

**COMMISSION OF SILICON VALLEY CLEAN WATER  
JOINT POWERS AUTHORITY  
SPECIAL MEETING – Monday, January 28, 2019  
8:00 a.m.**

Place: Pelican Conference Room  
Silicon Valley Clean Water  
1400 Radio Road, 2<sup>nd</sup> Floor  
Redwood City, California

**COMMISSIONERS**

COUNCIL MEMBER WARREN LIEBERMAN, PhD., BELMONT – CHAIR

BOARD MEMBER GEORGE S. OTTE, P.E., WEST BAY SANITARY DISTRICT – SECRETARY

COUNCIL MEMBER ALICIA AGUIRRE, REDWOOD CITY – MEMBER

COUNCIL MEMBER MARK OLBERT, SAN CARLOS – MEMBER

**MANAGER:** TERESA A. HERRERA

**ATTORNEY FOR THE AUTHORITY:** CHRISTINE C. FITZGERALD

**CONTROLLER:** KIMBRA MCCARTHY

**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, please 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
- B. Manager's Report (verbal)
- C. Financial Reports
  - 1. Investment Report November 2018
  - 2. Investment Report December 2018
- D. Engineering Projects Status Update December 2018
- E. Commission Requested Staff-Level Action Items
- F. RESCU Program Design-Build Project Status Update

6. MATTERS OF COMMISSION MEMBER'S INTEREST

- A. Set 2019 Commission Meeting Calendar

7. CONSIDERATION OF MOTION APPROVING CONSENT CALENDAR

8. BUSINESS ITEMS

- A. CONSIDERATION OF MOTION TO APPROVE TASK ORDERS TO CASCADE INTEGRATION & DEVELOPMENT FOR SCADA AUTOMATION PROGRAMMING

Proposed Actions:

- i. Move approval of TASK ORDER SCOPE AND BUDGET FOR PROGRAMMING SERVICES IN THE AMOUNT OF \$220,618 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS (Capital Project #293) – CASCADE INTEGRATION & DEVELOPMENT
- ii. Move approval of TASK ORDER SCOPE AND BUDGET FOR AUTOMATION PROGRAMMING SERVICES IN THE AMOUNT OF \$160,376 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS (CIP #9222) – CASCADE INTEGRATION & DEVELOPMENT

B. CONSIDERATION OF MOTION TO RECEIVE AND ACCEPT PRESENTATION OF LONG RANGE FINANCIAL PLAN – 2019 UPDATE

Proposed Action:

MOVE APPROVAL OF RECEIPT AND ACCEPTANCE OF SILICON VALLEY CLEAN WATER LONG RANGE FINANCIAL PLAN – 2019 UPDATE

9. CLOSED SESSION

A. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Government Code Section 54956.9 (One Potential Case)

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 roll call 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 – December 6, 2018 Meeting
- B. CONSIDERATION OF MOTION APPROVING CLAIMS AND CHECKS DATED NOVEMBER 30, 2018, DECEMBER 14 AND 28, 2018, AND JANUARY 2, 11, AND 18, 2019 AND NECESSARY PAYMENTS THROUGH JANUARY 18, 2019

- C. CONSIDERATION OF RESOLUTION REVISING ADMINISTRATIVE POLICY 2017-01, STATEMENT OF DEBT MANAGEMENT POLICY

Proposed Action:

Move adoption of RESOLUTION APPROVING AND ADOPTING REVISION B TO ADMINISTRATIVE POLICY 2017-01, STATEMENT OF DEBT MANAGEMENT POLICY

- D. CONSIDERATION OF RESOLUTION RATIFYING APPOINTMENT OF SECRETARY PRO TEM

Proposed Action:

Move adoption of RESOLUTION APPROVING AND RATIFYING APPOINTMENT OF JESSICA MANGUAL AS SECRETARY PRO TEM OF SILICON VALLEY CLEAN WATER AND RESCINDING RESOLUTION NO. SVCW 17-69

## **AGENDA ITEM 5A**

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**SAFETY MOMENT****4 Tips for Driving in Rain**

Did you know **it only takes 1/12th an inch of rain and 35 mph to hydroplane?** The roads are more dangerous when rain comes after a dry spell. (Rain slicks the road with accumulated oil and dirt). But you just need water. Even though most of the oil washes off after one day's rain, wet roads are dangerous—rainy weather or not. Limited visibility adds to the danger. Drive smart. Follow

these four driving tips for driving in rain.

**1. Turn your headlights on**

Day or night **keep your headlights on** while driving in rain. In many states, laws require headlights during rain or whenever visibility is less than 1,000 feet. That is about a quarter of a mile or three and one-third football fields.

**2. Newer tires, awesome breaks and wipers**

Threadbare tires are dangerous. Keep your traction at top performance. Maintain relatively new tires with deep tread. Or, get some all-weather tires. This should help if you hydroplane.

Get regular brake checks.

Keep your windshield wiper blades ready for rainy days—before the rain comes.

**What to do if you hydroplane?**

Ease off the accelerator and continue driving steadily forward. **Do not** slam on the breaks.

**3. Don't use cruise control**

Rainy weather demands full attention. Keep your eyes on the road, your hands on the wheel, and your feet ready for action.

**If you hydroplane, cruise control can cause you to lose control.** And, if you do hydroplane, the lack of traction may cause the cruise control to accelerate.

**4. Drive smarter**

Smart people adjust their strategy around changing conditions. Weather is one of those things. Driving in rain or any inclement weather be careful and pull back:

**Keep your distance.** You never know when the person ahead of you will spin out.

**Do not tailgate** — especially in limited visibility.

**Slow down.** Take corners slower.

**Be patient.** Expect extra traffic.

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## **AGENDA ITEM 5C**

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# SILICON VALLEY CLEAN WATER

JOINT POWERS AUTHORITY ~ A PUBLIC ENTITY



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WWW.SVCW.ORG

CITY OF SAN CARLOS | CITY OF REDWOOD CITY | CITY OF BELMONT | WEST BAY SANITARY DISTRICT

## SILICON VALLEY CLEAN WATER INVESTMENT LISTING November 30, 2018

Broker/Dealer Investment Name	Composite Credit	Maturity	Coupon Rate	Yield to Maturity	Par Value	Market Value	Cost	Estimated Annual \$ Yield Earnings
<b>Annual OPS and CAP Budget Reserve</b>								
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	02/01/2020	5.000%	3.07	18,850	19,090	19,887	586
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	2.375%	2.77	60,000	59,736	61,111	1,656
FEDERAL HOME LOAN BKS CONS BDS	AA+	02/18/2021	1.375%	2.82	30,000	29,072	30,263	821
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/01/2019	4.375%	2.78	50,000	50,506	51,283	1,404
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/13/2019	4.500%	2.81	100,000	101,353	103,311	2,847
FEDERAL NATL MTG ASSN	AA+	06/22/2020	1.500%	2.79	30,000	29,415	30,253	820
FEDERAL NATL MTG ASSN	AA+	11/30/2020	1.500%	2.83	100,000	97,405	99,751	2,757
FEDERAL NATL MTG ASSN	AA+	02/26/2021	1.375%	2.84	100,000	96,798	99,757	2,745
FEDERAL NATL MTG ASSN GTD REMIC	NR	09/25/2019	2.171%	2.56	132,287	131,401	134,023	3,357
FEDERAL NATL MTG ASSN	AA+	09/25/2020	1.750%	2.97	100,000	97,849	100,475	2,907
FEDERAL HOME LN MTG CORP MULTICLASS	NR	11/25/2019	1.869%	3.22	111,769	110,727	111,612	3,560
FEDERAL HOME LN MTG CORP	AA+	05/30/2019	1.750%	2.63	30,000	29,879	30,127	786
FEDERAL HOME LN MTG CORP	AA+	10/02/2019	1.250%	2.69	30,000	29,628	30,078	798
FEDERAL HOME LN MTG CORP MULTICLASS	N.A.	04/15/2020	4.000%	4.07	405	405	417	16
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	12/01/2019	5.500%	3.09	8,178	8,220	8,649	254
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	03/01/2020	5.500%	4.45	208	208	215	9
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	04/01/2020	5.000%	3.11	9,644	9,971	10,180	310
SMALL BUSINESS ADMIN GTD LN POOL	N.A.	02/25/2019	5.075%	0.06	4,989	4,964	5,177	3
UNIVERSITY CALIF REVS FOR PREV GEN	AA	07/01/2019	1.796%	2.70	50,000	49,719	49,856	1,343
MONTGOMERY CNTY MD CTFB PARTN COPS	N.A.	11/01/2019	1.200%	-	100,000	98,377	100,019	-
RICHMOND VA GO PUB IMPT BDS C	AA	07/15/2021	2.599%	3.43	100,000	98,872	103,510	3,389
PORT MORROW ORE TRANSMISSION F REV	AA	09/01/2021	2.737%	3.13	100,000	98,820	103,258	3,093
WACO TEX INDPT SCH DIST REF BDS	N.A.	02/15/2020	4.000%	2.91	110,000	111,186	114,357	3,232
FEDERAL HOME LN MTG CORP	AA+	12/30/2019	1.500%	2.74	80,000	78,902	80,000	2,164
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2021	2.030%	2.98	60,000	58,532	60,000	1,741
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	01/24/2022	2.050%	3.20	40,000	38,847	40,000	1,242
FEDERAL HOME LN MTG CORP MEDIUM	AA+	07/27/2020	1.625%	2.88	80,000	78,438	80,000	2,259
FEDERAL HOME LN MTG CORP	AA+	05/15/2020	1.600%	2.88	150,000	147,489	150,000	4,249
FEDERAL HOME LN MTG CORP	AA+	05/01/2020	1.375%	2.78	70,000	68,627	69,767	1,909
FEDERAL NATL MTG ASSN	AA+	10/07/2021	1.375%	2.84	70,000	67,130	69,332	1,903
FEDERAL HOME LN MTG CORP	AA+	01/13/2022	2.375%	2.85	35,000	34,435	35,870	983
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/29/2020	1.830%	2.85	140,000	137,778	140,769	3,925
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	1.750%	2.84	140,000	137,721	140,648	3,915
FEDERAL NATL MTG ASSN	AA+	05/06/2021	1.250%	2.82	90,000	86,730	89,224	2,447
FEDERAL NATL MTG ASSN	AA+	08/17/2021	1.250%	2.82	90,000	86,312	89,001	2,437
FEDERAL NATL MTG ASSN	AA+	09/28/2020	1.750%	2.84	30,000	29,411	30,000	836
ALTRIA GROUP INC SR NT	A-	08/09/2022	2.850%	3.90	30,000	28,881	30,230	1,126
US TREASURY NOTE	NR	03/15/2020	1.625%	2.77	50,000	49,270	49,813	1,366
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/11/2020	1.620%	2.91	140,000	137,077	138,371	3,988
FEDERAL HOME LN MTG CORP	AA+	03/26/2021	2.700%	2.97	50,000	49,633	49,938	1,476
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/15/2020	2.500%	2.94	100,000	99,469	99,925	2,926
FEDERAL NATL MTG ASSN	AA+	03/26/2021	2.700%	3.02	100,000	99,566	100,000	3,010
FEDERAL NATL MTG ASSN	AA+	10/19/2022	3.000%	3.36	50,000	49,706	50,000	1,669
US TREASURY NOTE	NR	07/31/2020	2.000%	2.92	20,000	19,738	19,797	576
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2022	3.170%	3.28	80,000	80,008	80,000	2,623
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/27/2021	3.000%	3.04	100,000	100,051	100,000	3,043
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/29/2021	3.150%	3.17	100,000	100,022	100,000	3,169
US TREASURY NOTE	NR	11/30/2020	1.625%	2.80	100,000	97,698	97,686	2,731
US TREASURY NOTE	NR	09/15/2021	2.750%	2.80	80,000	79,833	79,756	2,235
CASH & EQUIVALENTS	-	-	-	2.14	-	121,080	121,080	2,591
<b>Annual OPS and CAP Budget Reserve Total</b>						<b>\$ 3,525,982</b>	<b>\$ 3,588,776</b>	<b>\$ 99,231</b>
<b>Capital Improvement Program Reserve</b>								
APPLE INC SR FLT NT	AA+	02/07/2020	2.851%	2.93	100,000	100,121	99,821	2,934
CALIFORNIA ST GO BDS TAXABLE	AA-	10/01/2019	6.200%	2.74	100,000	102,779	104,087	2,817
CHEVRON CORPORATION SR NT	AA-	03/03/2019	4.950%	2.81	100,000	100,489	101,483	2,823
CISCO SYS INC SR GLBL NT	A+	01/15/2020	4.450%	3.02	125,000	126,903	129,705	3,830
EXXON MOBIL CORP SR FLT NT	AA+	03/15/2019	2.484%	2.90	100,000	100,003	99,935	2,901
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	02/01/2019	5.000%	2.77	1,751	1,760	1,846	49
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	2.375%	2.77	340,000	338,504	343,278	9,387
FEDERAL HOME LOAN BKS CONS BDS	AA+	02/18/2021	1.375%	2.82	100,000	96,908	100,876	2,737
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/06/2020	5.300%	3.05	450,000	464,765	474,098	14,152
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/03/2019	5.320%	2.88	50,000	50,973	51,857	1,468
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/11/2020	2.875%	2.86	60,000	60,016	61,683	1,717
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/24/2019	1.520%	2.62	250,000	248,528	250,000	6,521
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2019	5.125%	2.80	60,000	61,000	62,144	1,705
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	4.625%	2.95	200,000	205,408	211,110	6,062
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/14/2018	3.750%	2.55	250,000	250,103	253,048	6,375
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/01/2019	4.375%	2.78	25,000	25,253	25,641	702
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	4.125%	2.79	125,000	126,753	130,679	3,534
FEDERAL HOME LOAN BKS CONS BDS	AA+	03/13/2020	4.125%	2.80	700,000	711,634	725,659	19,954
FEDERAL NATL MTG ASSN	AA+	01/21/2020	1.625%	2.75	100,000	98,729	101,010	2,719
FEDERAL NATL MTG ASSN	AA+	06/22/2020	1.500%	2.79	50,000	49,025	50,422	1,366
FEDERAL NATL MTG ASSN	AA+	11/30/2020	1.500%	2.83	170,000	165,589	169,564	4,686
FEDERAL NATL MTG ASSN	AA+	12/28/2020	1.875%	2.81	325,000	318,835	330,129	8,950
FEDERAL NATL MTG ASSN	AA+	02/26/2021	1.375%	2.84	240,000	232,315	239,784	6,588
FEDERAL HOME LN MTG CORP MULTICLASS	NR	06/25/2020	3.531%	3.27	100,000	100,550	106,188	3,286
FEDERAL HOME LN MTG CORP	AA+	03/27/2019	3.750%	2.49	500,000	501,950	505,728	12,499
FEDERAL HOME LN MTG CORP	AA+	05/30/2019	1.750%	2.63	50,000	49,798	50,212	1,309
FEDERAL HOME LN MTG CORP	AA+	10/02/2019	1.250%	2.69	50,000	49,380	50,130	1,330
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	04/01/2019	2.680%	2.96	457,264	456,418	476,269	13,510

Broker/Dealer Investment Name	Composite Credit	Maturity	Coupon Rate	Yield to Maturity	Par Value	Market Value	Estimated Annual	
							Cost	\$ Yield Earnings
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	04/01/2019	5.000%	2.80	1,946	2,012	2,052	56
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	07/01/2019	4.821%	4.24	199,618	201,038	221,452	8,524
MICROSOFT CORP NT	AAA	06/01/2019	4.200%	2.53	100,000	100,609	102,344	2,544
MONONA WIS TAXABLE PROM NTS 2015B	N.A.	06/01/2020	3.250%	3.20	100,000	100,000	100,618	3,198
MONTGOMERY CNTY MD CTF5 PARTN COPS	N.A.	11/01/2019	1.200%	2.91	100,000	98,377	100,019	2,867
RICHMOND VA GO PUB IMPT BDS C	AA	07/15/2021	2.599%	3.43	100,000	98,872	103,510	3,389
BANK NEW YORK MTN BK ENT FR	A+	11/27/2020	2.450%	3.35	100,000	98,164	101,724	3,284
GILEAD SCIENCES INC SR NT	A-	09/01/2020	2.550%	3.28	100,000	98,662	102,154	3,239
WISCONSIN ST GEN FD ANNUAL APP REV	AA-	05/01/2021	1.616%	2.97	100,000	96,598	100,080	2,869
PORT MORROW ORE TRANSMISSION F REV	AA	09/01/2021	2.737%	3.13	225,000	222,345	232,331	6,959
WACO TEX INDPRT SCH DIST REF BDS	N.A.	02/15/2020	4.000%	2.91	165,000	166,779	171,536	4,848
FEDERAL NATL MTG ASSN	AA+	05/26/2021	1.800%	2.99	260,000	252,260	260,000	7,538
FEDERAL HOME LN MTG CORP	AA+	12/30/2019	1.500%	2.74	260,000	256,433	260,000	7,034
FEDERAL HOME LN MTG CORP	AA+	12/30/2020	1.750%	2.89	340,000	332,119	340,000	9,595
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2021	2.030%	2.98	80,000	78,043	80,000	2,322
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	01/24/2022	2.050%	3.20	120,000	116,540	120,000	3,727
FEDERAL HOME LN MTG CORP MEDIUM	AA+	07/27/2020	1.625%	2.88	80,000	78,438	80,000	2,259
FEDERAL HOME LN MTG CORP	AA+	05/15/2020	1.600%	2.88	220,000	216,317	220,000	6,232
FEDERAL HOME LN MTG CORP	AA+	10/26/2021	2.000%	2.94	220,000	214,500	220,000	6,300
FEDERAL HOME LOAN BKS CONS BDS	AA+	04/27/2022	2.300%	2.97	220,000	215,596	219,505	6,395
FEDERAL HOME LN MTG CORP	AA+	05/01/2020	1.375%	2.78	290,000	284,310	288,931	7,910
FEDERAL NATL MTG ASSN	AA+	10/07/2021	1.375%	2.84	140,000	134,260	138,664	3,806
FEDERAL HOME LN MTG CORP	AA+	01/13/2022	2.375%	2.85	310,000	305,000	316,073	8,705
FEDERAL NATL MTG ASSN	AA+	01/05/2022	2.000%	2.86	610,000	594,415	608,482	16,971
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	1.750%	2.84	170,000	167,232	170,787	4,754
FEDERAL NATL MTG ASSN	AA+	05/06/2021	1.250%	2.82	170,000	163,824	168,535	4,621
FEDERAL NATL MTG ASSN	AA+	08/17/2021	1.250%	2.82	170,000	163,033	168,113	4,602
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2022	1.900%	3.01	165,000	159,194	165,634	4,792
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	08/03/2022	1.900%	3.00	165,000	159,123	165,348	4,777
FEDERAL NATL MTG ASSN	AA+	04/05/2022	1.875%	2.86	170,000	164,548	170,498	4,706
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2022	1.850%	2.97	130,000	125,042	130,836	3,717
FEDERAL NATL MTG ASSN	AA+	09/28/2020	1.750%	2.84	120,000	117,646	120,000	3,345
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/04/2022	2.100%	3.15	220,000	213,921	220,000	6,734
FEDERAL HOME LN MTG CORP	AA+	10/12/2021	2.000%	2.97	120,000	116,334	120,000	3,453
BANK AMER CORP FR	A	05/13/2021	5.000%	3.63	75,000	77,447	79,599	2,814
CONSTELLATION BRANDS INC SR GLBL NT	BBB-	11/06/2020	2.250%	3.55	25,000	24,345	24,942	863
HOME DEPOT INC SR GLBL NT	A	04/01/2021	2.000%	3.23	80,000	77,714	79,838	2,510
LORILLARD TOB CO SR NT	BBB	05/01/2020	6.875%	4.08	25,000	26,054	26,634	1,063
MORGAN STANLEY SR NT	A-	01/27/2020	2.650%	3.30	80,000	79,329	80,571	2,619
ORACLE CORP SR GLBL	A+	05/15/2022	2.500%	3.43	80,000	77,495	80,069	2,656
PHILIP MORRIS INTL INC SR NT	A	03/26/2020	4.500%	3.24	25,000	25,377	25,918	821
STARBUCKS CORP SR GLBL	BBB+	02/04/2021	2.100%	3.36	80,000	77,881	79,979	2,620
3M CO FR	A+	06/26/2022	2.000%	3.23	100,000	95,809	99,045	3,095
FEDERAL HOME LN MTG CORP	AA+	12/29/2021	2.250%	3.06	120,000	117,415	120,000	3,596
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/26/2022	2.280%	3.06	100,000	97,357	99,600	2,980
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/11/2021	1.620%	2.91	400,000	391,648	395,347	11,393
FEDERAL HOME LOAN BKS CONS BDS	AA+	11/29/2021	1.875%	2.83	300,000	291,519	296,489	8,241
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/15/2021	2.200%	3.07	300,000	294,366	298,050	9,025
FEDERAL NATL MTG ASSN	AA+	11/26/2019	1.750%	2.74	300,000	297,087	299,115	8,143
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/17/2021	1.970%	3.01	100,000	97,790	98,615	2,941
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/15/2020	2.500%	2.94	160,000	159,150	159,880	4,682
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	11/22/2021	2.740%	3.23	100,000	99,060	99,975	3,196
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/01/2021	2.750%	3.11	60,000	59,671	59,970	1,853
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/01/2020	2.450%	3.02	90,000	89,324	89,978	2,697
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	03/07/2022	2.850%	3.10	100,000	99,319	100,000	3,080
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/20/2021	2.840%	3.07	100,000	99,426	100,000	3,056
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	03/29/2021	2.710%	3.02	80,000	79,712	80,000	2,407
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/29/2022	3.000%	3.22	100,000	99,787	100,000	3,214
FEDERAL HOME LN MTG CORP	AA+	12/14/2022	2.000%	3.22	25,000	24,790	24,648	797
FEDERAL HOME LN MTG CORP	AA+	11/24/2021	2.650%	2.99	100,000	99,079	99,750	2,966
FEDERAL HOME LN MTG CORP	AA+	02/24/2023	3.000%	3.21	80,000	79,426	79,984	2,549
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2022	2.130%	3.40	129,630	124,941	125,993	4,242
FEDERAL NATL MTG ASSN	AA+	03/26/2021	2.700%	3.02	100,000	99,566	100,000	3,010
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	08/16/2021	1.680%	3.08	100,000	96,798	97,005	2,980
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/18/2022	2.830%	3.18	150,000	149,154	150,000	4,739
FEDERAL HOME LN MTG CORP	AA+	03/15/2023	3.000%	3.20	150,000	148,668	149,850	4,760
FEDERAL HOME LOAN BKS CONS BDS	AA+	03/27/2023	3.000%	3.27	150,000	149,159	150,000	4,873
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/27/2022	1.700%	3.08	150,000	143,552	143,580	4,424
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/14/2021	2.810%	3.08	100,000	99,512	100,000	3,061
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/20/2022	3.090%	3.28	200,000	199,046	199,850	6,525
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/28/2022	3.060%	3.22	100,000	99,828	100,000	3,215
FEDERAL HOME LOAN BKS CONS BDS	AA+	05/02/2023	3.150%	3.29	200,000	198,864	199,650	6,551
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2022	3.170%	3.28	160,000	160,016	160,000	5,245
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/27/2021	3.000%	3.04	120,000	120,061	120,000	3,651
FEDERAL HOME LN MTG CORP	AA+	06/28/2023	3.250%	3.34	160,000	160,038	159,920	5,340
FEDERAL NATL MTG ASSN	AA+	11/27/2020	1.500%	2.96	100,000	97,265	97,281	2,875
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/29/2021	3.150%	3.17	120,000	120,026	120,000	3,802
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/27/2022	3.230%	3.27	180,000	179,825	179,827	5,878
US TREASURY NOTE	NR	09/15/2021	2.750%	2.80	120,000	119,749	119,634	3,352
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2023	3.200%	3.35	150,000	149,142	149,025	4,996
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/08/2023	3.440%	3.46	180,000	179,744	180,000	6,210
FEDERAL HOME LN MTG CORP	AA+	09/27/2023	3.200%	3.33	150,000	149,745	149,400	4,991
CASH & EQUIVALENTS	-	-	-	2.14	-	453,120	453,120	9,697
Capital Improvement Program Reserve Total						\$ 17,641,265	\$ 17,977,742	\$ 522,278
Stage 2 Capacity Reserve								
CISCO SYS INC SR GLBL NT	A+	01/15/2020	4.450%	3.02	75,000	76,142	77,823	2,298
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	02/01/2019	5.000%	2.77	1,751	1,760	1,846	49
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	11/01/2020	4.500%	3.12	7,499	7,639	7,818	238
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	2.375%	2.77	100,000	99,560	101,852	2,761
FEDERAL HOME LOAN BKS CONS BDS	AA+	02/18/2021	1.375%	2.82	100,000	96,908	100,876	2,737
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/11/2020	2.875%	2.86	60,000	60,016	61,683	1,717
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/24/2019	1.520%	2.62	200,000	198,822	200,000	5,217
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2019	5.125%	2.80	50,000	50,833	51,787	1,421
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/01/2019	4.375%	2.78	100,000	101,011	102,565	2,807
FEDERAL HOME LOAN BKS CONS BDS	AA+	03/13/2020	4.125%	2.80	125,000	127,078	129,521	3,563
FEDERAL NATL MTG ASSN	AA+	01/21/2020	1.625%	2.75	100,000	98,729	101,010	2,719
FEDERAL NATL MTG ASSN	AA+	06/22/2020	1.500%	2.79	100,000	98,050	100,844	2,732
FEDERAL NATL MTG ASSN	AA+	11/30/2020	1.500%	2.83	100,000	97,405	100,599	2,757
FEDERAL NATL MTG ASSN	AA+	12/28/2020	1.875%	2.81	175,000	171,680	177,762	4,819
FEDERAL NATL MTG ASSN	AA+	02/26/2021	1.375%	2.84	180,000	174,236	180,167	4,941
FEDERAL NATL MTG ASSN	AA+	01/14/2019	3.275%	2.53	100,000	100,099	100,860	2,530
FEDERAL HOME LN MTG CORP	AA+	03/27/2019	3.750%	2.49	250,000	250,975	252,850	6,249
FEDERAL HOME LN MTG CORP	AA+	05/30/2019	1.750%	2.63	100,000	99,596	100,424	2,618
FEDERAL HOME LN MTG CORP	AA+	08/01/2019	1.250%	2.67	100,000	99,064	100,442	2,646
FEDERAL HOME LN MTG CORP	AA+	10/02/2019	1.250%	2.69	100,000	98,760	100,260	2,660

