

**COMMISSION OF SILICON VALLEY CLEAN WATER
JOINT POWERS AUTHORITY
REGULAR MEETING – Monday, May 13, 2024
8:00 a.m.**

Place: Silicon Valley Clean Water
1406 Radio Road
Redwood City, California

Consistent with Government Code Section 54953, this meeting will be held both in person and virtually. See page 6 of this agenda for virtual meeting access information and instructions.

COMMISSIONERS

COUNCIL MEMBER ALICIA AGUIRRE, REDWOOD CITY – CHAIR
BOARD MEMBER GEORGE OTTE, WEST BAY SANITARY DISTRICT – VICE CHAIR
COUNCIL MEMBER RON COLLINS, SAN CARLOS – SECRETARY
VICE MAYOR, DAVINA HURT, BELMONT

MANAGER: TERESA A. HERRERA

ATTORNEY FOR THE AUTHORITY: CHRISTINE C. FITZGERALD

CONTROLLER: MICHELLE P. FLAHERTY

TREASURER: MATTHEW ANDERSON

AMERICANS WITH DISABILITIES ACT

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact SVCW (650) 591-7121. Notification in advance of the meeting will enable the Authority to make reasonable arrangements to ensure accessibility to this meeting.

AGENDA

1. CALL TO ORDER

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

4. PUBLIC COMMENT

Any member of the public may address and ask questions of the Chair under this item relating to any matter within the Commission's jurisdiction that does not appear as a separate item on the Agenda. An opportunity will be provided for members of the public to address the Chair and ask questions about any item that is listed on the agenda at the time the Commission considers the item and before action is taken. If you address the Commission on a non-agenda item, be aware that the Ralph M. Brown Act (Gov. C. § 54950 et seq.) prohibits the Commission from acting

on or discussing such matters at this meeting. Any such item may be referred to staff for a decision with regard to placing it on a future agenda for discussion, action or a report.

5. SAFETY MOMENT and REPORTS

- A. Safety Moment.....pg. 8
- B. Manager’s Report
 - 1. Upcoming Commission Actions.....pg. 10
 - 2. DEI Report.....pg. 12
- C. Financial Report
 - 1. Investment Reportpg. 15
- D. Engineering Capital Projects Report.....pg. 19
- E. Commission Requested Staff-Level Action Items..... pg. 24
- F. RESCU Program Design-Build Project Status Update..... pg. 27

6. MATTERS OF COMMISSION MEMBERS’ INTEREST

7. CONSIDERATION OF MOTION APPROVING CONSENT CALENDAR (begins pg. 37)

8. BUSINESS ITEMS

- A. **PUBLIC HEARING TO CONSIDER RESOLUTIONS AND MOTIONS APPROVING PROCUREMENT AND SERVICE AGREEMENTS WITH MAINSPRING ENERGY AND TASK ORDERS FOR CONSULTANT SUPPORT SERVICES (CIP #9269) (pg. 58)**

Receive staff report, open public hearing, receive public testimony, close public hearing and take the following Proposed Actions:

- i. Move approval of DETERMINATION THAT THE PROJECT IS CATEGORICALLY EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT PURSUANT TO SECTION 15329
- ii. Move adoption of RESOLUTION MAKING NECESSARY FINDINGS AND APPROVING PROCUREMENT AGREEMENT FOR BIOGAS UTILIZATION PROJECT (CIP #9269), AUTHORIZING EXECUTION OF AGREEMENT AND AUTHORIZING MANAGER TO APPROVE CONTRACT CHANGE ORDERS UP TO TEN PERCENT OF THE CONTRACT PRICE FOR SAID PROJECT – MAINSPRING ENERGY, Inc. – \$5,950,860
- iii. Move adoption of RESOLUTION APPROVING OPERATION AND MAINTENANCE AGREEMENT FOR BIOGAS UTILIZATION PROJECT (CIP #9269) AND AUTHORIZING EXECUTION OF AGREEMENT – MAINSPRING ENERGY, Inc.
- iv. Move approval of TASK ORDER SCOPE OF WORK AND BUDGET FOR DESIGN SERVICES FOR THE BIOGAS UTILIZATION PROJECCT (CIP

#9269) IN AN AMOUNT NOT TO EXCEED \$472,460 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – BROWN AND CALDWELL

- v. Move approval of TASK ORDER SCOPE OF WORK AND BUDGET FOR AS-NEEDED SERVICES FOR THE BIOGAS UTILIZATION PROJECT (CIP #9269) IN AN AMOUNT NOT TO EXCEED \$350,676 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – BEECHER ENGINEERING
- B. CONSIDERATION OF RESOLUTION APPROVING STAGE 1 AMENDMENT TO ENERGY CONSERVATION CONTRACT AGREEMENT WITH CDM CONSTRUCTORS INC. FOR FOOD WASTE RECEIVING IMPROVEMENTS PROJECT (CIP #9257) (pg. 64)

Proposed Action:

Move adoption of RESOLUTION APPROVING STAGE 1 AMENDMENT TO THE ENERGY CONSERVATION CONTRACT AGREEMENT FOR FOOD WASTE RECEIVING IMPROVEMENTS PROJECT (CIP #9257) IN AN AMOUNT NOT TO EXCEED \$250,379 AND AUTHORIZE MANAGER TO APPROVE UP TO A TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – CDM CONSTRUCTORS INC.

9. CLOSED SESSION

- A. PUBLIC EMPLOYEE PERFORMANCE EVALUATION (Gov't Code §54957)
Title: Manager
- B. CONFERENCE WITH LABOR NEGOTIATOR (Gov't Code §54957.6)
Unrepresented Employee: Manager

10. RECONVENE IN OPEN SESSION – Announce action taken in Closed Session, if any

11. ADJOURN

CONSENT CALENDAR

NOTICE TO PUBLIC

All matters listed under CONSENT CALENDAR are considered to be routine. There may be discussion on items on the CONSENT CALENDAR. All items will be enacted by one motion with a voice vote unless members of the Commission, staff, or public request specific items be removed from the CONSENT CALENDAR for separate action.

7. A. APPROVAL OF MINUTES – April 8, 2024 - Regular Meeting (pg. 37)

B. CONSIDERATION OF MOTION APPROVING CLAIMS AND CHECKS DATED FEBRUARY 20 – MARCH 18, 2024 AND NECESSARY PAYMENTS THROUGH MARCH 18, 2024 (pg. 42)

C. CONSIDERATION OF RESOLUTION AUTHORIZING TEMPORARY EXTENSION OF CREDIT AGREEMENT WITH WELLS FARGO BANK, NATIONAL ASSOCIATION FOR A LINE OF CREDIT (pg. 44)

Proposed Action:

Move adoption of RESOLUTION OF THE COMMISSION OF SILICON VALLEY CLEAN WATER AUTHORIZING AND RATIFYING SIXTH AMENDMENT TO A CREDIT AGREEMENT WITH WELLS FARGO BANK, NATIONAL ASSOCIATION, AND APPROVING RELATED FINANCING DOCUMENTS AND OFFICIAL ACTIONS

D. CONSIDERATION OF RESOLUTION APPROVING MASTER SERVICES AGREEMENT WITH DHI WATER AND ENVIRONMENT, INC. FOR ON-CALL PROCESS MODELING SERVICES (pg. 47)

Proposed Action:

Move adoption of RESOLUTION APPROVING MASTER SERVICES AGREEMENT WITH DHI WATER AND ENVIRONMENT, INC. FOR ON-CALL PROCESS MODELING SERVICES

E. CONSIDERATION OF RESOLUTION APPROVING AMENDMENT TO THE PUMP STATIONS IMPROVEMENTS PROJECT DESIGN-BUILD AGREEMENT WITH JFSHEA/PARSONS JOINT VENTURE FOR BAIR ISLAND ROAD RESTORATION (CIP #9501) (pg. 50)

Proposed Action:

Move adoption of RESOLUTION APPROVING AMENDMENT TO THE DESIGN BUILD AGREEMENT FOR PUMP STATIONS IMPROVEMENTS PROJECT (CIP #9501) IN THE AMOUNT NOT TO EXCEED \$787,636 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR

ADDITIONAL WORK ON AN AS-NEEDED BASIS – JFSHEA/PARSONS JOINT VENTURE.

- F. CONSIDERATION OF RESOLUTION APPROVING AMENDMENT 1 FOR THE DESIGN-BUILD AGREEMENT OF FINAL EFFLUENT PUMP STATION IMPROVEMENTS PROJECT (CIP#9223) FOR PRE-PROCUREMENT OF PUMPS, VARIABLE FREQUENCY DRIVES, AND PROGRAMMABLE LOGIC CONTROLLER HARDWARE (pg. 54)

Proposed Action:

Move adoption of RESOLUTION APPROVING AMENDMENT 1 TO THE DESIGN BUILD AGREEMENT FOR FINAL EFFLUENT PUMP STATION IMPROVEMENTS PROJECT (CIP#9223); AUTHORIZING EXECUTION OF AMENDMENT 1 AND AUTHORIZING MANAGER TO APPROVE CONTRACT CHANGE ORDERS UP TO TEN PERCENT OF THE CONTRACT PRICE FOR SAID PROJECT – W.M. LYLES CO. - \$4,018,245

Microsoft Teams Access Information
Silicon Valley Clean Water
Regular Meeting
Monday, May 13, 2024

WEBSITE: [Link to access meeting](#)

MEETING ID: 270 547 566 14

CALL IN PHONE NUMBER: +1 747-216-0281 **ID:** 925 412 740#

You may log in via URL located on SVCW's website at <https://svcw.org/about/governance/commission-meetings>. You may view video during the meeting via live stream. An audio will be available after the meeting at SVCW's website. If you experience technical difficulties or have technical questions prior to or during the meeting, please contact Teams meeting support at 707-862-0859. Note: Public participation is not permitted during closed session discussion items.

Public Comment

Public comment may be made by joining the meeting using the link or phone number above. Members of the public may provide public comments via the Teams platform by using the "raise hand" feature or, if calling in by phone, by unmuting and beginning to speak. In response to a "raised hand", SVCW will unmute the member of public and allow them to speak. In response to a phone request to speak, SVCW will ask what is the nature of the comment and will provide directions to follow to provide comment. Public comments will be limited to three minutes.

Public comment may also be made by emailing comments to commission@svcw.org up to two hours prior to the scheduled meeting time. Indicate in your email the agenda item to which your comment applies. If you have anything that you wish distributed to the Commission and included for the official record, please include it in your email.

Accessibility for Individuals with Disabilities

Upon request, SVCW will provide for access to individuals with disabilities to fully engage in the meeting process. Joining the meeting via the teleconference instructions above will provide access to open captioning. For other accommodations, please email your request to commission@svcw.org or call 650-591-7121 at least four (4) days prior to the scheduled meeting time. Requests will be granted whenever possible and resolved in favor of accessibility.

Subject to Change:

Given the current public health emergency and the rapidly evolving federal, state, and local orders, the format of this meeting may change or the meeting may be canceled. You may check on the status of the meeting by visiting SVCW's website www.svcw.org.

AGENDA ITEM 5A

Clean Air Month – 10 Ways to Improve Indoor Air Quality

10

TIPS FOR SIMPLE CLEAN-UP TO IMPROVE INDOOR AIR QUALITY



Indoor air quality is the biggest cause of infections and other fatal diseases; it is important to keep it as much fresh as possible.

Here are a few tips to effectively improve indoor air quality:

	<p>Keep Walkway and Entries Clean</p>		<p>Vacuum Frequency</p>
	<p>Start by keeping outside sidewalks, entry areas, porches and steps clean</p>		<p>Vacuuming should be done more slowly in entry areas where most particle soils accumulate.</p>
	<p>Use Mats to Trap Soil at Entries</p>		<p>Control Moisture and Humidity</p>
	<p>Outside and interior mats to trap and contain particles and moisture should be placed at each entry.</p>		<p>Dust mites and mold are the two most common allergens present in higher humidity climates.</p>
	<p>Clean Shoes at Entries</p>		<p>Heating ventilation and air conditioning (HVAC)</p>
	<p>Cleaning or removing and leaving shoes at the entry reduces fine particles containing lead.</p>		<p>Use quality pleated or reusable electrostatic filters for HVAC systems.</p>
	<p>Purchase and Use High Quality Vacuum Equipment</p>		<p>Clean the Carpet</p>
	<p>A quality, durable upright vacuum with brush agitation is a must.</p>		<p>Professional hot water extraction cleaning lifts and suspends fine particles of soil.</p>
	<p>Use High Efficiency Vacuum Filter Bag</p>		<p>Clean Other Soft Surfaces</p>
	<p>Using high-efficiency double-lined vacuum filter bags can filter out 99% of particles down to one micron or less in size.</p>		<p>Clean upholstery, drapery, bedding and other fabric surfaces regularly; wash linens weekly to remove allergens.</p>

It is essential to keep the indoor air fresh and breathable. It can protect elders and younger to stay away from infections. The above given tips will be helpful in improving the indoor air quality.

