



CAMBRIA COMMUNITY SERVICES DISTRICT

Karen Dean, Chair of the Resources & Infrastructure Committee, hereby calls a Special Meeting pursuant to California Government Code Section 54956. The Special Meeting will be held: **Monday, November 6, 2023, 2:00 PM, 1000 Main Street, Cambria, CA 93428.** The purpose of Special Meeting is to discuss or transact the following business:

NOTICE OF SPECIAL MEETING

CAMBRIA COMMUNITY SERVICES DISTRICT RESOURCES & INFRASTRUCTURE COMMITTEE

Monday, November 6, 2023

2:00 PM

1000 Main Street, Cambria, CA 93428

In person at:

**Cambria Veterans' Memorial Hall
1000 Main Street, Cambria, CA 93428**

AND via Zoom at:

Please click the link below to join the webinar:

Please click the link below to join the webinar:

[https://us06web.zoom.us/j/87606686384?](https://us06web.zoom.us/j/87606686384?pwd=ajdUNXpkRnpRREVDOGHNNjZYbDV1dz09)

[pwd=ajdUNXpkRnpRREVDOGHNNjZYbDV1dz09](https://us06web.zoom.us/j/87606686384?pwd=ajdUNXpkRnpRREVDOGHNNjZYbDV1dz09)

Passcode: 624729

Or One tap mobile:

US: +16694449171,,87606686384# or +16699006833,,87606686384#

Or Telephone:

Dial (for higher quality, dial a number based on your current location):

US: +1 669 444 9171 or +1 669 900 6833 or +1 253 205 0468 or +1 253 215 8782 or +1 346

248 7799 or +1 719 359 4580 or +1 312 626 6799 or +1 360 209 5623 or +1 386 347 5053

or +1 507 473 4847 or +1 564 217 2000 or +1 646 931 3860 or +1 689 278 1000 or +1 929

205 6099 or +1 301 715 8592 or +1 305 224 1968 or +1 309 205 3325

Webinar ID: 876 0668 6384

International numbers available: <https://us06web.zoom.us/j/87606686384?pwd=ajdUNXpkRnpRREVDOGHNNjZYbDV1dz09>

Copies of the staff reports or other documentation relating to each item of business referred to on the agenda are on file in the CCSD Administration Office, available for public inspection during District business hours. The agenda and agenda packets are also available on the CCSD website at <https://www.cambriacsd.org/>. In compliance with the

Americans with Disabilities Act, if you need special assistance to participate in this meeting or if you need the agenda or other documents in the agenda packet provided in an alternative format, contact the Confidential Administrative Assistant at 805-927-6223 at least 48 hours before the meeting to ensure that reasonable arrangements can be made. The Confidential Administrative Assistant will answer any questions regarding the agenda.

1. OPENING

A. CALL TO ORDER

B. ESTABLISH QUORUM

C. CHAIRMAN'S REPORT

D. AD HOC SUB-COMMITTEE REPORTS

E. COMMITTEE MEMBER COMMUNICATIONS

Any Committee Member may make an announcement, report briefly on his or her activities, or ask a question for clarification.

F. UTILITIES DEPARTMENT MANAGER'S REPORT

2. PUBLIC COMMENTS ON AGENDA ITEMS

Members of the public may now address the Board on any item on its agenda today.

3. CONSENT AGENDA

- A. Consideration to Approve the October 2, 2023 Special Meeting Minutes and October 17, 2023 Joint Special Meeting Minutes

4. REGULAR BUSINESS

- A. Discussion and Consideration of a Recommendation to the CCSD Board of Directors Regarding Approval of an Agreement for Contractor Services for Replacing San Simeon Well 3 Pump
- B. Discussion and Consideration to Form a Capital Improvement Plan (CIP) Ad Hoc Committee to Work with CCSD Staff to Prioritize Non-SST Projects
- C. Receive Ad Hoc Committee Report on Brine Waste Disposal Options and Discussion and Consideration to Approve Recommendation to the CCSD Board of Directors
- D. Receive Update on Advanced Clean Fleet Regulation

5. FUTURE AGENDA ITEMS

6. ADJOURN

RESOURCES & INFRASTRUCTURE COMMITTEE

SPECIAL MEETING

Monday, October 2, 2023 - 2:00 PM

1000 Main Street Cambria, CA 93428

1. OPENING

A. CALL TO ORDER

Chairperson Dean called the meeting to order at 2:00 pm.

B. ESTABLISH QUORUM

A quorum was established.

Committee members present: Chairperson Karen Dean, Mark Meeks, James Webb, Steven Siebuhr and Derrick Williams.

Committee members absent: Juli Amodei.

Staff present: General Manager Matthew McElhenie, Confidential Administrative Assistant Haley Dodson, Utilities Department Manager Jim Green, and Administrative Department Manager Denise Fritz.

Attendees present: Community members Chris Siebuhr, Allan Dean, and Hank Krzciuk. Interim San Simeon CSD General Manager Patrick Faverty

C. CHAIRMAN'S REPORT

No Report.

D. COMMITTEE MEMBER COMMUNICATIONS

No Report.

E. UTILITIES DEPARTMENT MANAGER'S REPORT

Mr. Green highlighted various items from the utilities department

- Coastal Development Permit (CDP). The District has selected SWCA Environmental Consultants for scoping the CDP and developing mitigation alternatives.
- Stuart Street Tanks. The District found a 1991 soils report for the tank site. This report will be refreshed for the current project; reusing parts of this report could save time and effort. The District is waiting for final approval of the grant funding for this project from EPA. Some trees that are in poor condition around the tanks may need to be trimmed or removed

- Badger Meter Replacement. The contract for this project will likely be approved by the end of the week.
- East Ranch Restroom. District staff will be meeting with the design consultant, Monte Soto of Civil Design Studio, on October 3. District staff will have more details regarding the bathroom after that meeting.
- San Simeon Wellfield Water Line Replacement. Cannon Engineering has flown a drone to start laying out initial alignment alternatives. Alternative alignments will be presented at a future R&I committee meeting.
- San Simeon Well #3. The District recently received two more bids on the well's replacement pump. A full staff report will be presented at the next R&I committee meeting

2. PUBLIC COMMENTS ON AGENDA ITEMS

No Public Comment:

3. CONSENT AGENDA

A. Consideration to Approve the September 11, 2023 Regular Meeting Minutes

Committee member Webb moved to approve the minutes.

Committee member Meeks seconded the motion.

The motion was approved: 3-Ayes; 0-Nays; 1-Abstain (Williams); 1-Absent (Amodei)

4. REGULAR BUSINESS

A. Discussion Regarding CIP List Review Format

Administrative Department Manager Fritz presented the reformatted CIP list and reported that she has met with the chair of the finance committee and the chair of R&I committee regarding the CIP list format.

Committee member Williams suggested the groups in the CIP list might be further divided to clarify what the District is currently funding or planning on funding, and what the District hopes to fund in the future.

Chairperson Dean stated that the R&I Committee has previously investigated how to rank CIP items. The proposed ranking was based on importance and what is currently necessary now. Administrative Department Manager Fritz comments that it might be important for the number one ranking to be reserved for projects being funded in the current year. The methodology for ranking CIP items will be a discussion at the joint Finance/R&I committees meeting.