Broker/Dealer Investment Name	Composite Credit	Maturity	Coupon Rate	Yield to Maturity	Par Value	Market Value	Estimated Annual	
							Cost	\$ Yield Earnings
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	12/01/2020	4.000%	3.16	29,803	30,372	31,228	960
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	07/01/2019	4.821%	4.24	166,962	168,149	185,224	7,130
JPMORGAN CHASE & CO SR NT	A	03/01/2021	2.550%	3.48	50,000	48,976	50,681	1,706
LANCASTER CNTY NEB SCH DIST NO SCH	AA+	01/15/2021	4.550%	3.37	50,000	51,315	52,994	1,730
NORFOLK VA GO CAP IMPT BDS 2010 B	AA	03/01/2019	4.650%	3.24	100,000	100,519	101,330	3,260
UNIVERSITY CALIF REVS FOR PREV GEN	AA	07/01/2019	1.796%	-	50,000	49,719	49,856	-
MONTGOMERY CNTY MD CTFS PARTN COPS	N.A.	11/01/2019	1.200%	2.91	100,000	98,377	100,019	2,867
BANK NEW YORK MTN BK ENT FR	A+	11/27/2020	2.450%	3.35	150,000	147,246	152,586	4,925
GILEAD SCIENCES INC SR NT	A-	09/01/2020	2.550%	3.28	150,000	147,993	153,231	4,859
WISCONSIN ST GEN FD ANNUAL APP REV	AA-	05/01/2021	1.616%	2.97	100,000	96,598	100,080	2,869
FEDERAL HOME LN MTG CORP	AA+	08/25/2021	1.500%	3.05	90,000	87,389	90,000	2,661
METRO WASTEWTR RECLAMATION DIS REV	AA+	04/01/2019	4.718%	2.77	100,000	100,610	101,809	2,785
WACO TEX INDPT SCH DIST REF BDS	N.A.	02/15/2020	4.000%	2.91	55,000	55,593	57,179	1,616
FEDERAL HOME LN MTG CORP	AA+	03/30/2021	1.500%	2.88	60,000	58,135	60,000	1,675
FEDERAL HOME LN MTG CORP	AA+	09/30/2021	1.250%	3.62	100,000	97,477	99,900	3,530
FEDERAL NATL MTG ASSN	AA+	09/30/2019	1.250%	2.74	60,000	59,281	59,985	1,623
FEDERAL NATL MTG ASSN	AA+	05/26/2021	1.800%	2.99	60,000	58,214	60,000	1,739
FEDERAL HOME LN MTG CORP	AA+	12/30/2020	1.750%	2.89	100,000	97,682	100,000	2,822
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2021	2.030%	2.98	80,000	78,043	80,000	2,322
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	01/24/2022	2.050%	3.20	60,000	58,270	60,000	1,863
FEDERAL HOME LN MTG CORP MEDIUM	AA+	07/27/2020	1.625%	2.88	40,000	39,219	40,000	1,130
FEDERAL HOME LN MTG CORP	AA+	10/26/2021	2.000%	2.94	150,000	146,250	150,000	4,295
FEDERAL HOME LOAN BKS CONS BDS	AA+	04/27/2022	2.300%	2.97	150,000	146,997	149,663	4,360
FEDERAL HOME LN MTG CORP	AA+	05/01/2020	1.375%	2.78	260,000	254,899	258,975	7,091
FEDERAL NATL MTG ASSN	AA+	10/07/2021	1.375%	2.84	80,000	76,720	79,237	2,175
FEDERAL HOME LN MTG CORP	AA+	01/13/2022	2.375%	2.85	120,000	118,064	122,351	3,370
FEDERAL NATL MTG ASSN	AA+	01/05/2022	2.000%	2.86	220,000	214,379	219,563	6,121
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	1.750%	2.84	260,000	255,767	261,204	7,271
FEDERAL NATL MTG ASSN	AA+	05/06/2021	1.250%	2.82	260,000	250,554	257,760	7,068
FEDERAL NATL MTG ASSN	AA+	08/17/2021	1.250%	2.82	260,000	249,345	257,115	7,039
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2022	1.900%	3.01	290,000	279,795	291,114	8,422
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	08/03/2022	1.900%	3.00	290,000	279,670	290,612	8,396
FEDERAL NATL MTG ASSN	AA+	04/05/2022	1.875%	2.86	300,000	290,379	300,879	8,305
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2022	1.850%	2.97	85,000	81,758	85,547	2,431
FEDERAL NATL MTG ASSN	AA+	09/28/2020	1.750%	2.84	180,000	176,468	180,000	5,017
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/04/2022	2.100%	3.15	280,000	272,264	280,000	8,571
FEDERAL HOME LN MTG CORP	AA+	10/12/2021	2.000%	2.97	180,000	174,501	180,000	5,179
HOME DEPOT INC SR GLBL NT	A	04/01/2021	2.000%	3.23	60,000	58,286	59,879	1,883
ORACLE CORP SR GLBL	A+	05/15/2022	2.500%	3.43	120,000	116,243	120,103	3,984
PHILIP MORRIS INTL INC SR NT	A	03/26/2020	4.500%	3.24	55,000	55,828	57,020	1,807
STARBUCKS CORP SR GLBL	BBB+	02/04/2021	2.100%	3.36	60,000	58,411	59,984	1,965
FEDERAL HOME LN MTG CORP	AA+	12/29/2021	2.250%	3.06	80,000	78,277	80,000	2,398
FEDERAL HOME LOAN BKS CONS BDS	AA+	11/29/2021	1.875%	2.83	120,000	116,608	118,596	3,296
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	11/22/2021	2.740%	3.23	100,000	99,060	99,975	3,196
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	03/07/2022	2.850%	3.10	80,000	79,455	80,000	2,464
FEDERAL HOME LN MTG CORP	AA+	02/24/2023	3.000%	3.21	60,000	59,569	59,988	1,912
FEDERAL NATL MTG ASSN	AA+	03/26/2021	2.700%	3.02	140,000	139,392	140,000	4,214
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/18/2022	2.830%	3.18	150,000	149,154	150,000	4,739
FEDERAL HOME LN MTG CORP	AA+	03/15/2023	3.000%	3.20	150,000	148,668	149,850	4,760
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/14/2021	2.810%	3.08	100,000	99,512	100,000	3,061
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/20/2022	3.090%	3.28	100,000	99,523	99,925	3,262
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/28/2022	3.060%	3.22	100,000	99,828	100,000	3,215
FEDERAL HOME LOAN BKS CONS BDS	AA+	05/02/2023	3.150%	3.29	150,000	149,148	149,738	4,913
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2022	3.170%	3.28	200,000	200,020	200,000	6,557
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/27/2021	3.000%	3.04	160,000	160,082	160,000	4,868
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/10/2023	1.500%	4.01	200,000	192,854	192,000	7,739
US TREASURY NOTE	NR	11/30/2020	1.625%	2.80	160,000	156,317	156,297	4,369
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/27/2022	3.230%	3.27	200,000	199,806	200,000	6,532
FEDERAL HOME LOAN BKS CONS BDS	AA+	04/30/2021	0.02	2.96	200,000	195,300	194,471	5,785
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/25/2021	0.0317	3.18	200,000	200,026	200,000	6,355
FEDERAL NATL MTG ASSN	AA+	10/28/2020	0.014	2.94	40,000	38,948	38,709	1,146
US TREASURY NOTE	NR	09/15/2021	0.0275	2.80	60,000	59,875	59,817	1,676
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/08/2023	0.0344	3.46	300,000	299,574	300,000	10,350
FEDERAL HOME LN MTG CORP	AA+	09/27/2023	0.032	3.33	150,000	149,745	149,400	4,991
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/06/2022	0.0327	3.26	200,000	200,010	200,000	6,524
CASH & EQUIVALENTS	-	-	-	2.14	-	241,790	241,790	5,174
Stage 2 Capacity Reserve Total						\$ 11,006,658	\$ 11,218,648	\$ 329,792
Subtotal, Bank of the West						\$ 32,173,905	\$ 32,785,166	\$ 951,300
Bank of New York (Trustee)								
2009 Reserve Account - Federal National Mortgage Assn 3136G3Q73	Aaa	7/26/2019	1.150%	1.16		4,733,586	4,780,000	54,910
2009 Reserve Account - BMW BK North Amer Salt Lake 05580ACK8	Aa	7/24/2019	2.000%	2.01		149,107	150,000	2,997
2009 Reserve Account - Morgan Stanley Treas Sec X9USDMORS	-	-	0.000%	2.05		161,769	161,769	3,316
2009 Reserve Account - Morgan Stanley Treas Sec X9USDMORS	-	-	0.000%	2.05		62,656	62,656	1,284
2009 Revenue FD Account - Morgan Stanley Treas Sec Portfolio X9USDMORS	-	-	0.000%	2.05		3,822	3,822	78
2009 Revenue FD Account - Morgan Stanley Treas Sec INST X9USDMORS	-	-	0.000%	2.08		13	13	0
2014 Revenue Account - Goldman FS Money MKT INST 474 X9USDGLD4	-	-	0.000%	2.35		11	11	0
2014 Revenue Account - Goldman Sachs Fin Sq Instl X9USDGLD4	-	-	0.000%	2.39		414	414	10
2014 Revenue Account - Cash	-	-	0.000%	-		11	11	-
2014 Interest Account - Goldman Sachs Fin Sq Instl X9USDGLD4	-	-	0.000%	2.43		13	13	0
2014 Principal Account - Goldman Sachs Fin Sq Instl X9USDGLD4	-	-	0.000%	2.37		7	7	0
2014 COI Account - Cash	-	-	0.000%	-		2	2	-
2015 Project Account - Cash	-	-	0.000%	-		2	2	-
2015 Revenue Account - JP Morgan Prime MMKT Instl X9USDJPMP	-	-	0.000%	2.3		163	163	4
2015 Revenue Account - Cash	-	-	0.000%	-		5	5	-
2009 Escrow - United States Treasury 912828B33	Aaa	1/31/2019	1.500%	1.50		602,198	610,349	9,033
2009 Escrow - Tunisia Government Aid Bonds 066716AG6	Aaa	7/16/2019	1.686%	1.70		40,070,825	40,944,692	681,204
2009 Escrow - Cash	-	-	0.000%	-		3,857	3,857	-
Subtotal, Bank of New York (Trustee)						\$ 45,788,463	\$ 46,717,788	\$ 752,837
Less Amounts held in Escrow for 2009 Bond Defeasance						\$ (40,676,880)	\$ (41,558,898)	\$ (690,237)
Net Total, Bank of New York (Trustee)						\$ 5,111,583	\$ 5,158,889	\$ 62,600
Zions Bank (Trustee)								
US Treasury N/B 912828U99	Aaa	12/31/2018	1.250%	2.04	3,370,000	3,367,462	3,348,674	68,696
US Treasury Notes 912828B33	Aaa	1/31/2019	1.500%	2.07	1,500,000	1,498,007	1,492,411	31,009
US Treasury Notes 912828B33	Aaa	1/31/2019	1.500%	2.06	11,600,000	11,584,584	11,542,000	238,642
US Treasury Notes 912828C24	Aaa	2/28/2019	1.500%	2.09	15,500,000	15,466,319	15,411,602	323,246
US Treasury Notes 912828P95	Aaa	3/15/2019	1.000%	2.11	10,300,000	10,258,913	10,186,941	216,463
US Treasury Notes 912828ST8	Aaa	4/30/2019	1.250%	2.12	16,430,000	16,345,287	16,268,909	346,520
US Treasury Notes 912828SX9	Aaa	5/31/2019	1.125%	2.14	13,550,000	13,456,315	13,384,330	287,965
Toyota Motor Credit Corp Comm Paper 89233HM35	P-1	3/8/2019	0.000%	2.32	3,900,000	3,899,310	3,833,557	90,464
Toyota Motor Credit Corp Comm Paper 89233HM43	P-1	3/8/2019	0.000%	2.33	2,400,000	2,399,434	2,359,238	55,907
Toronto Dominion Bank NY Cert Depos 89113XZJ6	P-1	3/9/2019	2.500%	2.50	6,300,000	6,287,678	6,300,000	157,192

Broker/Dealer Investment Name	Composite Credit	Maturity	Coupon Rate	Yield to Maturity	Par Value	Market Value	Cost	Estimated Annual \$ Yield Earnings
CAMP Pool	NR			2.41		4,367,098	4,367,098	105,247
Total, Zions Bank (Trustee)						\$ 88,930,406	\$ 88,494,761	\$ 1,921,352
Uninvested Operating Cash		-				4,705,400	4,705,400	-
California Local Agency Investment Fund		LAIF	-	2.208		\$ 708,783	\$ 708,783	15,650
Total Working Capital						5,414,182.92	5,414,182.92	15,650
TOTAL CASH & INVESTMENTS, UNRESTRICTED AND WITH TRUSTEE						\$ 131,630,077	\$ 131,852,999	\$ 2,950,902
							Weighted Average Yield to Maturity %	2.24%

Summary by Investment Type:	Market Value
US Treasuries	\$ 72,787,626
Agencies	31,589,162
Commercial Paper / Corporate Bonds	8,472,257
Municipal Bonds / Notes	1,895,454
Money Market / Certificates of Deposit	16,176,796
Local Agency Investment Fund	708,783
<b>TOTAL</b>	<b>\$ 131,630,077</b>

Summary by Purpose / Restriction Level	Market Value
Working Capital	\$ 5,414,183
Operations & Capital Budget Reserve	3,525,982
Capital Improvement Program Reserve	17,641,265
Stage 2 Capacity Reserve	11,006,658
Debt Reserve	5,111,583
Debt Proceeds	88,930,406
<b>TOTAL</b>	<b>\$ 131,630,077</b>

Summary by Liquidity:	Market Value
0-1 years	\$ 105,153,846
1 years	7,918,052
2 years	8,723,862
3-5 years	9,834,317
<b>TOTAL</b>	<b>\$ 131,630,077</b>

SVCW has sufficient liquid resources available to meet expenditure requirements per SVCW's investment policy.  
All SVCW investments are in compliance with SVCW's Investment Policy.



11/30/2018

M. Anderson

# SILICON VALLEY CLEAN WATER

JOINT POWERS AUTHORITY ~ A PUBLIC ENTITY



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CITY OF SAN CARLOS | CITY OF REDWOOD CITY | CITY OF BELMONT | WEST BAY SANITARY DISTRICT

## SILICON VALLEY CLEAN WATER INVESTMENT LISTING December 31, 2018

Broker/Dealer	Composite	Coupon	Yield to	\$ Yield						
Investment Name	Credit	Maturity	Rate	Maturity	Par Value	Market Value	Cost	Earnings		
Annual OPS and CAP Budget Reserve										
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	02/01/2020	5.000%	3.02	16,768	16,934	17,690	511		
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	2.375%	2.59	60,000	59,854	60,743	1,550		
FEDERAL HOME LOAN BKS CONS BDS	AA+	02/18/2021	1.375%	2.52	30,000	29,312	30,263	738		
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/01/2019	4.375%	2.66	50,000	50,435	51,283	1,340		
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/13/2019	4.500%	2.68	100,000	101,246	103,311	2,710		
FEDERAL NATL MTG ASSN	AA+	06/22/2020	1.500%	2.53	30,000	29,566	30,191	749		
FEDERAL NATL MTG ASSN	AA+	11/30/2020	1.500%	2.54	100,000	98,037	99,751	2,493		
FEDERAL NATL MTG ASSN	AA+	02/26/2021	1.375%	2.53	100,000	97,594	99,773	2,468		
FEDERAL NATL MTG ASSN GTD REMIC	NR	09/25/2019	2.171%	2.48	123,158	122,379	124,775	3,039		
FEDERAL NATL MTG ASSN	AA+	09/25/2020	1.750%	2.70	100,000	98,605	100,475	2,659		
FEDERAL HOME LN MTG CORP MULTICLASS	NR	11/25/2019	1.869%	3.09	111,504	110,568	111,348	3,414		
FEDERAL HOME LN MTG CORP	AA+	05/30/2019	1.750%	2.58	30,000	29,905	30,127	772		
FEDERAL HOME LN MTG CORP	AA+	10/02/2019	1.250%	2.61	30,000	29,690	30,078	774		
FEDERAL HOME LN MTG CORP MULTICLASS	N.A.	04/15/2020	4.000%	3.83	335	334	345	13		
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	12/01/2019	5.500%	3.09	6,854	6,873	7,248	212		
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	03/01/2020	5.500%	4.32	167	167	173	7		
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	04/01/2020	5.000%	3.03	8,717	8,869	9,202	269		
SMALL BUSINESS ADMIN GTD LN POOL	N.A.	02/25/2019	5.075%	-	3,333	3,314	3,459	-		
UNIVERSITY CALIF REVS FOR PREV GEN	AA	07/01/2019	1.796%	2.74	50,000	49,778	49,856	1,363		
MONTGOMERY CNTY MD CTFIS PARTN COPS	N.A.	11/01/2019	1.200%	2.76	100,000	98,589	100,019	2,720		
RICHMOND VA GO PUB IMPT BDS C	AA	07/15/2021	2.599%	2.80	100,000	99,784	103,510	2,797		
PORT MORROW ORE TRANSMISSION F REV	AA	09/01/2021	2.737%	2.79	100,000	99,670	103,258	2,776		
WACO TEX INDPT SCH DIST REF BDS	N.A.	02/15/2020	4.000%	2.84	110,000	111,257	114,357	3,154		
FEDERAL HOME LN MTG CORP	AA+	12/30/2019	1.500%	2.82	80,000	79,108	80,000	2,228		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2021	2.030%	2.90	60,000	59,105	60,000	1,716		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	01/24/2022	2.050%	3.12	40,000	39,278	40,000	1,225		
FEDERAL HOME LN MTG CORP MEDIUM	AA+	07/27/2020	1.625%	2.64	80,000	78,838	80,000	2,078		
FEDERAL HOME LN MTG CORP	AA+	05/15/2020	1.600%	2.67	150,000	148,101	150,000	3,956		
FEDERAL HOME LN MTG CORP	AA+	05/01/2020	1.375%	2.54	70,000	68,919	69,781	1,749		
FEDERAL NATL MTG ASSN	AA+	10/07/2021	1.375%	2.50	70,000	67,923	69,352	1,695		
FEDERAL HOME LN MTG CORP	AA+	01/13/2022	2.375%	2.50	35,000	34,861	35,870	873		
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/29/2020	1.830%	2.60	140,000	138,429	140,769	3,605		
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	1.750%	2.61	140,000	138,404	140,487	3,615		
FEDERAL NATL MTG ASSN	AA+	05/06/2021	1.250%	2.52	90,000	87,423	89,251	2,207		
FEDERAL NATL MTG ASSN	AA+	08/17/2021	1.250%	2.48	90,000	87,188	89,032	2,158		
FEDERAL NATL MTG ASSN	AA+	09/28/2020	1.750%	2.57	30,000	29,576	30,000	760		
ALTRIA GROUP INC SR NT	BBB	08/09/2022	2.850%	4.06	30,000	28,799	30,230	1,168		
US TREASURY NOTE	NR	03/15/2020	1.625%	2.56	50,000	49,447	49,813	1,265		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/11/2020	1.620%	2.88	140,000	137,775	138,371	3,971		
FEDERAL HOME LN MTG CORP	AA+	03/26/2021	2.700%	2.91	50,000	50,002	49,938	1,455		
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/15/2020	2.500%	2.89	100,000	99,953	99,925	2,886		
FEDERAL NATL MTG ASSN	AA+	03/26/2021	2.700%	2.96	100,000	100,036	100,000	2,961		
FEDERAL NATL MTG ASSN	AA+	10/19/2022	3.000%	3.28	50,000	50,005	50,000	1,639		
US TREASURY NOTE	NR	07/31/2020	2.000%	2.92	20,000	19,839	19,797	579		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2022	3.170%	3.22	80,000	80,206	80,000	2,584		
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/27/2021	3.000%	3.00	100,000	100,312	100,000	3,005		
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/29/2021	3.150%	3.14	100,000	100,016	100,000	3,143		
US TREASURY NOTE	NR	11/30/2020	1.625%	2.50	100,000	98,375	97,686	2,459		
US TREASURY NOTE	NR	09/15/2021	2.750%	2.48	80,000	80,569	79,756	1,994		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	12/05/2022	3.370%	3.32	60,000	60,110	60,000	1,996		
CASH & EQUIVALENTS	-	-	-	2.27	-	79,663	79,663	1,808		
Annual OPS and CAP Budget Reserve Total					\$	3,545,021	\$	3,590,953	\$	97,308
Capital Improvement Program Reserve										
APPLE INC SR FLT NT	AA+	02/07/2020	2.851%	2.99	100,000	100,006	99,821	2,987		
CALIFORNIA ST GO BDS TAXABLE	AA-	10/01/2019	6.200%	3.36	100,000	102,505	104,087	3,447		
CHEVRON CORPORATION SR NT	AA	03/03/2019	4.950%	3.02	100,000	100,314	101,483	3,032		
CISCO SYS INC SR GLBL NT	A+	01/15/2020	4.450%	2.79	125,000	126,940	129,705	3,544		
EXXON MOBIL CORP SR FLT NT	AA+	03/15/2019	2.938%	3.19	100,000	100,000	99,935	3,190		
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	02/01/2019	5.000%	2.91	613	616	646	18		
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	2.375%	2.59	340,000	339,174	342,193	8,785		
FEDERAL HOME LOAN BKS CONS BDS	AA+	02/18/2021	1.375%	2.52	100,000	97,707	100,876	2,459		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/06/2020	5.300%	2.89	450,000	465,507	474,098	13,458		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/03/2019	5.320%	2.79	50,000	50,914	51,857	1,420		
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/11/2020	2.875%	2.57	60,000	60,328	61,683	1,553		
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/24/2019	1.520%	2.55	250,000	248,783	250,000	6,334		
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2019	5.125%	2.66	60,000	60,910	62,144	1,621		
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	4.625%	2.74	200,000	205,882	208,370	5,631		
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/01/2019	4.375%	2.66	25,000	25,218	25,641	670		
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	4.125%	2.66	125,000	126,731	128,795	3,372		
FEDERAL HOME LOAN BKS CONS BDS	AA+	03/13/2020	4.125%	2.62	700,000	712,614	725,659	18,699		
FEDERAL NATL MTG ASSN	AA+	01/21/2020	1.625%	2.59	100,000	99,015	101,010	2,560		
FEDERAL NATL MTG ASSN	AA+	06/22/2020	1.500%	2.53	50,000	49,276	50,318	1,248		
FEDERAL NATL MTG ASSN	AA+	11/30/2020	1.500%	2.54	170,000	166,663	169,564	4,238		
FEDERAL NATL MTG ASSN	AA+	12/28/2020	1.875%	2.51	325,000	320,902	329,115	8,055		
FEDERAL NATL MTG ASSN	AA+	02/26/2021	1.375%	2.53	240,000	234,226	239,818	5,924		
FEDERAL HOME LN MTG CORP MULTICLASS	NR	06/25/2020	3.531%	3.07	100,000	100,517	106,188	3,089		
FEDERAL HOME LN MTG CORP	AA+	03/27/2019	3.750%	2.43	500,000	501,555	505,728	12,193		
FEDERAL HOME LN MTG CORP	AA+	05/30/2019	1.750%	2.58	50,000	49,842	50,212	1,287		
FEDERAL HOME LN MTG CORP	AA+	10/02/2019	1.250%	2.61	50,000	49,484	50,130	1,291		
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	04/01/2019	2.680%	3.05	456,391	455,469	475,360	13,892		
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	04/01/2019	5.000%	2.97	857	872	903	26		
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	07/01/2019	4.821%	4.43	199,223	200,420	221,013	8,879		
MICROSOFT CORP NT	AAA	06/01/2019	4.200%	2.57	100,000	100,634	101,177	2,589		
MONTGOMERY CNTY MD CTFIS PARTN COPS	N.A.	11/01/2019	1.200%	2.76	100,000	98,589	100,019	2,720		

Broker/Dealer Investment Name	Composite Credit	Maturity	Coupon Rate	Yield to Maturity	Par Value	Market Value	Estimated Annual	
							Cost	\$ Yield Earnings
RICHMOND VA GO PUB IMPT BDS C	AA	07/15/2021	2.599%	2.80	100,000	99,784	103,510	2,797
BANK NEW YORK MTN BK ENT FR	A+	11/27/2020	2.450%	3.04	100,000	98,837	101,724	3,007
GILEAD SCIENCES INC SR NT	A-	09/01/2020	2.550%	2.94	100,000	99,191	102,154	2,913
WISCONSIN ST GEN FD ANNUAL APP REV	AA-	05/01/2021	1.616%	2.83	100,000	97,184	100,080	2,749
PORT MORROW ORE TRANSMISSION F REV	AA	09/01/2021	2.737%	2.79	225,000	224,258	232,331	6,246
WACO TEX INDPST SCH DIST REF BDS	N.A.	02/15/2020	4.000%	2.84	165,000	166,886	171,536	4,731
FEDERAL NATL MTG ASSN	AA+	05/26/2021	1.800%	2.92	260,000	254,405	260,000	7,431
FEDERAL HOME LN MTG CORP	AA+	12/30/2019	1.500%	2.82	260,000	257,101	260,000	7,240
FEDERAL HOME LN MTG CORP	AA+	12/30/2020	1.750%	2.84	340,000	334,339	340,000	9,485
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2021	2.030%	2.90	80,000	78,806	80,000	2,289
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	01/24/2022	2.050%	3.12	120,000	117,834	120,000	3,674
FEDERAL HOME LN MTG CORP MEDIUM	AA+	07/27/2020	1.625%	2.64	80,000	78,838	80,000	2,078
FEDERAL HOME LN MTG CORP	AA+	05/15/2020	1.600%	2.67	220,000	217,215	220,000	5,802
FEDERAL HOME LN MTG CORP	AA+	10/26/2021	2.000%	2.85	220,000	216,636	220,000	6,178
FEDERAL HOME LOAN BKS CONS BDS	AA+	04/27/2022	2.300%	2.62	220,000	218,073	219,505	5,705
FEDERAL HOME LN MTG CORP	AA+	05/01/2020	1.375%	2.54	290,000	285,522	288,954	7,247
FEDERAL NATL MTG ASSN	AA+	10/07/2021	1.375%	2.50	140,000	135,846	138,703	3,391
FEDERAL HOME LN MTG CORP	AA+	01/13/2022	2.375%	2.50	310,000	308,766	316,073	7,732
FEDERAL NATL MTG ASSN	AA+	01/05/2022	2.000%	2.51	610,000	601,234	608,557	15,085
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	1.750%	2.61	170,000	168,062	170,592	4,390
FEDERAL NATL MTG ASSN	AA+	05/06/2021	1.250%	2.52	170,000	165,133	168,585	4,168
FEDERAL NATL MTG ASSN	AA+	08/17/2021	1.250%	2.48	170,000	164,688	168,171	4,076
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2022	1.900%	2.67	165,000	160,837	165,634	4,291
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	08/03/2022	1.900%	2.66	165,000	160,766	165,348	4,273
FEDERAL NATL MTG ASSN	AA+	04/05/2022	1.875%	2.51	170,000	166,658	170,498	4,190
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2022	1.850%	2.63	130,000	126,671	130,836	3,328
FEDERAL NATL MTG ASSN	AA+	09/28/2020	1.750%	2.57	120,000	118,306	120,000	3,042
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/04/2022	2.100%	3.07	220,000	216,427	220,000	6,633
FEDERAL HOME LN MTG CORP	AA+	10/12/2021	2.000%	2.88	120,000	117,494	120,000	3,379
BANK AMER CORP FR	A	05/13/2021	5.000%	3.26	75,000	77,852	79,599	2,539
CONSTELLATION BRANDS INC SR GBLB NT	BBB-	11/06/2020	2.250%	3.43	25,000	24,523	24,942	840
HOME DEPOT INC SR GBLB NT	A	04/01/2021	2.000%	2.85	80,000	78,419	79,838	2,234
LORILLARD TOB CO SR NT	BBB	05/01/2020	6.875%	3.74	25,000	26,014	26,634	973
MORGAN STANLEY SR NT	A-	01/27/2020	2.650%	3.22	80,000	79,399	80,571	2,558
ORACLE CORP SR GBLB	A+	05/15/2022	2.500%	3.17	80,000	78,282	80,069	2,478
PHILIP MORRIS INTL INC SR NT	A	03/26/2020	4.500%	3.13	25,000	25,425	25,918	797
STARBUCKS CORP SR GBLB	BBB+	02/04/2021	2.100%	3.21	80,000	78,034	79,979	2,507
3M CO FR	A+	06/26/2022	2.000%	3.00	100,000	96,664	99,067	2,904
FEDERAL HOME LN MTG CORP	AA+	12/29/2021	2.250%	2.98	120,000	118,720	120,000	3,533
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/26/2022	2.280%	2.95	100,000	98,656	99,600	2,912
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/11/2020	1.620%	2.88	400,000	393,644	395,347	11,345
FEDERAL HOME LOAN BKS CONS BDS	AA+	11/29/2021	1.875%	2.49	300,000	294,708	296,489	7,329
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/15/2021	2.200%	2.98	300,000	297,579	298,050	8,871
FEDERAL NATL MTG ASSN	AA+	11/26/2019	1.750%	2.61	300,000	297,612	299,190	7,756
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/17/2021	1.970%	2.94	100,000	98,666	98,615	2,898
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/15/2020	2.500%	2.89	160,000	159,925	159,880	4,617
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	11/22/2021	2.740%	3.16	100,000	100,000	99,975	3,157
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/01/2021	2.750%	3.04	60,000	60,001	59,970	1,825
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/01/2020	2.450%	3.00	90,000	89,702	89,978	2,688
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	03/07/2022	2.850%	3.02	100,000	100,001	100,000	3,022
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/20/2021	2.840%	2.98	100,000	100,001	100,000	2,980
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	03/29/2021	2.710%	2.96	80,000	80,002	80,000	2,367
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/29/2022	3.000%	3.16	100,000	100,003	100,000	3,155
FEDERAL HOME LN MTG CORP	AA+	12/14/2022	2.250%	3.12	25,000	24,958	24,656	779
FEDERAL HOME LN MTG CORP	AA+	11/24/2021	2.650%	2.92	100,000	100,005	99,750	2,922
FEDERAL HOME LN MTG CORP	AA+	02/24/2023	3.000%	3.14	80,000	80,016	79,984	2,513
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2022	2.130%	3.29	129,630	126,692	126,397	4,167
FEDERAL NATL MTG ASSN	AA+	03/26/2021	2.700%	2.96	100,000	100,036	100,000	2,961
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	08/16/2021	1.680%	3.02	100,000	97,780	97,005	2,950
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/18/2022	2.830%	3.10	150,000	150,072	150,000	4,658
FEDERAL HOME LN MTG CORP	AA+	03/15/2023	3.000%	3.13	150,000	150,032	149,850	4,693
FEDERAL HOME LOAN BKS CONS BDS	AA+	03/27/2023	3.000%	3.20	150,000	150,069	150,000	4,795
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/27/2022	1.700%	2.99	150,000	145,287	143,580	4,341
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/14/2021	2.810%	3.02	100,000	100,002	100,000	3,018
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/20/2022	3.090%	3.22	200,000	200,004	199,850	6,442
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/28/2022	3.060%	3.16	100,000	100,146	100,000	3,168
FEDERAL HOME LOAN BKS CONS BDS	AA+	05/02/2023	3.150%	3.24	200,000	200,004	199,650	6,482
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2022	3.170%	3.22	160,000	160,411	160,000	5,168
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/27/2021	3.000%	3.00	120,000	120,374	120,000	3,606
FEDERAL HOME LN MTG CORP	AA+	06/28/2023	3.250%	3.29	160,000	160,309	159,920	5,269
FEDERAL NATL MTG ASSN	AA+	11/27/2020	1.500%	2.92	100,000	97,931	97,395	2,856
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/29/2021	3.150%	3.14	120,000	120,019	120,000	3,771
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/27/2022	3.230%	3.23	180,000	180,130	179,827	5,820
US TREASURY NOTE	NR	09/15/2021	2.750%	2.48	120,000	120,853	119,634	2,991
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2023	3.200%	3.25	150,000	150,002	149,025	4,881
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/08/2023	3.440%	3.43	180,000	180,032	180,000	6,179
FEDERAL HOME LN MTG CORP	AA+	09/27/2023	3.200%	3.27	150,000	150,339	149,400	4,912
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	12/05/2022	3.370%	3.32	250,000	250,458	250,000	8,315
CASH & EQUIVALENTS	-	-	-	2.27	-	691,265	691,265	15,692
Capital Improvement Program Reserve Total						\$ 17,868,465	\$ 18,101,237	\$ 505,395
Stage 2 Capacity Reserve								
CISCO SYS INC SR GBLB NT	A+	01/15/2020	4.450%	2.79	75,000	76,164	77,823	2,126
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	02/01/2019	5.000%	2.91	613	616	646	18
FEDERAL HOME LN MTG CORP PARTN GOLD	N.A.	11/01/2020	4.500%	3.05	6,642	6,764	6,924	206
FEDERAL HOME LOAN BKS CONS BDS	AA+	12/13/2019	2.375%	2.59	100,000	99,757	101,238	2,584
FEDERAL HOME LOAN BKS CONS BDS	AA+	02/18/2021	1.375%	2.52	100,000	97,707	100,876	2,459
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/11/2020	2.875%	2.57	60,000	60,328	61,683	1,553
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/24/2019	1.520%	2.55	200,000	199,026	200,000	5,067
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2019	5.125%	2.66	50,000	50,759	51,787	1,351
FEDERAL HOME LOAN BKS CONS BDS	AA+	07/01/2019	4.375%	2.66	100,000	100,870	102,565	2,679
FEDERAL HOME LOAN BKS CONS BDS	AA+	03/13/2020	4.125%	2.62	125,000	127,253	129,521	3,339
FEDERAL NATL MTG ASSN	AA+	01/21/2020	1.625%	2.59	100,000	99,015	101,010	2,560
FEDERAL NATL MTG ASSN	AA+	06/22/2020	1.500%	2.53	100,000	98,552	100,635	2,496
FEDERAL NATL MTG ASSN	AA+	11/30/2020	1.500%	2.54	100,000	98,037	100,599	2,493
FEDERAL NATL MTG ASSN	AA+	12/28/2020	1.875%	2.51	175,000	172,793	177,216	4,337
FEDERAL NATL MTG ASSN	AA+	02/26/2021	1.375%	2.53	180,000	175,669	180,186	4,443
FEDERAL NATL MTG ASSN	AA+	01/14/2019	3.275%	2.36	100,000	100,027	100,860	2,363
FEDERAL HOME LN MTG CORP	AA+	03/27/2019	3.750%	2.43	250,000	250,778	252,850	6,096
FEDERAL HOME LN MTG CORP	AA+	05/30/2019	1.750%	2.58	100,000	99,683	100,424	2,575
FEDERAL HOME LN MTG CORP	AA+	08/01/2019	1.250%	2.63	100,000	99,168	100,442	2,604
FEDERAL HOME LN MTG CORP	AA+	10/02/2019	1.250%	2.61	100,000	98,967	100,260	2,581
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	12/01/2020	4.000%	3.02	24,083	24,660	25,234	745
FEDERAL NATL MTG ASSN GTD PASSTHRU	N.A.	07/01/2019	4.821%	4.43	166,631	167,633	184,857	7,426
JPMORGAN CHASE & CO SR NT	A	03/01/2021	2.550%	3.22	50,000	49,295	50,681	1,587
LANCASTER CNTY NEB SCH DIST NO SCH	AA+	01/15/2021	4.550%	3.21	50,000	51,420	52,994	1,649
NORFOLK VA GO CAP IMPT BDS 2010 B	AA	03/01/2019	4.650%	2.66	100,000	100,337	101,330	2,670
UNIVERSITY CALIF REVS FOR PREV GEN	AA	07/01/2019	1.796%	2.74	50,000	49,778	49,856	1,363
MONTGOMERY CNTY MD CTFPS PARTN COPS	N.A.	11/01/2019	1.200%	2.76	100,000	98,589	100,019	2,720
BANK NEW YORK MTN BK ENT FR	A+	11/27/2020	2.450%	3.04	150,000	148,256	152,586	4,510