200% higher allergen levels in super insulated homes as compared with ordinary homes.

6 out of 10 homes are hazardous to their occupants health

2x – 10x more pollution indoors than outdoors

Designed & issued in Public Interest by:
www.Chemdryofpalmbeachcounty.com

Source: <http://www.epa.gov/>

AGENDA ITEM 5B

Recurring and Upcoming 2024 Commission Actions
Updated for May 2024 Meeting

<p>January</p> <ul style="list-style-type: none"> • Meeting Cancelled 	<p>February</p> <ul style="list-style-type: none"> • Review Investment Policy • Long Range Financial Plan • Capital Improvement Plan Update 	<p>March</p> <ul style="list-style-type: none"> • Operating Budget Workshop 	<p>April</p> <ul style="list-style-type: none"> • Operating Budget Approval • Initiate Manager Performance Evaluation
<p>May</p> <ul style="list-style-type: none"> • Manager Performance Evaluation 	<p>June</p> <ul style="list-style-type: none"> • Approve Resolution 77-6 “Personnel Resolution” • Finalize Manager Evaluation • Review Reserve Funds Policy • Receive Q1 Investment Summary 	<p>July</p> <ul style="list-style-type: none"> • Elect Chair, Vice Chair; Appoint Secretary 	<p>August</p> <ul style="list-style-type: none"> • No Meeting
<p>September</p> <ul style="list-style-type: none"> • Review Investment Policy • Review Debt Management Policy 	<p>October</p> <ul style="list-style-type: none"> • Conflict of Interest Update (Biennial; even numbered years) • Annual Investment Update 	<p>November</p> <ul style="list-style-type: none"> • Audited Financial Report 	<p>December</p> <ul style="list-style-type: none"> • Commission Meeting Schedule for 2025

-  - Recurring Commission Actions
-  - Upcoming Commission Actions

AGENDA ITEM 5B2

D E I Report: Silicon Valley Clean Water (SVCW)

Provided to SVCW Commission May 13, 2024

Silicon Valley Clean Water’s (SVCW) commitment to Diversity, Equity, and Inclusion is fundamental to its values. The basis for DEI is foundational and practices are integrated throughout the agency. This table outlines our practices and procedures to ensuring a robust DEI program.

Diversity refers to who is represented in the workforce (age, gender, ethnicity, etc.).

Equity refers to fair treatment for all people so that the norms, practices, and policies in place ensure identity is not predictive of opportunities or workplace outcomes.

Inclusion refers to how the workforce experiences the workplace and the degree to which the organization embraces all employees and enable them to make meaningful contributions.

Key Area	SVCW Practices and Procedures
Diversity	60% workforce are People of Color (POC) 23% gender diversity 55%/25% POC/Women in Management Roles Manager is a non-binary POC
Equity	Standard Administrative Procedures Manager involved in ALL employee-related issues Manager reviews ALL Performance Evaluations Exhaustive training by all management staff Hiring is guided by FitMe; an unbiased method to measure culture fit Manager provides presentations on <i>Culture</i> at CASA

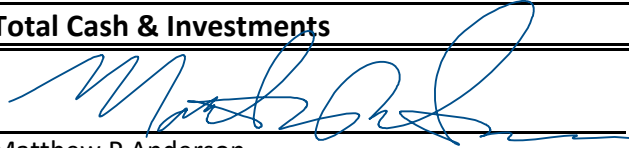
<p>Inclusion</p>	<p>Leadership training offered to all staff</p> <p>90-day Intensive leadership training for management staff</p> <p>Manager one-on-one meetings with front-line staff</p> <ul style="list-style-type: none"> Division-by-Division basis No Supervisors/Directors in attendance Open forum Action items follow-up <p>Manager quarterly meetings with Union Stewards</p> <p>Manager “open door policy” extends to all and is proactive vs reactive</p> <p>Monthly all-hands meeting held by Manager</p> <ul style="list-style-type: none"> Manager-led. Questions/comments fielded by any/all staff during meeting Ability to anonymously submit questions/comments that are addressed in the meeting Different divisions tapped to provide presentation on what each does Employee-of-the-Month named based upon exhibited excellence in completing a task Anniversaries acknowledged; each employee comes to front of room to shake Manager’s hand <p>Year of OPPORTUNITIES – each month emphasizing opportunities available for all staff (</p> <ul style="list-style-type: none"> May = Innovation; June = Ethics) <p>“The Hub” = intranet site where news, announcements, congratulations, etc are posted</p>
<p>Manager Key Tenets</p>	<p>Fairness – Respect – Trust</p>

In addition to the listed items, SVCW has a series of Standard Administrative Procedures and Commission Policies that reflect state and federal laws, regulations, and guidelines in addition to reflecting emphasis on diversity, equity, and inclusion.

AGENDA ITEM 5C1

**Silicon Valley Clean Water Authority
Cash & Investments Summary Report
March 31, 2024**

Description	Market Value	% of Total Holdings	Yield to Market
Reserve Accounts			
Operating Reserve* - Securities	\$ 1,965,177	1.68%	1.86%
Operating Reserve - Money Market Fund Balance	2,259,744	1.93%	5.18%
CIP Reserve* - Securities	24,173,568	20.65%	3.05%
CIP Reserve - Money Market Fund Balance	348,422	0.30%	5.18%
Stage 2 Capacity Reserve* - Securities	12,916,768	11.04%	1.78%
Stage 2 Capacity Reserve - Money Market Fund Balance	2,692,391	2.30%	5.18%
Debt Coverage Reserve - CAMP	2,595,698	2.22%	5.48%
Total Market Value: Operating and Reserve Accounts	\$ 46,951,768	40.1%	3.03%
Total Accrued Interest: Operating and Reserve Accounts	227,758		
GRAND TOTAL, RESERVE ACCOUNTS	\$ 47,179,525		
Trustee Accounts:			
2018 Bond Project Fund Account - CAMP	\$ 6,840,208	5.84%	5.48%
2018 Bond Revenue Account	3,195	0.00%	4.97%
2021 Refunding Bonds Revenue Account	1,763	0.00%	4.97%
2021A Notes (RESCU) - Money Market Fund	247	0.00%	4.97%
2021A Notes (RESCU) - LAIF**	1,415,533	1.21%	4.23%
2021B Notes (WWTP) - Money Market Fund	19,156,606	16.37%	4.97%
2021B Notes (WWTP) - CAMP	13,287,837	11.35%	5.48%
2021B Notes (WWTP) - LAIF**	23,668,429	20.22%	4.23%
2021 Notes Capitalized Interest Account - Money Market Fund	827,484	0.71%	4.97%
Total Market Value, Trustee Accounts	\$ 65,201,301	55.71%	4.84%
Accrued Interest:	177,168		
Operating Cash (includes outstanding checks)	2,402,309	2.05%	0.00%
Local Agency Investment Funds (LAIF) Balance	2,484,000	2.12%	4.23%
Total Cash & Investments	\$ 117,444,305	100.00%	4.00%



 Matthew P Anderson
 Chief Financial Officer / Assistant Manager

4/18/2024

 Date

* Monthly report of security transactions and interest available upon request
 **Market value of LAIF based on the most available Fair Value factor

Silicon Valley Clean Water
Operating and Reserve Funds - Sector Allocation & Compliance March 31, 2024

Security Type	Operating Reserve	CIP Reserve	Capacity Reserve	Debt Coverage Reserve	Total Market Value	% of Total Portfolio	% Allowed by Policy	In Compliance	% Change vs. Prior Month
U.S. Treasury	\$ 1,585,456	\$ 11,045,261	\$ 5,827,465	\$ -	\$ 18,458,182	39%	100%	✓	(0.5%)
Supranationals	-	-	-	-	-	0%	15%	✓	0.0%
Federal Agency/GSE	-	1,073,854	752,711	-	1,826,565	4%	100%	✓	(0.0%)
Federal Agency/CMBS	-	2,735,812	704,758	-	3,440,570	7%	100%	✓	(0.1%)
Federal Agency CMO	-	666,613	369,947	-	1,036,560	2%	100%	✓	(0.0%)
Federal Agency MBS	-	2,021,658	1,309,587	-	3,331,245	7%	100%	✓	(0.1%)
Municipal	-	872,757	706,746	-	1,579,503	3%	30%	✓	(0.0%)
Corporate Notes	357,777	5,536,862	3,078,428	-	8,973,066	19%	30%	✓	0.5%
Asset-Backed Securities	21,944	220,751	167,127	-	409,822	1%	10%	✓	(0.1%)
Securities Sub-Total	1,965,177	24,173,568	12,916,768	-	39,055,513	83%			
Accrued Interest	9,844	145,118	60,804	-	215,766				
Securities Total	1,975,021	24,318,685	12,977,572	-	39,271,278				
Money Market Fund	2,259,744	348,422	2,692,391	-	5,300,557	11%	20%	✓	0.4%
CAMP	-	-	-	2,595,698	2,595,698	6%	100%	✓	(0.0%)
Accrued Interest - CAMP	-	-	-	11,992	11,992				
CAMP Sub-Total	-	-	-	2,607,690	2,607,690	6%	100%	✓	0.0%
Total Investments	\$ 4,234,765	\$ 24,667,107	\$ 15,669,963	\$ 2,607,690	\$ 47,179,525	100%			
<i>As % of 6/30/24 Target:</i>	<i>101.2%</i>	<i>99.8%</i>	<i>100.0%</i>	<i>100.0%</i>	<i>100.0%</i>				

This report contains financial information which has not been reviewed or audited by an independent auditor, does not reflect the application of generally accepted accounting principles in all instances and is subject to future revision. This report has not been prepared with a view to informing an investment decision in any of the Authority's bonds, notes or other obligations. Any projections, plans or other forward-looking statements included in this report are subject to a variety of uncertainties that could cause any actual plans or results to differ materially from any such statement. The information herein is not intended to be used by investors or potential investors in considering the purchase or sale of the Authority's bonds, notes or other obligations and investors and potential investors should rely only on information filed by the Authority on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures and website, maintained at <https://emma.msrb.org>

1. All operating fund accounts are in compliance with SVCW's Investment Policy, and all bond proceeds accounts are in compliance with the relevant bond documents.
2. SVCW has adequate funding levels for more than six months of operations and claim payments, as referenced in CA Code Section 53646.
3. Market valuations for the Operating and Reserve accounts along with the 2018 bond, 2019A note, 2021 bond, 2021A and 2021B notes proceeds accounts are provided by PFM Asset Management LLC (PFM). Generally, PFM's market prices are derived from closing bid prices as of the last business day of the month as supplied by ICE Data Services or Bloomberg. Where prices are not available from generally recognized sources the securities are priced using a yield-based matrix system to arrive at an estimated market value. Prices that fall between data points are interpolated. Non-negotiable FDIC-insured bank certificates of deposit are priced at par. Although PFM believes the prices to be reliable, the values of the securities do not always represent the prices at which the securities could have been bought or sold.
4. In accordance with Generally Accepted Accounting Principles (GAAP), month-end holdings and information are reported on a trade date basis.
5. The yields shown for securities portions of the operating and reserve accounts and the 2019A and 2021A&B notes proceeds accounts are the yields to maturity at cost.
6. The yield for LAIF is the average monthly effective yield. Source: https://www.treasurer.ca.gov/pmia-laif/historical/avg_mn_ylds.asp
7. The yields shown for the PFM-managed money market funds are the Yield to Maturity at Cost, and the Yield to Maturity at Market sourced from the respective fund providers' statements. Yields for BNY-managed funds are Market Yields sourced from the respective fund providers' statements.
8. Yield shown for CAMP is the monthly distribution yield.
9. Amounts will slight differ due to timing of custodian account reports.

AGENDA ITEM 5D

**ENGINEERING REPORT: APRIL 2024
CAPITAL IMPROVEMENT PROGRAM****UPCOMING COMMISSION ACTIONS:**

RESCU Program (6008, 9501, 9502): Design and Construct Conveyance System Improvements

SVCW awarded progressive design build contracts to Barnard Bessac Joint Venture for the Gravity Pipeline (GP) Project and Shea Parsons Joint Venture for the Front of Plant (FoP) and Pump Stations Improvements (PSI) Projects. SVCW staff and consultant project team are intricately involved in all stages of work.

GP project construction is complete. Construction continues on the PSI and FoP projects. Acceptance testing of the FoP project is ongoing, with the processes receiving flow from West Bay and Redwood City through the gravity pipe. The FoP and PSI Projects are expected to be substantially complete in mid 2024 and late 2024, respectively. Refer to Commission Item 5F for status updates.