Public comments

Ms. Dickason asked if the EV charging station is complete. Ms. Fritz states it is in process, and will be updated.

B. Discussion and Consideration to Choose Dates to Schedule a Joint Finance Committee and Resources & Infrastructure Committee Special Meeting in October 2023

Committee member Williams moved to set a meeting on October 17 at 2:00 pm.

Committee member Meeks seconded the motion.

The motion was approved: 4-Ayes; 0-Nays; 1-Absent (Amodei)

C. Discussion of Final Ad Hoc Committee Report on Water Supply and Long Term Off Stream Storage and Approve Recommendation to Forward the Water Supply and Long Term Off Stream Storage Ad Hoc Report to the Board

Committee member Williams presented the report.

Committee member Webb stated that some options for long term supply and storage have been extensively studied in the past, and options that have been rejected many times were not included in the report. The report tried to identify options that use existing infrastructure and investments, such as the WRF.

Chairperson Dean requested clarification on whether Direct Potable Reuse allows recycled water to be put directly into the District's distribution system. Utilities Department Manager Green stated that under Direct Potable Reuse, the recovered water would go directly into the distribution system. The water would not be a new source of water since it is already recovered and previously served as part of the planned WRF operations.

Chairperson Dean requested clarification on the statement that new reservoirs must hold two to three years of supply. Committee member Webb stated that this came from a model developed by the Army Corp of Engineers. The Army Corp of Engineers needed to store two to three year's supply of water to achieve greater than 95% supply reliability. The Army Corp of Engineers needed 3 reservoirs to achieve adequate capacity.

Utilities Department Manager Green suggests these water supply and storage options be viewed as a portfolio. The District may not need one project; multiple sources of water and storage provide reliability.

Public Comment

Committee Member asked about how CCSD would deal with the waste from a surface water treatment plant. Utilities Department Manager Green says the District would need to truck away solids.

San Simeon Community Services District (SSCSD) interim GM Faverty introduced himself and stated that he and the new SSCSD Board of Directors are interested in cooperating with CCSD, Cayucos, and others for the collective good.

Ms. Dickason pointed out that Mr. Warren has been offering his property for a reservoir since 2006, and the opportunity still exists.

Mr. Swartz asked what the Board will do with this report. He suggested the existing groundwater model be used to assess if any options that rely on increasing pumping or storing water in aquifers are viable.

Mr. Krzciuk suggested that if we are discussing working with cooperating agencies, we might address future relationships with State Parks. Chairperson Dean suggests the report be modified to add a footnote regarding State Parks.

Committee member Williams moved to approve the report with addenda as discussed.

Committee member Webb seconded the motion.

The motion was approved: 4-Ayes; 0-Nays; 1-Absent (Amodei)

5. FUTURE AGENDA ITEMS

Chairperson Dean asked for any future agenda items. Three future agenda items are suggested

- San Simon well 3 replacement update
- PG&E/Advanced Clean Fleet EV upgrade report
- A report on the District's wet weather preparation

6. ADJOURN

Chairperson Dean adjourned the meeting at 2:55 pm.

FINANCE COMMITTEE/RESOURCES & INFRASTRUCTURE COMMITTEE

SPECIAL JOINT MEETING
Tuesday, October 17, 2023 - 2:00 PM
1000 Main Street Cambria, CA 93428

1. OPENING**A. CALL TO ORDER**

Finance Committee Chairperson Gray called the meeting to order at 2:00 pm.

B. ESTABLISH QUORUM

A Finance Committee quorum was established.
An R&I Committee quorum was established.

Finance Committee members present: Tom Gray, Cheryl McDowell, David Pierson, Karen Chrisman, and Scott McCann.

R&I Committee members present: Karen Dean, Juli Amodei, James Webb, and Derrick Williams. Members absent: Mark Meeks and Steven Siebuhr.

Staff present: Administrative Department Manager Denise Fritz and Confidential Administrative Assistant Haley Dodson.

2. PUBLIC COMMENTS ON AGENDA ITEMS

No public comment.

3. REGULAR BUSINESS**A. Discussion Regarding CIP List Review Format**

Administrative Department Manager Fritz presented the reformatted CIP list and stated that the purpose of this meeting is to discuss the ranking methodology. The District's finance department uses the CIP list to track expenditures, and as a tool for long-term capital expenditure planning.

R&I Chairperson Dean states that the R&I committee will address the ranking at their next meeting, along with District staff. The R&I committee previously ranked items by importance. For example:

1. Emergency items
2. Very important items, but not emergency
3. Less important items
4. Items that would be nice

Administrative Department Manager Fritz states that another approach is to reserve the top ranking for items that are currently budgeted, even if these items are not the most important items.

Finance Committee member Pierson states that a unified ranking system is needed so that the District's fund managers have a consistent template for developing their individual priority lists.

Administrative Department Manager Fritz suggests funded items could be labeled with a sub-rank such as 1.1 or 2.1.

Finance Committee member McCann suggests it is important to retain a simple system.

Finance Committee member McDowell requests that items on the CIP list include dates indicating how long the item has been on the list. Furthermore, the figures on the CIP list are not accurate.

Finance Chairperson Gray notes that items that are already budgeted may not need a priority ranking because they are ongoing. Administrative Department Manager Fritz proposes that budgeted projects be assigned a different signifier. Budgeted items could have their numeric ranking replaced with a "B" (for "Budgeted"). Budgeted items would be listed separately on the CIP list.

Administrative Department Manager Fritz suggests that the CIP list include a footnote that describes the ranking system. The differentiation between rankings of 1, 2, and 3 is for the R&I Committee and the managers to agree on. Finance Committee member McCann suggests a decimal system where the number before the decimal is the priority, and the number after the decimal indicates project status.

The Committees agree that budgeted items will be assigned a B, and other items will be prioritized either with a 1, 2, 3 system or a 1.1, 1.2, 2.1, etc. system.

Finance Committee member Chrisman identified typos in the CIP list.

Finance Chairperson Gray suggests the following prioritization:

1. Items that are critical for safety and/or regulatory compliance
2. Items that have an operational necessity, but are not critical
3. Future improvements

R&I Chairperson Dean requests that completed projects remain on the CIP as documentation of what the District has completed.

Finance Committee member Pierson suggests that the CIP include footnotes for projects that are at least partially funded by grants or other sources. The CIP list currently lists full project costs, whether the project is funded by the district or not.

4. FUTURE AGENDA ITEMS

None.

5. ADJOURN

Finance Chairperson Gray adjourned the meeting at 2:39 pm.

TO: Resources & Infrastructure Committee

AGENDA NO. 4.A.

FROM: Matthew McElhenie, General Manager
Jim Green, Utilities Department Manager

Meeting Date: November 6, 2023

Subject: Discussion and Consideration of a Recommendation to the CCSD Board of Directors Regarding Approval of an Agreement for Contractor Services for Replacing San Simeon Well 3 Pump

RECOMMENDATIONS:

Staff recommends that the Resources & Infrastructure Committee discuss and consider an Agreement for Contractor Services with 3rd Generation Pump & Well Service for replacing the San Simeon Well 3 (SS3) pump and recommend that the Board of Directors approve the agreement.