Broker/Dealer Investment Name	Composite Credit	Maturity	Coupon Rate	Yield to Maturity	Par Value	Market Value	Estimated Annual	
							Cost	\$ Yield Earnings
GILEAD SCIENCES INC SR NT	A-	09/01/2020	2.550%	2.94	150,000	148,787	153,231	4,370
WISCONSIN ST GEN FD ANNUAL APP REV	AA-	05/01/2021	1.616%	2.83	100,000	97,184	100,080	2,749
FEDERAL HOME LN MTG CORP	AA+	08/25/2021	1.500%	2.99	90,000	88,322	90,000	2,638
METRO WASTEWTR RECLAMATION DIS REV	AA+	04/01/2019	4.718%	2.72	100,000	100,459	101,809	2,733
WACO TEX INDPT SCH DIST REF BDS	N.A.	02/15/2020	4.000%	2.84	55,000	55,629	57,179	1,577
FEDERAL HOME LN MTG CORP	AA+	03/30/2021	1.500%	2.82	60,000	58,618	60,000	1,654
FEDERAL HOME LN MTG CORP	AA+	09/30/2021	1.250%	3.63	100,000	98,220	99,900	3,566
FEDERAL NATL MTG ASSN	AA+	09/30/2019	1.250%	2.86	60,000	59,384	59,985	1,700
FEDERAL NATL MTG ASSN	AA+	05/26/2021	1.800%	2.92	60,000	58,709	60,000	1,715
FEDERAL HOME LN MTG CORP	AA+	12/30/2020	1.750%	2.84	100,000	98,335	100,000	2,790
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2021	2.030%	2.90	80,000	78,806	80,000	2,289
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	01/24/2022	2.050%	3.12	60,000	58,917	60,000	1,837
FEDERAL HOME LN MTG CORP MEDIUM	AA+	07/27/2020	1.625%	2.64	40,000	39,419	40,000	1,039
FEDERAL HOME LN MTG CORP	AA+	10/26/2021	2.000%	2.85	150,000	147,707	150,000	4,213
FEDERAL HOME LOAN BKS CONS BDS	AA+	04/27/2022	2.300%	2.62	150,000	148,686	149,663	3,890
FEDERAL HOME LN MTG CORP	AA+	05/01/2020	1.375%	2.54	260,000	255,986	258,975	6,497
FEDERAL NATL MTG ASSN	AA+	10/07/2021	1.375%	2.50	80,000	77,626	79,259	1,938
FEDERAL HOME LN MTG CORP	AA+	01/13/2022	2.375%	2.50	120,000	119,522	122,351	2,993
FEDERAL NATL MTG ASSN	AA+	01/05/2022	2.000%	2.51	220,000	216,839	219,588	5,440
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/12/2020	1.750%	2.61	260,000	257,036	260,905	6,714
FEDERAL NATL MTG ASSN	AA+	05/06/2021	1.250%	2.52	260,000	252,556	257,836	6,375
FEDERAL NATL MTG ASSN	AA+	08/17/2021	1.250%	2.48	260,000	251,875	257,203	6,234
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	07/19/2022	1.900%	2.67	290,000	282,683	291,114	7,542
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	08/03/2022	1.900%	2.66	290,000	282,559	290,612	7,510
FEDERAL NATL MTG ASSN	AA+	04/05/2022	1.875%	2.51	300,000	294,102	300,879	7,394
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/15/2022	1.850%	2.63	85,000	82,823	85,547	2,176
FEDERAL NATL MTG ASSN	AA+	09/28/2020	1.750%	2.57	180,000	177,458	180,000	4,562
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/04/2022	2.100%	3.07	280,000	275,453	280,000	8,443
FEDERAL HOME LN MTG CORP	AA+	10/12/2021	2.000%	2.88	180,000	176,242	180,000	5,069
HOME DEPOT INC SR GLBL NT	A	04/01/2021	2.000%	2.85	60,000	58,814	59,879	1,676
ORACLE CORP SR GLBL	A+	05/15/2022	2.500%	3.17	120,000	117,424	120,103	3,716
PHILIP MORRIS INTL INC SR NT	A	03/26/2020	4.500%	3.13	55,000	55,934	57,020	1,753
STARBUCKS CORP SR GLBL	BBB+	02/04/2021	2.100%	3.21	60,000	58,526	59,984	1,880
FEDERAL HOME LN MTG CORP	AA+	12/29/2021	2.250%	2.98	80,000	79,146	80,000	2,355
FEDERAL HOME LOAN BKS CONS BDS	AA+	11/29/2021	1.875%	2.49	120,000	117,883	118,596	2,932
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	11/22/2021	2.740%	3.16	100,000	100,000	99,975	3,157
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	03/07/2022	2.850%	3.02	80,000	80,001	80,000	2,418
FEDERAL HOME LN MTG CORP	AA+	02/24/2023	3.000%	3.14	60,000	60,012	59,988	1,885
FEDERAL NATL MTG ASSN	AA+	03/26/2021	2.700%	2.96	140,000	140,050	140,000	4,145
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	04/18/2022	2.830%	3.10	150,000	150,072	150,000	4,658
FEDERAL HOME LN MTG CORP	AA+	03/15/2023	3.000%	3.13	150,000	150,032	149,850	4,693
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/14/2021	2.810%	3.02	100,000	100,002	100,000	3,018
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	06/20/2022	3.090%	3.22	100,000	100,002	99,925	3,221
FEDERAL HOME LOAN BKS CONS BDS	AA+	06/28/2022	3.060%	3.16	100,000	100,146	100,000	3,168
FEDERAL HOME LOAN BKS CONS BDS	AA+	05/02/2023	3.150%	3.24	150,000	150,003	149,738	4,862
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/19/2022	3.170%	3.22	200,000	200,514	200,000	6,461
FEDERAL HOME LOAN BKS CONS BDS	AA+	09/27/2021	3.000%	3.00	160,000	160,499	160,000	4,809
FEDERAL HOME LOAN BKS CONS BDS	AA+	08/10/2023	1.500%	3.98	200,000	194,872	192,000	7,758
US TREASURY NOTE	NR	11/30/2020	1.625%	2.50	160,000	157,400	156,297	3,935
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	09/27/2022	3.230%	3.23	200,000	200,144	200,000	6,467
FEDERAL HOME LOAN BKS CONS BDS	AA+	04/30/2021	0.02	2.88	200,000	197,082	194,471	5,676
FEDERAL HOME LOAN BKS CONS BDS	AA+	10/25/2021	0.0317	3.14	200,000	200,608	200,000	6,289
FEDERAL NATL MTG ASSN	AA+	10/28/2020	0.014	2.92	40,000	39,195	38,766	1,143
US TREASURY NOTE	NR	09/15/2021	0.0275	2.48	60,000	60,427	59,817	1,496
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/08/2023	0.0344	3.43	300,000	300,054	300,000	10,298
FEDERAL HOME LN MTG CORP	AA+	09/27/2023	0.032	3.27	150,000	150,339	149,400	4,912
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	05/06/2022	0.0327	3.26	200,000	200,124	200,000	6,532
FEDERAL FARM CR BKS CONS SYSTEMWIDE	AA+	12/05/2022	0.0337	3.32	100,000	100,183	100,000	3,326
CASH & EQUIVALENTS	-	-	-	2.27	-	163,627	163,627	3,714
<b>Stage 2 Capacity Reserve Total</b>					<b>\$</b>	<b>11,084,954</b>	<b>\$ 11,230,650</b>	<b>\$ 316,598</b>
<b>Subtotal, Bank of the West</b>					<b>\$</b>	<b>32,498,439</b>	<b>\$ 32,922,839</b>	<b>\$ 919,302</b>
<b>Bank of New York (Trustee)</b>								
2009 Reserve Account - Federal National Mortgage Assn 3136G3Q73	Aaa	7/26/2019	1.150%	1.16		4,741,139	4,780,000	54,997
2009 Reserve Account - BMW BK North Amer Salt Lake 05580ACK8	Aa	7/24/2019	2.000%	2.01		149,248	150,000	3,000
2009 Reserve Account - Morgan Stanley Treas Sec X9USDMORS	-	-	0.000%	2.20		162,144	161,769	3,567
2009 Reserve Account - Morgan Stanley Treas Sec X9USDMORS	-	-	0.000%	2.20		62,656	62,656	1,378
2009 Revenue FD Account - Morgan Stanley Treas Sec Portfolio X9USDMORS	-	-	0.000%	2.20		3,829	3,829	84
2009 Revenue FD Account - Morgan Stanley Treas Sec INST X9USDMORS	-	-	0.000%	2.23		13	13	0
2014 Revenue Account - Goldman FS Money MKT INST 474 X9USDGLD4	-	-	0.000%	2.62		11	11	0
2014 Revenue Account - Goldman Sachs Fin Sq Instl X9USDGLD4	-	-	0.000%	2.65		414	414	11
2014 Revenue Account - Cash	-	-	0.000%	-		13	13	-
2014 Interest Account - Goldman Sachs Fin Sq Instl X9USDGLD4	-	-	0.000%	2.66		13	13	0
2014 Principal Account - Goldman Sachs Fin Sq Instl X9USDGLD4	-	-	0.000%	2.65		7	7	0
2014 COI Account - Cash	-	-	0.000%	-		2	2	-
2015 Project Account - Cash	-	-	0.000%	-		2	2	-
2015 Revenue Account - JP Morgan Prime MMTK Instl X9USDJPMP	-	-	0.000%	2.55		163	163	4
2015 Revenue Account - Cash	-	-	0.000%	-		5	5	-
2009 Escrow - United States Treasury 912828B33	Aaa	1/31/2019	1.500%	1.50		602,602	610,349	9,039
2009 Escrow - Tunisia Government Aid Bonds 066716AG6	Aaa	7/16/2019	1.686%	1.70		40,110,389	40,944,692	681,877
2009 Escrow - Cash	-	-	0.000%	-		3,857	3,857	-
<b>Subtotal, Bank of New York (Trustee)</b>					<b>\$</b>	<b>45,836,508</b>	<b>\$ 46,717,796</b>	<b>\$ 753,959</b>
<b>Less Amounts held in Escrow for 2009 Bond Defeasance</b>					<b>\$</b>	<b>(40,716,849)</b>	<b>\$ (41,558,898)</b>	<b>\$ (690,916)</b>
<b>Net Total, Bank of New York (Trustee)</b>					<b>\$</b>	<b>5,119,659</b>	<b>\$ 5,158,898</b>	<b>\$ 63,043</b>
<b>Zions Bank (Trustee)</b>								
US Treasury Notes 912828B33	Aaa	1/31/2019	1.500%	2.07	1,500,000	1,499,004	1,492,441	31,029
US Treasury Notes 912828B33	Aaa	1/31/2019	1.500%	2.06	11,600,000	11,592,298	11,542,000	238,801
US Treasury Notes 912828C24	Aaa	2/28/2019	1.500%	2.09	15,500,000	15,477,820	15,411,602	323,486
US Treasury Notes 912828P95	Aaa	3/15/2019	1.000%	2.11	10,300,000	10,271,109	10,186,941	216,720
US Treasury Notes 912828ST8	Aaa	4/30/2019	1.250%	2.12	16,430,000	16,362,604	16,268,909	346,887
US Treasury Notes 912828SX9	Aaa	5/31/2019	1.125%	2.14	13,550,000	13,473,781	13,384,330	288,339
Toronto Dominion Bank NY Cert Depos 89113XZJ6	P-1	3/9/2019	2.500%	2.50	6,300,000	6,290,587	6,300,000	157,265
CAMP Pool	NR			2.55		9,936,956	9,936,956	253,392
<b>Total, Zions Bank (Trustee)</b>					<b>\$</b>	<b>84,904,158</b>	<b>\$ 84,523,179</b>	<b>\$ 1,855,921</b>
<b>Uninvested Operating Cash</b>	-					<b>5,376,609</b>	<b>5,376,609</b>	<b>-</b>
<b>California Local Agency Investment Fund</b>	LAIF	-	2.291		<b>\$</b>	<b>708,783</b>	<b>\$ 708,783</b>	<b>16,238</b>
<b>Total Working Capital</b>						<b>6,085,391.36</b>	<b>6,085,391.36</b>	<b>16,238</b>
<b>TOTAL CASH &amp; INVESTMENTS, UNRESTRICTED AND WITH TRUSTEE</b>					<b>\$</b>	<b>128,607,648</b>	<b>\$ 128,690,307</b>	<b>\$ 2,854,504</b>
						<b>Weighted Average Yield to Maturity %</b>		<b>2.22%</b>

Broker/Dealer	Composite	Coupon	Yield to		Estimated Annual
Investment Name	Credit	Maturity	Rate	Maturity	\$ Yield
				Par Value	Cost
				Market Value	Earnings
	<b>Summary by Investment Type:</b>				<b>Market Value</b>
	US Treasuries			\$ 69,492,166	
	Agencies			31,883,902	
	Commercial Paper / Corporate Bonds			2,181,782	
	Municipal Bonds / Notes			1,801,679	
	Money Market / Certificates of Deposit			22,539,336	
	Local Agency Investment Fund			708,783	
	<b>TOTAL</b>			<b>\$ 128,607,648</b>	
	<b>Summary by Purpose / Restriction Level</b>				<b>Market Value</b>
	Working Capital			\$ 6,085,391	
	Operations & Capital Budget Reserve			3,545,021	
	Capital Improvement Program Reserve			17,868,465	
	Stage 2 Capacity Reserve			11,084,954	
	Debt Reserve			5,119,659	
	Debt Proceeds			84,904,158	
	<b>TOTAL</b>			<b>\$ 128,607,648</b>	
	<b>Summary by Liquidity:</b>				<b>Market Value</b>
	0-1 years			\$ 102,628,073	
	1 years			8,007,162	
	2 years			8,553,818	
	3-5 years			9,418,595	
	<b>TOTAL</b>			<b>\$ 128,607,648</b>	

SVCW has sufficient liquid resources available to meet expenditure requirements per SVCW's investment policy.  
All SVCW investments are in compliance with SVCW's Investment Policy.

M. Anderson

12/31/2018

## **AGENDA ITEM 5D**

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**ENGINEERING REPORT: DECEMBER 2018  
CAPITAL IMPROVEMENT PROGRAM IMPLEMENTATION**

**DMF 6A/6B Project (9222):** Complete the buildout of the Dual Media Filter system by installing two additional filters. Implement automation improvements.

The mechanical and instrumentation equipment for the DMF 6A/6B project has been installed, and initial programming of the filters has been completed to incorporate them into the system and put them into operation. The final task for this project will be to upgrade the programming for all of the filters to further automate the system and ensure permit compliance and recycled water quality.

**Planned Commission Actions:** Approve Automation Programming Task Order – January 2019

**Pump Stations Rehabilitation and Replacement (9501):** Rehabilitate or Replace three pump stations and connect them to the new Gravity Pipeline. This project also includes replacing the Belmont Force Main.

The RESCU Program includes rehabilitation or replacement of the Belmont, Redwood City, and Menlo Park Pump Stations, as well as the construction of the Belmont Force Main to connect the Belmont system to the Gravity Pipeline. Preliminary design work was completed by Brown and Caldwell. SVCW will deliver these projects as a combined Progressive Design Build Project, with Brown and Caldwell acting as Owner's Advisor. SVCW received Statements of Qualifications from four qualified Design Builders and shortlisted two. SVCW received Proposals and interviewed both shortlisted firms and is in negotiation with the firm that scored highest in the best-value evaluation process.

**Planned Commission Actions:** Award Design-Build Project – February 2019

**Emergency Repair of the 12kV Vault (9808):** Respond to emergency condition of existing main 12 kV service.

On September 14, 2017 the Commission approved the emergency expenditure of funds for the repair of essential facilities. On November 9, 2017 The Commission approved a total budget amount of \$2,347,412 which included the initial emergency authorization of \$300,000 to perform work on a time and material basis to resolve the failing 12kV electrical vault. Beecher Engineering, Power Engineering and DW Nicholson designed a permanent repair to reroute the 12 kV conduits that supply power to the Solids Handling Building (SHB) and ultimately to all plant equipment and processes.

A new concrete vault was placed on the main structure side of the tunnel and is incorporated into the pile-supported tunnel structure. A new conduit run was constructed along the building to the new vault at the tunnel. Power Engineering

completed excavation under the SHB by the transformers and constructed a new duct bank structure under the transformers to connect the 12kV power lines to the new vault at the tunnel. The underground tunnel is pile supported and will offer the most stable pathway between the buildings to ensure the new conduits and vault will not subside in the future.

Planned Commission Actions: Accept Project and File Notice of Completion – February 2019

**Front of Plant Project (9502):** Using Progressive Design Build process, provide a surge shaft, receiving lift station, headworks with screening and grit removal, influent connector pipeline, and all required support facilities for a complete project.

On November 9, 2017 the Commission awarded a Progressive Design Build contract to Shea/Parsons Joint Venture (SPJV) for Stage 1 of the Front of Plant project. SPJV, SVCW staff, and consultants have met weekly to coordinate and discuss proposed designs, develop O/M options, and coordinate efforts between construction teams. While the designs were being developed, early construction packages have been authorized by the Commission to begin preparation work and order large equipment. The 60% design has been completed and a lump sum construction price has been negotiated with SPJV. The Stage 2D amendment includes the scope and budget to complete the construction of the project. It was approved at the December Commission Meeting

Planned Commission Actions: None anticipated

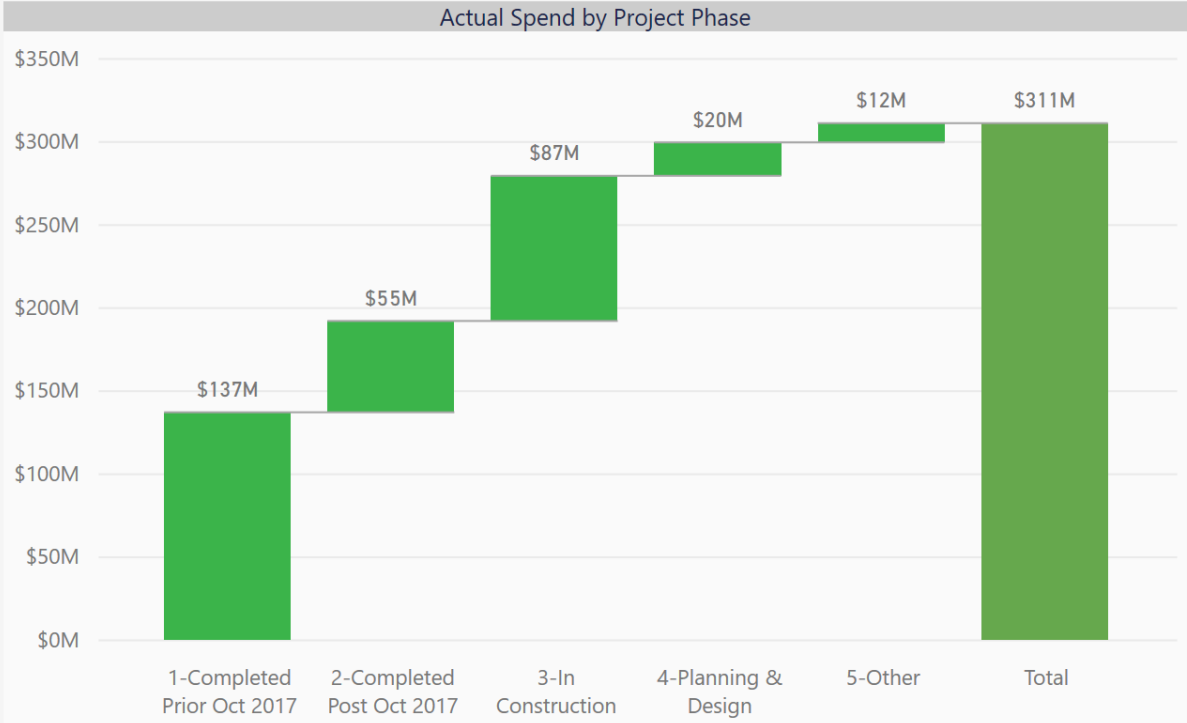
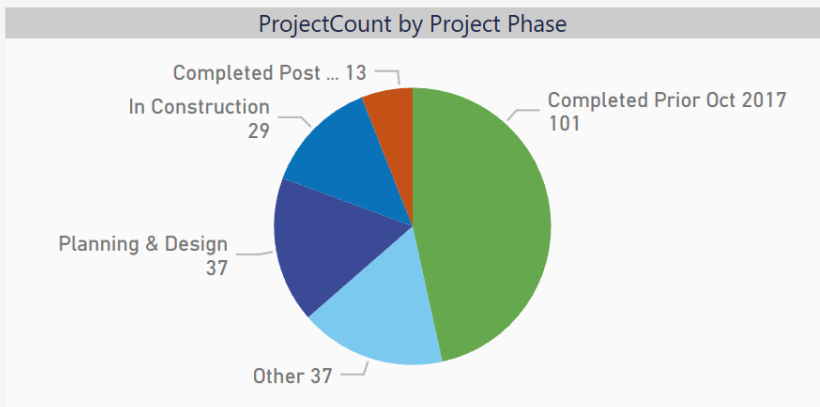
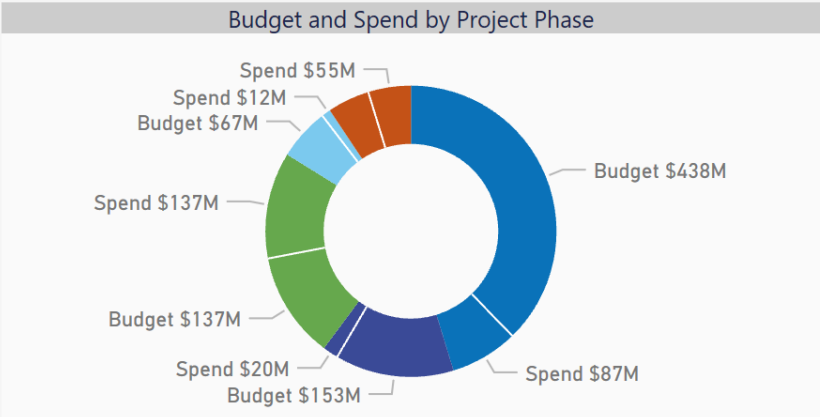
**Gravity Pipeline Project (6008):** Replace existing 54" force main with a deep gravity pipeline using tunneling methods of construction and a progressive design build procurement process.

On November 8, 2018 the Commission approved the Stage 2B Design Build Amendment, with Barnard/Bessac Joint Venture (BBJV) to complete the design and construction for the gravity pipeline project. SVCW staff and consultants are managing the project and completing the effort to obtain the necessary permits and easements, assure that the requirements of the CEQA documents are being met, and assure that the project is being coordinated with the other RESCU projects.

Planned Commission Actions: None anticipated

# CIP Spend Analysis

	Project Phase	Project Count	2018 CIP Budget	Actual Spend	Remaining	% Unspent
	Completed Prior Oct 2017	101	\$137,234,509	\$137,292,467	\$-57,958	-0.04%
	Completed Post Oct 2017	13	\$54,325,725	\$54,982,649	\$-656,924	-1.21%
	In Construction	29	\$438,155,720	\$87,396,554	\$350,759,166	80.05%
	Planning & Design	37	\$152,977,094	\$20,112,841	\$132,864,253	86.85%
	Other	37	\$66,873,374	\$11,579,240	\$55,294,134	82.68%
Total		217	\$849,566,422	\$311,363,750	\$538,202,671	63.35%



This report is a snapshot of CIP spending and displays the cost of projects as they evolve from un-initiated to completed. Within each phase, actual expenditures is compared to the 2017 CIP Budget Plan to arrive at dollars remaining.

"Planning/Design" budget values are not fully encumbered and therefore not meant for comparison to actual expenditures. Only upon completion of the planning and design phase will project budget and actual expenditures be recategorized to "In Construction" and a good measure of budget adherence.

"In Construction" dollar values reflect encumbrances (Budget) and expenditures (Actual Spent to date); comparing these numbers describes budget adherence.

"Other" phase includes projects that are administrative in nature (e.g. SRF loan expenses, Insurance, etc) and/or projects that have not been initiated.

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## AGENDA ITEM 5E

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**Silicon Valley Clean Water**  
**Commissioners' Requested Action Items**  
Updated: 12/7/2018

**JANUARY 28, 2019**  
**AGENDA ITEM 5E**

Commission Meeting Date		Action Item	Requested or Estimated Date for Completion	Status			Date of Completion	Notes
				Ongoing	In Progress	Complete		
12/6/2018	1	Private property easements: keep Commission apprised if/when impasse during easement negotiations	2/18/2019	✓				Pursue amenable terms regarding how to appropriately measure any settlement caused by tunneling activities.
11/8/2018	1	Draft Letter to County Manager for Commissioner Chair Signature	11/9/2018			✓	11/8/2018	Letter related to intended use of existing 48-in Force Main after Gravity Pipeline is put into use.
10/11/2018	1	No new items at this meeting						
8/23/2018	1	Item 8B error in bid summary sheet; note in minutes	10/11/2018			✓	10/3/2018	
7/12/2018	1	Provide interim financials for end of FY17-18	8/23/2018			✓	8/11/2018	Interim financials provided; audited financials to be presented to Commission in October/November 2018
	2	Reschedule December meeting to late November or early December	8/23/2018			✓	7/15/2018	December Commission meeting scheduled for December 6
	3	Prepare Commission member on-boarding package	first quarter 2019			✓	1/11/2019	Binder provided to RWC Commissioner. Will be provided to others at January meeting.
6/28/2018	1	No new items at this meeting						
6/14/2018	1	8B - Front of Plant project, report back if allowance is used	N/A			✓	12/6/2018	Report provided to Commission: Allowance for 40 additional piles or 1,530 extra length of piles. Of the allowance, an additional 76 feet of pile was used; this translates to \$5,890 used of the \$358,575 allowance.
	2	8C - Line of Credit; report back if proportion of use changes from JPA apportionment	N/A			✓	6/15/2018	Confirmed that use is proportional to JPA apportionment; should use of the LOC proportionally change, report this to Commission.
	3	8E - JPA Amendment; re-initiate "clean up" to JPA	N/A		✓			Make required and requested changes to the JPA a priority. Letter distributed to member agencies requesting input. Input received and Manager to schedule a meeting time with member agency staff to review.
5/10/2018	1	No new items at this meeting						
4/12/2018	1	Prepare letter Opposing AB1912	N/A			✓	4/17/2018	Prepare for John Seybert signature. Include all Commission names and who they're representing.

**Silicon Valley Clean Water**  
**Commissioners' Requested Action Items**  
Updated: 12/7/2018

**JANUARY 28, 2019**  
**AGENDA ITEM 5E**

Commission Meeting Date	Action Item		Requested or Estimated Date for Completion	Status			Date of Completion	Notes
				Ongoing	In Progress	Complete		
	2	FY18-19 Operating Budget	1-2 weeks			✓	5/2/2018	Send e-version, along with Benchmarking Chart of SVCW costs compared to other Bay Area WWTP costs, to Commissioners (Benchmarking Only), Member Agency Finance Directors and Tech Committee members.
3/8/2018	1	Reflect in LRFP how SVCW's procurement process and management strategies are saving costs	N/A			✓	1/28/2019	In response to the fact that SVCW staff is implementing significant projects with relatively little overhead costs.
	2	Recycled Water Workshop in Stanford	April			✓	4/12/2018	Reported highlights from the Recycled Water Workshop held at Stanford on March 9
	3	Operating Budget Benchmarking	April			✓	4/12/2018	Benchmark SVCW's operating budget increase with other agencies in the Bay Area; reported out at April meeting.
1/18/2018	1	RESCU Program and Project Updates	N/A	✓				When available, upload monthly dashboard summary reports onto website and email to Tech Cmte members.
	2	Gravity Pipeline Acquisitions	N/A		✓			Report out on acquisition results when available.
> One Year	1	When SVCW can begin exporting power to grid, make public for positive public relations standpoint	N/A		✓			The anticipated timeframe for SVCW to begin exporting power is late summer 2019. Public notice will be prepared and distributed.
	2	Project delay costs	N/A	✓			Ongoing	Inform Commission of any potential delays that could add time and costs to projects they have authorized.
	3	Greendale property construction progress	2/28/2019		✓			One item of work remains to complete; the Engineering Director is handling coordination with the contractor. A summary of costs was presented to the Commission at the October 2018 meeting.
	4	Connection Fees	NA		✓			Additional plant capacity evaluation is underway to ensure proper flow numbers are used in the calculations. Will be incorporated into upcoming JPA changes.