Planned Commission Actions: Approve Contract Amendment for Post-Construction Restoration on Inner Bair Island – May 2024

Food Waste Receiving Improvements Project (CIP #9257): Expand Food Waste Receiving Storage and Construct Associated Tanks and Equipment.

SVCW received a \$4 million grant from CalRecycle to improve its organic co-digestion facility. Staff negotiated an agreement with CDM Constructors Inc (CCI) to design and construct improvements to the existing Food Waste Co-Digestion Receiving facility. Under Stage 1 of the agreement, the project team has developed design to the 60% level. Initial cost proposal to complete the project provided by CCI is above the project budget. SVCW is negotiating a contract amendment to allow CCI to complete the design to 100%, attempting to optimize the cost and bring the project within the budget.

Planned Commission Actions: Approve Stage 1 Amendment to Energy Conservation Contract Agreement with CDM Constructors Inc – May 2024

Biogas Utilization Project (CIP #9269): Expand Onsite Power Generation Capacity

Install five Linear Generators with a total additional capacity of 1,150kW to efficiently convert biogas to electricity for plant use.

Planned Commission Actions: Approve Agreement and Task Orders to Design, Procure and Install Linear Generators – May 2024

Final Effluent Pump Project (CIP#9223): Replace Final Effluent pumps, motors, and electrical system.

The Final Effluent Pump project will replace all five pumps that pump final treated effluent into San Francisco Bay. These pumps were installed in the late 1970's original plant construction and have been operational since the Plant was commissioned in 1982. A competitive selection process was followed for a Progressive Design-Build team to do the work. Work has progressed to allow for SVCW staff and the design-builder to negotiate the first Stage 1 Amendment to allow for early procurement of long lead time equipment. Under this amendment, majority of the long lead items such as pumps, VFDs and PLCs will be procured.

Planned Commission Actions: Award Stage 1 Amendment to Progressive Design-Build Agreement – May 2024

Master Services Agreement for DHI Water and Environment: Approve Master Services Agreement for On-call Services for DHI.

DHI is a specialty firm specializing in process modeling. DHI provides the WEST process modeling platform which is based on modern technology that is flexible and future-proof. The software is competitively priced, feature-rich, easy-to-use, and can be maintained by plant staff in-house. SVCW has been working with DHI and has created a model for SVCW. The MSA will allow SVCW to seek ongoing support from DHI on updating the model on an ongoing basis.

Planned Commission Actions: Approve Master Services Agreement for On-call Services for DHI – May 2024

Fixed Film Reactor Project (CIP#9242): Rehabilitate FFRs and Upgrade 3W System

This project includes rehabilitation of the three fixed-film reactors and upgrading the 3W system to increase the process water system capacity (3W = disinfected effluent, used in-plant for all process water needs).

The rehabilitation project was designed by Brown and Caldwell. JF Shea was awarded the contract to complete the work in November 2023. Initial construction tasks have identified some unforeseen conditions that will be addressed by a contract change order.

Planned Commission Actions: Approve Contract Change Order for Unforeseen Conditions – June 2024

Digester 3 Cleaning and Rehabilitation (9245): Cleaning of Digester No. 3

This project includes transfer of sludge and cleaning of Digester No. 3. This work will prepare the Digester No. 3 for rehabilitation work after which it will be placed into

service. Once Digester No. 3 rehabilitation is complete, work on Digester No. 2 will start.

Planned Commission Actions: Approve Design Task Order – July 2024

ONGOING PROJECTS IN CONSTRUCTION:

Ras Pipe Rehabilitation Project (CIP #9120): RAS/WAS Pump Suction Pipe Rehab

This project includes rehabilitation of pipes serving the Return Activated Sludge (RAS) pumps and Waste Activated Sludge (WAS) pumps.

SAF-MBR (9236): Pilot Testing New Treatment Systems in Conjunction with Stanford University

SAF-MBR is operational with various types of equipment being tested. Additional equipment continues to be procured to further test different scenarios of treatment.

TASK ORDERS APPROVED CALENDAR YEAR 2024:

A list of task orders approved by the engineering division is attached.

SVCW Engineering Division - Task Order Summary 01/01/2024-04/30/2024

Task Order Date	Consultant	TO Amt.	Project #	Project Name	Scope of Work
Commission-Approved Date Task Orders:		\$140,120			
1/23/2024	David J. Powers & Assoc	\$90,000	9501	Pump Station Improvements - TO Amendment	Environmental Services for RESCU Program
2/12/2024	JHS Consulting	\$50,120	9501	Pump Station Improvements - TO Amendment	Environmental and Permitting Advisory for RESCU Program
*Use Commission approved date					
Task Order Date	Consultant	TO Amt.	Project #	Project Name	Scope of Work
Manager-Approved Task Orders*:		\$225,220			
2/6/2024	Freyer & Laureta	\$7,300	810	As-Needed Services FY 23-24	As needed surveying and civil engineering services
2/21/2024	Trinity Consultatns	\$30,000	9502	Front of the Plant - TO Amendment	Air Permit Application Support
2/23/2024	Brown & Caldwell	\$40,000	810	As-Needed Services FY 23-24	General Engineering Services
3/4/2024	Freyer & Laureta	\$42,980	9131	Plant Service Road Resurfacing, Phase 2	Design, Bid, Construction Svcs.
3/8/2024	Sierra Research/Trinity Consultants	\$5,000	810	As-Needed Services FY 23-24 - TO Amendment	Air Quality Permitting Services
3/26/2024	Cascade Integration & Development, Inc.	\$46,640	9247	SHB Electrical Rehabilitation	Eval. & Kohler Switchgear Programming; Troubleshooting & Program Conversion to Ladder Logic
4/11/2024	Hanson Bridgett, Inc.	\$50,000	9130	Capital Improvement Engineering	As-needed Legal Services
4/19/2024	WRA	\$10,600	9265	Levee Repair	Levee Repair Environmental Evaluation

*JPA level of Manager approval is \$75,000

**Use last approval signature (TAH) date

AGENDA ITEM 5E

**Silicon Valley Clean Water
Commissioners' Requested Action Items**

**MAY 13, 2024
AGENDA ITEM 5E**

Updated: 05/02/2024

Commission Meeting Date	Action Item	Requested or Estimated Date for Completion	Status			Date of Completion	Notes
			Ongoing	In Progress	Complete		
4/8/2024	1	Investments	N/A	✓			Research CA CLASS as an alternative to LAIF for short-term investing.
	2	May Commission Meeting	5/6/2024		✓	4/17/2024	Review what topics will be on the May Commission meeting agenda and determine if a Regular meeting is needed. Reviewed and email sent to Commissioners that a regular meeting is needed.
	3	Air Toxics Study	N/A		✓	4/9/2024	How long does the CARB Air Toxics study last? Email sent to Commissioners with answer.
	4	Bylaws	N/A	✓			Review bylaws with respect to annual Commission meeting calendar.
3/11/2024	1	Agenda Packet Distribution	4/8/2024	✓			Provide agenda packets to Commissioners' alternates with the exception of WBSD
2/12/2024	1	Strategic Plan	3/11/2024		✓	3/11/2024	Integrate "Innovation" into the strategic plan; completed via adding to the Vision Statement.
	2	NPDES Annual Report	N/A		✓		Question: how are SVCW's treatment issues/problems/maintenance requirements codified and captured for future action? Mainly in our Annual Report to the Regional Water Board. Place this onto the SVCW website.
12/11/2023		Strategic Plan	1/1/2024		✓		Add a section for long-term strategies (10-15 year timeframe).
11/13/2023		Recycled Water and Energy Management	N/A	✓			Bring regular updates to meetings. Presentation on SPRP at December 2023 meeting given.
10/9/2023	1	Investment Portfolio	N/A		✓	11/13/2023	Bring information on expected returns and administrative fees re: investing in ESG companies.
	2	Public Comments during Meetings	N/A	✓			Changes discussed at November meeting. Possible policy will be brought to the Commission at January 2024 meeting. No decisions made; topic tabled.
9/11/2023		Strategic Planning	1/1/2024		✓		Appoint subcommittee (Commissioners Aguirre and Otte) to develop new strategic plan. Subcmte appointed; draft provided to full Commission in Dec 2023. See action item from 12/11/23.
7/17/2023		Bylaws - Election/Appointment of Officers					Suggested to change bylaws such that new officers elected in February of each year. Decided against and will keep to July.

**Silicon Valley Clean Water
Commissioners' Requested Action Items**

**MAY 13, 2024
AGENDA ITEM 5E**

Updated: 05/02/2024

Commission Meeting Date	Action Item	Requested or Estimated Date for Completion	Status			Date of Completion	Notes
			Ongoing	In Progress	Complete		
5/8 & 6/12 2023	No Action Items						
> One Year	8E - JPA Amendment; re-initiate "clean up" to JPA	N/A		✓			Manager presented a pathway to address critical changes to the JPA at the April 2023 meeting. Commission concurred; Manager following up with Members.
	Project Changes/Commission Notification	N/A	✓			Ongoing	Ensure Commission is kept apprised of possible/potential project cost and/or schedule increases.
	Pump Stations Improvements - Capital vs Life Cycle Costs	N/A		✓			Reducing pump stations from 5 to 2 have been reported to save long-term costs; provide analysis results to Commissioners.

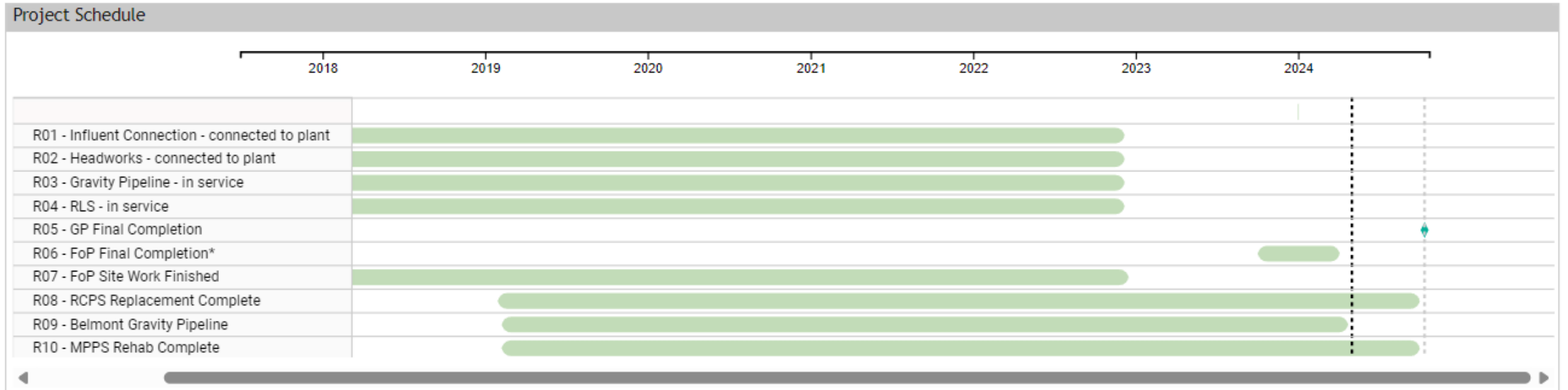
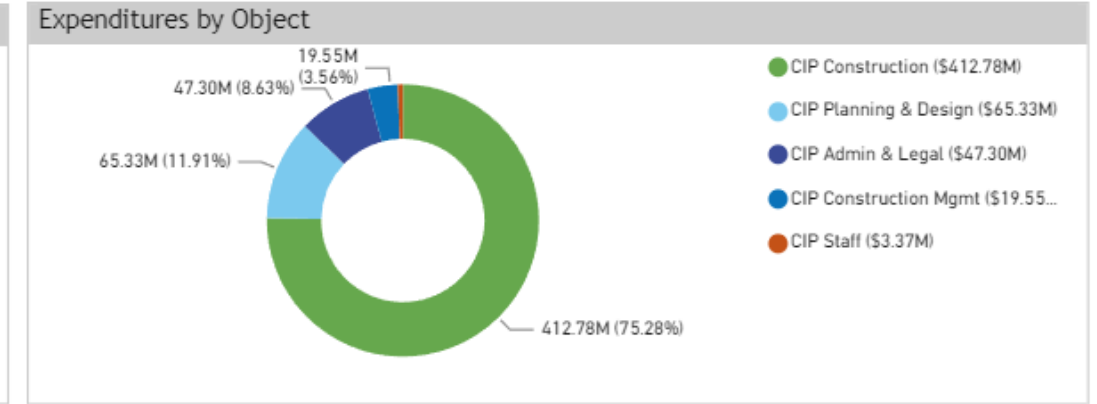
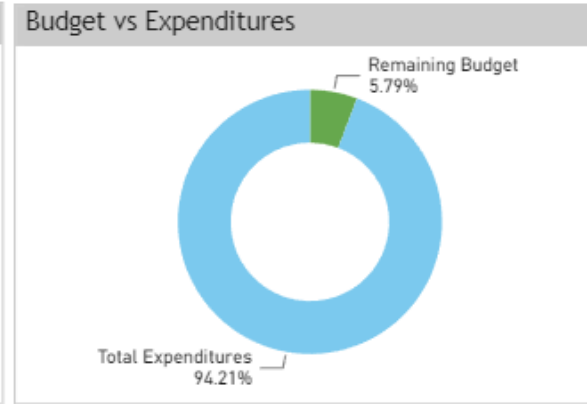
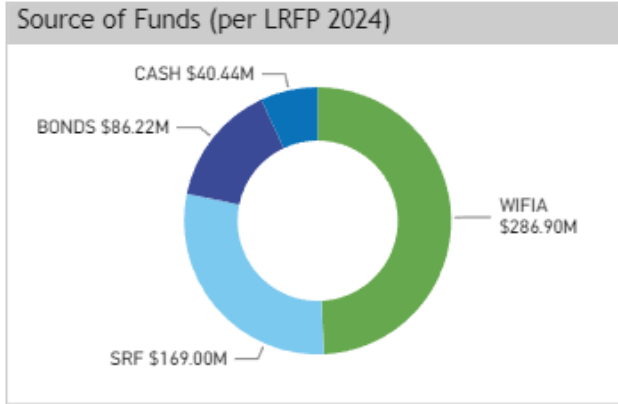
AGENDA ITEM 5F