FISCAL IMPACT:

The estimated cost of the SS3 pump replacement based on the proposal provided by 3rd Generation Pump is \$33,379.82. However, a budget of \$45,000 will be requested to cover any unforeseen expenses that may result during project activities and will be funded from Water Fund reserves as of June 30, 2023. Water Fund cash flow reserves are \$3,171,037 as of June 30, 2023.

DISCUSSION:

Recent wellhead operations at the SS3 have resulted in the final stages of duty life cycle operation for the 50 HP vertical turbine motor and pump installed in May 1985. Recent inspections have revealed that a harmful vibration is becoming increasingly severe. Diagnosis of the vibration demonstrates that it is coming from the impeller cup bowl assembly (15 Stage). Over time, uneven wear has occurred on the cup assemblies, resulting in wear to the tube and shaft. This recent vibration has also affected the pump motor life, causing extreme heat during daily production runs from this wellhead. SS3 produced 154.11 AF in the calendar year 2022. This yield was 30.44% of the total production for the community in 2022.

Repair for this failure involves removing the vertical turbine motor, 120' tube, shaft, and impellers by crane. Once the motor and pump assemblies are removed, the well casing for the pump will have a video camera inspection performed to evaluate its condition. The new pump will then be installed with new discharge piping and a new pump head, and the discharge piping will be connected from the pump head to the water transmission piping.

A new submersible pump and motor (similar to the one recently installed at SR 4 in May 2022) will considerably reduce appliance noise and energy consumption while providing a return on investment and positively influencing climate action planning.

Attachments: Att 01 Est Miller Drilling Company Submersible
Att 02 Est Miller Drilling Company Turbine
Att 03 Est Miller Drilling Company Video Inspection
Att 04 Est Filippini & Thompson Drilling, Inc.
Att 05 Est 3rd Gen Pump Well 3 Submersible
Att 06 Est 3rd Gen Well 3 Submersible Add VFD

329 North Main Street
Templeton, CA 93465



805-434-1888 main
805-434-2384 fax

www.millerdrillingcompany.com

PUMP ESTIMATE

8/4/2023

CAMBRIA CSD
P.O. BOX 65
CAMBRIA, CA 93428

Project	Terms
	Net 15 days
State Drilling Contractor License # 324634	

Description	Qty / Feet	Price Each	Total
** SS# 3 ** SUBMERSIBLE PUMP **			
50 HP 3 PHASE 460 VOLT 6" SUBMERSIBLE MOTOR	1	10,575.00	10,575.00T
385S500-6 PUMP END ONLY	1	5,780.00	5,780.00T
6" x 20' x .280 WALL TAPER COLUMN PIPE (PER PIECE)	6	825.00	4,950.00T
#4/4 JACKET SUBMERSIBLE PUMP CABLE (PER FOOT)	130	6.75	877.50T
SPLICE KIT	1	50.00	50.00T
FABRICATED WELL HEAD	1	1,500.00	1,500.00T
MISC. FITTINGS FLEX, NIPPLES, MAKE UP BOX, BANDING MATERIAL, GASKETS, ETC.	1	1,000.00	1,000.00T
10 MIL TAPE	10	9.90	99.00T
1" SOUNDING TUBE SCH 40 PVC (PER FOOT)	130	1.65	214.50T
LABOR SERVICE CALL 8/3/2023 TROUBLE SHOOT (PREVAILING WAGE)	1.25	270.00	337.50
LARGE RIG LABOR (P38) TO PULL TURBINE PUMP FROM WELL (PREVAILING WAGE)	7	445.00	3,115.00
STINGER CRANE LABOR TO REMOVE OLD MATERIAL AND STAGE NEW MATERIAL (PREVAILING WAGE)	5	425.00	2,125.00
MID SIZED RIG LABOR (P20) TO INSTALL SUBMERSIBLE PUMP IN TO WELL (PREVAILING WAGE)	7	445.00	3,115.00
** CUSTOMER RESPONSIBLE TO TIE NEW FABRICATED WELL HEAD TO EXISTING DISCHARGE PIPING **			

Accepted by: _____

This job will not be scheduled until this estimate has been signed and original copy is returned with a deposit of 40% of the total amount due. This estimate will expire in 30 days unless accepted.

Seller, for security purpose, retains title to described goods until paid according to terms. Buyer assumes risk of loss or damage to described goods upon delivery. In case of buyers default, seller or his agents may take possession of and remove described goods from buyers premises or elsewhere without prior notice. Buyer waives all rights of action for trespass, damage or other cause resulting from repossession. Upon buyers default in payment, buyer agrees to pay a finance charge of 18% APR plus reasonable collection costs and actual attorney fees.



WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Subtotal	\$33,738.50
Sales Tax (7.25%)	\$1,815.84
Total	\$35,554.34

329 North Main Street
Templeton, CA 93465



805-434-1888 main
805-434-2384 fax

www.millerdrillingcompany.com

PUMP ESTIMATE

CAMBRIA CSD
P.O. BOX 65
CAMBRIA, CA 93428

8/4/2023	
Project	Terms
	Net 15 days
State Drilling Contractor License # 324634	

Description	Qty / Feet	Price Each	Total
** SS# 3 ** TURBINE PUMP **			
15 STAGE 8EHM BOWL ASSEMBLY	1	14,305.00	14,305.00T
6" x 20' x .280 WALL BUTT COLUMN PIPE (PER PIECE)	6	825.00	4,950.00T
2" x 1-3/16" x 20' PEERLESS TUBE & SHAFT ASSEMBLY	6	760.00	4,560.00T
6" x 2" SPIDERS	2	10.00	20.00T
DISCHARGE HEAD PARTS	1	1,500.00	1,500.00T
1" SOUNDING TUBE SCH 40 PVC (PER FOOT)	130	1.65	214.50T
MISC. FITTINGS THREAD COMPOUNDS, BOLTS, GASKETS, ETC.	1	500.00	500.00T
LABOR SERVICE CALL 8/3/2023 TROUBLE SHOOT (PREVAILING WAGE)	1.25	270.00	337.50
LARGE RIG LABOR (P38) TO PULL TURBINE PUMP FROM WELL (PREVAILING WAGE)	7	445.00	3,115.00
STINGER CRANE LABOR TO REMOVE OLD MATERIAL AND STAGE NEW MATERIAL (PREVAILING WAGE)	5	425.00	2,125.00
LARGE RIG LABOR (P38) TO INSTALL TURBINE PUMP IN TO WELL (PREVAILING WAGE)	7	445.00	3,115.00
** THIS WOULD RE-USE EXISTING 50 HP WESTINGHOUSE MOTOR **			

Accepted by: _____

This job will not be scheduled until this estimate has been signed and original copy is returned with a deposit of 40% of the total amount due. This estimate will expire in 30 days unless accepted.