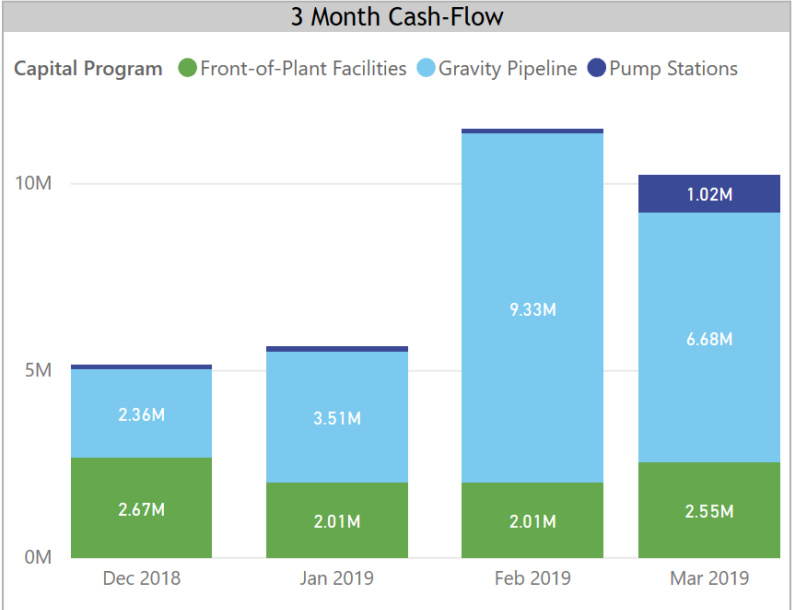
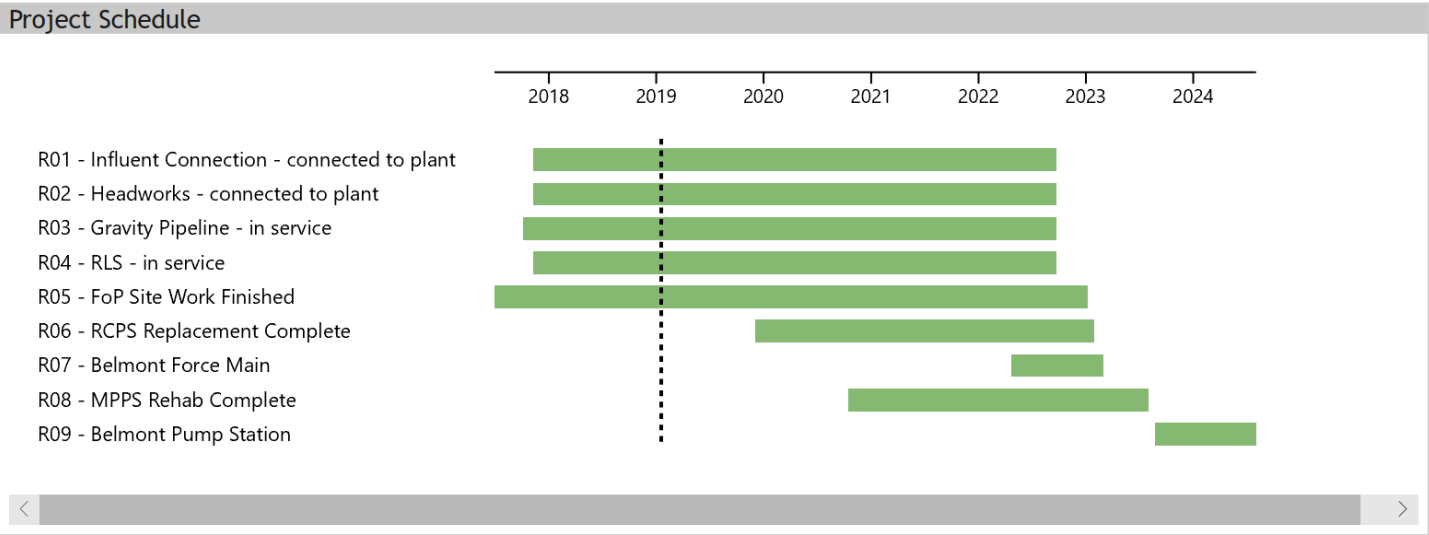
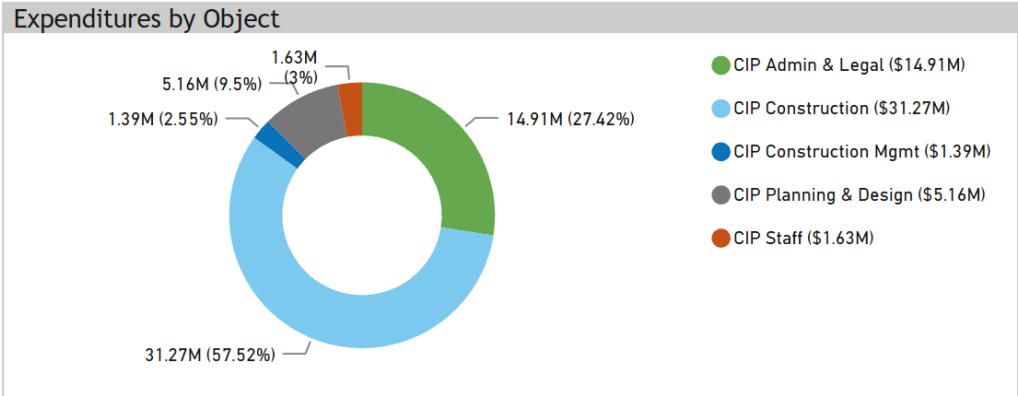
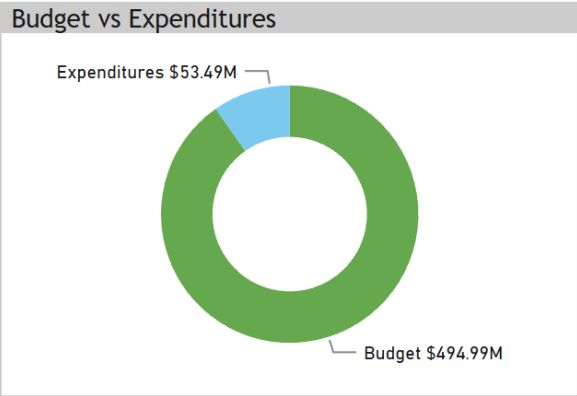
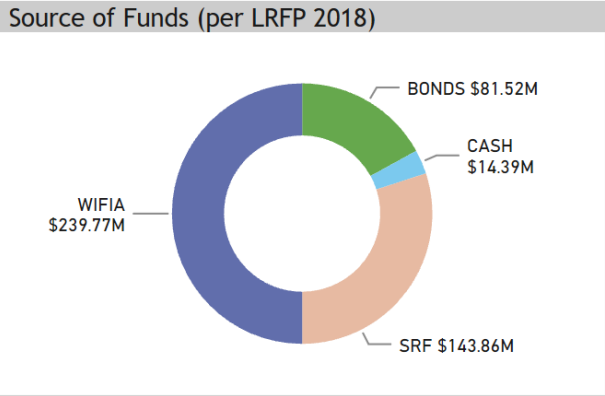
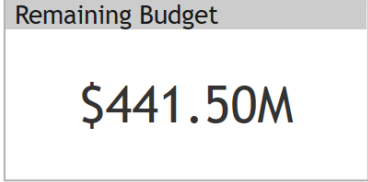
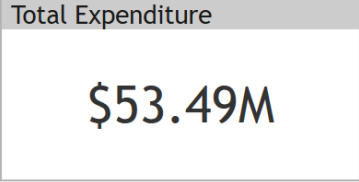
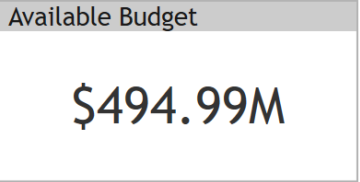
## **AGENDA ITEM 5F**

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Overview



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.



As of : 2018 - 12

# Front of Plant Progressive DB Project



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 Facilities, Influent Connector Pipe, Storage and Chemical Offload Facilities, Civil site work, Emergency Overflow pipe to storage basin and related process support systems. Work is being implemented under a Progressive Design-Build procurement process in stages.

## Available Budget

\$137.81M

## Total Expenditure

\$27.90M

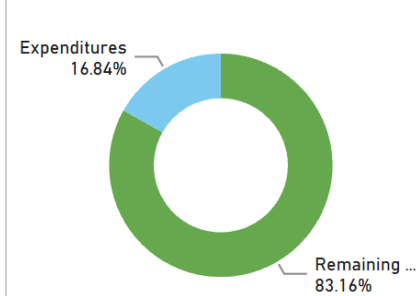
## Remaining Budget

\$109.90M

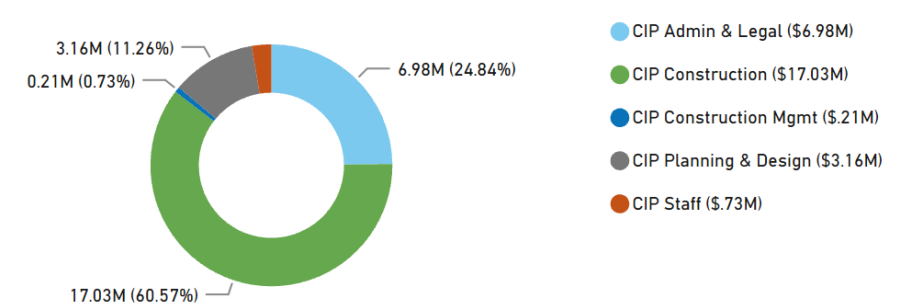
## Milestone Schedule

	Start	Finish
Completed Stage 1 Services	11/28/2017	12/6/2018
Completed Stage 2A - Piles	6/18/2018	11/12/2018
Completed Stage 2B - RLS Shaft Preparation	7/23/2018	12/28/2018
100 Percent (%) Design Documents	12/6/2018	7/31/2019
Stage 2C - RLS Shaft Construction	10/11/2018	2/25/2020
Headworks Completed/Early Start-Up	12/6/2018	10/24/2021
SFS/RLS Operational	12/6/2018	8/28/2022
Stage 2D - Balance of Stage 2 Work Final Completion	12/6/2018	10/20/2022

## Budget vs Expenditures

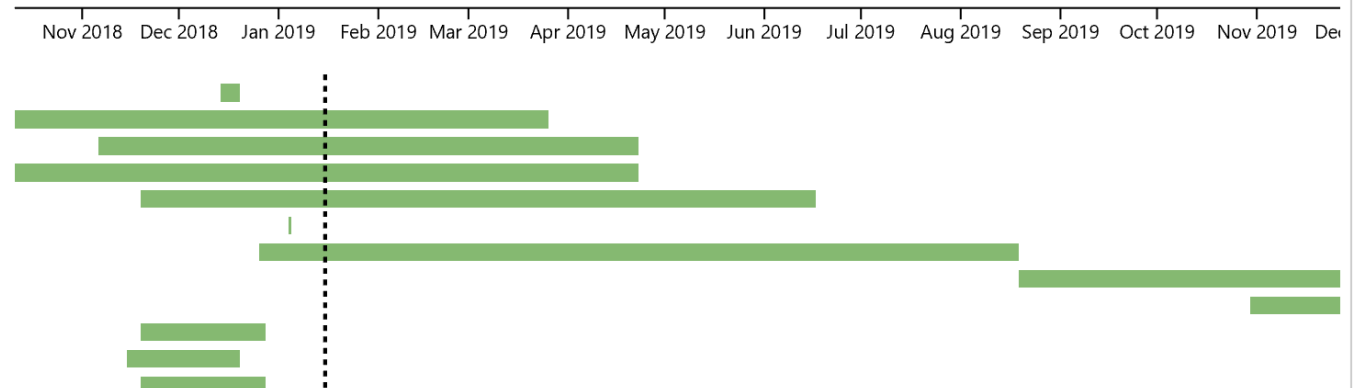


## Expenditures by Object



## Schedule

- GPS2.R1000 - Stage2B - Construct Working Platform for Shaft Work
- GPS2.R1010 - Stage2C - Prepare and Submit Submittals
- GPS2.R1020 - Stage2C - Review & Approve Submittals
- GPS2.R1030 - Stage2C - Procurement of Materials
- GPS2.R1040 - Stage2C - SFS & RLS Diaphragm Wall Work
- GPS2.R1050 - Stage2C - RLS Barrettes Work
- GPS2.R1060 - Stage2C - Pre-Excavation Work
- GPS2.R1070 - Stage2C - Shaft Excavation Work
- GPS2.R1080 - Stage2C - Concrete Base Slabs
- GPS2.R1090 - Stage2B - Guidewall Installation - RLS Shaft & Barrettes
- GPS2.R1100 - Stage2B - Guidewall Installation - SFS Shaft
- GPS2.R1110 - Stage2B - Diaphragm Wall Mobilization & Setup



As of : 2018 - 12





Major Accomplishments this Period	
▼	
Design	<div><div>- SVCW provided follow-up responses to SPJV's resubmittal of the 60% design package.</div><div>- Continued design of instrumentation and controls for RLS control strategies.</div><div>- Completed second revision of all FoP control Narratives</div><div>- Completed Master Equipment List with naming convention_x000D_</div></div>
Procurement of Trade Packages	<div><div>- Owner advisors' completed the independent 60% cost estimate review of the Stage 2D package.</div><div>- SPJV finished negotiating their lump sum cost with SVCW for Stage 2D.</div><div>- SVCW updated the risk register for SRF/WIFIA fund requirements.</div><div>- Completed WIFIA certification letter for procurement.</div></div>
Construction	<div><div>- Continued the installation of guidewalls for the RLS and SFS</div><div>- Completed mobilization of the diaphragm wall equipment and site layout</div></div>

3 - Month Look Ahead

	▲ Start	End	January	February	March
Installation of RLS and SFS Support of Excavation Walls	November 12, 2018	March 17, 2019	X	X	X
Develop 100% Design Package	December 6, 2018	July 31, 2019	X	X	X

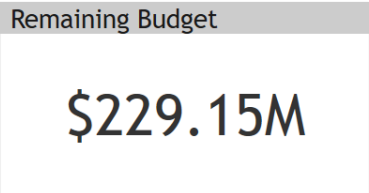
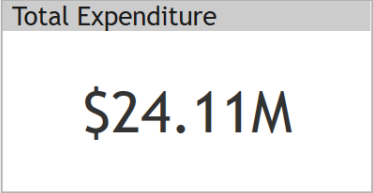
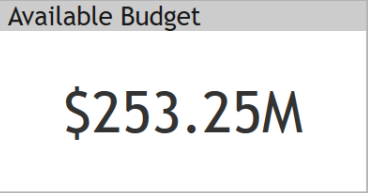
Upcoming Key Activities
Continue detailing RLS and Headworks facilities
Finalize equipment list with proposed manufacturers
Complete the installation of the RLS and SFS Support of Excavation Walls

Safety Spot Light	
Category	Value
Lost Time	0
Near Misses	0
Recorded Losses	0

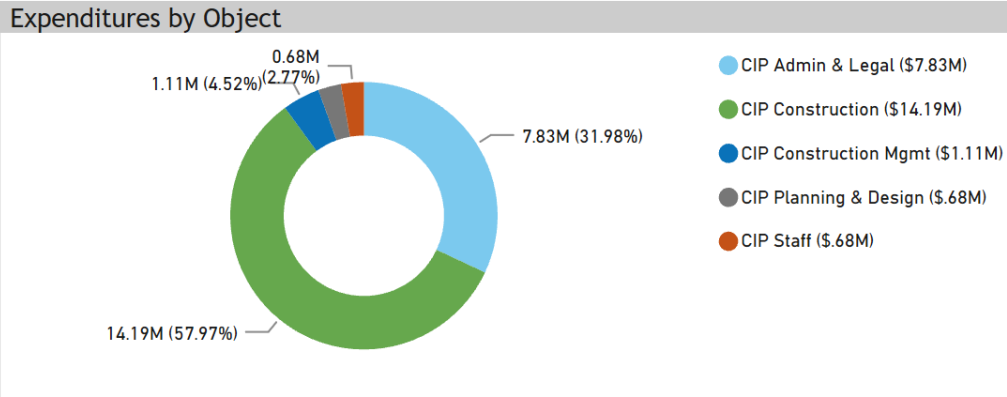
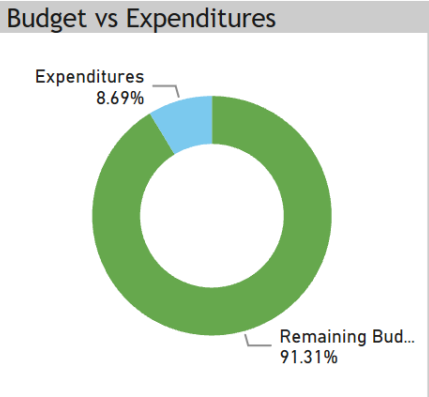
# Gravity Pipeline Progressive DB Project



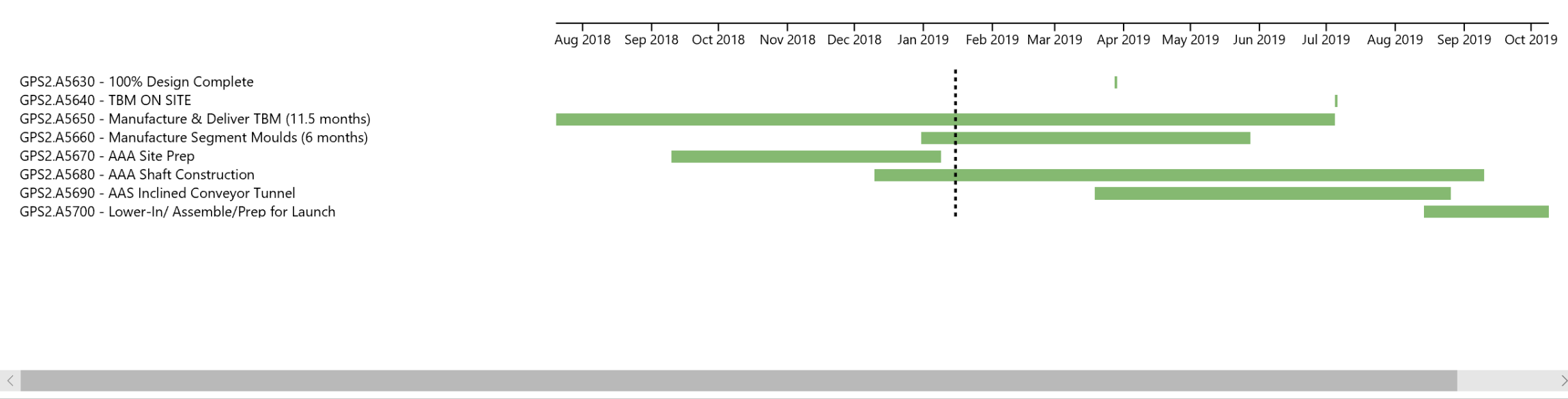
The Gravity Pipeline (GP) Project consists of the design, construction, permitting, start-up, commissioning, and closeout of approximately 17,600 feet of wastewater gravity FRP pipe inside a concrete-segment tunnel. The work includes three shafts and will interface directly with the Front of Plant (FoP)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



Milestone Schedule		
	Start	Finish
Notice to Proceed - Stage 1 Services		10/13/2017
Basis of Design Report (BODR)		12/3/2018
30 Percent (%) Design Documents		11/29/2018
60 Percent (%) Design Documents		1/21/2019
Stage 2A Approval - TBM Purchase, Airport Clear and Grub, Crane purchase		8/23/2018
Stage 2B Approval - Balance of Stage 2 Work	9/17/2018	11/8/2018
Stage 1 Services Complete	10/13/2017	1/21/2019
Airport Access Shaft Construction	12/14/2018	9/4/2019



## Schedule



## Major Accomplishments this Period

▼	
Design	<ul style="list-style-type: none"> <li>- Continued sediment transport modeling</li> <li>- Continued air flow and H2S concentration modeling. Coordinating with FoP DB team</li> <li>- Progressed Tunnel lining and Instrumentation &amp; Monitoring design to 100%</li> <li>-Continued design of Bair Island and San Carlos shafts to 60%</li> </ul>
Procurement of Trade Packages	<ul style="list-style-type: none"> <li>- Selected Tunnel Segment supplier</li> <li>- Ongoing discussions with FRP pipe manufacturers</li> <li>- Outreach in conformance with SRF and WIFIA funding requirements</li> </ul>
Construction	<ul style="list-style-type: none"> <li>- Completed TBM Launch Site preparation</li> <li>- SOE subcontractor mobilized and began excavating slurry walls</li> </ul>

## Upcoming Key Activities

Airflow and grit transport design
Airport Access shaft coordination with San Carlos Airport
Inner Bair Island retrieval shaft design
San Carlos Pump Station connection piping design
Construction of Airport Access Shaft support of excavation
Tunnel conveyor procurement

## 3 - Month Look Ahead

	▲ Start	End	January	February	March
TBM Procurement	January 22, 2018	August 23, 2019	X	X	X
Bair Island Shaft Design (100% Design)	August 8, 2018	January 29, 2019	X		
Hydraulic Design (100% Design)	August 15, 2018	January 29, 2019	X		
San Carlos Shaft Design (100% Design)	August 15, 2018	January 29, 2019	X		
Conveyor and other tunneling equipment	November 8, 2018	August 5, 2019	X	X	X
Airport Access Shaft Construction	December 14, 2018	August 5, 2019	X	X	X

## Safety Spot Light

Category	Value
Lost Time	0
Near Misses	0
Recorded Losses	0

# Pump Stations



All SVCW pump stations require replacement or rehabilitation. Menlo Park PS will be rehabilitated. Redwood City PS will be replaced. Belmont PS will be rehabilitated. San Carlos PS is no longer needed due to the new gravity pipeline; flows from San Carlos and Belmont will enter into the gravity pipeline via a drop structure at the current San Carlos pump station site. Flows from the MPPS and RCPS will flow through the new 48-inch force main to a drop structure at Inner Bair Island. This project also includes replacement of the Belmont Force Main and will be implemented via a Progressive Design-Build Process.

## Available Budget

\$103.93M

## Total Expenditure

\$1.49M

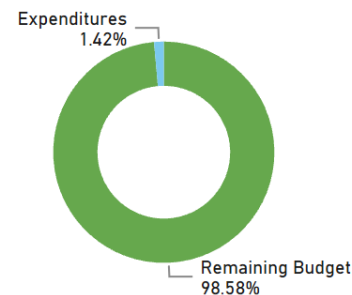
## Remaining Budget

\$102.44M

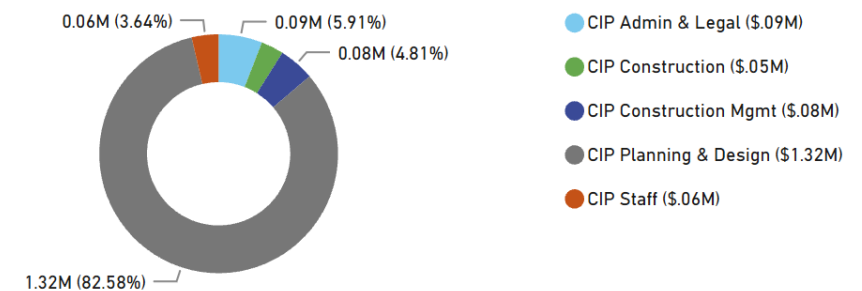
## Milestone Schedule

	Start	Finish
PSI Project Procurement process approved by Commission	7/13/2018	7/13/2018
Issue RFQ	7/16/2018	7/16/2018
D/B Selection Process - Short List Established	7/16/2018	9/28/2018
Issue RFP	10/1/2018	
D/B Selection Process - Proposals Submitted	12/10/2018	
D/B Interviews Completed and D/B Firm Selected	1/11/2019	
Recommend Award of DB Agreement to Commission	2/18/2019	

## Budget vs Expenditures



## Expenditures by Object



## Schedule

Mar 2019 Apr 2019 May 2019 Jun 2019

BPS-BPR.1440 - Obtain BCDC Permit - BPS  
 BPS-BPR.1460 - DJPA/WRA TO for Mitigation Monitoring - BPS  
 MPPS.1560 - DJPA/WRA TO for Mitigation Monitoring - MPPS  
 MPPS.1590 - Obtain BCDC Permit - MPPS  
 RCPS.1510 - Obtain BCDC Permit - RCPS  
 RCPS.1530 - DJPA/WRA TO for Mitigation Monitoring - RCPS



Major Accomplishments this Period	
▼	
Design	<div>- Reviewed the DB firms' proposals</div> <div>- Received DB firms' indicative cost proposals</div>

Upcoming Key Activities
<div>Select Design Buildier</div> <div>Issue NTP for Stage 1 Services</div> <div>Begin developing the Basis of Design Report for the project</div>

3 - Month Look Ahead					
	Start	End	January	February	March
	▲				
Select Design Builder	December 10, 2018	January 11, 2019	X		
Hold D/B Interviews and Review Indicative Cost	January 9, 2019	January 10, 2019	X		
Commision Approval to Award Contract	February 18, 2019	February 18, 2019		X	
Stage 1 Notice of Award	February 18, 2019	February 18, 2019		X	

Safety Spot Light	
Category	Value
Lost Time	0
Near Misses	0
Recorded Losses	0

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## **AGENDA ITEM 6A**

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**SILICON VALLEY CLEAN WATER**  
*Memorandum*

The following are the scheduled Commission Meeting dates for calendar year 2019. Regular Commission Meetings are held on the third Monday of each month at 8:00 a.m. Please review the dates below and be prepared to discuss any needed changes at the Commission meeting of January 28, 2019.

January 28, 2019 - Special
February 18, 2019 (Presidents' Day)
March 18, 2019
April 15, 2019
May 20, 2019
June 17, 2019
July 15, 2019
August 19, 2019
September 16, 2019
October 21, 2019
November 18, 2019
December 16, 2019

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## **AGENDA ITEM 7A**

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**MINUTES OF SILICON VALLEY CLEAN WATER  
SPECIAL MEETING – December 6, 2018  
8:00 a.m.**

**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 John Seybert, Redwood City – Chair  
Council Member Warren Lieberman, PhD., Belmont– Vice Chair  
Mayor Robert Grassilli, San Carlos – Secretary  
Board Member George B. Otte, P.E., West Bay Sanitary District

**Staff, Consultants and Visitors Present**

Teresa A. Herrera, SVCW Manager  
Christine C. Fitzgerald, SVCW Legal Counsel  
Jennifer Flick, Human Resources Manager  
Matt Anderson, SVCW Chief Financial Officer/Administration Manager  
Monte Hamamoto, SVCW Chief Operating Officer  
Kim Hackett, SVCW Authority Engineer  
Arvind Akela, SVCW Engineering Director  
William Bryan, SVCW Senior CIP Manager  
Jessica Mangual, SVCW Administrative Clerk  
EJ Shalaby, Senior Consultant, DNS Strategic Partners  
Derek Rampone, City of Redwood City  
Molly Flowerday, City of Redwood City  
Bill Tanner, Tanner Pacific, Inc.  
Mark Minkowski, Kennedy/Jenks  
Aren Hansen, Brown & Caldwell  
Sheldon Chavan, Chavan & Associates LLP  
David Ferrie, Cascade Integration & Development  
Philip Leung, 928 Governor's Bay Drive, Redwood City, CA  
Herman Young, 930 Governor's Bay Drive, Redwood City, CA  
Charlie Joyce, Brown & Caldwell  
Thomas Fluehr, Shea Parsons Joint Venture  
Bruce Burnworth, MPF Consulting

**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**

Ms. Herrera discussed holiday tree safety.

Reporting on a previous Commission request regarding use of Front of Plant, Stage 2A allowance funds: the allowance covered 40 additional piles; no additional piles were needed.

A status on both SRF and WIFIA funding was provided; both program applications are in progress.

In appreciation for the outgoing Commissioners, Messrs. Seybert and Grassilli, two SVCW parking lots were named for them; the signs that will be placed were presented to the two outgoing Commissioners.

#### **ITEM 6**

##### **MATTERS OF COMMISSION MEMBER'S INTEREST**

Elect a new Commission Chair and new Secretary to be effective at January 2019 meeting. Nominate and vote for Warren Lieberman to the position of Commission Chairman

**Motion/Second: Mr. Seybert / Mr. Grassilli**

The Motion carried by Unanimous Roll Call Vote.

Nominate and vote for George Otte to the position of Commission Secretary

**Motion/Second: Mr. Grassilli / Mr. Lieberman**

The Motion carried by Unanimous Roll Call Vote

Note that 2019 meetings will be moved to third Mondays of each month.

#### **ITEM 7**

##### **CONSIDERATION OF MOTION APPROVING CONSENT CALENDAR ITEMS 7A THROUGH 7F**

**Motion/Second: Mr. Lieberman / Mr. Otte**

The Motion carried by Unanimous Roll Call Vote

### **ITEM 8A**

The Commission was provided a written staff report with supporting documentation, as well as visual and oral background information on the public project and proposed real property acquisitions necessary for the project for Agenda Items 8A, 8B and 8C. Statutory requirements for adoption of Resolutions of Necessity under the laws of Eminent Domain were reviewed, including required findings and that proper notice of the Commission's public hearing was given to all of the property owners and that owners Young/Leung and Lau/Chang made written requests to appear and be heard at the hearing.

The public hearing for Agenda Item 8A was opened and the Commission received testimony from Mr. Herman Young who expressed his concerns regarding the impact of the project on his home and family. The Commission directed staff to provide the Chair's personal email to Mr. Young for his use, if needed.

Motion to close public hearing on Item 8A.

**Motion/Second: Mr. Grassilli / Mr. Otte**

The Motion carried by Unanimous Roll Call Vote

PUBLIC HEARING TO CONSIDER RESOLUTION OF NECESSITY AUTHORIZING EMINENT DOMAIN PROCEEDINGS FOR THE ACQUISITION OF A SUBSURFACE EASEMENT FROM PROPERTY LOCATED AT 930 GOVERNOR'S BAY DRIVE, REDWOOD CITY (APN 095-380-210) FOR THE GRAVITY PIPELINE PROJECT.

Move adoption of RESOLUTION OF THE COMMISSION OF SILICON VALLEY CLEAN WATER DECLARING THE NECESSITY FOR AND AUTHORIZING THE ACQUISITION OF CERTAIN INTERESTS IN REAL PROPERTY FOR THE REGIONAL ENVIRONMENTAL SEWER CONVEYANCE UPGRADE PROGRAM GRAVITY PIPELINE PROJECT (APN 095-380-210 YOUNG/LEUNG) (2/3<sup>rds</sup> weighted vote count required).

**Motion/Second: Mr. Grassilli / Mr. Otte**

The Resolution carried by Unanimous Roll Call Vote

### **ITEM 8B**

The background information and statutory requirements for adoption of Resolutions of Necessity under the laws of Eminent Domain provided prior to agenda item 8A is incorporated here by reference. Details on the second real property addressed in Agenda Item 8B was provided and the public hearing for this item was opened. The Commission recognized and received testimony from Mr. Philip Lau who concurred with the previous testimony of Mr. Young and requested soil settlement monitoring. The Commission noted

to Mr. Lau and Mr. Young that they should contact the SVCW Manager directly with any concerns they have.

Motion to close public hearing on Item 8B.

**Motion/Second: Mr. Grassilli / Mr. Otte**

The Motion carried by Unanimous Roll Call Vote

PUBLIC HEARING TO CONSIDER RESOLUTION OF NECESSITY AUTHORIZING EMINENT DOMAIN PROCEEDINGS FOR THE ACQUISITION OF A SUBSURFACE EASEMENT FROM PROPERTY LOCATED AT 928 GOVERNOR'S BAY DRIVE, REDWOOD CITY (APN 095-380-220) FOR THE GRAVITY PIPELINE PROJECT.

Move adoption of RESOLUTION OF THE COMMISSION OF SILICON VALLEY CLEAN WATER DECLARING THE NECESSITY FOR AND AUTHORIZING THE ACQUISITION OF CERTAIN INTERESTS IN REAL PROPERTY FOR THE REGIONAL ENVIRONMENTAL SEWER CONVEYANCE UPGRADE PROGRAM GRAVITY PIPELINE PROJECT (APN 095-380-220 LAU/CHANG) (2/3<sup>rd</sup>s weighted vote count required).