RESCU Program describes eleven projects which constitute full replacement and rehabilitation of SVCW's conveyance system. RESCU includes the Gravity Pipeline, Front of Plant, Pump Stations, and Belmont Force Main projects. The Front of Plant includes six and Pump Stations includes four of the eleven projects. The Conveyance System Improvements Environmental Impact Report completed and adopted by the SVCW Commission in April 2017 covers work to be done under all the RESCU Program projects.

Available Budget
\$582.56M

Total Expenditure
\$548.82M

Remaining Budget
\$33.74M



*Time extension is pending

NOTE: all information in this report are as of the end of previous month, except for the SPI data, which is one month behind all other information.

As of : 2024 - 04

Startup Progress

Project	PreCommissioning	Functional Testing (Design verification)	Functional Testing (Dry verification)	Functional Testing (Wet verification)	Acceptance Testing
FoP	100%	100%	100%	100%	100%
GP	100%	100%	100%	100%	0%
MPPS A side	100%	100%	100%	100%	100%
MPPS B side	100%	100%	100%	100%	100%
BGP	100%	100%	100%	100%	0%
RCPS	0%	0%	0%	0%	0%

Major Accomplishments To Date

Front of Plant	<ul style="list-style-type: none"> - FoP Control Strategies completed. - FoP Design Intent presentation completed. - Acceptance Testing plan completed. - All vendor trainings completed. - Headworks and SFS/RLS Functional Testing completed.
Gravity Pipeline	<ul style="list-style-type: none"> - GP Design Intent presentation completed. - Acceptance Testing plan completed. - FM to GP switchover completed.
Pump Stations Improvements	<ul style="list-style-type: none"> - MPPS A-Side 30-Day Acceptance Testing completed. - MPPS B-Side 30-Day Acceptance Testing completed. - BGP Cutover completed and Functional Testing completed. Acceptance testing expected to begin early May 2024.
Program	<ul style="list-style-type: none"> - RESCU Commissioning Risk Register workshop completed. - Bi-weekly Risk Register meeting ongoing.

3 - Month Look Ahead

	Start	End	May	June
San Carlos Connecting Piping Startup (Acceptance Testing)	May 6, 2024	June 5, 2024	X	X
BGP Startup (Acceptance Testing)	May 6, 2024	June 5, 2024	X	X



Front of Plant Progressive DB Project (CIP 9502)

The Front of Plant (FoP) Project consists of the design, construction, permitting, start-up, commissioning, and final acceptance for the Receiving Lift Station (RLS), Surge and Flow Splitter (SFS), Headworks Facility, Odor Control System, Influent Connector Pipe, Emergency Overflow pipe to an existing storage basin and other related process support systems. Work is being implemented under a Progressive Design-Build procurement process in stages.

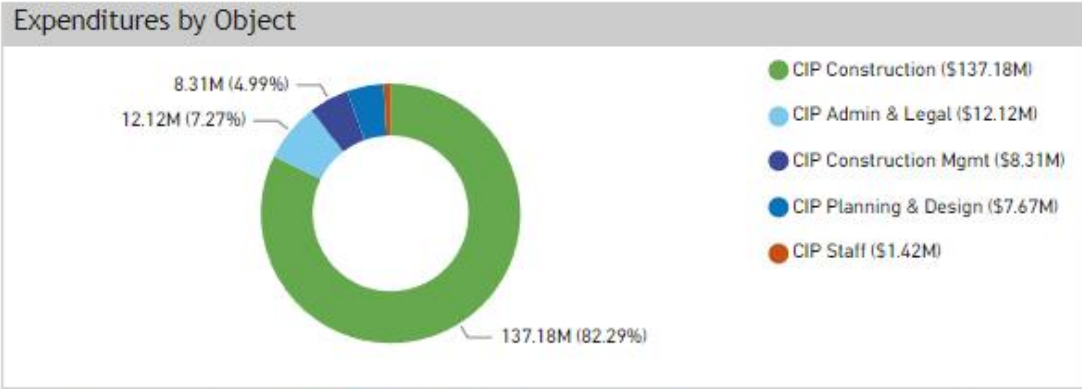
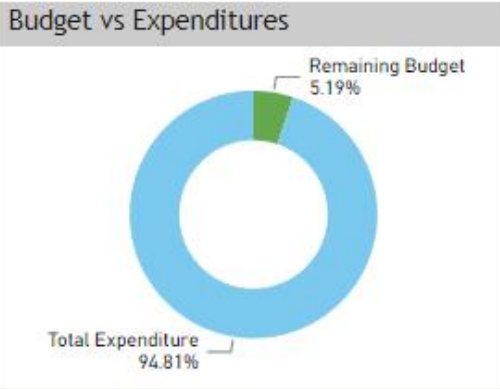
Available Budget
\$174.19M

Total Expenditure
\$165.14M

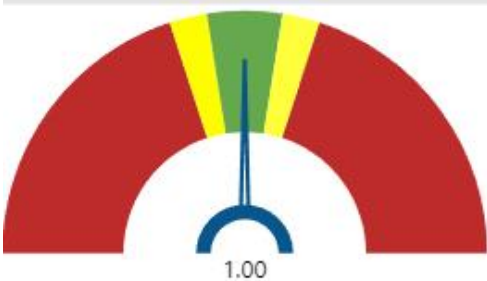
Remaining Budget
\$9.04M

Milestone Schedule		
	Start	Finish
Interconnection Pipe Completed	7/24/2020	8/1/2023
Headworks Facility Completed	12/6/2018	11/30/2022
SFS/RLS Completed	12/6/2018	2/22/2023
Bair Island Connecting Piping Startup	10/3/2022	4/22/2024
San Carlos Connecting Piping Startup	8/5/2022	4/22/2024
Substantial Completion		4/11/2024
Final Completion*		4/24/2024

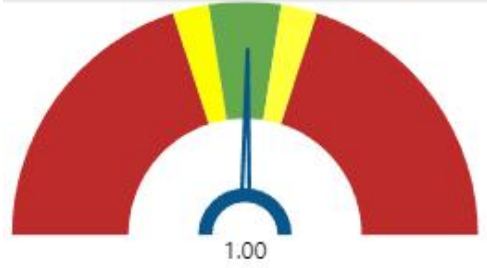
*No-cost time extension pending



Cost Performance Index (CPI)



Schedule Performance Index (SPI)



Major Accomplishments this Period

Construction	<ul style="list-style-type: none"> - SPJV continued to address punch list items throughout the RLS and Headworks. SPJV demoed the 48" IPL bypass and installed the 1W line to the Dog Park. - The Admin/Grassili Lot concrete paving work was completed. - Vendor training is complete. - The 30-day acceptance testing of the Headworks, SFS, and RLS was completed. - SPJV completed the permanent connection of the force main to the drop structure at Bair Island and San Carlos.
Design	- FoP design is complete.
Procurement of Trade Packages	- Front of Plant Trade Procurement is complete.

3 - Month Look Ahead

	Start	End	May	June	July
SCGL Connecting Piping	August 5, 2022	June 12, 2024	X	X	
Project Closeout	April 9, 2024	May 24, 2024	X		
Extended Commissioning/Training	June 12, 2024	July 12, 2024		X	X

Potential Issues

Odor control fan
 No Cost Time Extension
 Air permit coordination

Approved Project Changes

SCPS Miscellaneous Improvement
 San Carlos and Bair Island Connecting Piping
 Project Management past December 2021
 Power Loss and Recovery and Other Electrical Improvements
 New County/Local Sales Tax
 Miscellaneous Site Improvements
 ILS Pipe Repair
 Extended Overhead Costs Associated with CFRP Delays
 Extended Overhead Costs Associated with 54-inch Valve Delays
 Electrical System
 Electrical and Mechanical Miscellaneous Improvement
 Credit for the deletion of the chemical storage system
 Credit for deletion of 48" bypass from 54" force main
 Change order for odor control system
 Bair Island and San Carlos Pump Station Pipe Connection Work - mechanical
 3 Water and Utilidor Improvements

Safety Spot Light

Lost Time	0
Near Misses	5
Recorded Losses	2

Gravity Pipeline Progressive DB Project (CIP 6008)



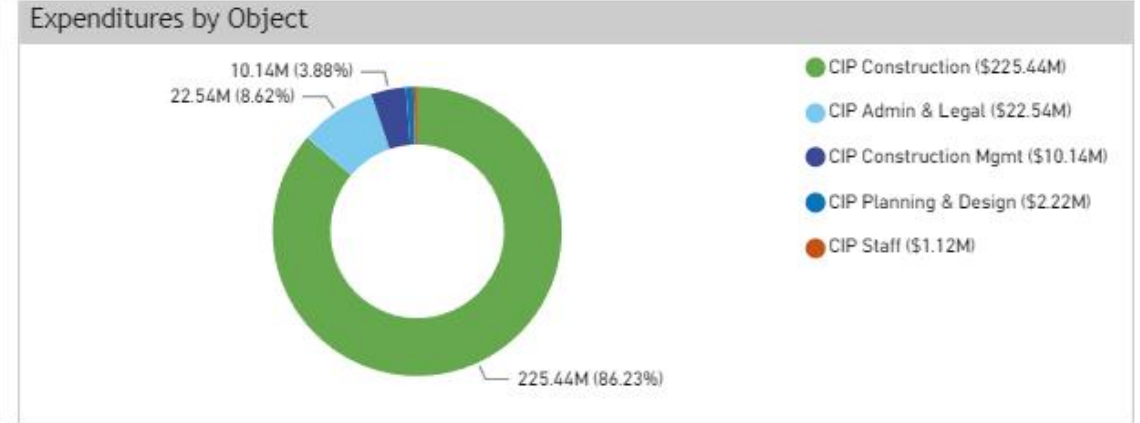
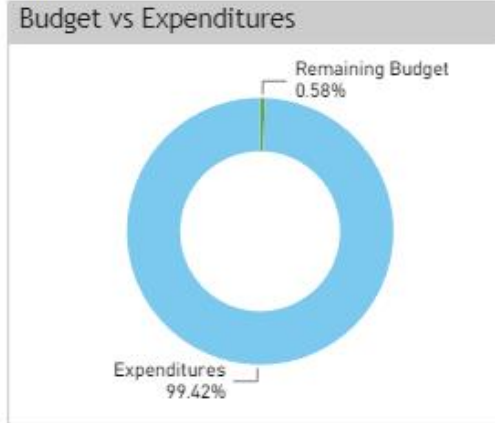
The Gravity Pipeline (GP) Project consists of the design, construction, permitting, start-up, commissioning, and closeout of approximately 17,600 feet of wastewater gravity FRP pipe inside a concrete-segment tunnel. The work includes three shafts and will interface directly with the Front of Plant (FoP) Project at the Surge & Flow Shaft (SFS). Work is being implemented under a Progressive Design-Build procurement process.