Seller, for security purpose, retains title to described goods until paid according to terms. Buyer assumes risk of loss or damage to described goods upon delivery. In case of buyers default, seller or his agents may take possession of and remove described goods from buyers premises or elsewhere without prior notice. Buyer waives all rights of action for trespass, damage or other cause resulting from repossession. Upon buyers default in payment, buyer agrees to pay a finance charge of 18% APR plus reasonable collection costs and actual attorney fees.



WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Subtotal	\$34,742.00
Sales Tax (7.25%)	\$1,888.59
Total	\$36,630.59

329 North Main Street
Templeton, CA 93465



805-434-1888 main
805-434-2384 fax

www.millerdrillingcompany.com

PUMP ESTIMATE

CAMBRIA CSD
P.O. BOX 65
CAMBRIA, CA 93428

8/16/2023	
Project	Terms
	Net 15 days
State Drilling Contractor License # 324634	

Description	Qty / Feet	Price Each	Total
** SS# 3 **			
VIDEO INSPECTION OF WELL	1	1,000.00	1,000.00

Accepted by: _____

This job will not be scheduled until this estimate has been signed and original copy is returned with a deposit of 40% of the total amount due. This estimate will expire in 30 days unless accepted.

Seller, for security purpose, retains title to described goods until paid according to terms. Buyer assumes risk of loss or damage to described goods upon delivery. In case of buyers default, seller or his agents may take possession of and remove described goods from buyers premises or elsewhere without prior notice. Buyer waives all rights of action for trespass, damage or other cause resulting from repossession. Upon buyers default in payment, buyer agrees to pay a finance charge of 18% APR plus reasonable collection costs and actual attorney fees.

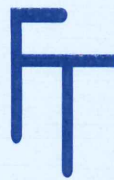


WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Subtotal	\$1,000.00
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Sales Tax (7.25%)	\$0.00
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Total	\$1,000.00
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Filipponi &
Thompson
Drilling, Inc.

State License No. C57 432680
P.O. Box 845 • Atascadero, CA 93423 • Phone 466•1271

September 29, 2023

Cambria CSD
c/o Steven Meeks
smeeks@cambriacsd.org

Re: Well SS-3

Dear Steven:

We appreciate the opportunity to provide you with an estimate to pull existing turbine and install submersible w/ VFD. Filipponi & Thompson will not be responsible for control wiring. This estimate is based upon site unseen so actual billing will reflect site conditions. This letter outlines the charges involved.

- Grundfos 385500-6 (400 GPM @ 350')
 - Franklin DR56 50/60 Motor
 - 63' 6" Galvanized Drop Pipe
 - 70' #4/4 PVC Jacketed sub cable
 - 70' Sounder Tube or Airline
 - Yaskawa VFD
 - 12" x 6" Well Seal
 - Misc.(well head, electrical, tape, Splices)
- | | |
|--------------------|---------------------|
| Sub Total: | \$ 44,892.50 |
| Tax: | \$ 3,254.70 |
| Labor: | \$ 10,000.00 |
| Freight: | \$ 500.00 |
| Well Video: | \$ 1,750.00 |
| Total: | \$ 60,397.20 |

If you would like to move forward, please sign below and return it to our office along with a **deposit of \$24,200.00**. Feel free to contact me at our office with any questions. We look forward to working with you.

Thank you,

John O. Thompson
JOT/ew

Steven Meeks

Date



3rd Gen Pump & Well

PO Box 2144
 Pismo Beach, CA 93448
 (805) 904-8808

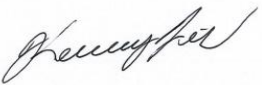
Project Estimate

Customer Cambria CSD
 PO Box 65
 Cambria, CA 93428

Date 09/29/23

Contact Steven
Phone/Cell 805-550-3558
E-mail Smeeks@cambriacsd.org

Site Info Well 3

Date	Qty	Description		
TBD		Move in, pull turbine pump & inspect		
TBD		Remove old material from site, prep and move in new equipment		
TBD		Conduct well video		
TBD		Install new submersible pump system to 100', set with new pump head, tie into discharge line		
TBD		Wire up, check rotation & test operation		
		Component Summary		
	1	Grundfos 385S500-6 Submersible Pump		
	1	50HP 460V 3PH 3600RPM Submersible Motor		
	120	Feet of #4 Submersible Flat Jacketed Cable		
	5	6" x 20' T&C Tapered Column Pipe		
	1	Custom Fab Pump Head, Build To Suit		
	1	Airline, Tape, Misc To Complete		
		50% Deposit Due Before Scheduling		
		Total Includes Materials, Tax & Installation	Total Job Cost:	\$ 33,379.82
				
		_____ Kenny Fisher		
		Accepted By _____ Date _____		



3rd Gen Pump & Well

PO Box 2144
Pismo Beach, CA 93448
(805) 904-8808

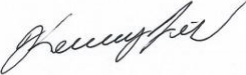
Project Estimate

Customer Cambria CSD
PO Box 65
Cambria, CA 93428

Date 09/29/23

Contact Steven
Phone/Cell 805-550-3558
E-mail Smeeks@cambriacsd.org

Site Info Well 3

Date	Qty	Description		
		Move in, pull pump and inspect		
		Move old material off site & prep new equipment		
		Conduct Well Video		
		Install new submersible pump system to 100', set with new pump head, tie into discharge line		
		Supply and install 60HP 460V 3PH Danfoss VFD with full cabinet enclosure, pull wire to and from VFD		
		Wire up VFD, power up, program to application,		
		Component Summary		
	1	Grundfos 385S500-6 Submersible Pump		
	1	50HP 460V 3PH 3600RPM Submersible Motor		
	120	Feet of #4 Submersible Flat Jacketed Cable		
	5	6" x 20' T&C Tapered Pipe		
	1	Custom Fab Pump Head, Build To Suit		
	1	Danfoss 60HP 460V 3PH VFD Full Cabinet		
	1	0-300PSI Danfoss Pressure Transducer		
	1	Misc Material To Complete		
		50% Deposit Due Before Scheduling		
		Total Includes Materials, Tax & Installation	Total Job Cost:	\$ 49,859.37
				