**Motion/Second: Mr. Grassilli / Mr. Lieberman**

The Resolution carried by Unanimous Roll Call Vote

#### **ITEM 8C**

The public hearing for this item was opened. There were no public speakers and a motion was made to close the public hearing.

**Motion/Second: Mr. Otte / Mr. Lieberman**

The Motion carried by Unanimous Roll Call Vote

PUBLIC HEARING TO CONSIDER RESOLUTION OF NECESSITY AUTHORIZING EMINENT DOMAIN PROCEEDINGS FOR THE ACQUISITION OF A SUBSURFACE EASEMENT FROM PROPERTY LOCATED WITHIN A COMMON AREA AND PRIVATE STREET ALONG GOVERNOR'S BAY DRIVE, REDWOOD CITY FOR THE GRAVITY PIPELINE PROJECT.

Move adoption of RESOLUTION OF THE COMMISSION OF SILICON VALLEY CLEAN WATER DECLARING THE NECESSITY FOR AND AUTHORIZING THE ACQUISITION OF CERTAIN INTERESTS IN REAL PROPERTY FOR THE REGIONAL ENVIRONMENTAL SEWER CONVEYANCE UPGRADE PROGRAM GRAVITY PIPELINE PROJECT LOT B, LOT F AND PORTION OF GOVERNOR'S BAY DRIVE HOA) (2/3<sup>rd</sup>s weighted vote count required).



**Motion/Second: Mr. Lieberman / Mr. Otte**

The Resolution carried by Unanimous Roll Call Vote

**ITEM 8D**

CONSIDERATION OF RESOLUTION APPROVING STAGE 2D AMENDMENT TO THE FRONT OF PLANT (FOP) DESIGN-BUILD AGREEMENT WITH SHEA PARSONS JOINT VENTURE (SPJC), APPROVE TASK ORDER FOR OWNER'S ENGINEERING ADVISOR SERVICES FOR BROWN & CALDWELL AND FREYER & LAURETA AND APPROVE A TASK ORDER FOR CONSTRUCTION QUALITY ASSURANCE SERVICES FOR TANNER PACIFIC ASSOCIATED WITH THE FRONT OF PLANT PROJECT (CIP #9502). APPROVE PROGRAM MANAGEMENT SERVICES FOR THE OVERALL RESCU PROGRAM (CIP # 6008, 9501 AND 9502)

A staff presentation was provided giving details of and rationale for each action and including a 3D model of the proposed Front of Plant project facilities.

- i. Move adoption of RESOLUTION APPROVING STAGE 2D AMENDMENT TO THE DESIGN-BUILD AGREEMENT FOR FRONT OF PLANT PROJECT (CIP #9502) AUTHORIZING EXECUTION OF STAGE 2D AMENDMENT AND AUTHORIZING MANAGER TO APPROVE CONTRACT CHANGE ORDERS AND ALLOWANCES UP TO TEN PERCENT (10%) OF THE CONTRACT PRICE AND SAID AMENDMENT – SHEA PARSONS JOINT VENTURE - \$93,904,235
- ii. Move approval of TASK ORDER SCOPE AND BUDGET FOR OWNER'S ADVISOR SERVICES FOR THE FRONT OF PLANT PROJECT STAGE 2D (CIP #9502) IN AN AMOUNT NOT TO EXCEED \$3,200,000 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT (10%) CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – BROWN AND CALDWELL CONSULTANTS.
- iii. Move approval of TASK ORDER SCOPE AND BUDGET FOR OWNER'S ADVISOR SERVICES FOR THE FRONT OF PLANT PROJECT STAGE 2D (CIP #9502) IN AN AMOUNT NOT TO EXCEED \$600,000 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT (10%) CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – FREYER AND LAURETA CONSULTANTS.
- iv. Move approval of TASK ORDER SCOPE AND BUDGET FOR OWNER'S ADVISOR SERVICES FOR THE FRONT OF PLANT PROJECT STAGE 2D (CIP #9502) IN AN AMOUNT NOT TO EXCEED \$400,000 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT (10%) CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – BEECHER ENGINEERING CONSULTANTS.
- v. Move approval of TASK ORDER SCOPE AND BUDGET FOR CONSTRUCTION QUALITY ASSURANCE SERVICES FOR THE FRONT OF PLANT PROJECT STAGE 2D (CIP #9502) IN AN AMOUNT NOT TO EXCEED \$7,700,000 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT (10%)

CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS –  
TANNER PACIFIC, INC.

- vi. Move approval of TASK ORDER SCOPE AND BUDGET FOR PROGRAM MANAGEMENT SERVICES FOR RESCU PROGRAM (CIP #6008, 9501 AND 9502) IN AN AMOUNT NOT TO EXCEED \$5,716,650 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT (10%) CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS – KENNEDY/JENKS CONSULTANTS.

A motion to approve Agenda Item 8D, Subitems i through vi was made.

**Motion/Second: Mr. Otte / Mr. Lieberman**

The Motion carried by Unanimous Roll Call Vote

**ITEM 9**  
CLOSED SESSION

Closed Session was called to order at 9:14 a.m.

**ITEM 10**  
RECONVENE FROM CLOSED SESSION

Open Session reconvened at 9:23 a.m.

Ms. Fitzgerald reported that as to Item 9A there was no reportable action taken and direction was given to Counsel. As to Item 9B, no reportable action was taken.

**ITEM 11**  
ADJOURN

There being no further business, the meeting adjourned at 9:24 a.m.

Minutes prepared by Teresa A. Herrera

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George Otte, Secretary

## **AGENDA ITEM 7B**

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**SVCW WARRANT REGISTER**

SVCW Warrant Register dated November and December 2018 and January 2019, were scanned and a copy was emailed to Commissioners and Legal Counsel on January 23, 2019.

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## AGENDA ITEM 7C

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**CONSIDERATION TO REVISE ADMINISTRATIVE POLICY 2017-01,  
STATEMENT OF DEBT MANAGEMENT POLICY**

**ISSUE**

Approve revisions to SVCW Administrative Policy 2017-01, Statement of Debt Management Policy

**BACKGROUND**

SVCW's Administrative Policy 2017-01, Debt Management Policy, establishes policies and procedures for the issuance and management of bonds, capital leases, and other forms of indebtedness, providing guidance to ensure for the issuance and management of the Authority's debt portfolio, with the goal of financing its capital improvement program in an equitable and low-cost way.

**DISCUSSION**

SVCW amends the Debt Management Policy to be consistent with changes in federal and state securities laws and pronouncements of the Securities and Exchange Commission. Amendments are also made to accommodate changes in strategies.

Proposed changes to the policy are attached and include:

- Grammatical and definition changes offered for clarity
- Language needed to accommodate anticipated participation in governmental loan programs such as the federal Water Infrastructure Finance and Innovation Act (WIFIA). Specifically, the language increases short-term debt limits if used for interim financing of projects.
- Recognition of new Government Code Section 5852.1 (Senate Bill 450), requiring agencies to disclose good faith estimates in a public meeting prior to authorization of issuance of bonds.

The SVCW Manager recommends approval of SVCW Administrative Policy 2017-01, Revision B, dated January 28, 2019.

**FINANCIAL IMPACT**

There are no direct financial impacts to this action.

**RECOMMENDATION**

Move adoption of RESOLUTION APPROVING AND ADOPTING REVISION B TO ADMINISTRATIVE POLICY 2017-01, STATEMENT OF DEBT MANAGEMENT POLICY

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Rev: A BRev Date: 04/12/18 01/28/2019

Issue Date: 3/23/2017

Approved by Commission at Meeting of ~~March 23, 2017~~ January 28, 2019 by Resolution No. SVCW 19-xx17-05

**SUBJECT:** Statement of Debt Management Policy

**APPLICABLE CODES AND REGULATIONS:**

Government Code Section 8855, Government Code 5852.1

**PURPOSE:**

This Debt Management Policy (the “Policy”) establishes the comprehensive policies and procedures for the issuance and management of bonds, capital leases, and other forms of indebtedness (“Debt”) of Silicon Valley Clean Water (the “Authority”, or “SVCW”) The purpose of the Policy is to identify Debt policy objectives, improve the quality of decision making processes, provide a basis for the determination of the appropriate structures, diversify SVCW’s Debt portfolio, to the extent such is cost effective, to support its financial needs and to demonstrate a commitment to best practices in municipal debt management planning and execution.

This Policy provides guidelines for the issuance and management of the Authority’s Debt portfolio. Adherence to the policy will help ensure that the Authority maintains a diversified Debt portfolio that supports its financing needs and minimizes the Authority’s cost of funding.

The Commission of SVCW (the “Commission”) may, in its sole discretion, approve Debt that deviates from this Policy, upon the recommendation of management. The failure of SVCW to comply with any provision of this Policy shall not affect the authorization or the validity or enforceability of any Debt that is otherwise issued in accordance with law. SVCW shall conduct an annual review and evaluation of this Policy. As appropriate, SVCW shall amend the Policy to be consistent with changes in the federal and state securities laws, pronouncements of the Securities and Exchange Commission and such other matters as the Chief Financial Officer (“CFO”) deems necessary or desirable.

The Authority’s overarching goal in issuing Debt is to respond to, and provide for the funding of capital projects and other financing needs of the Authority’s wastewater system while ensuring that Debt is issued and managed prudently. Additional Policy goals are to maintain appropriate Debt and debt service levels through collaborative long-term planning with the Member Agencies, as defined herein, and to maintain a sound fiscal position and protect the credit quality of SVCW.

The Authority believes that Debt can provide an equitable means of financing projects for customers of the Member Agencies and providing access to new capital needed for infrastructure and project needs. Debt will be used to meet financing needs if (i) it meets the goals of equitable treatment of all customers of the Member Agencies, respectively, both current and future; (ii) it provides for an effective means of paying for assets over their useful lives in lieu of paying for the assets over a much shorter period with cash and thereby avoiding sharp spikes in customers’ rates; (iii) it is fiscally prudent, responsible, and diligent under the prevailing economic conditions; and (iv) if there are other important policy reasons therefor.

## **POLICY:**

### CREATION AND GOVERNING PRINCIPLES

In the issuance and management of Debt, the Authority shall comply with all legal constraints and conditions imposed by federal, state and local law. The following section highlights the key governing documents and certain Debt limitations.

### GOVERNING LAWS

**Joint Powers Act** – The Authority is a Joint Exercise of Powers Authority (JPA) organized under the provisions of California law governing the joint exercise of powers, being Chapter 5, Division 7, Title 1 of the Government Code of the State of California. The JPA Act gives the Authority the right to contract, construct works, and to incur indebtedness. The Authority shall comply with all constraints of the JPA Act.

**Governance** - The Authority is a ~~Joint Exercise of Powers Authority (JPA)~~ created by and among the City of Belmont, the City of Redwood City, the City of San Carlos and West Bay Sanitary District (the “Member Agencies”), all of which are located in Silicon Valley between the cities of San Francisco and San Jose. SVCW is governed by a four-member Commission consisting of one appointed member from each of the Members Agencies’ elected governing bodies. The Authority was created through an agreement by and among the Member Agencies (the “JPA Agreement”) to provide wastewater transmission, treatment and effluent disposal for the Member Agencies and to own and operate the related wastewater facility and all appurtenances related thereto. The Authority shall comply with all constraints of the JPA Agreement.

**Federal Tax Law** – The Authority shall issue and manage Debt in accordance with the limitations and constraints imposed by federal tax law, to maximize its ability to sell tax-exempt debt. Such constraints include, but are not limited to, private activity tests, review of eligible projects, spend-down tests, and arbitrage rebate limitations.

**Securities Law** – The Authority shall comply with the requirements of federal and state securities laws in offering Authority Debt and the Authority shall comply with securities law requirements in providing ongoing disclosure to the securities markets.

### ETHICAL STANDARDS GOVERNING CONDUCT

Member Agencies’ representatives, management and Commissioners of the Authority, consultants, service providers, and underwriters to the Authority shall adhere to standards of conduct as stipulated by the California Political Reform Act, as applicable. All debt financing participants shall maintain the highest standards of professional conduct at all times, in accordance with MSRB Rules, including G-37. Additionally, all debt financing participants will assist Authority staff to achieve its goals and objectives as defined in this Policy; shall make cooperation with Authority staff its highest priority and shall take reasonable actions to avoid conflicts of interest and immediately advise SVCW of possible conflicts of interest.

## PERMITTED DEBT BY TYPE

The Authority may legally issue both short-term and long-term Debt, subject to the limitations of this Policy, using the debt instruments described below. The CFO, in consultation with the SVCW Manager, Authority General Counsel, Bond Counsel, and Municipal Advisor shall determine the most appropriate instrument for a proposed Debt issuance.

**JPA Revenue Bonds** – SVCW shall issue Limited Obligation Bonds to make proceeds available to finance the acquisition, construction and/or improvement of SVCW's wastewater system. The obligations represent special limited obligations of SVCW which are payable solely from and secured solely by the Net Revenues (as such term is defined in the respective governing documents), pledged under the indenture consisting primarily of payments made by participating Member Agencies.

**Lines of Credit** - The Authority may enter into financing arrangements providing for interim cash liquidity through a source of funds that can be readily accessed by the Authority for capital needs. The period of a Line of Credit may not exceed five years from its issuance date. Commission action is sufficient to legally authorize the establishment of a line of credit.

**Commercial Paper** – SVCW may establish a commercial paper program ("Commercial Paper Program") for the purpose of providing funds to finance the acquisition, construction, and rehabilitation of capital improvements and the financing of vehicles and equipment. A Commercial Paper Program will may be utilized and commercial paper obligations notes will be issued from time to time to provide financing for projects, subject to the conditions that the projects and project financing will have prior approval from the Commission. The Authority's commercial paper shall be secured by amounts payable by the Member Agencies to the Authority under a lease, installment sale agreement, or a contract of indebtedness. The CFO shall provide a written report to the Commission twelve months following the initial issuance of commercial paper obligations notes and annually thereafter so long as there is any commercial paper outstanding. The report shall summarize the status of projects financed with commercial paper; and identifying any certificates of participation or other long term obligation refunding commercial paper obligations. notes

**Capital Leases** – Capital equipment and personal property SVCW may be eligible for capital lease financing. Eligible equipment must have per unit cost of at least \$100,000 unless it is an integral part of a system (such as a computer network) then the aggregate of the various components must be at least \$100,000. The useful life of the asset will be in excess of five years and at least 120% of the financing and refinancing term.

**Bond Anticipation Notes** – SVCW may issue short-term indebtedness ("BANs") in anticipation of the issuance of revenue bonds. The BANs will have a final maturity not exceeding five years from the date of issuance.

**Refunding Revenue Bonds** – The Authority is authorized to issue refunding revenue bonds to refund outstanding Authority indebtedness pursuant to the State of California local agency refunding revenue bond law (Articles 10 and 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California).

**Loans** – The Authority is authorized to enter into loans, installment payment obligations, or other similar funding structures secured by a prudent source, or sources of repayment. SVCW may enter into Loans with private financial institutions, or federal, state agencies.

**Other Obligations** - There may be special circumstances when other forms of financing are appropriately utilized by SVCW. SVCW will evaluate such proposed transactions on a case-by-case basis. Such other forms include, but are not limited to, grant anticipation notes and judgment or settlement obligation bonds.

## LIMITATIONS ON DEBT ISSUANCE

The CFO shall determine whether proposed Debt transactions comply with the Debt limitations prescribed by the Policy. Proposed Debt transactions that meet the limitations of the Policy will be subject to approval by resolution of the Commission as prescribed by state law. In the event the CFO determines any proposed Debt transaction exceeds the limits imposed by this Policy, the Commission may approve such transaction by majority vote.

**Senior Lien Long-Term Debt** – The Authority’s senior lien long-term Debt, for which revenues are pledged, shall be limited to that amount for which each participating Member Agency can generate wastewater revenues to the extent that (i) current year gross revenues sufficient to pay operations and maintenance costs and its allocable share of Authority Debt service and (ii) projected net revenues of each Member Agency are equal to 120% of the participating Member Agency’s allocable share of Authority Debt service. The calculation of Debt service coverage shall include amounts on hand in the unencumbered funds. The Authority will work collaboratively with the Member Agencies to structure Debt so as to achieve ~~185%~~ senior lien debt service coverage at the Member Agency level that will ~~to~~ retain the strong credit ratings of the Authority’s Debt.

**Short-Term Debt** – Short-term Debt with a term to maturity of less than five years is issued to 1) provide for funding for assets that are short-lived but due to cost are more equitable to finance or 2) provide financing for the acquisition and/or construction of long-lived capital projects to be refunded by long-term Debt financing described above. Due to the size of the current funding requirements of the capital improvement program, (“CIP”), short-term debt may represent an amount equal to 30% of its total Debt at the time of issuance. SVCW will periodically assess this limitation and based upon the CIP or rating agency standards management may recommend changes to this Policy. The calculation of short-term Debt shall include variable rate demand obligations, the authorized amount of commercial paper, any notes/bonds with a final maturity equal to or less than five years, and any variable rate Debt. SVCW may exclude the principal from the 30% limitation if the Authority intends to pay such principal from the proceeds of bonds, notes or other obligations of the Authority or moneys other than Net Revenues.

**Subordinate Lien Long-Term Debt** - The Authority’s subordinate lien Debt, for which revenues are pledged, shall be limited to that amount for which current and projected net revenues of each participating Member Agency can generate overall Debt service coverage of at least 100 percent.

**Variable Rate Debt** – The Authority is authorized to issue variable rate Debt including, but not limited to, public market indexed notes, indexed notes or loans placed directly with financial institutions and other alternative variable rate and market access products as well as traditional variable rate demand obligations backed by bank liquidity facilities. Prior to the issuance of variable rate Debt, the savings and other possible advantages compared to a fixed rate borrowing will be evaluated and a comparative analysis presented to the Commission as part of the approval process. Based upon rating agency standards, the Authority’s variable rate Debt shall not exceed 30 percent of its total Debt at the time of issuance of any variable rate Debt.

**Capital Equipment Leases** - The outstanding aggregate principal amount of capitalized lease agreements in connection with equipment may not exceed \$5,000,000; however, such amount shall increase by five percent each fiscal year starting with fiscal year 2016/17. SVCW will monitor the amount of capital equipment lease outstanding and maximum limitation to ensure sufficient borrowing capacity.

## PURPOSE FOR BORROWING

The Authority shall issue long term Debt (such Debt that has a final maturity of more than five years from its date of issuance) solely for the purpose of financing the cost of design, acquisition, and/or construction of wastewater system improvements in furtherance of the Authority's Capital Improvement Program ("CIP") or for refunding existing Debt. The Authority will not issue Debt to fund operations. The Authority shall issue short-term Debt only as provided for in this Policy.

## **PROCEDURE:**

### PROCEDURE I. INTEGRATION OF CAPITAL PLANNING AND DEBT ACTIVITIES

#### **Evaluating Capital Improvement Program Spending**

The Authority shall develop and maintain a capital finance model to evaluate the impact of capital program spending, operations and maintenance costs, and Debt service on its financial condition. To that end, the CFO shall oversee the ongoing maintenance of quantitative modeling that includes, but is not limited to, the following:

- Historic and projected cash flows; [including capital expenditures and operating costs;](#)
- ~~Historic and projected capital expenditures;~~
- ~~Historic and projected operating costs;~~
- Historic and projected fund balances, including the Operating Fund, the Rate Stabilization Fund, (if any), Pay-As-You-Go Fund, Debt Proceeds Fund, and Debt Service Reserve Fund, if any,
- Historic and projected Debt service coverage;
- The most efficient mix of funding sources (long-term Debt; short-term Debt, and cash);
- Projected revenue requirements; and
- [Collaborative modeling with Member Agencies to establish](#) ~~P~~projected rates and charges.

The following steps outline the Authority's approach to Debt management.

- The Authority will evaluate financing options annually as part of the update to the Long-Range Financial Plan capital project.
- The Authority will seek to pay for all capital projects from current revenues and available reserves prior to or in combination with the use of Debt.
- The Authority will issue Debt only in the case where there is an identified source of repayment. The Authority will work with its Member Agencies to reasonably demonstrate that (i) projected revenues are sufficient to pay for the forecasted operation and maintenance expenses and proposed Debt service together with all existing Debt service covered by such fixed revenues, or (ii) additional projected revenues have been identified as a source of repayment in an amount



sufficient to pay for forecasted operations and maintenance expenses and the proposed Debt.

- Debt issuance for a capital project will not be considered unless such issuance has been incorporated into the capital improvement plan and Long Range Financial Plan.
- Wastewater rates and charges will be set by each participating Member Agency at adequate levels, which are fair and nondiscriminatory, to generate sufficient revenues to pay all operating and maintenance costs, to maintain sufficient operating reserves, and to pay Debt service costs, if necessary.

## PROCEDURE II. PROCUREMENT AND EVALUATION OF PROFESSIONAL SERVICES

**Appointment of Service Providers** – The CFO shall solicit from time to time bids, quotes or proposals, including sole source proposals, for the following services on an as needed basis:

- Municipal Financial Advisor – Service provider that ensures the Authority complies with all financial management procedures and policies and ensures successful closing for bond transactions. While serving as the Authority’s municipal advisor, a firm may not also engage in the underwriting of the Authority bond issue for which that firm acts as municipal advisor. A firm may not switch roles (i.e., from municipal advisor to underwriter) after a financial transaction has begun. SVCW may determine to utilize the services of independent financial municipal advisor(s) and feasibility consultant(s) (“MAFA”) on Debt financing when prudent. SVCW shall utilize a request for qualifications and/or request for proposals (“RFP”) to select a pool of such financial-municipal advisors to mitigate time constraints and reduce overhead costs of SVCW in procuring such services. Services shall be documented by contract and compensation shall be capped. Every MFA shall be registered with the Municipal Securities Rulemaking Commission (“MSRB”) and Securities and Exchange Commission (“SEC”). No municipal financial advisor shall serve as an underwriter on a transaction.
- Bond and Tax Counsel – Service provider that drafts appropriate documentation to ensure successful and timely closing and create valid and legally binding security for bond issues, and provide appropriate advice and take appropriate actions to ensure legal validity of bond issues under state and federal laws as applicable. The CFO and General Counsel shall jointly select bond, tax and /or disclosure counsel (“Bond Counsel”) for each transaction. SVCW General Counsel shall periodically review the performance of Bond Counsel with SVCW management in terms of quality and timeliness of legal services.
- Disclosure Counsel – Service provider that drafts offering documentation in connection with the sale of debt to ensure compliance with all federal and state securities laws and regulations; provides appropriate legal opinions in connection with the offering documentation under state and federal laws as applicable. The CFO and General Counsel shall jointly select disclosure counsel (“Disclosure Counsel”) for each transaction. SVCW General Counsel shall periodically review the performance of Disclosure Counsel with SVCW management in terms of quality and timeliness of legal services.



- **Rebate Consultant** – A Rebate Consultant shall be selected by RFP for all tax-exempt long-term obligations for a set term with 1-year extensions. Rebate analyses will be performed annually on the anniversary of the issuance, or as determined by SVCW, by the Rebate Consultant.

Nothing in this Policy shall prevent the Authority from using the same law firm from acting as both Bond and Disclosure Counsel.

### PROCEDURE III. TRANSACTION-SPECIFIC ACTIVITIES

#### **Method of Sale for Publically Offered Debt**

Unless otherwise justified and deemed necessary to minimize the costs and risks of the Authority's bond issue, SVCW will proceed with the sale of Debt on a competitive basis.

**Competitive Bid Method** - Such bids may take the form of hand-delivered or electronically transmitted offers to purchase the Debt. Authority Debt issued on a competitive bid basis will be sold to the bidder proposing the lowest true interest cost to the Authority provided the bid conforms to the official notice of sale.

**Negotiated Bid Method** – A negotiated bond issue will provide for the sale of Debt by negotiating the terms and conditions of the sale, including price, interest rates, credit facilities, underwriter or remarketing fees, and commissions. Examples of such sales include:

- Variable rate demand obligations;
- Commercial paper;
- An issue of debt so large that the number of potential bidders would be too limited to provide the Authority with truly competitive bids;
- An issue requiring the ability to react quickly to sudden changes in interest rates (e.g. refunding bonds);
- An issue requiring intensive marketing efforts to establish investor acceptance;
- An issue of debt with specialized distribution requirements; and
- An issue of debt sold during a period of extreme market disruption or volatility.

Variable rate demand obligations, or commercial paper, would be expected to be issued by negotiated sale. SVCW shall retain a minimum of two broker/dealers or remarketing agents for each issuance of variable rate demand obligations, or commercial paper equal to or exceeding \$100 million. The broker/dealers or remarketing agents shall be retained for a period co-terminus with the final maturity of any variable rate bonds provided that SVCW may replace a broker/dealer or remarketing agent with notice at any time for any reason in its sole discretion.

Underwriters and Remarketing Agents shall be selected by SVCW through a request for proposal process for each transaction. The performance of Remarketing Agents shall be monitored on a monthly basis. SVCW may replace a remarketing agent or broker-dealer with notice at any time.

If bonds are sold on a negotiated basis, the negotiations of terms and conditions shall include, but not be limited to, prices, interest rates, underwriting or remarketing fees, and underwriting spreads. The Authority, with the assistance of its [Municipal Financial](#) Advisor, shall evaluate the terms offered by the

underwriter(s). Guidelines with respect to price, interest rates, fees, and underwriting spreads shall be based on prevailing terms and conditions in the marketplace for comparable issuers.

If more than one underwriter is included in the negotiated sale of debt, the Authority shall establish appropriate levels of liability, participation and priority of orders. Such levels shall be based upon Authority policy with regards to the underwriting responsibility among the team members (Authority Staff and Counsel, ~~Financial-Municipal~~ Advisor and Bond and Disclosure Counsel), the desired allocation of total fees, and the desired distribution of bonds. Guidelines for establishing liability, participation, and priority of orders shall be based on prevailing terms and conditions in the marketplace for comparable issuers.

The Authority shall, with the assistance of ~~its-its Municipal Financial~~ Advisor, oversee the bond allocation process. The bond allocation process shall be managed by the lead underwriter, with the following requirements:

- The bonds are allocated fairly among members of the underwriter(s), consistent with the previously negotiated terms and conditions;
- The allocation process complies with all MSRB regulations governing order priorities and allocations;
- The lead underwriter shall submit to the CFO a complete and timely account of all orders, allocations, and underwriting activities with the investor names identified as appropriate.

The CFO shall require a post-sale analysis and reporting for each negotiated bond sale. The lead underwriter shall perform such analysis. A post-sale analysis will include, but not be limited to:

- Summary of the pricing, including copies of the actual pricing wires;
- Results of comparable bond sales in the market at the time of the Authority's pricing;
- Detailed information on orders and allocation of bonds, by underwriting firm;
- Detailed information on final designations earned by each underwriter; and
- Summary of total compensation received by each underwriter.

**Private Placements/Direct Loans** - In the event the Authority chooses to proceed with a loan, or private placement of any form of Debt from a non-governmental entity, the Authority will issue a request for proposal seeking bids from responsible and credit-worthy financial institutions. The request for bids shall include a description of the project and terms and conditions of the financing in accordance with prudent financial and industry standards. The Authority may award the Debt solely based upon true-interest cost but may take into consideration call features, debt service structure and the requirement of any reserve fund requirements prior to making any award.

### **Structural Elements**

**Pledge of Revenues** – The Authority's pledge of revenues shall be determined for each debt issue depending upon the debt instrument. Revenue Bonds of the Authority shall be repaid from revenues received from the Member Agencies, as defined in the governing documents related to the applicable revenue bonds.

**Maturity** – The Authority may issue tax-exempt debt with an average equal to 100% of the useful life of the assets, if warranted the Authority may issue tax-exempt debt with an average life greater than 100% of the average useful life of the assets, but only in compliance with federal tax code requirements and with the express approval of the Commission. The final maturity of the debt should be no longer than 40 years; however, the Commission may expressly approve a final maturity longer than 40 years upon the recommendation of management. Factors to be considered when determining the final maturity of debt include: the average useful life of the assets being financed, relative level of interest rates, intergenerational equity and the year-to-year differential in interest rates.

**Maturity Structure** – The Authority’s long-term debt may include serial and term bonds. Other maturity structures may also be considered if they are consistent with prudent financial management practices.

**Coupon Structure** – Debt may include par, discount and premium obligations. Discount and premium bonds must be demonstrated to be advantageous relative to par bond structures taking into consideration market conditions and opportunities. For variable rate debt, the variable rate may be based on one of a number of commonly used interest rate indices and the index will be determined at the time of pricing.

**Debt Service Structure** – Debt service may be structured primarily on an approximate level (combined annual principal and interest) basis. Certain individual bond issues, such as refunding bonds, may have debt service that is not level. However, on an aggregate basis, the Authority will strive to debt service should be structure d debt primarily on a level basis.

**Redemption Features** – In order to preserve flexibility and refunding opportunities, Authority Debt will generally be issued with call provisions. The Authority may consider calls that are shorter than traditional and/or non-call debt when warranted by market conditions and opportunities. For each transaction, the Authority will evaluate the efficiency of call provision alternatives.

**Credit Enhancement** – The Authority shall competitively procure credit enhancement for a sale of bonds if the CFO, in consultation with the Municipal Financial Advisor and the lead underwriter, determines that it is cost effective to do so.

**Senior/Subordinate Lien** – The Authority may utilize both a senior and a subordinate lien structure. The choice of lien will be determined based on such factors as, including but not limited to, -as overall cost of debt, impact on debt service, impact on wastewater rates of the Member Agencies, and marketing considerations.

**Debt Service Reserve Funds** – The Authority shall provide a reserve fund as market conditions dictate. A reserve fund can be established to support each individual series of debt or as a common reserve that can support more than one debt issuances. The reserve fund is typically funded in its entirety with bond proceeds at the time of issuance but can also be funded through a letter of Credit or a Surety Policy.

**Investment of Bond Proceeds** - Bond proceeds will be invested in accordance with the permitted investment language outlined in the bond documents for each transaction. The District will seek to maximize investment earnings within the investment parameters set forth in each respective bond indenture. The reinvestment of bond proceeds will be incorporated into the evaluation of each financing decision; specifically addressing arbitrage/rebate position, and evaluating alternative debt structures and refunding savings on a “net” debt service basis, where appropriate.