Available Budget
\$258.06M

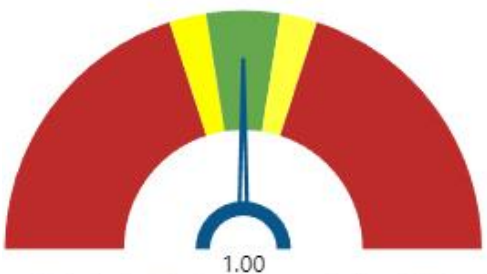
Total Expenditure
\$256.56M

Remaining Budget
\$1.50M

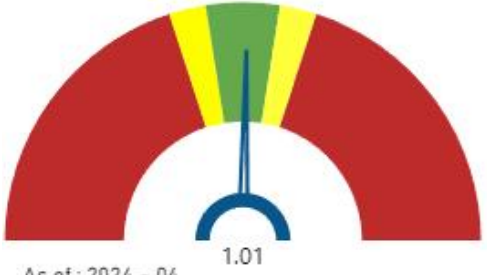
Milestone Schedule		
	Start	Finish
Conditional Substantial Completion		7/1/2022
Final Completion		10/11/2024



Cost Performance Index (CPI)



Schedule Performance Index (SPI)



Major Accomplishments this Period

Construction	<ul style="list-style-type: none"> - BBJV completed backfill of the Airport Access Shaft. - BBJV completed site restoration at the AAS. - Acceptance Testing to begin after Belmont flows are introduced to the Gravity Pipeline tunnel - date TBD
Design	- Gravity Pipeline design is complete.
Muck Disposal	<ul style="list-style-type: none"> - 79% of Muck Disposal Amendment spent. - 21% of Muck Disposal Amendment remaining. Credit was issued for remaining funds.
Procurement of Trade Packages	- Gravity Pipeline Trade Procurement is complete.

3 - Month Look Ahead

	Start	End

Potential Issues

Remaining budget to be transferred to other RESCU project

Approved Project Changes

- Soil Conditioner Leak at CPT Hole STA 171 + 80
- SFS Slurry Wall Hardness DSC
- SCPS Basement Connection
- San Carlos Shaft Ammonia Mitigation
- San Carlos Adit Ammonia Mitigation
- Redwood City Sales Tax Increase 2021
- New County/Local Sales Tax and US Tariffs
- Exceedence of Muck Offhaul Allowance
- Bair Island Weir Optimization
- Bair Island Force Main Exposure and Additional Monitoring
- Additional Survey at Governors Bay
- Acceptance Testing Time Extension

Safety Spot Light

Lost Time	1
Near Misses	4
Recorded Losses	5

Pump Stations Improvement Progressive DB Project (CIP 9501)



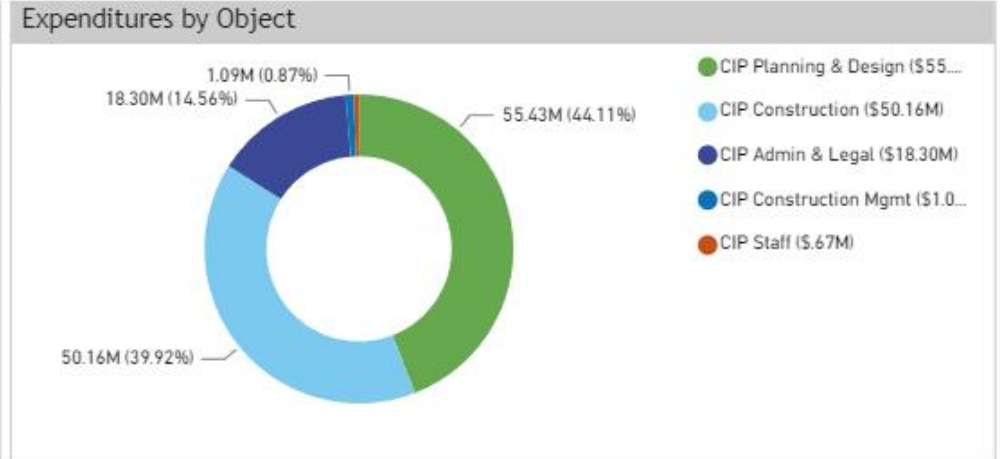
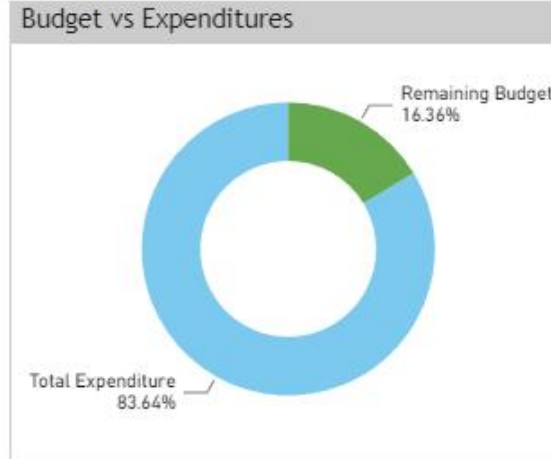
All SVCW pump stations require replacement or rehabilitation. Menlo Park PS will be rehabilitated. Redwood City PS will be replaced. Belmont PS will be replaced with a gravity pipeline. San Carlos PS is no longer needed due to the new gravity tunnel; flows from San Carlos and Belmont will enter into the gravity tunnel via a drop structure at the current San Carlos pump station site. Flows from MPPS and RCPS will flow through the 48-inch force main to a drop structure at Inner Bair Island. RCPS pumps MPPS flows during wet weather events.

Available Budget
\$133.00M

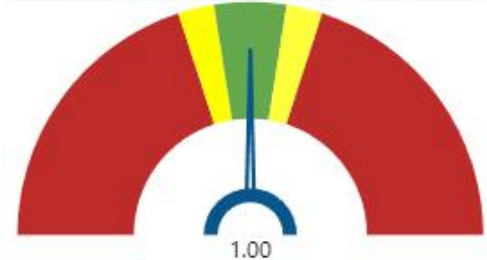
Total Expenditure
\$111.23M

Remaining Budget
\$21.76M

Milestone Schedule		
	Start	Finish
MPPS - B-side Pumps Completed	3/15/2022	10/13/2022
MPPS - A-side Pumps Completed	10/4/2022	2/16/2024
BGP - Gravity Pipe Installed	11/22/2023	3/6/2024
BGP - Shaft/Tunneling Work on Shoreway Road	4/12/2021	4/18/2023
RCPS - PG&E Service Work	5/4/2021	4/12/2024
RCPS - Wet Well & Screening Building Completed	4/17/2022	10/22/2024
RCPS - Electrical Building Completed	2/8/2021	6/3/2024
Substantial Completion - MPPS		10/21/2024
Substantial Completion - RCPS		10/21/2024
Substantial Completion - BGP		6/27/2024



Cost Performance Index (CPI)



Schedule Performance Index (SPI)



As of: 2024 - 04



Pump Stations Improvement Progressive DB Project (CIP 9501)



Major Accomplishments this Period

- Construction
 - BGP: BGP/SCPS Cutover to the Gravity Pipe was completed. SCPS Driveway and Hiller Aviation Parking Lot restoration was completed.
 - Bair Island Road Restoration: The Northside of the road was completed and hydroseeded. The Southside was completed with a final SWPPP walk held. Hydroseeding of the road to happen fall of 2024.
 - RCPS: PG&E removed the Existing Transformer and Meter, existing facility now runs on the new service until the new RCPS is started up. Discharge Manifolds have been installed and connected to effluent piping. Junction Box sheet piles were removed.
 - MPPS: A-Side 30-Day Acceptance has been completed. SPJV continues to complete remaining Punch List Work.
- Design
 - BGP: SPJV provided declassification drawings, including changes to transmitter screen locations.
 - RCPS: SPJV provided updated Yard Piping Design for capability to double pump MPPS flows in wet weather.

Potential Issues

- SCPS Site Restoration
- SCPS Declassification
- Hiller Parking Lot Restoration
- Future Connection for Redwood City 60-inch Pipe
- Challenges from permitting and land acquisition conditions at RCPS
- Bair Island Road Restoration

3 - Month Look Ahead

	Start	End	May	June	July
MPPS - Punchlist	February 19, 2024	May 29, 2024	X		
BGP - Belmont Pump Station Demo	April 22, 2024	June 26, 2024	X	X	
RCPS - Structural Concrete	September 8, 2021	June 10, 2024	X	X	
RCPS - Mechanical - Wet Well	November 28, 2022	October 22, 2024	X		
RCPS - Mechanical - Screening Structure	October 31, 2022	June 17, 2024		X	
RCPS - Electrical / I&C	April 1, 2024	July 9, 2024	X	X	X
RCPS - Electrical Building & Restroom	February 8, 2021	June 3, 2024	X	X	
RCPS - 36" MPPS Force Main and Valve Vaults	May 16, 2024	September 20, 2024	X	X	X
RCPS - Site Utilities	September 28, 2023	October 8, 2024	X		
RCPS - Effluent Piping and Meter Vault	December 19, 2023	September 20, 2024	X		X
RCPS - Standby Generator	June 2, 2021	May 22, 2024	X		

Safety Spot Light

Lost Time	0
Near Misses	1
Recorded Losses	0

Approved Project Changes

Updated MPPS Schedule to address Electrical Equipment Delays

Stage 2F Traffic Control Allowance Release

Stage 2 Baseline Schedule Revision

Segment 1 Force Main Junction Box Repairs

Revised Piping and Flowmeter for BGP Piping in SCPS, Autostart for MPPS and RCPS Portable Generator, RCPS Pump Protection Panel "Reset" Button, MPPS Chemical Feed Pump Receptacles, MPPS and RCPS Phase Loss Relay, MPPS Bathroom Items, Additional Paving Thickness in San Carlos

Redwood City 48" Pipe Rehabilitation Costs and Impacts, Updated Stage 2A and 2C Substantial Completion

PSI Allowance Release - All Stages

Pre-design for 33-inch FM Stabilization and Maple Street Improvements

MPPS Roof Receptacle, MPPS E/I&C Adjustment from 60% to 100%, SCPS E/I&C Adjustment from 60% to 100% (Credit), BGP Manhole Lids, Differing Site Conditions at JS-1 and RS-1, San Carlos Pump Station Declassification Design, RCPS Chopper Pump Replacement (Credit), Raising Screenings Deck, Design of 60-inch Connection and Isolation Gate to RCPS Junction Box, PG&E Impacts at RCPS, RCPS E/I&C Adjustment from 60% to 100% (Credit)

MPPS PG&E Allowance Release, MPPS PG&E Electrical Impact Costs, MPPS PG&E Transformer Swap - Temporary Generator Additional Costs, RCPS Secondary Conductors

MPPS CARVs, MPPS 404 Valve Wiring, MPPS Irrigation Scope Removal, MPPS PVC Coating Scope Removal, MPPS FIT Re-Location, SCPS Leachate Flowmeter, Reuse Existing RCPS Sampler, RCPS Encased PG&E Conduit, Install MPPS UPS Power Display, Install SCPS UPS Power Display, Install RCPS UPS Power Display

Izzy's Lot Restoration

BPS Demo Allowance Release, Retaining Wall Slab Concrete Removal, Existing RCPS Crack Repair, Bigge Crane Costs, RCPS Hauling (Credit), Moving Conex and Equipment to the Cargill Lot, Updated Stage 2F Substantial Completion

BGP RS-2 Lane Realignment

BGP Design Development

Bair Island and San Carlos Pump Station Connecting Piping Electrical Scope (transfer from GP Project)

Allowance Release, Monitoring Off Position for PSI Valves, Communications Cable and Power Updates Related to Smartlinx Addition at MPPS, Remote ARV Monitoring Modification, RCPS Standby Generator Cost Increase, MPPS Sampler Piping, RCPS CARVs, Monitoring MPPS PRV, 12" Water Relocation and Calwater Costs (RS3) (Credit), MTBM Stoppage at STA 46+43, Irrigation Piping at ARV Vault, Raise KGVs and Piping, Credit for Segment 2 ARV (Sta. 155+80) (Credit)

Allowance Release, JS-4 Unforeseen Fiber Optic Utility Impacts, MPPS Baffle Wall, BPS Demo Design

AGENDA ITEM 7A

**MINUTES OF SILICON VALLEY CLEAN WATER
REGULAR MEETING – April 8, 2024
8:00 a.m.**

Place: Silicon Valley Clean Water
1406 Radio Road
Redwood City, California

Members of the public and SVCW staff and consultants were also able to observe and participate remotely per instructions provided in the agenda.

ITEM 1

CALL TO ORDER

The meeting was called to order at 8:00 a.m.