		_____ Kenny Fisher		
		Accepted By _____ Date _____		

	B	C	D	E	F	G	H	I	J
1	General Fund CIP (FY 23/24 Revised 09/18/2023)								
2	General Fund Projects	Ranking	Project Estimate		Current FY Expenditures	Prior Expenditures		Total Project Expenditures to Date	Project Estimate Remaining
3	Administration Department Projects								
4									
5	Update Sound System - Vets Hall	1	\$ 20,000		\$ -			\$ -	\$ 20,000
6	Replace District Car	3	\$ 30,000		\$ -			\$ -	\$ 30,000
7									
8		Subtotal	\$ 50,000		\$ -				\$ 50,000
9	Facilities & Resources Projects								
10	Skate Park Improvements	1	\$ 1,200,000		\$ 35,000	\$ 20,000		\$ 55,000	\$ 1,145,000
11	East Ranch Restroom	1	\$ 371,480		\$ -	\$ 21,776		\$ 21,776	\$ 349,704
12	EV Charging Station - Vets Hall	1	\$ 24,831						
13	Replace Dump Trailer	2	\$ 15,000		\$ -				\$ 15,000
14	Replace 2012 F-350	2	\$ 45,000		\$ -				\$ 45,000
15	New Office Space and Shop Space	2	\$ 500,000		\$ -				\$ 500,000
16	Replace Wood Chipper	2	\$ 70,000		\$ -				\$ 70,000
17	Electric Vehicle Charging Station (East Village Parking Lot)	3	\$ 17,000		\$ -				\$ 17,000
18	Vets Hall Sewer Line	3	\$ 40,000		\$ -				\$ 40,000
19	Vets Hall Electrical Emergency (Generator & Equipment)	3	\$ 80,000		\$ -				\$ 80,000
20	Vets Hall Water Line	3	\$ 10,000		\$ -				\$ 10,000
21	Re-Roof - Entire Vets Hall Building	3	\$ 55,000		\$ -				\$ 55,000
22	Vets Hall Kitchen Improvements	3	\$ 20,000		\$ -				\$ 20,000
23	Vets Hall Restroom Improvements	3	\$ 17,500		\$ -				\$ 17,500
24		Subtotal	\$ 869,500		\$ -			\$ 76,776	\$ 792,724
25	Fire Department Projects								
26	Radio System Upgrade Phase 2	1	\$ 79,097		\$ -	\$ 30,000		\$ 38,000	\$ 41,097
27	Fire Station Dry Rot Repair/Rain Gutter Repair/Paint	2	\$ 40,000		\$ -			\$ -	\$ 40,000
28	Fire Station Turnout Lockers and Storage Room	2	\$ 45,000		\$ -			\$ -	\$ 45,000
29	Ballistic Vests for Active Shooter Response	2	\$ 15,000		\$ -			\$ -	\$ 15,000
30	Fire Station Sleeping Quarters Addition	3	\$ 450,000		\$ -			\$ -	\$ 450,000
31	Fire Department Metal Building (Apparatus Bays/Storage/Gym Relocation)	3	\$ 220,000		\$ -			\$ -	\$ 220,000
32	Replace Water Tender (21 years old)	3	\$ 600,000		\$ -			\$ -	\$ 600,000
33	Fire Apparatus Rust Repair and Paint	3	\$ 35,000		\$ -			\$ -	\$ 35,000
34	Sattelite Phones	3	\$ 6,000		\$ -			\$ -	\$ 6,000
35	Fire Hose and Nozzles	3	\$ 32,000		\$ -			\$ -	\$ 32,000
36	Fire Station Bathrooms Remodel x 3	3	\$ 45,000		\$ -			\$ -	\$ 45,000
37	Fire Training Buiding	3	\$ 475,000		\$ -			\$ -	\$ 475,000
38	Replace old rescue boat and Rescue ski	3	\$ 21,000		\$ -			\$ -	\$ 21,000
39	4 Gas Detector	3	\$ 5,000		\$ -			\$ -	\$ 5,000
40	Fire Station Computers Upgrades	3	\$ 6,000		\$ -			\$ -	\$ 6,000
41	Fire Department Gate and Fencing	3	\$ 40,000		\$ -			\$ -	\$ 40,000
42	Fire Station Kitchen Remodel	3	\$ 70,000		\$ -			\$ -	\$ 70,000

	B	C	D	E	F	G	H	I	J
1	General Fund CIP (FY 23/24 Revised 09/18/2023)								
2	General Fund Projects	Ranking	Project Estimate	Current FY Expenditures	Prior Expenditures	Total Project Expenditures to Date		Project Estimate Remaining	
43	Fuel Station Computer Replacement	3	\$ 7,000	\$ -		\$ -		\$ 7,000	
44	CERT Team Respse Vehicle	3	\$ 40,000	\$ -		\$ -		\$ 40,000	
45	Refurbish Antique Fire Engine	3	\$ 30,000	\$ -		\$ -		\$ 30,000	
46	Replace Rescue Boat	3	\$ 14,000	\$ -		\$ -		\$ 14,000	
47	Fire Marshal Vehicle (pending approval for a Fire Marshal Position)	3	\$ 71,000	\$ -		\$ -		\$ 71,000	
48		Subtotal	\$ 2,275,097	\$ -		\$ 38,000		\$ 2,237,097	
49				\$ -					
50	Priority 1 Total			\$ -					
51	Priority 2 Total			\$ -					
52	Priority 3 Total			\$ -					
53	Priority 4 Total		\$ -	\$ -					
54			\$ -	\$ -					
55	Completed Projects	Ranking	Project Estimate	FY Expenditures		Project to Date Expenditures		FY Budget Amount Remaining	
56	F350 Truck - Replace 1999 F150 Truck	1	\$ 40,000	\$ -		\$ 40,000			
57	Electric Vehicle Charging Station (Vets Hall)	1	\$ 22,272	\$ -		\$ 22,272			
58	Re-Roof - Vets Hall American Legion Kitchen Area	1	\$ 8,446	\$ -		\$ 8,446			
59	Tyler Incode	1	\$ 76,050	\$ -		\$ 76,050			
60	Zoll X Series EKG	1	\$ 40,000	\$ -		\$ 41,776			
61	Utility Truck F-350	1	\$ 79,800	\$ -		\$ 76,964			
62	Extrication Tool	1	\$ 60,000	\$ -		\$ 42,234			
63	Purchase New Fire Truck - Engine Type 3	1	\$ 450,000	\$ -		\$ 446,506			