## PROCEDURE IV. COMMUNICATION AND DISCLOSURE

### Rating Agencies

SVCW will secure underlying ratings on all ~~publically newly~~ issued obligations ~~from at least one of the from the three major~~ nationally recognized statistical rating organizations, provided it is economic to do so. Investor preference with respect to the number of ratings assigned to a bond issuance can vary depending upon market conditions and global economic conditions. In light of such, the CFO, with the assistance of the Municipal Advisor, will recommend the number of credit ratings at an appropriate time prior to the approval of any issuance by the Commission. The Authority shall maintain the credit ratings on its debt through prudent fiscal management and consistent communications with the rating analysts. The CFO shall manage relationships with the rating analysts assigned to the Authority's credit, using ~~practical both informal and formal~~ methods to disseminate information. Communication with the rating agencies may include one or more of the following:

- Full disclosure on an annual basis of the financial condition of the Authority through publically available documents;
- A formal presentation, as necessary to the rating agencies analysts, covering economic, financial, operational, and other issues that impact the Authority's credit;
- Timely disclosure of major financial events that impact the Authority's credit;
- Timely dissemination of the Comprehensive Annual Financial Report, following its acceptance by the Authority's Commission;
- Full and timely distribution of any documents pertaining to the sale of bonds; and
- Periodic tours of the ~~SRWRF~~ Wastewater Treatment Plant, as appropriate.

### Bond Insurers

The CFO shall manage relationships with the bond insurers, to the extent any Debt is so insured, by providing appropriate information. Communication with other bond insurers shall be undertaken when the CFO, with the assistance of the Authority's ~~Municipal Financial~~ Advisor, determines that credit enhancement is cost effective for a proposed bond issue.

**Disclosure Reports** – The Authority ~~shall may~~ make disclosure reports readily available to institutional investors, rating agencies and credit enhancers who have specific analysts assigned to review the Authority's credit. SVCW shall comply with all federal securities disclosure laws and strive to maintain good investor relations through the timely dissemination of pertinent and material financial information. SVCW will covenant to provide annual disclosure in accordance with SEC Rule 15c2-12. SVCW will also covenant to provide its annual disclosure report (the "Annual Report") no later than 270 days following the end of the fiscal year (currently March 31 based on the Authority's fiscal year end of June 30), but SVCW will strive to issue the Annual Report as soon as practical following any issuance of SVCW's annual Comprehensive Annual Financial Report ("CAFR"). The Annual Report, in addition to being posted in accordance with law, will also be posted at SVCW office of the CFO and be on file with the Treasurer. The Annual Report shall include CUSIPs, trustee and SVCW contacts, and applicable project status as required, for all transactions subject to annual reporting.

**Website** – The Authority shall use its website and affiliated investor relation links as a tool for providing timely information to investors.

## PROCEDURE V. REFUNDING

The Authority shall strive to refinance Debt to maximize savings and minimize the cost of funds as market opportunities arise. A net present value analysis will be prepared that identifies the economic effects of any refunding to be proposed to the Commission. The Authority shall target a 3% net present value savings for Current Refunding transactions and 5% for Advanced Refunding transactions. A Current Refunding transaction is one which closes not more than ninety (90) days prior to the call date of the refunded Debt. An Advance Refunding transaction is one which closes more than (90) days prior to the call date of the refunded Debt. SVCW will use the refunding issue's arbitrage yield as the discount rate to calculate net present value savings.

Upon the advice of the CFO, with the assistance of the [Municipal Financial](#) Advisor and Bond Counsel, the Authority will consider undertaking refunding transactions for other than economic purposes, such as to restructure Debt, change the type of Debt instruments being used, or to retire a bond issue and indenture in order to remove undesirable, or onerous covenants; such refunding transactions do not need to achieve any net present value savings.

**Savings Thresholds** – Minimum savings thresholds have been established to help guide the economic analysis of refunding bonds. The minimum savings guidelines are applicable on an overall basis and are expressed as a percentage of refunded bond par calculated by dividing the expected net present value savings generated by the proposed refunding by the par amount of refunded bonds.

In completing a refunding for net present value savings the CFO with the advice of the [Municipal Financial](#) Advisor may take the following into consideration:

- **Coupon on Refunded Bond** – The CFO may take into consideration whether the coupon on the refunded bond is significantly higher or lower than the most common outstanding bond coupons.
- **Escrow Structuring** - The District shall [strive to](#) utilize the least costly securities available in structuring each escrow. A certificate will be required from a third party agent who is not acting as a broker-dealer, stating that the securities were purchased through an arms-length, competitive bid process (in the case of open market securities), that such securities were more cost effective than State and Local Government Series Securities (SLGS), and that the price paid was reasonable and within Federal guidelines. When evaluating the economic viability of an economic versus legal defeasance, the District shall take into consideration both the financial impact on a net present value basis as well as the rating/credit impact. The District shall take all necessary steps to optimize its escrows and to avoid negative arbitrage in its refunding transactions. SVCW will strive to achieve an escrow efficiency between 70% and 80%; the escrow efficiency is calculated by dividing the net present value savings by the sum of the net present value savings plus the negative arbitrage in the escrow.
- **General Interest Rate Environment** – The CFO may take into consideration whether the available refunding bond interest rates are generally high or generally low relative to long-term averages of historical rates.
- **General Interest Rate Outlook** – The CFO may take into consideration the general outlook for future interest rates, as derived from economic forecasts, market forecasts, implied forward rates, or other sources.
- **Debt Management Considerations** – The CFO may take into consideration debt management issues such as cost and staff efficiencies associated with combining multiple refunding bond issues or combining refunding and new money bond issues.

- **Call Date** – The CFO may take into consideration the amount of time between the pricing/closing date of the refunding Debt and the call date of the Debt to be refunded.
- **Final Maturity Date** – The CFO may take into consideration the amount of time remaining until the final maturity of the Debt to be refunded.

#### PROCEDURE VI. REINVESTMENT OF PROCEEDS

**General** – The Authority shall comply with all applicable Federal, State, and contractual restrictions regarding the use and investment of bond proceeds. This includes compliance with restrictions on the types of investment securities allowed, restrictions on the allowable yield of some invested funds, as well as restrictions on the time period over which some bond proceeds may be invested. To the extent that a bond issue is credit enhanced, the Authority shall adhere to the investment guidelines of the credit enhancement provider.

**Requirements of Indenture** – The Authority will comply with all terms and conditions of the appropriate legal documents related to the Debt. Such limitations shall include, but not be limited to [Permitted Investments](#) in the indenture.

#### PROCEDURE VII. CREATION AND MAINTENANCE OF FUNDS

The Authority maintains a number of different funds integral to the long-range financial planning process. Each of these funds is held for a specific purpose and can generally be categorized as either an operating, capital or debt reserve fund. The Authority will comply with all requirements and limitations created under its Reserve Policy.

#### PROCEDURE VIII. COMPLIANCE

##### **Arbitrage Liability Management**

The Authority shall minimize the cost of arbitrage rebate and yield restrictions while strictly complying with tax law. Because of the complexity of arbitrage rebate regulations and the severity of non-compliance penalties, the Authority shall solicit the advice of Bond Counsel and other qualified experts about arbitrage rebate calculations. The Authority shall contract with a qualified third-party for preparation of the arbitrage rebate calculation.

The Authority shall maintain an internal system for tracking expenditure of bond proceeds and investment earnings. The expenditure of bond proceeds shall be tracked in the financial accounting system by issue. Investment may be pooled for financial accounting purposes and for investment purposes. When investment of bond proceeds are co-mingled with other investments, the Authority shall adhere to IRS rules on accounting allocations.

##### **Post-Issuance Tax Compliance**

The Authority shall comply with all federal tax code requirements and limitations to maintain the tax-exempt status of Authority Debt obligations or to maintain eligibility for direct pay subsidy payments, as applicable.



## **Continuing Disclosure**

The Authority shall comply with the requirements of each Continuing Disclosure Certificate entered into at the time of a sale of bonds. Annual information provided by the Authority shall mirror certain selected information in any Authority Official Statement at the time of a primary offering. Annual financial information will be sent by the Authority or its designated consultant, within nine months of the Authority's fiscal year end, to all Nationally Recognized Municipal Securities Information Depositories (NRMSIRs) designated by the SEC and to the State Information Depository (SID), if one exists. This shall include:

- Audited Financial Statements; and
- Updated tables from the Official Statement, as detailed in the Continuing Disclosure Certificate.

In addition to annual disclosure, the Authority shall provide ongoing information about certain enumerated events, as defined by regulation, ("Material Events") to the NRMSIRs and to the SID.

The Authority shall engage a firm to assist it in ensuring timely completion and filing of annual reports and in identifying, and making timely filings with respect to, the occurrence of reportable enumerated events.

## **Legal Covenants**

The Authority shall comply with all covenants and conditions contained in governing law and any legal documents entered into at the time of a bond offering.

## **PROCEDURE IX. DEBT DATABASE MANAGEMENT**

The Authority shall maintain complete information on its outstanding Debt portfolio, in a spreadsheet or database program format. The information in the database shall include, but not be limited to, the following:

- Issue Name
- Initial Issue Par Amount
- Dated Date of the Issue
- Principal Maturity Amounts
- Coupon Rate by Maturity
- Amount Outstanding
- Call Provisions
- Purpose of the Issue
- Credit Enhancer, if any
- Competitive or Negotiated Sale
- Names of Underwriter(s) Members

The Authority shall use the Debt database for the following purposes:

- Generate reports
- Gross annual Debt service
- Net annual Debt service
- Refunding Analyses
- Output to Fund Accounting System

#### PROCEDURE X. MISCELLANEOUS RESPONSIBILITY:

Primary responsibility for Debt management rests with the CFO. The CFO shall:

- Provide for the issuance of Authority Debt at its lowest possible cost and risk;
- Determine the available Debt capacity of the Authority;
- Provide for the issuance of Authority Debt at appropriate intervals and in reasonable amounts as required to fund approved capital expenditures;
- Recommend to the Commission the method and manner of sale of Authority Debt;
- Monitor opportunities to refund Debt and recommend any such refunding as appropriate to reduce costs or to achieve other policy objectives;
- Comply with all Internal Revenue Service (“IRS”), Municipal Securities Rulemaking Board (“MSRB”), and Securities and Exchange Commission (“SEC”) rules and regulations governing the issuance of Debt;
- Maintain a current database with all outstanding Debt;
- Provide for the timely payment of principal and interest on all Debt;
- Comply with all terms and conditions, and disclosure required by the legal documents governing the Debt issued;
- Submit to the Commission all recommendations to issue Debt in accordance with this Policy;
- Distribute to appropriate repositories information regarding the Authority’s financial condition and affairs at such times and in the form required by law, regulation and general practice;
- Provide for the frequent distribution of pertinent information to the rating agencies; and
- Apply and promote prudent fiscal practices.

#### Internal Controls

In order to comply with the following internal controls, the CFO, SVCW Manager, and the Authority Chief Engineer shall share responsibility to assure that disbursements are made only after each request for disbursement is substantiated with appropriate invoices, requisitions and other supporting documentation. Each of the aforementioned shall thoroughly review any request for disbursement and may request further documentation as may be deemed appropriate.

- To ensure that proceeds of any Debt issued in accordance with its governing documents and this Policy, no disbursements shall be made without the written approval of the CFO and ~~General~~



SVCW Manager. The draw request shall be provided to the Authority's Engineering Department by the Contractor. Approval shall only be provided when the CFO is in receipt of an appropriate certification from the construction project manager with supporting invoices from suppliers and / or contractors evidencing appropriate expenses in connection with the project.

- In the case of an issue of bonds, the proceeds of which will be used by a governmental entity other than the Authority, the Authority may rely upon a certification by such other governmental entity that it has adopted the policies described in SB 1029.

The Authority shall also comply with Government Code Section 5852.1 (SB 450) by disclosing specified good faith estimates in a public meeting prior to the authorization of the issuance of bonds.

### **Approval by the Commission**

All long-term and short-term financing transactions shall be approved by resolution of the Commission.

- Revenue Bonds: All issuances of special limited obligation revenue bonds shall be authorized by resolution of the Commission.
- Capital Leases: All capital leases financing capital equipment with a term exceeding five years and requiring anticipated expenditures by SVCW exceeding \$100,000 shall be authorized by resolution or ordinance of the Commission by majority vote.
- Refunding Obligations: The Commission is authorized to provide for the issuance of Debt for the purpose of refunding any limited obligation bond.

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## AGENDA ITEM 7D

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**RATIFICATION OF APPOINTMENT OF SECRETARY PRO-TEM**

**ISSUE**

Approval of Appointment of a Secretary Pro Tem to Replace Previous Secretary Pro Tem

**BACKGROUND AND DISCUSSION**

Since 2005, SVCW has appointed a Secretary Pro Tem to ensure Authority business can continue if there is an absence of the Secretary of the Commission. Such instances could arise when certain documents need to be formally attested to meet time requirements.

The current position of Secretary Pro Tem is vacant due to the resignation of the previously appointed individual, Ms. Ilana Schmidt. A Secretary Pro Tem is needed to be named due to this vacancy.

The SVCW Manager recommends that Jessica Mangual be appointed to the position of Secretary Pro Tem. Ms. Mangual assists the Manager with preparation of all Commission-related items and is well suited and positioned to take this responsibility. Resolution No. SVCW 17-69 appointed Ms. Schmidt Secretary Pro Tem and will be rescinded and replaced with Resolution No. SVCW 19-02 as a result of this action.

**FINANCIAL IMPACT**

There is little to no financial impact from this action. There could be minor cost savings by providing for timely attestation of critical documents and/or from cancelling the need to drive certain documents for Commission Secretary's signature.

**RECOMMENDATION**

Move adoption of RESOLUTION APPROVING AND RATIFYING APPOINTMENT OF JESSICA MANGUAL AS SECRETARY PRO TEM OF SILICON VALLEY CLEAN WATER AND RESCINDING RESOLUTION NO. SVCW 17-69

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## **AGENDA ITEM 8A**

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**SCADA SOFTWARE UPDATES (CAPITAL PROJECT 293)  
DUAL MEDIA FILTERS AUTOMATION (CIP #9222) AND  
COMPLETION OF AUTOMATION PROGRAMMING SERVICES**

**ISSUE**

Authorization of Task Orders for SCADA Software Improvements and Automation programming services (Capital Project #293 and CIP Project #9222).

**BACKGROUND**

The computers that SVCW Operators use to view treatment process parameters, make changes to process set points, and view alarms are called Human Machine Interfaces (HMI's). Software run on these HMI's is called SCADA software. In 2013, SVCW implemented a project to upgrade the SCADA software from a program called iFix to a program called Wonderware. Wonderware is the most commonly used HMI software in the wastewater industry and provides significantly more features than the old and outdated iFix software. Recently, Wonderware has developed a significant upgrade to the software that would allow for more efficiency and more flexibility with its use of the program.

SVCW's filtration process filters secondary effluent, removing very small solids from the flow stream in advance of 1) discharge to San Francisco Bay or 2) disinfection and recycled water production. Each filter has two bays, called the "A Side" and the "B Side". SVCW is required to filter all flow that is discharged to the Bay under the Authority's NPDES permit and recycled water production requires all flow to be filtered prior to disinfection and distribution under Title 22 Water Recycling Criteria.

As the filters run, they accumulate solids. When they are full of solids, they need to be taken out of service and put into backwash mode. Currently, the majority of the filters are programmed to automatically backwash after 100 hours of run time. During the season that SVCW is producing recycled water, regulatory guidelines place a strict limit on the turbidity of the water. The filters that are in recycled water production mode get automatically shut down if the turbidity leaving the filters reaches 1.8 NTU; this is a failsafe measure to ensure permit compliance. Because it's critical to keep the filters in operation (not hit the failsafe shut off mode), Operators visually monitor the turbidity levels and manually initiate a backwash when it appears that a recycled water filter will be reaching 1.8 NTU.

In 2015, the SVCW Commission authorized a project to add capacity to the filters; to this end, Filters 6A and 6B were added to the filtration system. At the time, SVCW staff identified the opportunity to improve the automation programming for the filters. Initiating backwashes based on filter run time leads to inefficient operation and too-frequent backwashes, thus using more electricity and polymer than otherwise required. Solids contents in wastewater is variable and the operators set the runtime for the filters to a conservatively low number to avoid filter plugging or breakthrough of solids. A better way to control backwashes is to base it on differential pressure across the filter or effluent turbidity rather than on run time. During the progress of work, the two new filters

6A and 6B were programmed to be able to be backwashed based on these parameters but the old filters' programming was not changed. Part of the reason for not changing the other filters' programming at that time was to ensure that the new method of operation via automated backwashes was reliable enough to meet permit limits.

## DISCUSSION

For the past eight years, SVCW has used the professional services of a firm, Cascade Integration & Development (CID), for programming and system integration across the entire treatment facility. SVCW Engineering and O&M staff have negotiated a scope and budget for CID to upgrade the Wonderware software and to develop and implement the new automated backwash program for the remaining filters.

Upgrading the SCADA software will allow SVCW to use all of the most recent functionality that has been included by the software developer. This will provide improvements in data storage and retrieval, simplification of programming thus reducing programming time, and advanced viewing applications. Included in the latest version of Wonderware is the ability for it to be used on mobile devices and tablets, which has been a goal for SVCW operations to be able to see system data while they are walking around the plant and away from the Control Room.

The SCADA software upgrade scope of work for CID also includes configuring and installing a system that will analyze and prioritize the various alarms that are generated by SCADA. It will identify "nuisance" alarms that occur and clog up the alarm system and distract the operators from their duties. Currently, Operators can see up to 1,000 alarms per day and many are nuisance alarms. This not only distracts the operators from the serious alarms, it also takes up significant computer bandwidth.

The Filter 6A and 6B project was completed in late 2017. While the two new filters had the additional backwash parameters included in the programming, the other 10 filters' programs have not yet been upgraded.

One of the elements of the in-progress WWTP Reliability Phase II Project is the replacement of the filter backwash pumps. When new pumps are installed, they will be incorporated into the backwash program in the local Programmable Logic Controller. By upgrading the programming for Filters 1A/B through 5A/B at the same time as the pumps are being installed, significant efficiency will be gained. If this work is performed after the fact and as a standalone project, SVCW would need to contract additional pump manufacture and contractor time, including remobilization fees.

The negotiated budget for implementing upgrades to Wonderware and configuring the alarm advisor program is \$220,618.

The negotiated budget for changing the filter program is \$160,376. This reflects an estimated \$35,000 savings for completing the programming at the same time as the new Filter Backwash Pumps.

### FINANCIAL IMPACT

The Wonderware Upgrade and Alarm Advisor Services will be paid from Capital Project #293. This project was identified during the current fiscal year budget process and was estimated to require a budget of \$240,000. This value was split with \$120,000 identified and included in the FY 18/19 budget and the other \$120,000 slated for inclusion in the FY 19/20 budget. The rate of CID's work will be paced such that the currently budgeted value will not be exceeded.

CIP Project #9222, Dual Media Filters 6A and 6B, has an allocated project cost of \$2,077,557. There is approximately \$1.1 million budget remaining. After this programming effort is completed, there will be approximately \$1 million remaining in the project.

### RECOMMENDATION

- i. Move approval of TASK ORDER SCOPE AND BUDGET FOR PROGRAMMING SERVICES IN THE AMOUNT OF \$220,618 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS (Capital Project #293) – CASCADE INTEGRATION & DEVELOPMENT
- ii. Move approval of TASK ORDER SCOPE AND BUDGET FOR AUTOMATION PROGRAMMING SERVICES IN THE AMOUNT OF \$160,376 AND AUTHORIZE MANAGER TO APPROVE UP TO TEN PERCENT CONTINGENCY FOR ADDITIONAL WORK ON AN AS-NEEDED BASIS (CIP #9222) – CASCADE INTEGRATION & DEVELOPMENT

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## **AGENDA ITEM 8B**

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**LONG RANGE FINANCIAL PLAN  
2019 UPDATE****ISSUE**

Receipt and approval of the Silicon Valley Clean Water Long Range Financial Plan January 2019 Update.

**BACKGROUND**

The proposed Long Range Financial Plan (LRFP, or Plan) Update describes the total cash flows needed by Silicon Valley Clean Water (SVCW) over the next decade to provide wastewater services to the communities it serves. This includes funding for operations and maintenance of wastewater facilities, revenue-funded capital projects, debt service payments, and required cash reserve contributions. Meant to encourage discussion and support decision making, the Plan provides up-to-date financial information so that SVCW and its Member Entities have the information needed to understand the financial impact of decisions and communicate with internal and external stakeholders.

The Plan conforms to the financial and budgetary aspects of the SVCW Joint Powers Agreement, the adopted 2018-19 operating/capital budgets, and relevant fiscal policies that influence cash flow requirements. Staff updates the Plan annually and presents to the Commission as a measure of SVCW's financial position relative to anticipated cash flows required from Member Entities. SVCW staff strives to adhere to the Plan, including construction and cost schedules, debt coverage ratio targets, and operating cost forecasts.

**DISCUSSION**

In 2006, engineering studies determined the majority of SVCW's fixed assets were beyond their useful lives and needed replacement. SVCW thereafter initiated its Capital Improvement Program (CIP) to replace and rehabilitate its wastewater conveyance and treatment system in a structured and prioritized manner. Now in its eleventh year, the CIP has completed over 120 projects and to date has spent \$290 million to rebuild, rehabilitate, and upgrade SVCW facilities. An October 2018 CIP update included new information and now estimates the entire CIP cost will be \$849.6 million when complete in fiscal year 2025-26. Remaining expenditures are \$559 million as illustrated below:

SVCW Remaining Capital Expenditures - By Fiscal Year End and Member Allocation												
Member Entity		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Total		
Belmont	9.45%	\$ 12.7	\$ 18.1	\$ 13.2	\$ 3.8	\$ 1.0	\$ 0.4	\$ 0.4	\$ 3.4	\$ 52.8		
Redwood City	48.57%	65.2	92.9	67.7	19.4	5.0	1.9	1.9	17.7	271.6		
San Carlos	15.14%	20.3	29.0	21.1	6.1	1.6	0.6	0.6	5.5	84.7		
West Bay SD	26.84%	36.0	51.3	37.4	10.7	2.8	1.0	1.0	9.8	150.1		
TOTAL	100.00%	\$ 134.2	\$ 191.3	\$ 139.3	\$ 40.0	\$ 10.3	\$ 3.8	\$ 3.8	\$ 36.5	\$ 559.2		

The CIP is largely funded through long-term debt strategies. The LRFP currently assumes sources of funds will include 4.3% wastewater revenue bonds, 62.4% Government Loans, and 24.8% from a 2018 bond issuance / cash contribution program already in place.

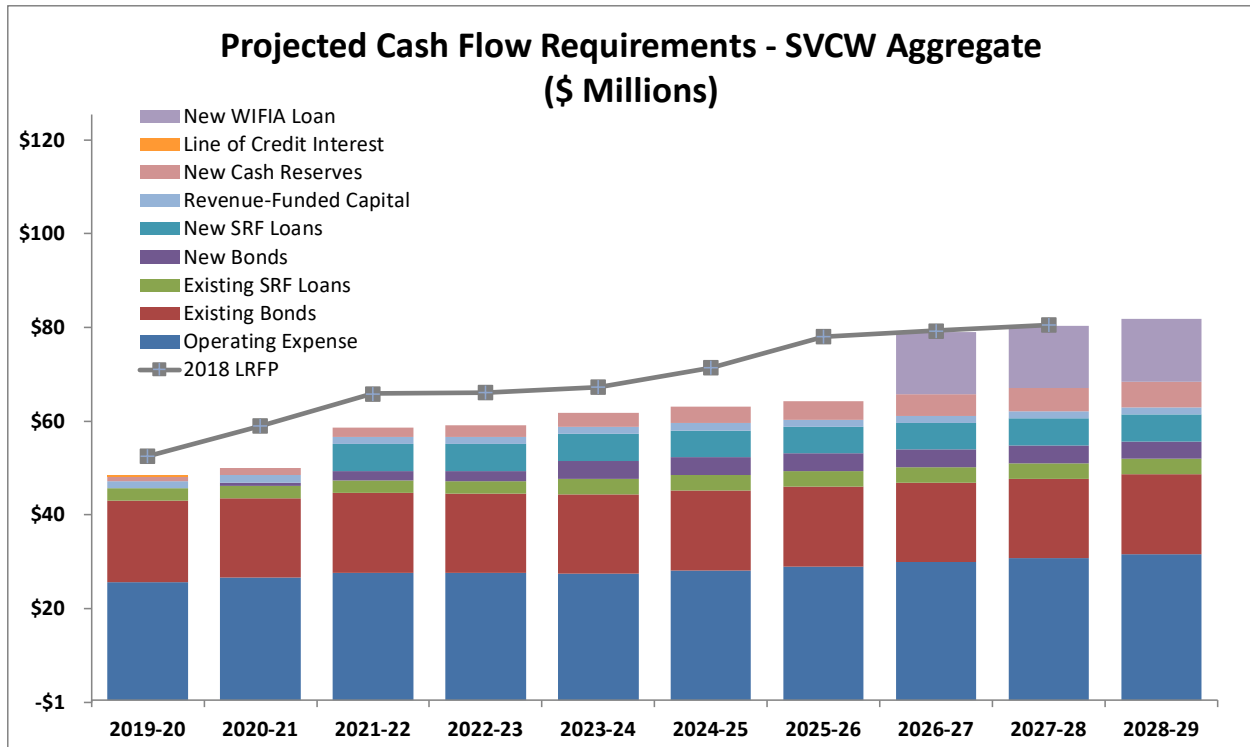
Each year, the LRFP considers three critical items:

- **CIP Update:** In October 2018, SVCW updated its CIP document to incorporate changes in project cost estimates, add or delete projects, and apply inflationary impacts. Combined, these factors added \$15.9 million and bring total anticipated CIP expenditures (from inception to completion) to \$849.6 million.
- **Construction Timing:** SVCW made significant progress over the past year on the RESCU program (Regional Environmental Sewer Conveyance Upgrade). RESCU is comprised of a gravity pipeline project, front-of-plant pumping and preliminary treatment facilities, and pump station rehabilitation. By using a Progressive Design-Build (PDB) project delivery, the Authority has remained on schedule. The gravity pipeline and front-of-plant projects are in construction and it is anticipated that the PDB contractor for the pump stations project will be under contract by spring 2019. Total remaining cost of RESCU is approximately \$442 million and Engineering predicts the pace of construction will remain intact.
- **Financing Sources:** Whereas last year the LRFP assumed a modest amount of funding would come from Government Loans, this updated LRFP contains optimism in securing state and federal loans. In 2018 the California State Water Resource Control Board (the Water Board) included \$141 million for SVCW RESCU projects in its Intended Use Plan. Similarly, the federal Environmental Protection Agency (EPA) invited SVCW to participate in its Water Infrastructure Financing and Innovation Act (WIFIA) program, indicating up to a \$208 million loan amount is available. This LRFP therefore adjusted the amounts of governmental loans assumed to be available and reduced the amount of bond-financing. As a result, total debt service payments will decrease over remaining amortization periods.

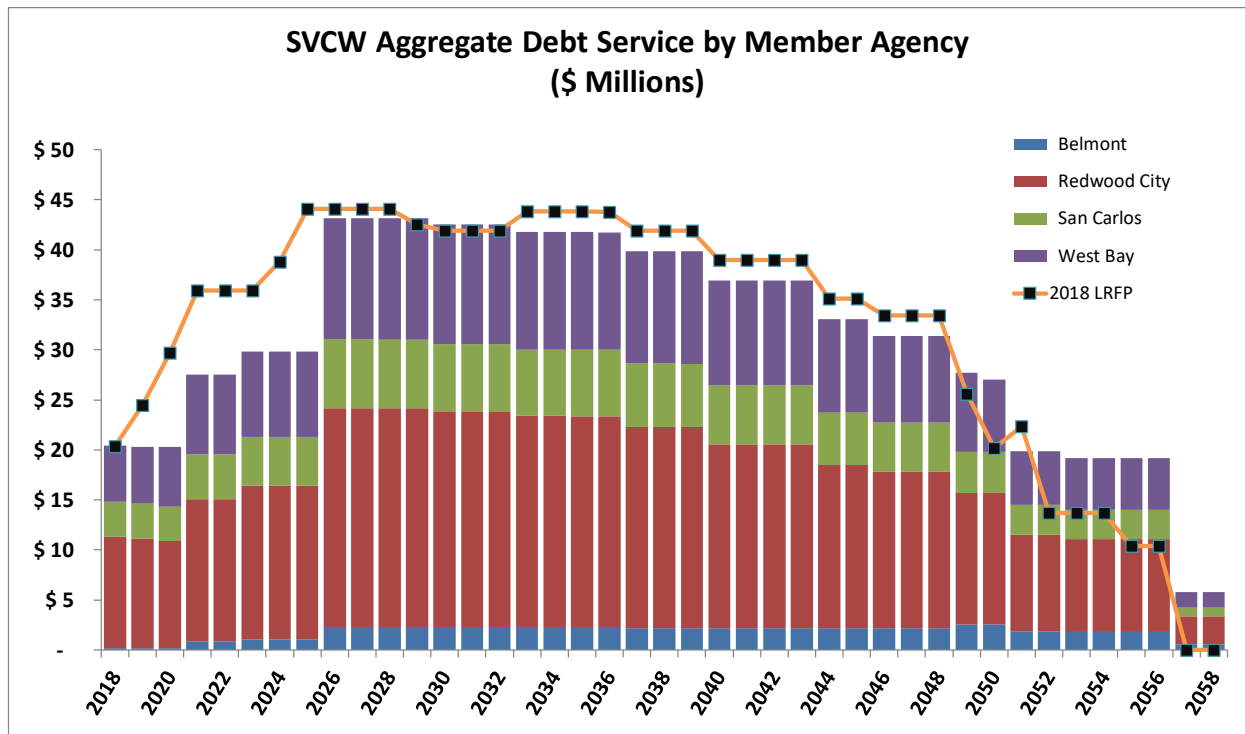
#### FINANCIAL IMPACT

The LRFP describes the structure, timing, and amount of all SVCW expenditures over the next decade, useful to Member Entities for future rate-setting purposes. It incorporates inflation on operating expenses, estimates debt service payments needed to finance the CIP, provides for cash-funded capital projects, and accounts for future contributions to cash reserves. Whereas SVCW anticipates \$48 million is needed in fiscal year 2019-20, this annual figure will rise to \$81 million in ten years. Projected cash flow requirements are shown on the following page.