ITEM 2

ROLL CALL - Commissioners Duly Appointed by Each Agency

Council Member Alicia Aguirre, Redwood City – Chair
Board Member George Otte, West Bay Sanitary District – Vice-Chair
Council Member Ron Collins, San Carlos – Secretary
Council Member Davina Hurt, Belmont - Member

Staff, Consultants and Visitors Present

Teresa A. Herrera, SVCW Manager
Christine C. Fitzgerald, SVCW Legal Counsel
Matt Anderson, SVCW Chief Financial Officer/Assistant Manager
Monte Hamamoto, SVCW Chief Operating Officer
Kim Hackett, SVCW Authority Engineer
Jennifer Flick, SVCW Human Resources Director
Arvind Akela, SVCW Engineering & Environmental Services Director
Jessica Mangual, SVCW Secretary Pro Tem
Daniel Buenrostro, Operations Director
Jane Kao, SVCW Senior Engineer
Kiki Newberry, SVCW Financial Analyst
Mark Minkowski, Kennedy Jenks
Bill Tanner, Tanner Pacific
EJ Shalaby, DNS Strategies
Sergio Ramirez, West Bay Sanitary District
Debra Fisher, West Bay Sanitary District
E Martinez, Redwood City

ITEM 3

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was recited by those in attendance

ITEM 4

PUBLIC COMMENT

There were no Public Comments

ITEM 5

SAFETY MOMENT AND REPORTS

Instructions for enabling live captioning and providing public comment during the remote meeting site were provided.

Item 5A Safety Moment included tips on how to deal with seasonal allergies.

For other written reports contained within the agenda packet, there were no questions or comments.

ITEM 6

MATTERS OF COMMISSION MEMBER'S INTEREST

Discussion initiated to change the May 13, 2024 meeting start time to 10:30 a.m.; the Commission voted to change the meeting start time contingent on agenda item requirements. Manager to follow up and notify Commissioners.

Motion/Second: Mr. Otte / Mr. Collins

The Motion carried by Unanimous Vote

ITEM 7

CONSIDERATION OF MOTION APPROVING CONSENT CALENDAR ITEMS 7A THROUGH 7D

- A. APPROVAL OF MINUTES – March 11, 2024 - Regular Meeting
- B. CONSIDERATION OF MOTION APPROVING CLAIMS AND CHECKS DATED JANUARY 9 – FEBRUARY 19, 2024, AND NECESSARY PAYMENTS THROUGH FEBRUARY 19, 2024
- C. CONSIDERATION OF RESOLUTION AUTHORIZING TEMPORARY EXTENSION OF CREDIT AGREEMENT WITH WELLS FARGO BANK, NATIONAL ASSOCIATION FOR REVOLVING LINE OF CREDIT

Proposed Action:

Move adoption of RESOLUTION OF THE COMMISSION OF SILICON VALLEY CLEAN WATER AUTHORIZING AND RATIFYING FIFTH AMENDMENT TO CREDIT AGREEMENT WITH WELLS FARGO BANK, NATIONAL ASSOCIATION, AND APPROVING RELATED FINANCING DOCUMENTS AND OFFICIAL ACTIONS

D. CONSIDERATION OF MOTION APPROVING MUNICIPAL FINANCIAL ADVISORY SERVICES MASTER SERVICES AGREEMENT AND TASK ORDER

Proposed Action:

Move approval of MUNICIPAL ADVISORY SERVICES IN AN AMOUNT NOT TO EXCEED \$965,000 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – FIELDMAN ROLAPP & ASSOCIATES

Motion/Second: Mr. Collins / Ms. Hurt

The Motion carried by Unanimous Vote

ITEM 8A

A. CONSIDERATION OF RESOLUTIONS APPROVING FISCAL YEAR 2024-25 ANNUAL OPERATING AND CAPITAL EXPENDITURES BUDGET (pg. 47)

Proposed Actions:

- i. FISCAL YEAR 2024-25 REVENUE PLAN IN THE AMOUNT OF \$32,468,378 IN NET OPERATING REVENUES REQUIRED AND \$1,499,635 FOR REVENUE-FUNDED CAPITAL PROJECTS
- ii. FISCAL YEAR 2024-25 CASH RESERVE DESIGNATIONS IN THE AMOUNT OF \$3,500,000 TO THE CAPITAL IMPROVEMENT PROGRAM RESERVE FUND
- iii. FISCAL YEAR 2024-25 CASH IN LIEU OF DEBT CONTRIBUTIONS IN AN AMOUNT OF \$13,622,706
- iv. FISCAL YEAR 2024-25 DEBT SERVICE EXPENDITURES IN AN AMOUNT OF \$25,863,091
- v. AUTHORIZING SVCW MANAGER TO IMPLEMENT, MANAGE AND APPROVE EXPENDITURES AUTHORIZED WITHIN THE FISCAL YEAR 2024-25 ANNUAL OPERATING AND CAPITAL EXPENDITURES BUDGET AS ADOPTED BY THE SILICON VALLEY CLEAN WATER COMMISSION

Motion/Second: Mr. Collins / Ms. Hurt

The Motion carried by Unanimous Vote

ITEM 9

Closed Session was called to order at 8:37 a.m.

ITEM 10

RECONVENE IN OPEN SESSION

Open Session reconvened at 9:55 am

Ms. Fitzgerald reported that, as to closed session items 9A, 9B, and 9C, no actions were taken.

ITEM 11
ADJOURN

There being no further business, the meeting adjourned at 9:56 am

Minutes prepared by Teresa A. Herrera
Reviewed by General Counsel

Ron Collins, Secretary

AGENDA ITEM 7B

SVCW WARRANT REGISTER

SVCW Warrant Registers dated February 20 – March 18, 2024, were scanned and a copy was emailed to Commissioners and Legal Counsel on May 8, 2024.

AGENDA ITEM 7C

**AUTHORIZATION TO TEMPORARILY EXTEND EXISTING
LINE OF CREDIT AGREEMENT**

ISSUE

Authorization to temporarily extend Credit Agreement with Wells Fargo Bank, National Association for a Line of Credit

BACKGROUND

A similar Line of Credit (LOC) temporary extension was brought to, and approved by, the Commission on April 08, 2024. SVCW staff are preparing a three-year renewal of the Line of Credit (LOC) facility, which will require a public hearing at a future regularly scheduled commission meeting. This item again temporarily extends current LOC terms until a full three-year agreement is submitted for Commission approval.

The timing and amount of SVCW capital expenditures can fluctuate significantly as SVCW implements its capital improvement program. Since 2012 SVCW has used a LOC to manage its cash liquidity needs. The LOC remains a valuable tool that also helps reduce borrowing costs for capital projects. In 2015, SVCW entered into an LOC Agreement with Wells Fargo, National Association (Wells Fargo), with an authorized renewal in 2018 and again in 2021.

Given the reimbursement timeline of governmental loans, it would be prudent to have \$30 million in liquidity from an LOC. SVCW's LOC is especially useful to accommodate cash flows needs associated with the Authority's State Revolving Fund (SRF) Loans from the State Water Resource Control Board (SWRCB). The SRF loan program is structured such that, during construction, SVCW initially settles contractor invoices and afterwards seeks reimbursement from the SWRCB. Reimbursement claims may take 90 to 120 days to be processed and settled. The SWRCB designates those reimbursed funds as principal amounts owed on SRF Loans and accrues interest until construction is completed.

DISCUSSION

Staff are preparing for a three-year LOC agreement (as either a Seventh LOC Agreement Amendment or a new agreement with a different institution) that will be brought to the June commission meeting. To ensure adequate liquidity remains available, a Sixth Amendment to the LOC Agreement will allow another temporary 60-day extension. All other terms remain unchanged. This Sixth Amendment extension will allow the parties sufficient time to negotiate the terms of the Seventh LOC Amendment or new Agreement, which will be brought to the Commission for consideration and approval at a later date.

CLIMATE EFFECTS

There are no anticipated direct effects to climate from this action.

FINANCES

Since December 2023, SVCW has maintained a drawn balance from the LOC of zero. Currently, however, approximately \$25 million in future reimbursements from an active SRF loan remain which may require occasional draws from the LOC.

The existing LOC agreement calculates interest charges by indexing to the Secured Overnight Financing Rate (SOFR). The resultant index, as of April 19, 2024, produces an annual interest rate of approximately 4.25%.

RECOMMENDATION

Move adoption of RESOLUTION OF THE COMMISSION OF SILICON VALLEY CLEAN WATER AUTHORIZING AND RATIFYING SIXTH AMENDMENT TO A CREDIT AGREEMENT WITH WELLS FARGO BANK, NATIONAL ASSOCIATION, AND APPROVING RELATED FINANCING DOCUMENTS AND OFFICIAL ACTIONS

AGENDA ITEM 7D

**MASTER SERVICES AGREEMENT
DHI WATER AND ENVIRONMENT PROCESS MODELING SERVICES**

ISSUE

Approve Master Services Agreement with DHI Water and Environment, Inc. for On-Call Process Modeling Services

BACKGROUND

SVCW operates a wastewater treatment plant that serves over 220,000 people and businesses located in the surrounding service area. The Environmental Protection Agency (EPA), through the local Regional Water Quality Control Board (RWQCB), has issued a permit for SVCW to discharge treated effluent to San Francisco Bay under the National Pollutant Discharge Elimination System (NPDES), with specific criteria for effluent Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD).

Wastewater treatment includes physical, chemical, and biological processes to prevent BOD, TSS, harmful microorganisms, and other hazardous contaminants of concern from discharging into receiving waters. The interaction between these various processes is complex and the overall treatment process must be robust to account for variations in incoming wastewater characteristics. Plant staff also continuously optimizes existing processes to reduce use of energy, chemicals, and labor all while maintaining consistent and dependable wastewater effluent quality to meet regulations.

One of the tools used to safely manage changes to the complex treatment process is process modeling. Process modeling is the use of computer-aided simulation programs that mimic the wastewater treatment processes; it allows plant staff to manipulate various parameters without impacting actual treatment plant operation. Results then are used to determine the efficacy and feasibility of any proposed changes to the treatment process, without the risk of process upset or permit violation. This provides a safe environment to test out changes with minimal risk to SVCW. Process modeling has been used across the wastewater industry for decades and is a proven tool.

SVCW has been utilizing process modeling on individual process areas as part of CIP projects but has recently invested in efforts to create a comprehensive process model that can be used by plant staff. This model provides a holistic view of the entire treatment process and can be run by engineering and operations staff to optimize the plant operation in a risk-free and efficient manner.

DISCUSSION

SVCW staff conducted a search for process modeling firms that specialize in wastewater simulation software and short-listed DHI Water and Environment Inc (DHI). DHI provides the WEST process modeling platform which is based on modern technology that is flexible and future-proof. The software is competitively priced, feature-rich, easy-to-use, and can be maintained by plant staff in-house.

SVCW has worked with DHI to develop and calibrate a baseline plant model and the undertaking has been successful. There is a need to now extrapolate from the baseline to simulate opportunities for future plant upgrades, optimization, and digitization.

The Master Services Agreement (MSA) will allow SVCW to contract with DHI on an On-

Call Task Order basis for specialized minor projects needing process modeling support and advisory services. The scope of services anticipated include advisory review of modifications and simulation runs performed by SVCW staff, maintenance of existing baseline process model, research of biokinetics to better simulate SVCW treatment processes like trickling filters, activated sludge, and anaerobic digesters, as well as assistance in modeling specialized wastewater treatment efforts.

This model will be critical in planning efforts for the nutrient removal upgrades that will be required by the upcoming Watershed Permit. It is anticipated that SVCW will need to remove effluent nitrogen by more than 60% by 2034. To remove nitrogen, significant changes will need to be made to the wastewater treatment plant processes including the possibility that new tanks would need to be constructed. The WEST model will be critical in the efforts to optimize the existing infrastructure to meet this new requirement and save on capital costs.

CLIMATE EFFECTS

This action has no climate impact.

FINANCIAL IMPACT

There is no financial impact for approving this MSA. Funding for specialized process modeling services will be from various CIP projects or operating funds on an as-needed basis. Currently no funding is required for this recommendation.

RECOMMENDATION

Move adoption of RESOLUTION APPROVING MASTER SERVICES AGREEMENT WITH DHI WATER AND ENVIRONMENT, INC. FOR ON-CALL PROCESS MODELING SERVICES

AGENDA ITEM 7E

**PUMP STATIONS IMPROVEMENT PROJECT (CIP #9501)
APPROVE CONTRACT AMENDMENT**

ISSUE

Approve Amendment to the Pump Stations Improvements Project Design-Build Agreement with Shea Parsons Joint Venture for Bair Island Road Restoration (CIP #9501)

BACKGROUND

SVCW's Regional Environmental Sewer Conveyance Upgrade (RESCU) Program includes conveyance system improvements to transport wastewater from member agencies' collection systems to the SVCW wastewater treatment plant. RESCU is comprised of three projects: Pump Stations Improvements (PSI), Gravity Pipeline (GP), and Front of Plant (FoP). The PSI Project includes three distinct scopes of work: Menlo Park Pump Station (MPPS) Rehabilitation, Redwood City Pump Station (RCPS) Replacement, and Belmont Gravity Pipe Construction.