	B	C	D	E	F	G	H	I	J
1	Waste Water CIP (FY 23/24 Revised 09/18/2023)								
2		Ranking	Project Estimate		Current FY Expenditures	Prior Expenditures		Total Project Expenditures to Date	Project Estimate Remaining
3	Treatment Plant Projects in SST (All SST Cost Estimates Current as of IGA Final Report)								
4	Investment Grade Audit (30% Design for all ECMs)	1	\$ 528,404		\$ -			\$ -	\$ 528,404
5	(ECM 1) Influent Flow Equalization	1	\$ 3,791,224		\$ 466,696			\$ 1,076,702	\$ 2,714,522
6	(ECM 2) Influent Lift Station	1	\$ 46,512		\$ 13,759			\$ 26,224	\$ 6,530
7	(ECM 3) Modified Ludzak-Ettinger Process Upgrade	1	\$ 2,419,093		\$ 322,080			\$ 371,214	\$ 1,725,799
8	(ECM 4) Blower Improvements	1	\$ 603,329		\$ 89,942			\$ 107,143	\$ 406,244
9	(ECM 5) RAS and WAS Pumping Improvements	1	\$ 1,290,972		\$ 153,516			\$ 230,389	\$ 907,067
10	(ECM 7) Electrical Upgrades	1	\$ 554,687		\$ 22,400			\$ 100,139	\$ 432,148
11	(ECM 8) Generator Replacement	1	\$ 925,404		\$ 28,674			\$ 153,675	\$ 743,055
12	(ECM 9) SCADA System	1	\$ 1,148,557		\$ 32,512			\$ 185,587	\$ 930,458
13	(ECM 12) Sewer Lift Stations	1	\$ 1,320,222		\$ -			\$ 54,511	\$ 1,265,711
14	(ECM 10) Secondary Water System (3W) Improvements	2	\$ 318,202		\$ -			\$ -	\$ 318,202
15	(ECM 11) Effluent Pump Station Improvements	2	\$ 374,580		\$ -			\$ -	\$ 374,580
16	Pads for electrical ECMs	2	\$ 313,893		\$ -			\$ -	\$ 313,893
17	Final Design	2	\$ 308,394		\$ -			\$ -	\$ 308,394
18									
19	Tertiary Treatment	4	\$ 889,436		\$ -			\$ -	\$ 889,436
20	Storm Drain	2	\$ 130,521		\$ -			\$ -	\$ 130,521
21	Demolish Old Tanks	2	\$ 567,815		\$ -			\$ -	\$ 567,815
22			\$ 15,531,245		\$ 1,129,578			\$ 2,305,583	
23	Treatment Plant Projects								
24	Security Improvements	1	\$ 15,000		\$ -			\$ -	\$ 15,000
25	New polymer skid for sludge press	1	\$ 25,000		\$ -			\$ -	\$ 25,000
26	PFAS Treatment (Design Phase)	2	\$ 50,000		\$ -			\$ -	\$ 50,000
27	Van Gordon House Demolition (Split with Water)	2	\$ 50,000		\$ -			\$ -	\$ 50,000
28	Clarifier Improvements								
29	Eastern clarifier - Replace chain drive	2	\$ 40,000		\$ -			\$ 37,552	\$ 2,448
30	Eastern clarifier - Replace drive unit's metallic hubs with non-corrosive hubs	2	\$ 35,000		\$ -			\$ -	\$ 35,000
31	Eastern clarifier - Replace clarifier wear shoes, skid plates, & sprockets	2	\$ 40,000		\$ -			\$ -	\$ 40,000
32	Western clarifier - Replace clarifier chain, wear shoes, skid plates, & sprockets	2	\$ 40,000		\$ -			\$ -	\$ 40,000
33	Cover for Sheltering of Equipment @ Plant (50%)	2	\$ 15,000		\$ -			\$ -	\$ 15,000
34	Secondary Water System	2	\$ 4,100		\$ -			\$ 4,053	\$ 47
35	Blower Replacement	2	\$ 9,200		\$ -			\$ -	\$ 9,200
36	Redundant Blower for Plant	3	\$ 400,000		\$ -			\$ -	\$ 400,000
37	Repaint the handrails on the digester	3	\$ 30,000		\$ -			\$ -	\$ 30,000
38	Walkway Grating on Digester Tanks	3	\$ 30,000		\$ -			\$ -	\$ 30,000
39	Cargo Box for Storage	3	\$ 10,000		\$ -			\$ -	\$ 10,000
40									
41			\$ 753,300		\$ -			\$ 41,605	\$ 711,695
42	Collection System Projects								
43	Lift Station A (Nottingham & Leighton/Park Hill)								
44	New Submersible Pumps, MCC, Bypass Piping, Control Panel at Grade Elevation	1	\$ 490,000		\$ -			\$ -	\$ 490,000
45	Lift Station A-1 (Sherwood & Harvey/Marine Terrace)								
46	New Submersible Pumps, Bypass Piping	1	\$ 265,000		\$ -			\$ -	\$ 265,000
47	Lift Station B - (SR Creek/Behind Park Hill)								
48	New Control Panel, Generator, Wet Well, Submersible Pumps, and Valve Vault	3	\$ 435,000		\$ -			\$ -	\$ 435,000
49	Lift Station B-1 (Burton Dr at Tin City)								
50	Convert to gravity flow	1	\$ 600,000		\$ -			\$ -	\$ 600,000

	B	C	D	E	F	G	H	I	J
1	Waste Water CIP (FY 23/24 Revised 09/18/2023)								
2		Ranking	Project Estimate		Current FY Expenditures	Prior Expenditures		Total Project Expenditures to Date	Project Estimate Remaining
51	Lift Station B-2 (Wood Dr./E. Lodge Hill)								
52		1	\$ 425,000		\$ -			\$ -	\$ 425,000
53	Lift Station B-3 (Green St./W. Lodge Hill)								
54		1	\$ 250,000		\$ -			\$ -	\$ 250,000
55		3	\$ 250,000		\$ -			\$ -	\$ 250,000
56	Lift Station 8								
57		1	\$ 95,000		\$ -			\$ -	\$ 95,000
58		2	\$ 1,000,000		\$ -			\$ -	\$ 1,000,000
59		2	\$ 12,000		\$ -			\$ -	\$ 12,000
60		2	\$ 10,000		\$ -			\$ -	\$ 10,000
61		1	\$ 20,000		\$ -			\$ -	\$ 20,000
62		2	\$ 10,000		\$ -			\$ -	\$ 10,000
63		2	\$ 2,000,000		\$ -			\$ -	\$ 2,000,000
64			\$ 5,862,000		\$ -			\$ -	\$ 5,862,000
65	Vehicles and Trailer Mounted Equipment								
66	Replacement of 1999 John Deere Loader and Backhoe Tractor	1	\$ 75,000					\$ 69,054	
67	Replace 2005 F250	3	\$ 65,000					\$ 52,982	
68									
69			\$ 22,286,545						
70									
71			\$ -						
72			\$ -						
73			\$ -						
74			\$ -						
75			\$ -						
76									
77		Ranking	10-Yr Cost					FY Project Cost	
78	Replace Tractor	1	\$ 75,000					\$ 69,054	
79	Replace Van - Transport of Sewer Video Camera System	1	\$ 65,000					\$ 52,982	
80	Replace F150	1	\$ 30,000					0	
81	Pearpoint or equal TV inspection camera (removed cost from mid year total to meet reduced funding balance, 11/20/2018.)		\$ 75,000					0	
82	F-350 Service Truck with Crane Body		\$ 57,040					0	
83	Vactor truck - replace with new \$430K truck that meets emssion requirements (7 yr loan @ 4.5%)		\$ 518,000						
84	Replacement Rack Truck (F-150)		\$ 24,193					0	
85	Influent screen, support platform design, & installation		\$ 164,509					0	
86	Lift Station A-1 MCC, SCADA Improvements		\$ 45,000					0	