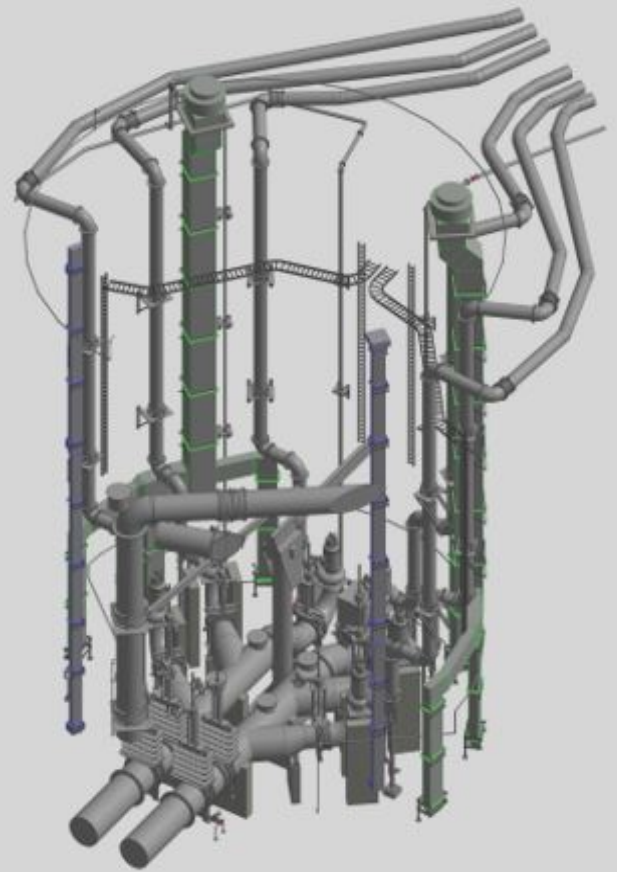
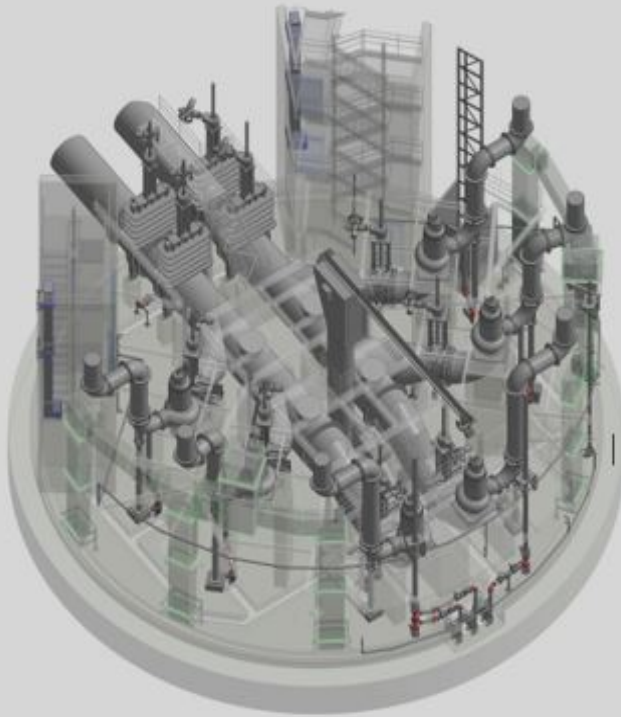


The LRFP quantifies how the above-described increase would be moderated, however, through securing low-cost governmental loans. Over the duration of the debt amortization period, total aggregate debt service is estimated at \$1.28 billion in nominal dollars which is approximately \$40 million less than the prior year LRFP. If discounted to January 2018 dollars this difference is valued at a Net Present Value of \$46 million.



### RECOMMENDATION

Move approval of RECEIPT AND ACCEPTANCE OF SILICON VALLEY CLEAN WATER  
LONG RANGE FINANCIAL PLAN 2019 UPDATE



# Long Range Financial Plan

January 2019

**Silicon Valley Clean Water**

**Presented January 2019 by:**

Matthew Anderson, CPA  
Chief Financial Officer / Assistant Manager  
Silicon Valley Clean Water  
1400 Radio Road  
Redwood City, CA 94065  
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## **Silicon Valley Clean Water Commissioners**

<b><u>Commissioner</u></b>	<b><u>Title</u></b>	<b><u>Member Agency</u></b>
Warren Lieberman	Chair	City of Belmont
Alicia Aguirre	Member	West Bay Sanitary District
George Otte	Secretary	City of Redwood City
Mark Olbert	Member	City of San Carlos

## **Member Entity Staff**

<b><u>Name</u></b>	<b><u>Title</u></b>	<b><u>Member Agency</u></b>
Kimbra McCarthy	ACM of Administrative Services	City of Redwood City
Terrence Kyaw	Public Works Director	City of Redwood City
Thomas Fil	Finance Director	City of Belmont
Afshin Oskoui	Public Works Director	City of Belmont
Rebecca Mendenhall	Administrative Services Director	City of San Carlos
Grace Le	City Engineer	City of San Carlos
Steven Machida	Interim Public Works Director	City of San Carlos
Phil Scott	District Manager	West Bay Sanitary District
Liz Bahrami	Accountant	West Bay Sanitary District
Bill Kitajima	Projects & IT Manager	West Bay Sanitary District

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### **Silicon Valley Clean Water Staff**

#### **Name**

Teresa A. Herrera  
Matthew Anderson  
Kim Hackett  
Arvind Akela  
Monte Hamamoto  
Krista Politzer

#### **Title**

Manager  
Assistant Manager & Chief Finance Officer  
Authority Engineer  
Engineering Director  
Chief Operating Officer  
Financial Analyst

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## SECTION 1 – EXECUTIVE SUMMARY AND INTRODUCTION

This Long Range Financial Plan (LRFP; or the Plan) describes the anticipated cash flows required by Silicon Valley Clean Water (SVCW; or the Authority) over the next decade to provide wastewater services and fund critical construction for the communities it serves. This includes funding for operations and maintenance of wastewater facilities, revenue-funded capital projects, as well as the Capital Improvement Program (CIP) program and its associated debt service payments. It also describes contributions to cash reserves to go towards future capital improvements. This Plan is meant to encourage discussion and support decision-making. It provides to-date financial information to Member Entities (as herein defined) as they measure the financial implications of decisions and communicate with internal and external stakeholders.

SVCW's Wastewater Treatment Plant (WWTP) was placed in operation November 1981 and connected to an influent conveyance system and effluent disposal system built in 1969. In 2006, engineering studies determined the majority of SVCW fixed assets were beyond their useful lives and needed replacement. SVCW therefore initiated its Capital Improvement Program (CIP) to replace and rehabilitate the wastewater conveyance and treatment system in a structured and prioritized manner. It has also anticipated more stringent treatment requirements will be necessary. Now in its eleventh year, the CIP has completed over 120 projects and spent \$290 million through October 2018. The CIP is the Authority's guiding document and a recent update in October 2018 estimates that, inclusive of spending to date, the program will cost \$849.6 million when completed.

This Plan incorporates the guidelines from the SVCW Joint Powers Agreement, the adopted 2018-19 Operating and Capital Budget, and relevant fiscal policies that influence cash flow requirements. It also recognizes the importance of growing the Authority's cash reserves dedicated to future projects.

The LRFP is updated each year to measure SVCW financial position relative to anticipated cash flows needed from SVCW's Member Entities. After incorporating CIP construction and expenditure schedules, the LRFP-recommended strategy ensures SVCW obligations can be met while members strengthen their credit ratings.

Compared to the January 2018 LRFP, this Plan incorporates three significant changes:

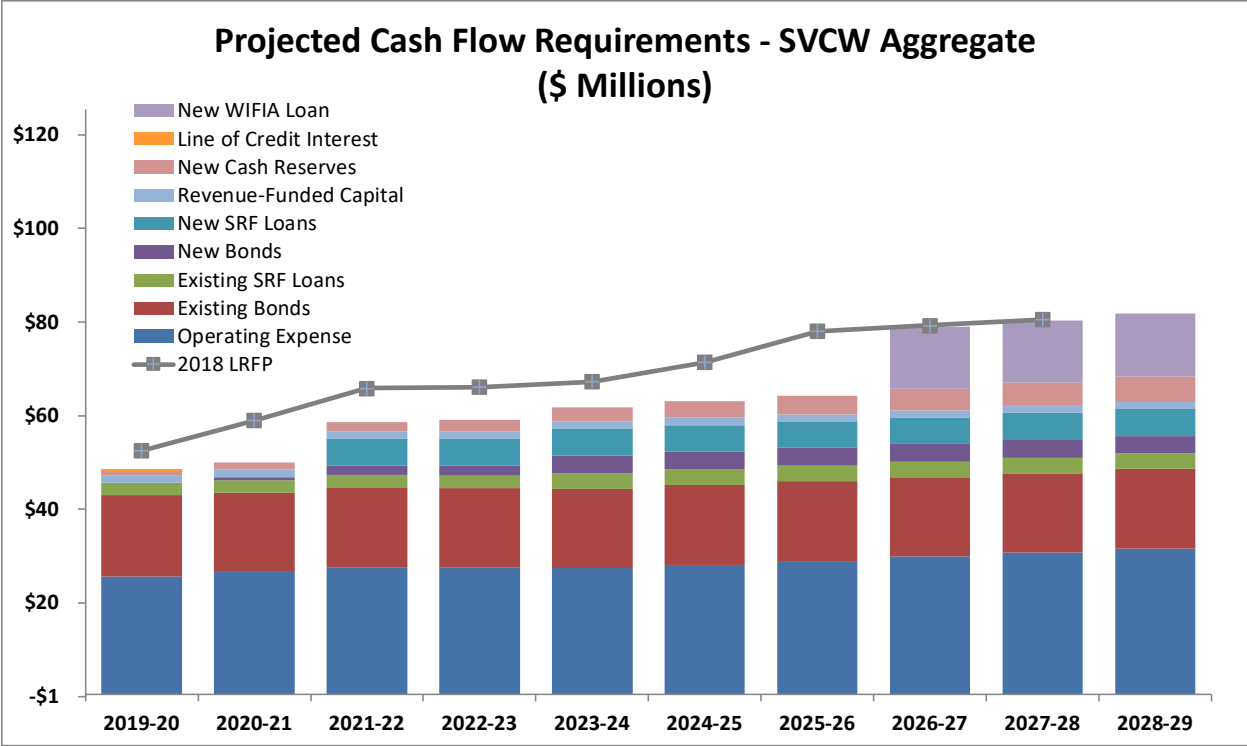
- CIP Update – In October 2018, SVCW updated its CIP document to incorporate changes in project cost estimates, add or delete projects, and apply inflationary impacts to bring project costs to mid-point of construction. It also included a cost reduction for the Nutrient Removal Program as new information garnered from the Regional Water Quality Control Board more fully defines nutrient-loading issues in the San Francisco Bay. Combined, these factors added \$15.9 million and bring total anticipated CIP expenditures (from inception to completion in 2026) to \$849.6 million.

- Construction Timing – Design of SVCW conveyance projects progressed rapidly over the past year. Collectively known as RESCU, the Regional Environmental Sewer Conveyance Upgrade program is using a Progressive Design-Build (PDB) project delivery method. RESCU construction has commenced for the Gravity Pipeline and Front-of-Plant elements. Total remaining costs of RESCU are approximately \$440 million, 90% of which is anticipated be spent by the end of fiscal year 2020-21.
- Financing Sources – Whereas in last year’s LRFP SVCW assumed a modest amount of funding would come from Government Loans, this updated LRFP contains optimism in securing state and federal loans. In 2018 the California State Water Resource Control Board (the Water Board) included \$141 million for SVCW RESCU projects in its Intended Use Plan. Similarly, the United States Environmental Protection Agency (EPA) invited SVCW to participate in its Water Infrastructure Financing and Innovation Act (WIFIA) program, indicating up to a \$208 million loan amount may be available. This LRFP therefore adjusted the amounts of governmental loans assumed to be available and reduced the amount of bond-financing.

Like many other water treatment agencies, SVCW infrastructure was originally funded by the 1972 Clean Water Act. As assets aged, the absence of a sinking fund at SVCW created a reliance on debt to fund the current CIP. The Authority now strives to obtain the lowest-cost financing available through a combination of Wastewater Revenue Bonds, low-cost Governmental Loans at federal and state levels, and cash reserves when available.

When made aware in 2008 of the need to invest a significant amount into SVCW infrastructure, Member Entities developed strategies to increase their sewer rates. Regular updates to the CIP and this LRFP have kept Member Entities informed of the next decade of cash flow requirements and, as a result of their steady rate adjustments, only modest rate increases will be necessary.

SVCW annual cash flow requirements in FY 2019-20 are estimated at \$48 million. Cash flow requirements are thereafter projected to reach \$81.3 million by FY 2028-29 when projected new debt is fully in place. The largest increase in expenditures over the next decade is for debt service payments, which are estimated to peak at \$43.2 million annually once fully in place. Other non-debt related expenditures are less impactful; the average annual increase in Operating Expense is less than four percent. This LRFP describes the structure, timing, and amount of all expenditure increases to inform Member Entities as SVCW plans for the future.



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## INTRODUCTION

### **Purpose of Long-Range Financial Planning**

Member Entities' sewer rates provide the underlying repayment security for all SVCW financing. As such, in 2008, SVCW developed a Five Year Financial Plan (the "Financial Plan") to provide a financial roadmap for funding the CIP and ongoing operating costs. The Financial Plan was frequently updated and presented to the SVCW Commission (as hereinafter defined) to incorporate CIP budget figures. It provides a roadmap that Member Entities follow when considering sewer rates.

A long-Range financial plan combines financial projections with strategy. The Government Finance Officers Association (GFOA) recommends that all governments regularly engage in long-Range financial planning as a collaborative process to consider future scenarios and help navigate challenges. By aligning financial capacity with long-Range service objectives, SVCW and its Member Entities gain insight as to financial resources needed to support strategies. With this information, Member Entities can balance objectives and financial challenges.

SVCW will manage its finances and meet critical funding needs while recognizing its Member Entities' need to maintain reasonable wastewater rates. This LRFP will be enacted as SVCW and its Members adopt annual budgets, monitor financial performance, and incorporate Commission-directed actions. The LRFP is based upon financial planning models that include long-Range forecasts of operating and capital expenditures. It includes reasonably conservative assumptions and attempts to account for uncertainties. It aims to generate adequate cash reserves for capital projects while maintaining good standing in the credit markets to provide ready access to cost-effective capital financing when needed. It evaluates the capital financing and debt service coverage policies to optimize cash funding of capital investments. Finally, it continues to evaluate cash reserve policies that must consider intergenerational equity with regards to funding capital projects and raising rates.

The LRFP includes a debt structure model to document recommended debt strategy, identify risks to that strategy, and offer mitigation steps available or alternative funding solutions. As part of the Plan a financial model (the Model) was created to assess financing alternatives for the CIP.

This LRFP is meant to stimulate discussions for decision making by providing up-to-date financial information. Member Entities can incorporate this material to understand the financial impact of decisions, and to communicate those impacts to internal and external stakeholders. This long-Range financial plan includes the following elements:

- Time Horizon – The plan looks nine years beyond the current fiscal year.
- Scope – The plan considers all expenditures associated with the conveyance and treatment of wastewater received from Member Entities. Expenditures include all SVCW operating costs, capital improvements, debt service, and cash reserve requirements.
- Frequency – This long-range plan is updated annually to aid Member Entities with their own budget and rate-setting processes.
- Content – The plan includes an analysis of the financial environment, revenue and expenditure forecasts, debt position and affordability analysis, strategies for achieving and maintaining financial balance, and monitoring mechanisms such as a scorecard of key financial health indicators. Adherence with the financial plan and the ability to comply with the financial requirements of this Plan can be measured primarily through debt service coverage and the number of days cash on hand. SVCW can readily monitor these financial metrics through an annual review of the Member Entities' respective audited financial statements.
- Visibility – The plan will inform Member Entities about the long-Range financial prospects of SVCW. Each year going forward, actual results will be compared to the LRFP by integrating it into future LRFPS.

SVCW Member Entity staff was involved in the Plan preparation process to help identify necessary tables, discuss assumptions, and review results. Member Entities, via the Silicon Valley Clean Water governing commission (the Commission), can now integrate the information provided into their own respective financial plans.



## **Organizational and Business Structure**

SVCW was founded in 1975 as the successor to the Strategic Consolidation Sewerage Plan. SVCW took title to all property, capital and equipment of the Strategic Consolidation Sewerage Plan. SVCW maintains and operates sanitary sewerage pumping, transmission and outfall facilities that were originally constructed or otherwise owned by the Strategic Consolidation Sewerage Plan. SVCW provides wastewater transmission, treatment, and effluent disposal services for the surrounding communities including the Cities of Belmont, Redwood City, and San Carlos and for the West Bay Sanitary District (collectively, the Member Entities). SVCW provides recycled water to the City of Redwood City.

SVCW is a Joint Exercise of Powers Authority (JPA) that provides wastewater transmission, treatment, recycled water, and effluent disposal services to its Member Entities, all facilities of which (hereinafter referred to as Joint Facilities) are located in the northern part of Silicon Valley between the cities of San Francisco and San Jose. SVCW's wastewater treatment plant is located in the City of Redwood City. SVCW serves more than 200,000 people and businesses located predominantly in San Mateo County, California. SVCW operates in a strong Bay Area economy, with a customer base that includes large business customers such as Oracle Corporation, EA Sports, and Facebook.

SVCW owns and operates a regional wastewater treatment plant with an average dry weather flow permitted capacity of 29 million gallons per day, an approximately nine-mile influent force main pipeline that conveys wastewater from the Member Entities to SVCW's treatment plant, four wastewater pump stations, and a 1.25-mile effluent disposal pipeline that discharges treated effluent into the San Francisco Bay.

## **Governance & Management**

The JPA is governed by a four-member Commission consisting of one appointed person from each of the Member Entities' governing bodies. There is a total of 100 votes, allocated as follows:

- City of Redwood City                      42 votes
- West Bay Sanitary District              28 votes
- City of San Carlos                        19 votes
- City of Belmont                            11 votes

A vote of at least seventy five percent is required to adopt or amend bylaws, rules, and regulations; to adopt or modify any budget; to approve any capital costs, contracts, appropriations, or transfers of more than \$75,000; to employ the manager and certain consultants; to sell or dispose of property; and to approve other designated items. Other actions of the Commission must be approved by a simple majority of the votes. In addition, any amendment to the Joint Powers Agreement must be approved by a four-fifths vote by each of the Member Entities' governing bodies.

## Financial Oversight and Control

SVCW sets an annual budget according to goals established by the Commission that support operational priorities, the Capital Improvement Program and the Long Range Financial Plan. The Budget reflects a progressive approach to fund wastewater operations while controlling costs, minimizing unplanned expenditures, limiting risks, and investing in projects and programs that provide the long-Range resources needed for the community.

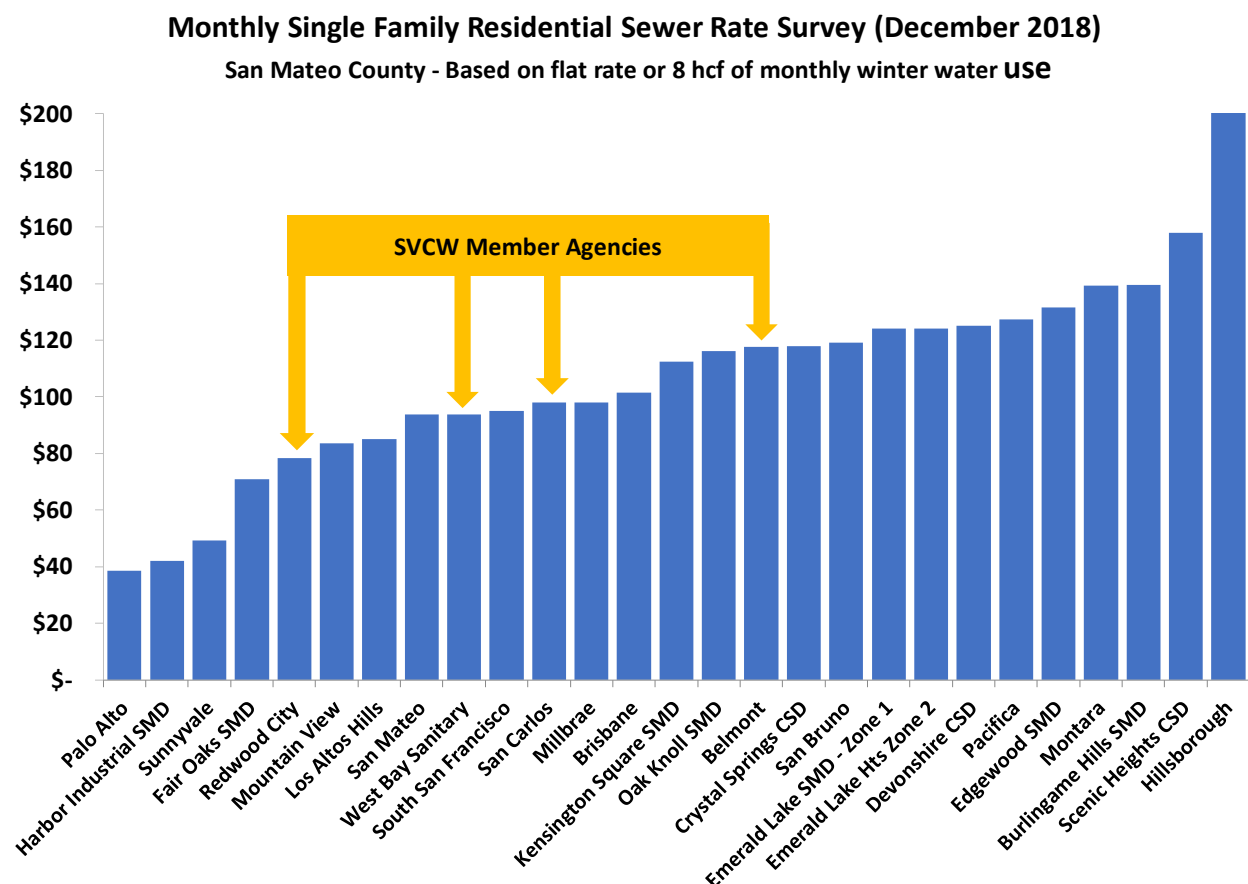
SVCW has no taxing power. SVCW receives nearly all funding, other than interest earnings and other miscellaneous revenues, from payments made by the Member Entities for operations, capital improvements, debt service, and cash reserves.

## Comparative Residential Sewer Charges

Based upon previous Financial Plans, Member Entities have already adopted significant rate increases since 2008 to generate their allocable share of the CIP and capital program costs. The following table shows the single family residential monthly sewer rates of each participating SVCW Member Entity over the past ten years.

Residential Sewer Rates by Member Agency Based on 8 HCF of flow										
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Belmont	\$48.06	\$51.34	\$72.13	\$77.33	\$82.77	\$88.13	\$88.13	\$99.47	\$105.35	\$117.74
City of Redwood City	\$44.70	\$48.72	\$53.10	\$57.88	\$63.09	\$68.77	\$74.95	\$75.11	\$76.68	\$78.24
City of San Carlos	\$43.76	\$46.82	\$50.10	\$53.10	\$67.29	\$80.75	\$88.82	\$88.82	\$93.26	\$97.93
West Bay SD	\$46.67	\$54.17	\$57.50	\$62.67	\$68.33	\$74.42	\$81.08	\$85.92	\$89.33	\$93.83

Despite these increases, Member Entities' rates remain among the middle tier of San Mateo County sewer rates.



## Regulations and Permits

The federal Clean Water Act requires that all municipal, industrial and commercial facilities that discharge wastewater or storm-water directly from a point source into a water of the United States (such as a lake, river, bay, or ocean) must obtain a National Pollutant Discharge Elimination System ("NPDES") permit. All permits are written to ensure the receiving waters will achieve certain water quality standards.

The federal government delegates the NPDES Program to the State of California for implementation through the State Water Resources Control Board and its nine Regional Water Quality Control Boards, collectively Water Boards. It is the responsibility of the Water Boards to preserve and enhance the quality of the state's waters through the development of water quality control plans and the issuance of NPDES Permits.

SVCW currently operates under a five-year NPDES permit that is valid through September 2022. As an active member in the Bay Area Clean Water Agencies (“BACWA”), a consortium of publicly-owned treatment works agencies that operate within the nine-county San Francisco Bay Area, SVCW prepares for future NPDES permit requirements. BACWA is central since some requirements imposed may be efficiently fulfilled as a group. Through BACWA, SVCW meets provisions related to overall receiving water quality monitoring, Total Maximum Daily Load and Site Specific-Objective Support, Mercury Special Studies, Copper Action Plans, and Cyanide Action Plans.

Regulatory requirements of the NPDES program may increase in the future. Many California agencies have already been required to significantly increase treatment to remove nutrients (ammonia, nitrates and phosphates) and further reduce pathogenic organisms. Studies are also underway regarding Active Pharmaceutical Ingredients to monitor the cumulative effects of pharmaceuticals and personal products, including anti-psychotic and antihypertensive drugs.

Additionally, nutrients like nitrogen and phosphorus are found in municipal waste. When excessive, these nutrients are considered harmful water pollutants leading to such problems as algae blooms. Nutrient management is an important planning consideration for California wastewater treatment operators – both to remove and to recover these resources. This LRFP includes estimated costs needed to address nutrients in SVCW’s wastewater. It should be noted, however, that SVCW has joined a cooperative to explore a joint response strategy regarding future Nutrient Removal requirements.

## **Financial Modeling**

The CIP estimates approximately \$559 million remains to be spent on capital expenditures over the next eight years. The Financial Plan documents the funding strategy, risks to this strategy, and anticipated mitigation and/or alternative funding solutions available. Prior to issuing debt SVCW updates a capital finance model to evaluate the impact of capital program spending, operations and maintenance costs, and debt service to its, and the Member Entities’, financial condition. To that end, SVCW’s Chief Financial Officer oversees ongoing maintenance of quantitative modeling that includes, but is not limited to, the following:

- Historic and projected cash flows;
- Historic and projected capital expenditures;
- Historic and projected operating costs;
- Historic and projected cash reserve balances, including the Operating Fund, the CIP Fund, Revenue-funded Capital Fund, and Debt Service Reserve Fund, if any;
- Historic and projected debt service coverage;

- The most efficient mix of funding sources (debt and cash);
- The most efficient form of debt (government-subsidized loans, capital market offerings, or private loans) and most efficient structures;
- Projected revenue requirements; and
- Revenue Sources, including miscellaneous revenues and grants.

The Plan incorporates these factors to develop an all-inclusive projection of future cash flow requirements. As part of the Plan, the Financial Model was created to generate and assess multiple debt-based financing alternatives for the CIP. Several scenarios were analyzed to reach the recommended plan, including the extent to which funds would be sourced from Wastewater Revenue Bonds versus Governmental Loans. Further analysis and results are described in Sections 2 and 3 of this Plan.

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## SECTION 2 – GUIDING DOCUMENTS AND PRINCIPLES

### Audited Financial Reports

SVCW financial statements are maintained in accordance with all state and federal laws, Generally Accepted Accounting Policy, and standards of the Government Accounting Standards Board. This means revenues and expenses are recognized on a full accrual basis, where revenues are recognized in the period when they are earned and expenses are recognized in the period incurred.

An annual audit is performed by an independent public accounting firm, with an unqualified opinion that SVCW financial statements are presented fairly in all material respects.

### Operating Budgets

Each year, the adopted budget establishes the funding requirements for Member Entities. It includes all operating costs, revenue-funded capital needs, debt service payments, and cash reserves requirements. A full overview of all expenditures facilitates discussion of anticipated changes. Subsequent to the fiscal year-end closing, annual payments made by each SVCW Member Entity are reconciled against the actual expenditures allocated to each SVCW Member Entity and any differences are applied toward funding reserves held by SVCW.

The Budget is constructed consistent with goals established by the Commission to support operational priorities and the Capital Improvement Program. The Budget reflects a progressive approach to controlling costs, minimizing unplanned expenditures, limiting risk, and investing in activities that provide the long-Range resources needed for the community.

Used as a baseline for this study, the 2018-19 Budget was \$47.1 million. This includes \$24.2 million in operating expenditures, \$1.5 million for revenue-funded capital projects, additional cash reserve contributions of \$1 million, and debt service payments estimated at \$20.4 million.

2018-19 Adopted Budget - Total Contributions by Member Agency						
Description	City of Belmont	Redwood City	City of San Carlos	West Bay San District	TOTAL	
Net Operating Expenditures	\$ 2,973,317	\$ 11,245,294	\$ 3,067,987	\$ 6,927,025	\$ 24,213,623	
Revenue-Funded Capital Expenditures	140,380	721,507	224,905	398,708	1,485,500	
Reserve Contributions	92,991	477,945	148,983	264,115	984,034	
Debt Service Payments	178,425	11,137,107	3,508,897	5,565,516	20,389,946	
Subtotal - Contributions to SVCW	\$ 3,385,113	\$ 23,581,854	\$ 6,950,772	\$ 13,155,364	\$ 47,073,103	

## Expenditure Allocation

SVCW annual operating and maintenance costs are allocated according to the Joint Powers Agreement. Specifically, administrative, safety, and conveyance operating costs are allocated based on each Member Agency's proportionate share of total flow contributed to the Joint Facilities. Pump Station maintenance and operation costs are tracked as actual costs charged to each pump station and borne by the Member Agency served by each particular pump station. However, the maintenance and operation costs of the booster station are allocated on a percentage basis to West Bay Sanitary District and Redwood City at 92% and 8%, respectively.

Treatment plant operation and maintenance costs are allocated according to each Member Agency's proportionate contribution of hydraulic flow ("Flow"), Biochemical Oxygen Demand ("BOD") and Suspended Solids ("SS") to the Joint Facilities. The total annual treatment plant maintenance and operation costs are allocated as 26.5% to flow, 33.5% to Biochemical Oxygen Demand and 40% to Suspended Solids. Using these allocations, the 2018-19 Operating Budget assigns costs using the following three-year flow and loading averages:

2018-19 Budget Revenue Allocation to Member Agencies - Adopted									
Description				Belmont	Redwood City	San Carlos	West Bay San District	TOTAL	
Allocation Factors									
Flow				12.43%	47.49%	13.89%	26.19%	100%	
Biochemical Oxygen Demand (BOD)				12.44%	44.63%	12.29%	30.64%	100%	
Suspended Solids (SS)				11.97%	46.74%	11.57%	29.72%	100%	
Operating Expenditures	Weightings								
	Flow	BOD	SS						
	Operations	26.5%	33.5%	40.0%	\$ 1,125,355	\$ 4,247,351	\$ 1,141,584	\$ 2,672,767	\$ 9,187,056
	Maintenance	26.5%	33.5%	40.0%	779,011	2,940,169	790,245	1,850,186	6,359,611
	Laboratory	26.5%	33.5%	40.0%	216,185	815,934	219,303	513,450	1,764,871
	Environmental Services	26.5%	33.5%	40.0%	143,750	542,546	145,823	341,413	1,173,532
	Engineering	26.5%	33.5%	40.0%	93,467	352,765	94,814	221,987	763,033
	Safety	100.0%	0.0%	0.0%	49,945	190,821	55,812	105,235	401,813
	Information Services	26.5%	33.5%	40.0%	206,749	780,317	209,730	491,037	1,687,833
	Administrative Services	100.0%	0.0%	0.0%	452,709	1,729,619	505,884	953,858	3,642,071
Subtotal				\$ 3,067,171	\$ 11,599,522	\$ 3,163,195	\$ 7,149,933	\$ 24,979,821	
Subtract Miscellaneous Income	26.5%	33.5%	40.0%	\$ 93,854	\$ 354,228	\$ 95,208	\$ 222,908	\$ 766,198	
2018-19 Net Operating Revenue Required				\$ 2,973,317	\$ 11,245,294	\$ 3,067,987	\$ 6,927,025	\$ 24,213,623	

Capital costs are distributed based on each member entity's percentage of its capacity rights as defined in the Joint Powers Agreement:

<u>Belmont</u>	<u>San Carlos</u>	<u>Redwood City</u>	<u>West Bay</u>
9.45%	15.14%	48.57%	26.84%

Unrelated to the number of votes originally ascribed to Member Agencies in the Joint Powers Agreement, the above capital cost distributions are derived from each member entity's share of



maximum capacity rights of the originally-built facilities ("Stage 1" capacity) plus its share of expansion capacity ("Stage 2"), based on average dry weather flows.