The three projects have had separate schedules, all closely coordinated by the program management team to ensure continual operation of the conveyance system and to optimize opportunities for cost savings.

One opportunity to save costs related to the work scope of the GP tunneling contractor, Barnard Bessac Joint Venture (BBJV). BBJV completed the main construction activities of tunneling and FRP pipe installation in July 2022, while the FoP and PSI projects were still in middle of construction. Their remaining scope included constructing the connecting piping to allow wastewater flow to enter the tunnel and final restoration activities, all of which could not be completed until the FoP project was substantially complete and able to receive wastewater flow. In February 2022, SVCW staff recommended to the Commission that the connecting pipeline construction and associated work be transferred to other RESCU projects. This was recognized as a benefit to the program for the following reasons: (1) as a tunneling contractor, smaller diameter pipeline construction was not within BBJV's primary realm of expertise, and (2) the overall cost to SVCW would be less, based on the ability to close out the GP contract on time and not incur additional overhead costs.

The work to complete the connecting piping was subsequently transferred to the FoP and PSI projects and completed by Shea Parsons Joint Venture (SPJV), the contractor on both projects. There were two locations for connecting piping. On the northern end of Inner Bair Island (IBI) and near the San Carlos Airport. At IBI, the 48" force main, carrying flow from West Bay Sanitary District and Redwood City, connects to a drop structure and into the tunnel. Near the San Carlos airport, the Belmont and San Carlos gravity systems enter the tunnel through a second drop structure shaft.

As part of the Gravity Pipeline (GP) project scope of work, the Design-Builder installed an extensive heavy-duty road on Inner Bair Island to enable access to the construction site of the Bair Island drop structure. This road was also used to transport the tunnel boring machine and all its trailing gear off IBI after the first tunneling run was completed. The road was constructed on SVCW's permanent easement along the western perimeter of IBI, an

area owned and maintained by the US Fish and Wildlife Service (USFWS) as a wildlife refuge. The removal of this road and post-construction restoration of this area was closely coordinated with USFWS. The scope of work and costs for this work were negotiated with SPJV for addition to the PSI project.

DISCUSSION

The following work elements are included in the Amendment:

Bair Island Road Restoration

The road restoration scope includes work tasks such as removing the construction road and building a new access road. This necessitates removing large amounts of aggregate within the road footprint by using deep rip soil techniques within the existing construct road footprint.

Soil Amendment

Replacing the construction road and reinstalling the new light maintenance road entails significant effort and materials to bring topsoil back to the original grade within the road footprint.

Surface Infrastructure

Work includes removing k-rails, chain link, and silt fencing as well as Salt Harvest Mouse (SHM) exclusionary fencing. Removal of the SHM exclusion fencing requires work to be performed in the presence of biologists. Work includes replacing boundary fencing of the USFWS Refuge property, modifying the existing fence along the Inner Bair Island Trail to facilitate SVCW maintenance access to the new drop shaft location. Finally, this effort includes installing and repairing best management infrastructure for compliance with the storm water permit.

Whipple Ave Entrance

Re-establish connection between the Bair Island entrance road and bridge at Whipple to the Inner Bair Island Trail for small vehicular access. Install new access road within SVCW permanent easement on County Property.

Future work on Bair Island will conclude with completing the improvements to restore the Whipple bridge entranceway and hydroseeding the USFWS areas of the island in the Fall of 2024. After this work is completed, USFWS will utilize volunteer resources to plant native species on the property.

CLIMATE EFFECTS

This scope has a negligible climate impact, however due to the close coordination with USFWS, it helps achieve the wildlife refuge's goals of providing habitat and helping mitigate sea level rise.

FINANCES

These changes result in a cost of \$787,636 to the PSI project. By performing this work as part of the PSI project, approximately \$50,000 was saved in direct construction costs and approximately \$220,000 was saved in contractor overhead costs.

RECOMMENDATION

Move adoption of RESOLUTION APPROVING AMENDMENT TO THE DESIGN BUILD AGREEMENT FOR PUMP STATIONS IMPROVEMENTS PROJECT (CIP #9501) IN THE AMOUNT NOT TO EXCEED \$787,636 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – JFSHEA/PARSONS JOINT VENTURE.

AGENDA ITEM 7F

**FINAL EFFLUENT PUMP STATION IMPROVEMENTS PROJECT (CIP #9223)
DESIGN-BUILD AGREEMENT AMENDMENT 1**

ISSUE

Approve Amendment 1 for the Design-Build Agreement of Final Effluent Pump Station Improvements project (CIP#9223) for Pre-procurement of Pumps, Variable Frequency Drives, and Programmable Logic Controller Hardware

BACKGROUND

Silicon Valley Clean Water (SVCW) uses five large pumps to convey final treated water into the San Francisco Bay. These pumps have been in operation for over four decades, put into place with the original treatment plant construction. The pumps play a critical role in operation of the treatment facility and, while SVCW's Maintenance Division staff have performed excellently in keeping the pumps functional, they are well past their useful lives. SVCW's Capital Improvement Program (CIP) includes CIP Project #9223 – Final Effluent Pump Replacement Project ("Project") to replace these original pumps and upgrade associated electrical and control systems.

In January 2016, the Commission approved Commission Policy No. 2016-01 and its subsequent revisions which establishes procedures for implementing Design-Build processes for delivery of capital projects. In March 2023, the Commission approved utilization of Progressive Design Build delivery method for this Project. In September 2023, the Commission approved the Stage 1 Design-Build Agreement with W.M. Lyles for this project. Stage 2 of the Agreement will come before the Commission later in 2024.

The Commission will recall that Stage 1 in a Progressive Design-Build process covers design to approximately 60% completion and possible equipment pre-procurement. Upon completion of Stage 1, the design-builder prepares a cost to complete the design and build the project; this is established as a Guaranteed Maximum Price and forms the cost basis for Stage 2 of the Design-Build Agreement.

DISCUSSION

From the inception of this project, staff anticipated pre-purchasing specific equipment items due to long lead times. One of the advantages of progressive design build is the ability to collaboratively select and pre-purchase equipment with the design-builder. Given that the contractor responsible for installing the equipment is also pre-purchasing the equipment, SVCW's risk of coordination issues during construction is greatly reduced.

Upon approval of the Design-Build Agreement, staff immediately began working with W.M. Lyles on the design portion of the project. A project schedule was formulated and, with input from product manufacturers about current equipment lead times, the team identified time-critical equipment. The time-critical equipment items include pumps, variable frequency drives (VFD), and programmable logic controller (PLC) hardware. To ensure the project is completed on time (during the dry seasons of 2025 and 2026), these items need to be pre-purchased.

Pump Procurement

The project team evaluated multiple pump manufacturers for suitability with current WWTP operational flow conditions. Future sea level rise, increased flows during wet weather events, and new efficiencies introduced via the gravity tunnel and the receiving lift station, were considered to determine future flow ranges for the final effluent pump station.

With the pump performance requirements defined, the team prepared a pre-procurement package that included technical specifications, drawings, and a best-value-based selection criterion. WM Lyles publicly advertised the pre-procurement package as a Request for Quotations (RFQ) on March 5, 2024. Pump manufacturers, Xylem and Grundfos submitted quotes on April 5, 2024. Both pump manufacturers met technical requirements of the RFQ. Xylem proposed to furnish five effluent pumps for \$1,722,677 while Grundfos proposed to furnish five effluent pumps for \$2,370,951. Following the best-value-based evaluation as outlined in the RFQ, W.M. Lyles recommended to proceed with Xylem. SVCW staff concurs with the recommendation made by WM Lyles. Flygt pumps, manufactured by Xylem, are also used at the Receiving Lift Station and at the Redwood City Pump Station, thus providing overall efficiencies facility-wide.

In addition to the direct costs associated with the Xylem pumps purchase, W.M. Lyles has additional costs associated with pump procurement such as submittal review, managing delivery, and various coordination efforts with the manufacturer. After including the additional effort for coordination by W.M. Lyles, the total price to SVCW to furnish five final effluent pumps is \$1,913,463. An independent cost estimator has reviewed the costs and confirmed that they are fair and reasonable.

Additional costs to install, test, and startup of pumps will be included in the Stage 2 price in a separate future amendment.

VFD and PLC Hardware Procurement

Electrical and Control Systems' infrastructure at SVCW are complex. For example, electrical issues from one process can affect other processes due to intertie situations. Choosing a proven and standardized manufacturer for electrical and control system equipment is key to maintain reliability of the entire treatment facility, including the final effluent pump station. For this reason, SVCW maintains a sole-source list for critical equipment types including as VFDs and PLC hardware.

As outlined in the SVCW Engineering Standards, the project team sole-source Rockwell Alan Bradley VFDs and PLC hardware for this project. WM Lyles' project team prepared technical specifications, drawings, and solicited quotations from the local suppliers for this equipment. Local suppliers submitted direct costs to furnish VFDs and PLC hardware. Including additional work scope by WM Lyles, the total cost for furnishing of VFDs and PLC hardware is \$2,076,376. An independent cost estimator has reviewed the costs and confirmed that they are fair and reasonable.

Pipe Rehabilitation Specialty Subcontractor

The project also requires contracting with a specialty subcontractor to apply carbon fiber reinforced polymer (CFRP) wrap on the final effluent pumps suction pipes. This rehabilitation method has been used elsewhere in the treatment plant and is the most effective way to rehabilitate in-plant pipes. This project will benefit from pre-selecting a CFRP wrap specialty subcontractor because 1) these types of firms are in high demand and 2) it will provide cost certainty. This amendment includes \$28,406 administrative expense to select a CFRP subcontractor. Note that this cost is not additional to the overall project but displacement of a Stage 2 cost to Stage 1.

The total cost of Amendment 1 is \$4,018,245.

CLIMATE EFFECTS

This project has a beneficial climate impact. With high efficiency pumps and VFDs, it is expected to reduce the overall electrical consumption, hence reducing greenhouse gas emissions.

FINANCIAL IMPACT

Final Effluent Pump Replacement Project (CIP #9223) has an allocated budget of \$16 million. As of March 2024, \$1,031,928 has been expended.

RECOMMENDATION

Move adoption of RESOLUTION APPROVING AMENDMENT 1 TO THE DESIGN BUILD AGREEMENT FOR FINAL EFFLUENT PUMP STATION IMPROVEMENTS PROJECT (CIP#9223); AUTHORIZING EXECUTION OF AMENDMENT 1 AND AUTHORIZING MANAGER TO APPROVE CONTRACT CHANGE ORDERS UP TO TEN PERCENT OF THE CONTRACT PRICE FOR SAID PROJECT – W.M. LYLES CO. - \$4,018,245

AGENDA ITEM 8A

**BIOGAS UTILIZATION PROJECT (CIP#9269)
PROCUREMENT AND SERVICE AGREEMENTS WITH MAINSPRING ENERGY AND
TASK ORDERS FOR CONSULTANT DESIGN SERVICES
*PUBLIC HEARING***

ISSUE

Approval of Procurement Agreement and Operation and Maintenance Agreement with Mainspring Energy for the Biogas Utilization Project. Approval of Design Task Order with Brown and Caldwell for the Installation of a Biogas Conditioning and Piping System. Approval of Design Task Order with Beecher Engineering for Electrical and Controls Infrastructure. Biogas Utilization Project (CIP#9269)

BACKGROUND

SVCW staff continuously explore opportunities to reduce WWTP operating costs. One avenue is to reduce purchased energy by increasing electrical self-generation capabilities. Self-generation also provides sustainable long-term energy independence to SVCW along with limiting the financial impact from yearly utility rate increases.

SVCW has implemented several projects and initiatives to 1) maximize the amount of biogas produced at the WWTP and 2) put infrastructure in place to beneficially use the biogas. Initiatives include:

- Receiving Fats Oils and Grease (FOG) for digestion in the anaerobic digesters, which increases biogas production.
- Development of the Food Waste Receiving Facility to accept biodegradable waste from solid waste haulers, increasing biogas production.
- Operation of internal combustion engine (ICE) cogeneration units to convert biogas generated in the anaerobic digesters to electricity.

ICE units have an electrical conversion efficiency of about 28%. ICE cogeneration units also provide heat from the exhaust gas as a byproduct. This heat byproduct is used to maintain temperature of the digesters for anaerobic bacteria growth and to meet building heating demands, thus saving the cost of natural gas purchase. Heat from one ICE cogeneration unit is sufficient to maintain temperature needs throughout the facility.