	A	B	C	D	E	F	G	H	I
1	Water CIP (FY 23/24 Revised 09/18/2023)								
2		Ranking	Project Estimate		Current FY Expenditures	Prior Expenditures		Total Project Expenditures To Date	Project Estimate Remaining
3	Water Distribution System Projects								
4	Cover for Sheltering of Equipment @ Plant (50%)	1	\$ 15,000		\$ -				\$ 15,000
5	Modular Office Building @ Plant	1	\$ 10,000		\$ -				\$ 10,000
6	Advanced Metering Infrastructure (AMI)	1	\$ 2,220,000		\$ -				\$ 2,220,000
7	Meter install	1	\$ 500,000		\$ -				\$ 500,000
8	Design and Permitting for SSWF Transmission Main and Effluent Line at State Park Wetlands	1	\$ 600,000		\$ -				\$ 600,000
9	Lead and Copper Service Line Regulations	1	\$ 20,000						
10	Source Water Assessment	1	\$ 10,000						
11	Piney Way Erosion Control - Design, Permitting and	1	\$ 10,000		\$ -				\$ 10,000
12	San Simeon Well Field Transmission Main at State Park Wetlands	2	\$ 5,000,000		\$ -	\$ -	\$ -	\$ -	\$ 5,000,000
13	SR4 Generator	2	\$ 80,000		\$ -				\$ 80,000
14	Well site pump replacements	2	\$ 532,141		\$ -				\$ 532,141
15	Vault upgrades (Rodeo Grounds, Charing, and	2	\$ 60,000		\$ -				\$ 60,000
16	District Metered Areas (Phased - Design and Permitting, Implementation cost TBD)	2	\$ 150,000		\$ -				\$ 150,000
17	Upgrading undersized water mains	3	\$ 130,000		\$ -				\$ 130,000
18	Pine Knolls - Iva Court zone 1 pipeline expansion	4	\$ 165,000		\$ -				\$ 165,000
19	Demo Van Gordon House (Water Portion)	3	\$ 50,000		\$ -				\$ 50,000
20	Subtotal		\$ 9,527,141		\$ -	\$ -		\$ -	\$ 9,497,141
21	Tank & Booster Pump Station Projects								
22	Stuart Street Tank Rehabilitation	1	\$ 550,000		\$ -	\$ 92,000		\$ 92,000	\$ 458,000
23	Santa Rosa Well #4 Replacement	1	\$ 50,000		\$ 48,792				
24	Electrical transfer switch and conduit to well SS-3	1	\$ 25,000		\$ -				
25	SCADA System - Phased Upgrades (Phase III- Alarms, Flow Data, Monitoring Wells)	1	\$ 225,000		\$ -				
26	Rodeo Grounds booster A pump	1	\$ 25,000		\$ -				
27	Rodeo Grounds Pump Station Replacement (aka Zone 2 Booster pump station)	2	\$ 2,200,000		\$ -				
28	Stuart Street and Leimert Booster Pump Replacement	3	\$ 500,000		\$ -				
29	Third Stuart Street Tank Installation	3	\$ 600,000		\$ -				
30	Subtotal		\$ 4,175,000		\$ 48,792				
31	Vehicles and Trailer-Mounted Equipment								
32	Replacement 2005 F-150 Truck with F-250 (for towing Ditch Witch)	1	\$ 55,000		\$ -				
33	Truck Replacement Program (annual cost to build reserves)	3	\$ 55,000		\$ -				
34	Replacement of 1999 John Deere Loader and Backhoe Tractor	3	\$ 75,000		\$ -				
35	Dump trailer for storing and hauling spoils from road repairs	3	\$ 15,000		\$ -				
36	Subtotal		\$ 200,000		\$ -				
37	Programs and Plans								
38	Hydraulic System Model Update	3	\$ 75,000		\$ -				
39	Asset Management Plan	2	\$ 25,000		\$ -				
40	Water Master Plan Amendment	3	\$ 35,000		\$ -				
41	Database for water conservation program/tracking with parcel links & APN file conversion	3	\$ 10,000		\$ -				
42	Subtotal		\$ 145,000		\$ -				
43									
44			\$ 14,047,141		GRAND TOTAL				
45									
46			\$ 9,100,000		Priority 1 Total				

	A	B	C	D	E	F	G	H	I
47			\$ 2,625,000		Priority 2 Total				
48			\$ 2,002,141		Priority 3 Total				
49			\$ 165,000		Priority 4 Total				
50									
51	Completed Projects	Ranking	10-Yr Cost		FY Project Cost				
52	replacement @ SR Creek pedestrian bridge	1	\$ 215,527		\$ -				
53	SR4 submersible pump replacement		\$ 50,338						
54	SS2 Electrical Panel Upgrade		\$ 25,000						
55	SCADA System - Phase I and II Upgrades		\$ 99,371						
56	Replacement Dump Truck		\$ 74,871		\$ -				
57	Trailer-Mounted Air Compressor		\$ 22,557		\$ -				
58	Trailer-Mounted Vacuum Extractor		\$ 46,169		\$ -				
59	San Simeon well field generator replacement		\$ 50,449		\$ -				
60									

ECM-1 Influent Flow Equalization

- Assess condition of existing welded equalization tank
- Review plant flow records and confirm size of equalization tank(s)
- Develop hydraulic profile from lift station through new screen, grit removal, and proposed equalization tanks
- Develop cost comparison of rehabilitating existing welded tank with new liner or new coating; constructing two new concrete tanks; and constructing two new glass-coated bolted steel tanks
- Develop preliminary size and description of major equipment items, including blowers and enclosure, transfer pumps, coarse bubble diffusers, valves, process instrumentation, and piping

ECM-2 Influent Lift Station Modifications

- Review plant flow records and confirm design criteria for new pumps
- Develop system curve for influent lift station and four (4) priority collection system pumps
- Evaluate potential wet well improvements for influent pumps including baffling to improve flow distribution
- Evaluate potential improvements for collection system pumps
- Review and confirm options for pump type with District staff
- Confirm number and flow range of pumps over a range of motor speeds
- Develop preliminary size and description of major equipment items, including new pumps, process instrumentation including flow meter(s), and piping
- Develop scope of work and design to integrate collection system pumps into SCADA system

ECM-3 Modified Ludzak-Ettinger Process Upgrade

- Review plant flow and water quality records and confirm design criteria
- Confirm proposed anoxic and aerobic basin size and configuration from prior studies
- Determine recirculation and waste activated sludge flows and aeration requirements under a range of operating conditions
- Develop preliminary piping and mechanical plan for review by District staff
- Develop preliminary size and description of major equipment items, including new anoxic mixer(s), diffusers, valves, process instrumentation, and piping

ECM 4 – Blower System Improvements

- Determine range of air requirements under various influent loading conditions based on analysis in ECM 3
- Develop description of process instrumentation (including air flow meters and dissolved oxygen probes)
- Evaluate options for upgrading / retrofitting blower system

- Develop scopes of work and preliminary design for recommended upgrades/retrofit
- Develop new sequences of operation to optimize system operation

ECM-5 RAS and WAS Pumping Improvements

- Perform assessment of visible surfaces within scum pit and RAS wet well
- Develop description of RAS pumps, WAS control valve, flow meters, process instrumentation, piping, valves, scum troughs, and scum pumps

ECM-7 & ECM-8 Electrical Upgrades and Backup Power

- Evaluate and develop retrofit solution for power requirements (hp and voltage) for new motors and loads in proposed ECMs
- Size and specify replacement solution for standby generator and transfer switch

ECM-9 SCADA System

- Develop preliminary process and instrumentation diagrams for coordination with SCADA design
- Develop scope of work for all necessary SCADA upgrades

ECM-12 Sewer Lift Stations (B1 and B4)

- Develop design flows for each lift station based on available plant records, review of upstream land uses, and estimated peaking factors
- Confirm design criteria (flow and head requirements) for submersible pumps at each station
- Confirm size (depth and operating ranges) for wet well
- Evaluate dimensions and visible condition of existing wet well to determine if it can be used or a new wet well should be constructed
- Develop preliminary layout of B1 and B4 for review by District staff
- Develop description of new pumps, valves, access hatches, instrumentation, and appurtenances
- Develop scope of work and 30% design to integrate lift stations into existing SCADA system
- Conduct Feasibility Assessment for four (4) additional Lift Stations

BRINE DISPOSAL AD HOC COMMITTEE

DATE: October 13, 2023

TO: Cambria Community Services District Resources and Infrastructure Committee

FROM: Jim Webb
Steve Siebuhr
Derrick Williams

SUBJECT: Cambria Community Services District Brine Disposal Options Update

INTRODUCTION

The Brine Disposal Ad-Hoc Committee is tasked with researching brine waste disposal alternatives, including zero liquid discharge, with utilities engineer Dienzo. On July 5, 2023, The Brine Waste Disposal Ad-Hoc Committee reviewed potential brine waste disposal options with District Utilities Manager Ray Dienzo. All options were considered without any intent to make recommendations.

