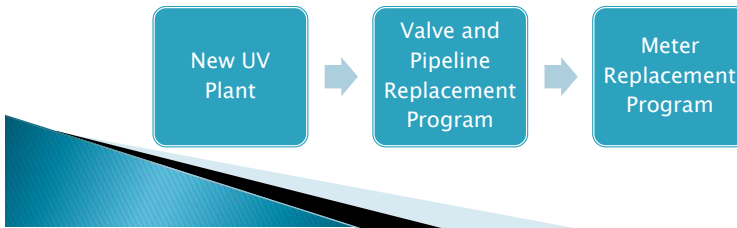
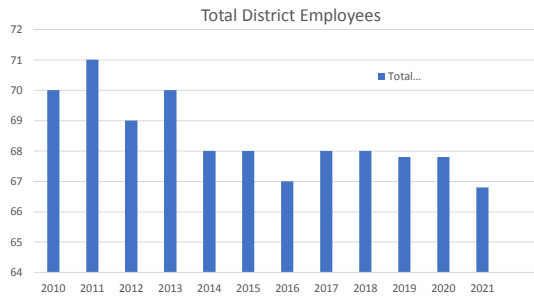


Supervisors & Managers use Dashboards to track workload and completion

# What does this cost the District?

Annual Software Costs	
CMMS/EAM Annual Cost	\$ 20,000
GIS Annual Cost	\$ 37,780
SCADA Annual Cost	\$ 16,370
<b>Total</b>	<b>\$ 74,150</b>

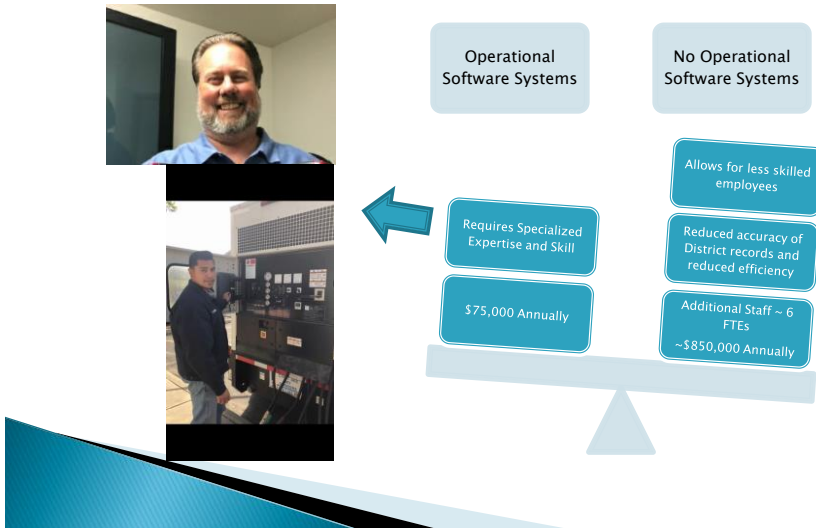
# What are the savings?



## What would be the impact of eliminating some of these software systems?

- ▶ SCADA
  - Require 24/7 staffing. Would require 3-4 staff and instead of 2-3 for SMRCUP operation another 4-5 staff.
- ▶ GIS
  - Require 1-2 additional staff to update, maintain and produce maps and maintain records or
  - No organized system for maintaining and tracking District facilities
- ▶ CMMS/EAM
  - Add 1-2 staff for scheduling and tracking of maintenance and field services or
  - No organized system for scheduling and tracking field services

# What is the cost/benefit?



## Key Takeaways

- ▶ Biggest innovation in the industry over last couple decades has been software and automation.
- ▶ Smart implementation of software systems has ability to allow us to increase our Level of Service and reduce staff.
- ▶ District has implemented systems to be in line with industry best practices. Still some gaps in integration of systems with CIS/Financial System
- ▶ These systems require effort and expertise to implement by they result in on-going significant savings to our ratepayers.

# Questions