A local energy company, Mainspring Energy, Inc., has developed a new technology called linear generators (Lgens) where biogas is converted to electricity through a low-temperature reaction. This technology has an electrical conversion efficiency of about 45%. In addition to higher efficiency, this technology produces low emissions. Mainspring Lgens can operate on biogas and natural gas. Even though using natural gas will continue energy dependence on outside utilities, overall energy costs when using natural gas is much less than importing electricity from P.G.&E. Natural gas also provides fuel flexibility to SVCW where energy consumption costs can be reduced even when digesters are not producing adequate biogas; this can occur during events such as preventative maintenance activities.

In December 2023, the SVCW Commission approved a Non-Disclosure-Agreement (NDA) with Mainspring Energy, Inc. to explore the feasibility of utilizing Lgens at the WWTP to self-generate electricity using biogas.

DISCUSSION

After entering the NDA, SVCW staff have conducted numerous discussions with Mainspring Energy, Inc. Topics have included:

- Lgen technology,
- compatibility of Lgens with biogas produced at SVCW,
- compliance with the Bay Area Air Quality Management District permit,
- interconnection with PG&E for natural gas and electricity,
- interconnection to SVCW facilities,
- applicability for investment tax credits through the Inflation Reduction Act,
- compliance with the California Public Utility Commission's Self-Generation Incentive Program (SGIP),
- data sharing,
- network security and
- cost negotiations.

Several SVCW personnel participated in a facility tour of the Mainspring Lgen assembling campus located in Menlo Park in January 2024. After evaluating current SVCW energy consumption data, staff determined that SVCW could benefit from purchase of five units from Mainspring Energy, Inc. with a total nameplate capacity of 1,150 kilowatts. Upon initial startup, three units will be dedicated to biogas and two units will be dedicated to natural gas. This will provide SVCW with fuel flexibility early. Upon increasing biogas production through expanding the food waste program, SVCW may switch one or both natural gas dedicated units to operate on biogas. One ICE cogeneration unit will operate in parallel with the Lgens to provide heat to meet process and building heat demands.

Purchase and Installation

SVCW is authorized to enter arrangements for energy services under California Government Code Section 4217 which allows public entities to authorize energy services contracts without competitive bidding. A requirement under Section 4217 is public advertisement of the agency's intent; such requirement was met by SVCW with publication in the San Mateo County Times on April 23, 2024 noting the date for the public hearing for this item (May 13, 2024 Commission meeting).

The overall project to install Lgens consist of these elements:

Project Element	Responsible Party
Five Lgens and Site Improvements	Mainspring
Gas Conditioning System	SVCW
Gas Pipeline	SVCW
Interconnection to PG&E (Rule 21) and controls infrastructure	SVCW

To provide biogas to the Lgens system, a new biogas treatment system and pipeline are needed. Existing SVCW electrical and control infrastructure is complex and is a critical component for treatment plant reliability; any changes to the system need to be performed very carefully. Therefore, SVCW will manage the design and construction of the interconnection between the Lgens and SVCW electrical and controls infrastructure.

SVCW has negotiated with Mainspring Energy, Inc. to furnish and install five linear generators for a cost of \$5,950,860. To provide the electrical and control interconnection, the cost for biogas conditioning and biogas pipeline is estimated to be \$4.21 million. Adding construction oversight for the project is estimated to bring the overall project cost to approximately \$11 million.

Grants and incentives for this project can make payback on this project very attractive, leading to an expected overall payback between 3 and 5 years. Up to 30% of the upfront capital (\$3 million) can be provided as direct payment through the **Inflation Reduction Act** (IRA) One of the main requirements of the IRA grant is that construction needs to begin before the end of 2024. Therefore, staff are working diligently to get design completed and construction begun.

Additionally, the State of California continues to offer a very attractive incentive for alternative energy systems under the Self-Generation Incentive Program (SGIP). SVCW anticipates \$1.3 million will be available through the SGIP incentive.

Operation and Maintenance

This agenda item includes a 15-year agreement with Mainspring to operate and maintain the Lgens for an estimated present annual cost of \$2.50 per hour of Lgen runtime with a 2.5% escalation per year. The agreement stipulates a 90% uptime for the Lgens. These O&M costs include extended service warranty of the Lgen system and support facilities that are furnished by Mainspring Energy, Inc. An extended (minimum 10 years) service agreement or warranty is required to satisfy the SGIP incentive requirements. The first year's cost will be \$98 thousand and will be included in SVCW's annual operating budget.

Terms of the operation and maintenance agreement have not been fully vetted as of the writing of this agenda item. Staff seeks approval from the Commission to enter into this agreement upon final review by Legal Counsel.

Design

SVCW will be utilizing design assistance from Brown and Caldwell to install the gas conditioning system and the pipeline. Brown and Caldwell have delivered several biogas projects in the United States and are considered experts in this subject area. SVCW has negotiated a task order for \$472,000 for Brown and Caldwell to design a project to install a gas conditioning system and a pipeline to connect to Lgens.

SVCW will be utilizing assistance from Beecher Engineering to interconnect the electrical system of Mainspring linear generators to SVCW electrical infrastructure and coordinate with PG&E to start-up and commission the cogeneration facility. Beecher Engineering has completed several critical electrical infrastructure projects for SVCW and has exhaustive knowledge of SVCW electrical systems. These include 12kV switchgear and 4MW backup generators. SVCW staff negotiated a \$350,676 task order to provide electrical assistance for this project.

CEQA Determination

This project is determined to be categorically exempt from the California Environmental Quality Act (CEQA) under Section 15329, Cogeneration Projects at Existing Facilities.

CLIMATE EFFECTS

This project offers a significant positive climate impact. The Lgens exhibit substantially higher electrical efficiency compared to internal combustion engines. 28% net efficiency of the current cogeneration engines versus an impressive overall efficiency of 45% of the Lgens. This heightened efficiency translates to reduced fuel consumption for equivalent electricity production.

Furthermore, Lgens produce significantly lower air emissions compared to internal combustion engines. For instance, internal combustion engines emit NOx at approximately 70 ppm, whereas Lgens emit less than 6 ppm of NOx. Additionally, other emission factors of Lgens are notably lower than those of traditional engines.

FINANCIAL IMPACT

Funds for this project will derive from CIP #9269 Biogas Utilization Project which has an allocated budget of \$8 million. As of May of 2024, no money has been spent. The total upfront cost to install five linear generators from Mainspring Energy, Inc. is \$11 million. The IRA direct payment of \$3 million and SGIP grant of \$1.3 million will be provided after the project construction is completed.

RECOMMENDATION –

Receive staff report, open public hearing, receive public testimony, close public hearing, and take the following actions:

- i. Move approval of DETERMINATION THAT THE PROJECT IS CATEGORICALLY EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT PURSUANT TO SECTION 15329
- ii. Move adoption of RESOLUTION MAKING NECESSARY FINDINGS AND APPROVING PROCUREMENT AGREEMENT FOR BIOGAS UTILIZATION PROJECT (CIP #9269), AUTHORIZING EXECUTION OF AGREEMENT AND AUTHORIZING MANAGER TO APPROVE CONTRACT CHANGE ORDERS UP TO TEN PERCENT OF THE CONTRACT PRICE FOR SAID PROJECT – MAINSPRING ENERGY, Inc. – \$5,950,860.
- iii. Move adoption of RESOLUTION APPROVING OPERATION AND MAINTENANCE AGREEMENT FOR BIOGAS UTILIZATION PROJECT (CIP #9269) AND AUTHORIZING EXECUTION OF AGREEMENT – MAINSPRING ENERGY, Inc.
- iv. Move approval of TASK ORDER SCOPE OF WORK AND BUDGET FOR DESIGN SERVICES FOR THE BIOGAS UTILIZATION PROJECCT (CIP #9269) IN AN AMOUNT NOT TO EXCEED \$472,460 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – BROWN AND CALDWELL

- v. Move approval of TASK ORDER SCOPE OF WORK AND BUDGET FOR AS-NEEDED SERVICES FOR THE BIOGAS UTILIZATION PROJECT (CIP #9269) IN AN AMOUNT NOT TO EXCEED \$350,676 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – BEECHER ENGINEERING

AGENDA ITEM 8B

**FOOD WASTE RECEIVING IMPROVEMENTS PROJECT (CIP #9257)
ENERGY CONSERVATION CONTRACT AGREEMENT – STAGE 1 AMENDMENT**ISSUE

Approve Stage 1 Amendment to Energy Conservation Contract Agreement with CDM Constructors Inc. for Food Waste Receiving Improvements Project (CIP #9257)

BACKGROUND

SVCW's treatment processes remove solids from incoming wastewater. The solids are conveyed to three 70-foot diameter anaerobic digesters where they are broken down through microbiological activity. This process, called anaerobic digestion, leads to destruction of harmful bacteria in the solids and makes the resultant biosolids ready for beneficial re-use through composting or land application. The digestion process also results in a byproduct called digester gas or biogas. Digester gas goes through a gas conditioning system to remove its impurities before fueling two internal combustion engines to produce electricity. Waste heat from the engines is captured and used to heat the digesters and buildings throughout the treatment plant and offsets the need to purchase natural gas.

SVCW's two 633 kW cogeneration internal combustion engines generate more than 60% of the treatment plant power demand, significantly lowering the amount of power purchased from PG&E. This use of biogas to produce electricity improves SVCW's overall energy costs by 75%: the in-house cost of power production is approximately 7 cents per kilowatt-hour as compared to 28 cents per kilowatt-hour when purchased from PG&E.

In May 2022, the SVCW Commission approved a resolution to apply for grant funding from California's Department of Resources Recycling and Recovery (CalRecycle). The grant program provides funding to build new and expanded food waste co-digestion projects with the goal of achieving greenhouse gas emission reductions. In September 2022, SVCW was awarded a \$4 million grant as part of this program and a notice to proceed was issued by CalRecycle in November 2022. The scope of work for this grant-funded project includes construction of approximately 100,000 gallons of storage, including tanks, pumps, mixers, and piping. This storage will allow SVCW to accept more organic waste slurry and provide optimization of the process to maximize biogas utilization.

In March 2023, the SVCW Commission approved a resolution to approve an energy conservation contract agreement and Stage 1 services for Food Waste Receiving Project (CIP #9257) with CDM Constructors Inc (CCI). This contract allowed CCI to develop a basis of design report, 30% design, 60% design, and a guaranteed maximum price submittal for the constructing project.

In February 2024 after completing 60% design, CCI submitted a Guaranteed Maximum Price of \$8.3 million for construction. In addition to construction costs, SVCW has contract administration and Quality Assurance costs, which will add approximately 15% to the construction total. The allocated CIP project budget is \$7.3 million, lower than the estimated cost developed by CCI.

DISCUSSION

Due to estimated costs exceeding the budget, SVCW staff recommends not entering a Stage 2 amendment for construction at this time. SVCW has the option to “off ramp” from awarding the construction contract to CCI and instead have them complete a 100% design and then bid the project as a conventional low-bid contract. Alternately, SVCW can have CCI complete the 100% design and prepare another GMP that has increased price certainty due to more detailed design.

Stage 1 Amendment: The scope of work to be authorized by the Stage 1 Amendment is completion of the design from 60% to 100% and a revised Guaranteed Maximum Price (GMP) submittal.

Once Stage 1 is complete, SVCW will have the option to award the Stage 2 construction contract to CCI if the revised GMP is within the allowable project budget. If CCI and SVCW cannot come to an agreement on terms for Stage 2 construction services or if SVCW is otherwise not satisfied with CCI’s performance, SVCW will “off-ramp” and bid the project as a conventional low-bid construction contract. This “off ramp” is an important contract term that helps ensure that SVCW is receiving the best value from CCI.

CLIMATE EFFECTS

This project has a beneficial climate impact.

Accepting and processing food waste at SVCW’s wastewater treatment plant reduces regional greenhouse gas emissions. The waste would otherwise be disposed of in landfills and, while many landfills have facilities to capture and burn methane, they are not 100% efficient and, thus, allow for methane emissions whereas SVCW’s process does not.

FINANCES

Work under this task order will be funded from the Food Waste Receiving Improvements Project (CIP #9257), which has an allocated budget of \$7.32 million; \$3.32 million CIP funding and a \$4 million CalRecycle grant funding. As of April 2024, \$813,679 has been expended. The not-to-exceed fee for the Stage 1 Amendment work is \$250,379.

RECOMMENDATION

Move adoption of RESOLUTION APPROVING STAGE 1 AMENDMENT TO THE ENERGY CONSERVATION CONTRACT AGREEMENT FOR FOOD WASTE RECEIVING IMPROVEMENTS PROJECT (CIP #9257) IN AN AMOUNT NOT TO EXCEED \$250,379 AND AUTHORIZE MANAGER TO APPROVE UP TO A TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – CDM CONSTRUCTORS INC.