The Committee noted during the meeting that while the Water Reclamation Facility (WRF) concentrate is often referred to as a brine, it has lower salinity than seawater. There is no agreed-upon level of Total Dissolved Solids (TDS) that defines a brine. To avoid confusion with brines that have TDS levels higher than seawater, these notes will use the word concentrate rather than brine.

CONCENTRATE DISPOSAL OPTIONS

OPTIONS DISCUSSED WITH DISTRICT STAFF

Concentrate disposal options that the committee discussed with Mr. Dienzon included the following:

1. Trucking Concentrate to an Approved Facility

This option entails temporarily storing the concentrate onsite, then transporting it by truck to an approved facility such as the South San Luis Obispo County Sanitation District (SSLOCS) in Oceano. This is currently the default disposal option.

Pros: No special permitting required
No new facilities required

Cons: Expensive

2. Reducing Concentrate Volume with Zero Liquid Discharge (ZLD)

This option reduces the amount of concentrate that must be disposed of by removing most or all of the liquid from the concentrate. The semi-solid concentrate would be trucked to an approved disposal site. CCSD is currently investigating one potential ZLD technology.

Pros: - Reduces the amount of waste that must be transported by truck compared to the default trucking option
- Likely less expensive than the default trucking option

Cons: - The technology is untested, but a pilot test is planned
- Cost of the ZLD plant is unknown
- The cost of disposal is uncertain, and will depend on the concentrations of constituents in the concentrate

3. Disposing Through the Existing San Simeon CSD Outfall

This option requires CCSD enter into an agreement with San Simeon CSD to dispose of concentrate through SSCSD's existing outfall. The outfall has unused capacity that could accept some concentrate.

Pros: - The outfall infrastructure and permit already exist.

Cons: - Concentrate would currently need to be trucked to San Simeon. Rough estimates for pipes to San Simeon are approximately \$2 Million/mile
- San Simeon CSD has historically not shown interest in this option
- California Coastal Commission has indicated it would like San Simeon CSD to abandon the existing outfall, and may not favor additional users of the outfall
- Some residents of San Simeon would like to move their existing plant and outfall

4. Disposing in Coordination with a New San Simeon Treatment Plant Located in or Near San Simeon Creek Valley

This option relies on San Simeon CSD moving its treatment plant to a new location relatively near CCSD's San Simeon Creek facilities. CCSD could enter into an agreement with San Simeon CSD to dispose of concentrate in San Simeon CSD's new wastewater

disposal system. This agreement could be part of a land lease, land sale, funding agreement, or other contractual mechanism.

Pros: - Eliminates the need for trucking or piping concentrate
 - Could be relatively inexpensive
 - Permitting covered as part of the new treatment plant
 - In accordance with California Coastal Commission and San Simeon community's desire to move the San Simeon CSD treatment plant

Cons: - San Simeon CSD currently has no plans to move its treatment plant

5. Disposing as Part of a Regional Wastewater Treatment System

This option is similar to option 4. However, instead of San Simeon CSD moving its treatment plant to a new location, San Simeon CSD and CCSD would jointly build and operate a regional treatment plant.

Pros: - Eliminates the need for trucking or piping concentrate
 - In accordance with California Coastal Commission and San Simeon community's desire to move the San Simeon CSD treatment plant

Cons: - San Simeon CSD has historically shown little interest in a regional treatment plant.

6. Improve the Existing Discharge System in Coordination with Cambria WWTP Expansion

This option relies on CCSD expanding its existing treatment plant. As part of the treatment plant expansion, CCSD could design and permit a new wastewater discharge system. Part of this system could accept concentrate discharge

Pros: - Eliminates the need for trucking or piping concentrate
 - Does not rely on San Simeon CSD plans

Cons: - CCSD currently has no plans to move expand its treatment plant

7. Disposing Through Subsurface Discharge Originating from the Flag Lot

This option uses CCSD's existing pipe infrastructure at the Flag Lot, with any needed improvements, to discharge concentrate. Rather than an open ocean discharge, the concentrate would be discharged beneath the ocean floor.

The committee noted that the Sand City brackish water desalination plant is permitted to dispose of its concentrate in the Monterey Bay Marine Sanctuary through a subsurface horizontal well beneath the surf zone. The Sand City permit could provide some guidance on how such a disposal could be permitted. However, the committee noted that the source water for the Sand City plant does not contain municipal waste constituents that are likely found in the WRF concentrate. These constituents may prevent permitting this disposal option.

Pros: - CCSD has existing, permitted facilities in the Flag Lot
- Eliminates the need for trucking or piping concentrate

Cons: - Existing pipe condition is unknown
- Permitting is required by many agencies, and may be difficult
- Community environmental concerns may prevent this option

OPTIONS NOT DISCUSSED WITH DISTRICT STAFF

Two brine waste disposal options were not discussed with Mr. Dienzo but could be viable options for brine waste disposal.

8. Deep Well Injection

This option injects concentrate into deep geologic strata. This is similar to how oil-field brines are disposed. The geologic strata used for injection are far below any water supply wells or areas of environmental concern.

Limited geologic data may be available from the California Department of Conservation, Geologic Energy Management Division (GEM). The GEM online well finder shows two deep exploratory oil wells in San Simeon. Both exploratory holes were drilled in 1952. Neither well produced oil, and both holes were abandoned the same year. One hole was drilled to a depth of 641 feet, and the other hole was drilled to a depth of 1,620 feet.

Pros: - Eliminates the need for trucking or piping concentrate
- Eliminates environmental impacts from disposal

Cons: - Unknown if an adequate geologic stratum exists locally at depth
- Permitting requirements are unknown
- Injection wells are expensive (millions of dollars)

9. Evaporation Ponds

An evaporation pond was included in the original WRF system design. The evaporation pond was built, but the Regional Water Quality Control Board issued a cease and desist order after a flood event highlighted a flaw with the original engineering firm's design. The District cannot currently use the existing pond for its intended purpose. The technology, however, might still be a viable alternative for brine disposal.

Pros: - Eliminates the need for trucking or piping concentrate
- Relatively low environmental impacts from disposal

Cons: - Subject to flooding
- Potential community concerns after previous pond experiences