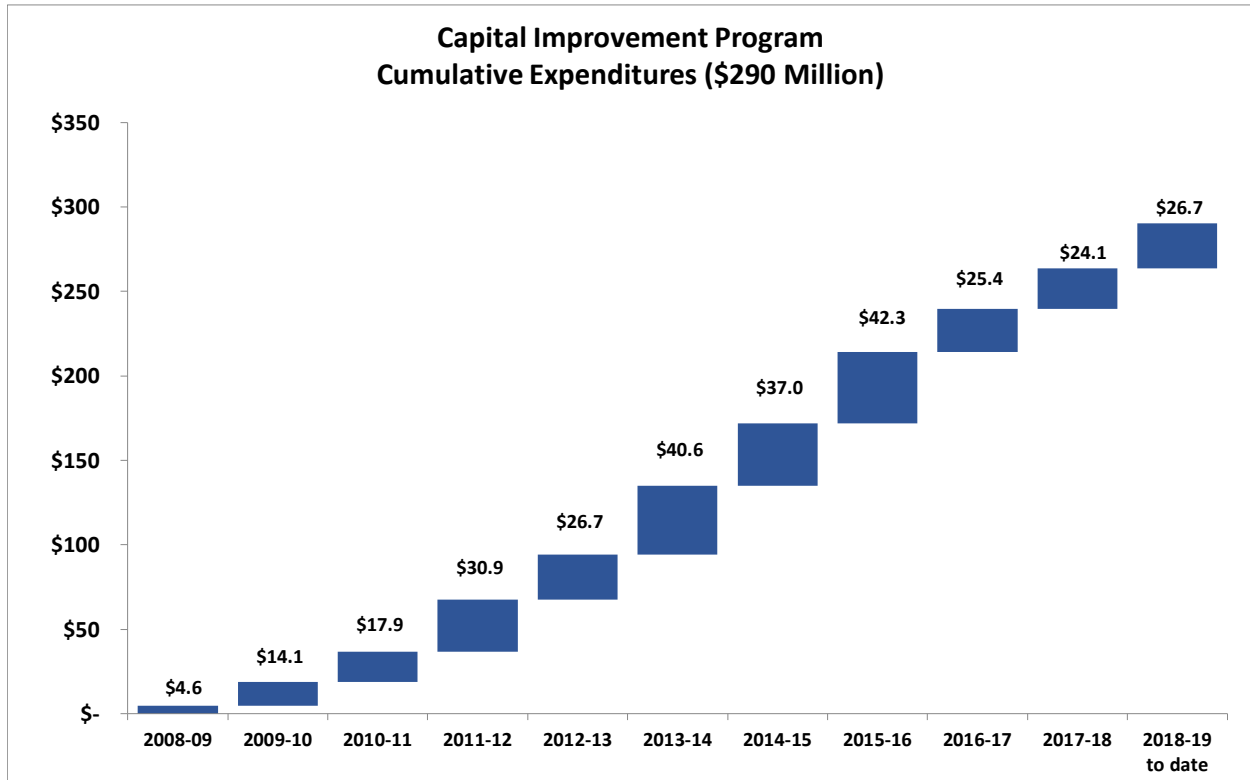
Capital costs associated with the Joint Facilities include improvements resulting from reconstruction, replacement, rehabilitation, remodeling or relocation. This includes all costs meeting the definition of a capital expense as defined in SVCW's Capital Expense Policy.

2018-19 Capital and Reserve Allocation Calculations					
Description	City of Belmont	Redwood City	City of San Carlos	West Bay San District	TOTAL
Capital and Reserve Allocation Factors	9.45%	48.57%	15.14%	26.84%	100.00%
<b>CAPITAL IMPROVEMENT</b>					
Plant (cash-funded capital)	\$ 87,885	\$ 451,701	\$ 140,802	\$ 249,612	\$ 930,000
Pump Stations	-	-	-	-	-
Force Main	-	-	-	-	-
Equipment	52,495	269,806	84,103	149,096	555,500
Subtotal	\$ 140,380	\$ 721,507	\$ 224,905	\$ 398,708	\$ 1,485,500
<b>RESERVE CONTRIBUTIONS</b>					
Operating Reserve	\$ (1,509)	\$ (7,755)	\$ (2,417)	\$ (4,285)	\$ (15,966)
CIP Reserve	94,500	485,700	151,400	268,400	1,000,000
Subtotal	\$ 92,991	\$ 477,945	\$ 148,983	\$ 264,115	\$ 984,034

### Capital Improvement Program

SVCW is in the process of rebuilding, rehabilitating, and updating its wastewater conveyance and treatment facilities which are at or approaching the end of their useful operating lives. A CIP was developed in 2008 to proactively address near-Range and long-Range capital replacement needs. Engineering staff periodically updates the CIP to include projects that will address known Joint Facility deficiencies. This includes rehabilitation and replacement of aging infrastructure and equipment; improvements and additions to the treatment plant and conveyance system that substantially enhance reliability; technological upgrades, required regulatory treatment improvements and system-wide automation projects designed to improve operational efficiency and reliability (thereby reducing future operating and maintenance expenses); and additional energy management solutions.

The amounts charged to CIP include all capitalized components of projects such as planning, design, engineering, construction, and construction management. The costs also include interest incurred during construction, as well as certain administrative costs like insurance and internal labor directly related to the CIP work. Since the inception of the CIP, SVCW spent approximately \$290 million through September 2018.



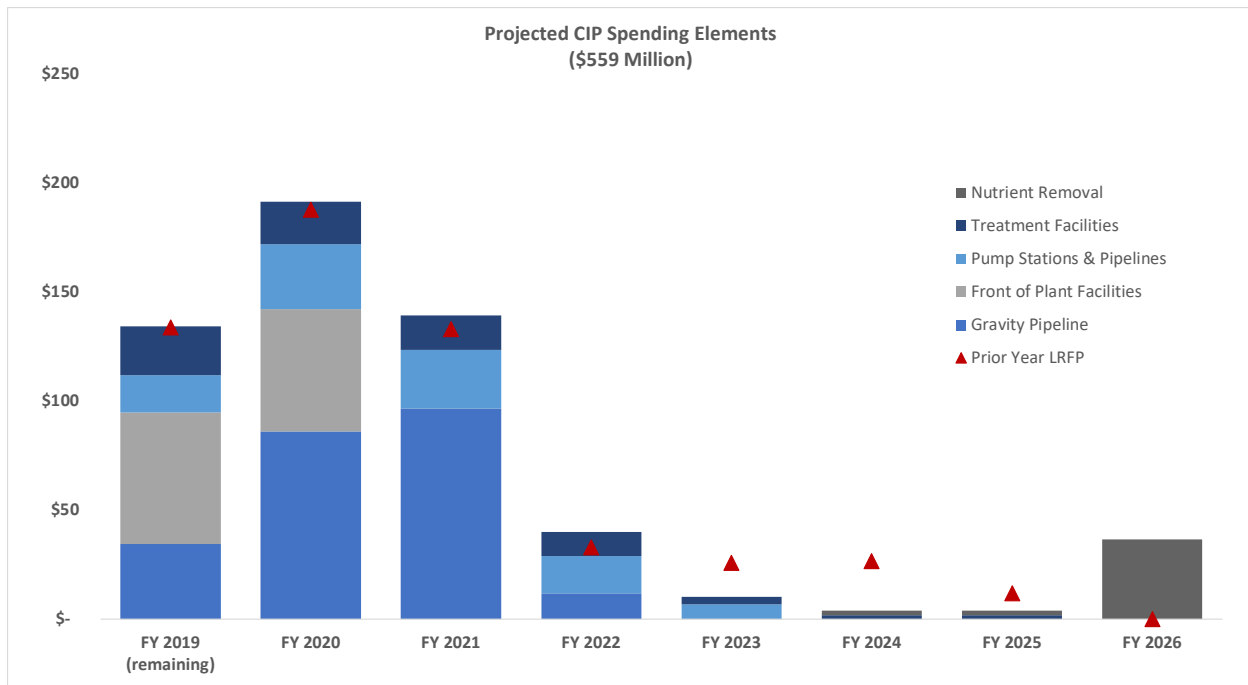
Since inception through September 2018, the majority of CIP spending has been to replace aging pipes, rehabilitate treatment facilities including energy reliability, deliver process automation, and improve solids handling processes.

CIP Expenditures (\$ Millions)					
Program	Spent to Date		Remaining		Total
Conveyance System	\$	115.8	\$	395.7	\$ 511.6
Energy and Automation		83.2		26.2	109.4
Plant Process		20.4		60.4	80.7
General Plant Facilities		35.2		7.6	42.8
Nutrient Removal		0.7		40.5	41.2
Solids Handling		20.4		19.3	39.7
Corrosion and Odor Control		14.1		9.4	23.5
CIP Support		0.5		0.2	0.7
TOTAL	\$	290.3	\$	559.2	\$ 849.6

#### *Forecasted CIP Expenditures*

The CIP was updated in October 2018 and is currently estimated to spend nearly \$850 million from inception to completion beyond 2026. Going forward, remaining expenditures are estimated at \$559 million. The below table illustrates how remaining capital expenditures are allocated amongst member entities.

SVCW Remaining Capital Expenditures - By Fiscal Year End and Member Allocation												
Member Entity		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Total		
Belmont	9.45%	\$ 12.7	\$ 18.1	\$ 13.2	\$ 3.8	\$ 1.0	\$ 0.4	\$ 0.4	\$ 3.4	\$ 52.8		
Redwood City	48.57%	65.2	92.9	67.7	19.4	5.0	1.9	1.9	17.7	271.6		
San Carlos	15.14%	20.3	29.0	21.1	6.1	1.6	0.6	0.6	5.5	84.7		
West Bay SD	26.84%	36.0	51.3	37.4	10.7	2.8	1.0	1.0	9.8	150.1		
<b>TOTAL</b>	<b>100.00%</b>	<b>\$ 134.2</b>	<b>\$ 191.3</b>	<b>\$ 139.3</b>	<b>\$ 40.0</b>	<b>\$ 10.3</b>	<b>\$ 3.8</b>	<b>\$ 3.8</b>	<b>\$ 36.5</b>	<b>\$ 559.2</b>		
<i>Prior LRFPA Assumption:</i>												
		\$ 30.1	\$ 133.7	\$ 187.5	\$ 132.8	\$ 33.0	\$ 25.9	\$ 26.5	\$ 11.7	\$ 581.2		



The majority of anticipated CIP costs can be attributed to replacement of the aging conveyance system infrastructure, namely, the RESCU program. RESCU is comprised of three significant elements with a combined remaining expenditures estimate of approximately \$443 million. These projects include:

1. Replacement of the influent force main with a gravity pipeline;
2. Construction of a receiving lift station, screening and grit removal, peak flow and storm water handling facilities, influent connector pipeline (collectively, “Front of Plant”), and;
3. Replacement / rehabilitation of the pump stations.

The environmental review for RESCU is complete for all elements. Construction has commenced for the gravity pipeline and Front of Plant elements, and the Authority anticipates entering into a Design-Build contract in early 2019 for the Pump Station Improvement Plan. Combined, these three elements require capital expenditures of \$112 to \$172 million per year for the next three years.

## **Cash Reserves Policy**

In 2013, the SVCW Commission adopted a cash reserves policy that protects its fiscal solvency and funds future long Range capital needs. The policy describes the goals and amounts intended to be held in reserves. Each year during the budget process, SVCW reviews reserve balances and adjusts as needed. SVCW debt reserves mitigate the negative impact of revenue shortfalls from economic fluctuations, to fund unforeseen expense requirements, to provide stable rates for member entities, and to help fund future long-Range capital needs.

- The Operating Reserve must be maintained at a minimum balance of 10% of the approved Operating and Pay-go Capital Budget, plus \$1 million. This fund allows for continued operation in times of local, regional state, or national crisis or for unbudgeted, unexpected operational, maintenance or capital expenses approved by the SVCW Commission. As of December 31, 2018 the amount held in this reserve was \$3.5 million.
- The Capital Improvement Program Reserve Fund goal is to accrue funds equal to the annual calculated depreciation of SVCW facilities to meet the long Range needs of replacing capital assets when their useful life has been met. This will ultimately allow most major expenses in the future to be paid for on a pay-as-you go basis and limit the need for borrowing. Per policy, a minimum of \$1 million is added to the Capital Improvement Program Reserve Fund each fiscal year through fiscal year 2020-21, after which it shall follow prescribed increases until the annual contribution equals annual depreciation. As of December 31, 2018 the CIP reserve was \$17.9 million.
- Stage 2 Capacity Reserve is utilized to pay for capital projects that increase the treatment capacity of SVCW facilities. This fund is a pay as you go fund that derives income from fees paid by new customers to buy capacity for the use of SVCW facilities. Projects that enhance capacity will be built when there are adequate cash reserves to fund the projects if needed to accommodate additional flow or loadings or at the discretion of the SVCW Commission. As of December 31, 2018 the amount held in this reserve was \$11.1 million.

## **Debt Policy**

SVCW adopted a debt policy in 2017 that considers intergenerational equity between residents, strives to achieve the lowest possible cost of capital, and mitigates market and credit risk. Appropriately structured, the debt policy attempts to assign capital costs between current ratepayers and future generations.

Significant capital acquisitions can be funded through traditional bonds or alternative financing mechanisms such as government loans (e.g. SRF and WIFIA) and/or public/private partnerships.

Long Range financings are structured to minimize transaction-specific risk and total debt portfolio risk to SVCW and its Member Entities.

SVCW debt must comply with all laws, legal agreements, contracts, best practices, and adopted policies related to debt issuance and management, including disseminating, in a timely manner, disclosure information concerning SVCW's and SVCW's Member Entities' financial condition. It must also follow sound procurement practices to avoid conflicts of interest.

SVCW debt promotes cooperation and coordination with all stakeholders in the financing and delivery of services by maintaining cost-effective access to capital markets through prudent debt management. This includes integrating debt policies with the operating and capital budgets, the multi-year CIP, the Long Range Financial Plan, and other financial goals. SVCW must also maintain good investor relationships through the timely dissemination of material financial information to maintain the highest practical credit rating and ensure efficient access to capital markets.

Long-Range debt financing is not used to fund operating costs or operating deficits of SVCW. The principal types of municipal debt instruments employed by SVCW to finance long-Range capital projects are SRF Loans and Wastewater Revenue Bonds. Such instruments may be refunded by the issuance of refunding obligations for economic savings and/or restructuring considerations.

Short-Range debt has Ranges to maturity of less than five years and may be issued to provide financing for the acquisition and/or construction of long-lived capital projects that could otherwise be funded by long-Range debt financing described above. This includes commercial paper notes that are issued to provide interim project financing, Bond Anticipation Notes which may have a final maturity of not more than five years and are issued in anticipation of the issuance of wastewater revenue bonds, and a short-Range line of credit not to exceed five years.

## **Investment Policy**

SVCW has adopted a policy to invest monies not required for immediate expenditure. The policy establishes a standard of care to ensure investments are made with the appropriate considerations of capital safety, liquidity, and yield. The investment portfolio is diversified such that losses, if any, on specific securities are offset by the revenue generated from other investments. The portfolio is also kept sufficiently liquid to meet the operating and capital needs of SVCW. Within these two constraints, as well as in accordance with California Government Code Section 53601 through 53686, the investment portfolio is designed to attain the market rate of return after consideration is given to safety and liquidity.

### **SECTION 3 – MODELING ASSUMPTIONS**

SVCW has developed a Debt Model (the Model) to project debt service costs associated with the Capital Improvement Plan. Currently there is approximately \$559 million of capital projects to be funded over the next eight years. The Model allows SVCW to produce multiple funding scenarios that compare debt service costs at aggregate and Member Entity levels. The Model also optimizes variables by considering the impact of using cash, longer repayment Ranges, caps on debt service levels, deferred repayment, and changes in interest rate assumptions.

For each change in assumption, the Model displays total aggregate debt service, maximum aggregate annual cost, average annual debt service cost, weighted average cost of capital and weighted average CIP repayment year, among a few other debt summary outputs. Additionally, the Model shows the height and length of the “plateau” of this plateau, a critical consideration for members’ sewer rates. Finally, the Model also compares efficiency versus affordability of financing the debt by determining the length of each repayment period and financing rates.

#### **Debt Structure**

The Model generated and compared multiple debt financing scenarios to fund the total CIP by comparing interest rates and average costs per year. The flexibility of the Model allows for changing multiple assumptions, including interest rates, the timing and structure of government loan or bond repayments, and the mix of financing methods such as government loans or wastewater revenue bonds.

While the availability of government loan programs like SRF and WIFIA is uncertain, these loans are attractive for their low interest rates and traditional structures. Both have a similar structure as revenue bonds: thirty-year amortization and level debt service, but the SRF interest rate is set at half the California General Obligation Bonds rate while the WIFIA program is at the Treasury rate plus a few basis points. For example, tax-exempt interest rates in the current AAA bond market for a thirty-year maturity were approximately 3.03% as of January 11, 2019; or approximately 181 basis points higher than SVCW’s anticipated SRF loan at an effective rate of 1.22%. Including the additional execution costs of a publicly offered debt issue, SRF Loans are clearly the most cost-effective strategy as they become available.

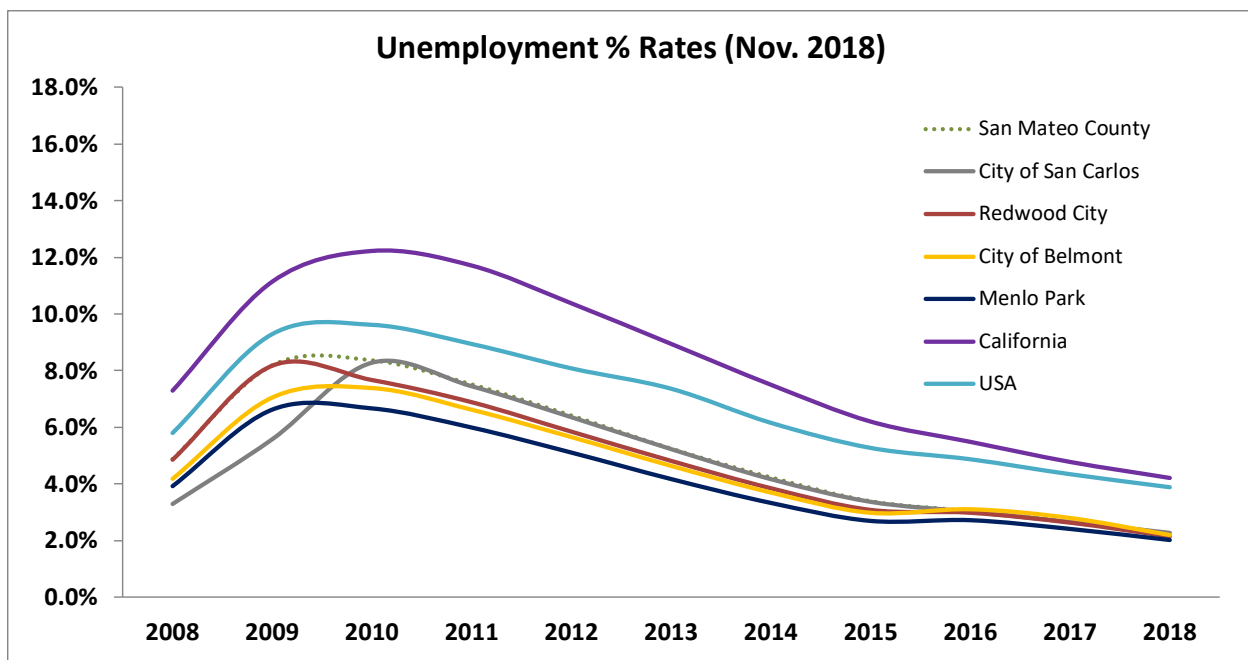


## Economic Factors

Sewer revenues are somewhat influenced by the strength of the economy and other financial indicators. SVCW-estimated operating costs and the timing of CIP expenditures assume neither a significant downturn nor expansion in the San Francisco Bay Area economy. General economic conditions are comprised of many different factors; but sewer revenues are likely influenced by only a few factors. This report therefore focuses on six different broad factors that are good indicators of a strong economic environment: unemployment, assessed property valuation, taxable sales, income (measured by effective buying income and median household income), and interest rates.

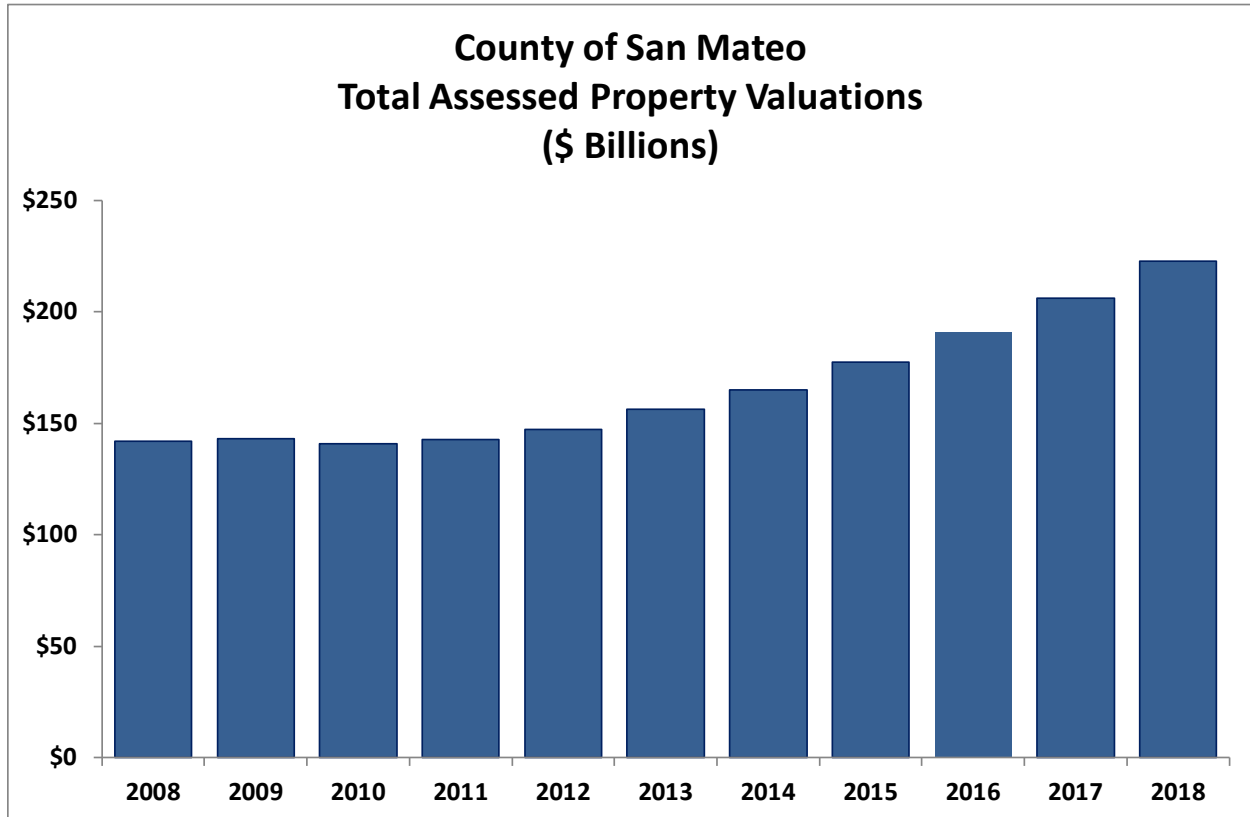
### *Unemployment*

Reflective of the Bay Area's strong economy, recent 2018 data from the United States Bureau of Labor Statistics shows unemployment rates for San Mateo County at 2.2%, well below California and National rates, respectively. The cities of San Carlos, Redwood City, Menlo Park and Belmont show similarly low rates.



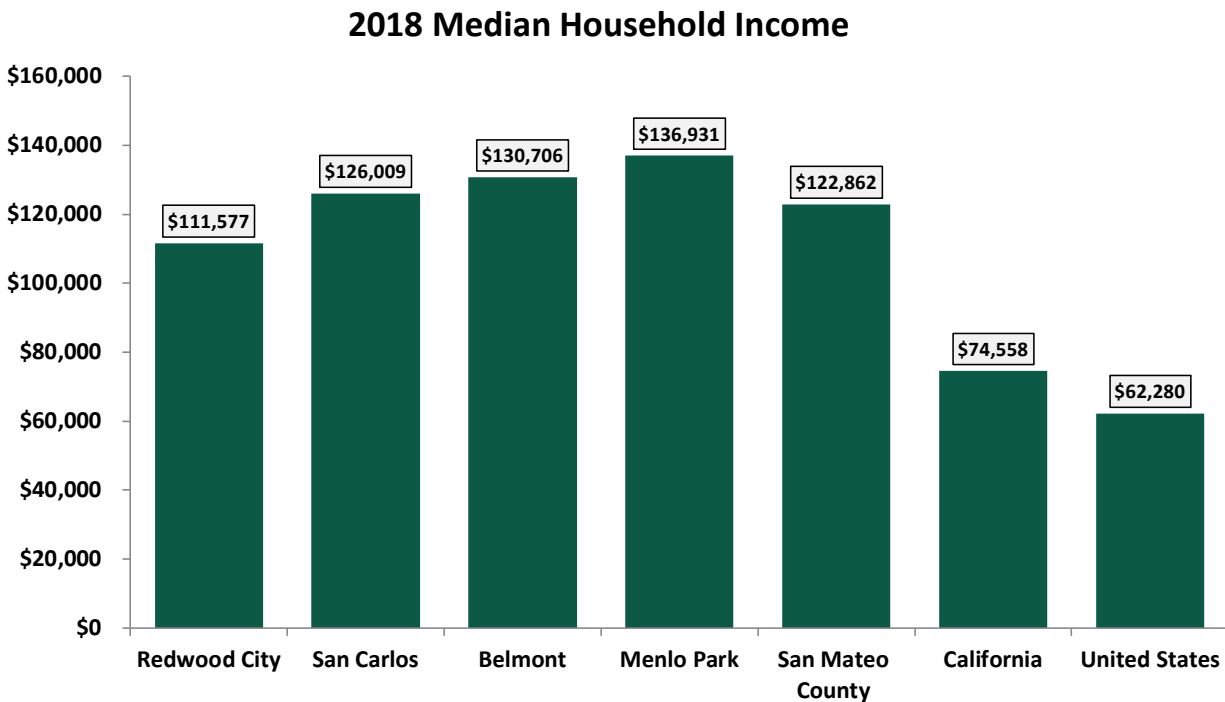
### *County Assessed Valuations*

San Mateo County has approximately \$223 billion in total assessed real property valuation, an increase of \$16.5 billion (or 8.0%) from the previous year.



### *Median Household Income*

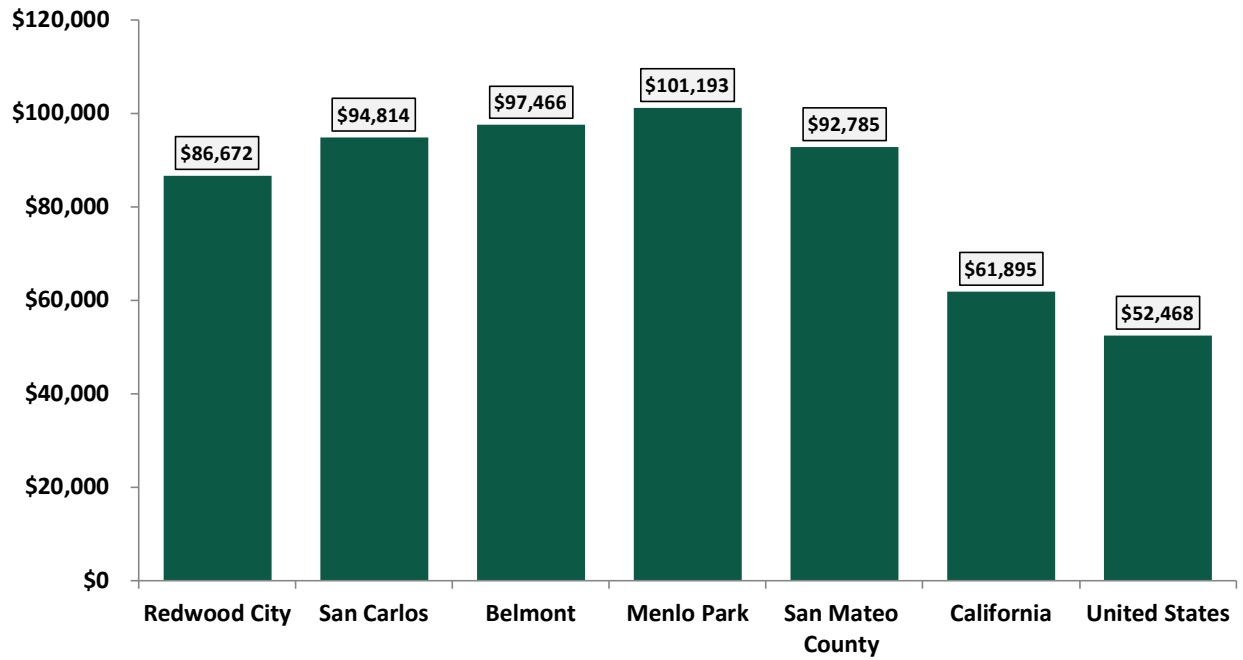
The median household incomes and effective buying incomes are consistently above the State and National income rates for San Mateo County, City of Belmont, City of San Carlos, City of Menlo Park and Redwood City. Public 2018 economic data shows that the median household income of San Mateo County, at \$122.8 thousand, is 197 percent and 165 percent of the Nation's and State's median household income, respectively.



### *Effective Buying Income*

The Communities served by SVCW show high effective buying income levels in comparison to National and State medians. The Effective Buying Income is the amount of a consumer's disposable income; it reflects the money consumers have to spend after taxes. The following chart shows that SVCW communities have Effective Buying Incomes of \$86 thousand to \$101 thousand, which is 165 percent to 193 percent of the National levels, and 140 percent to 163 percent of California levels.

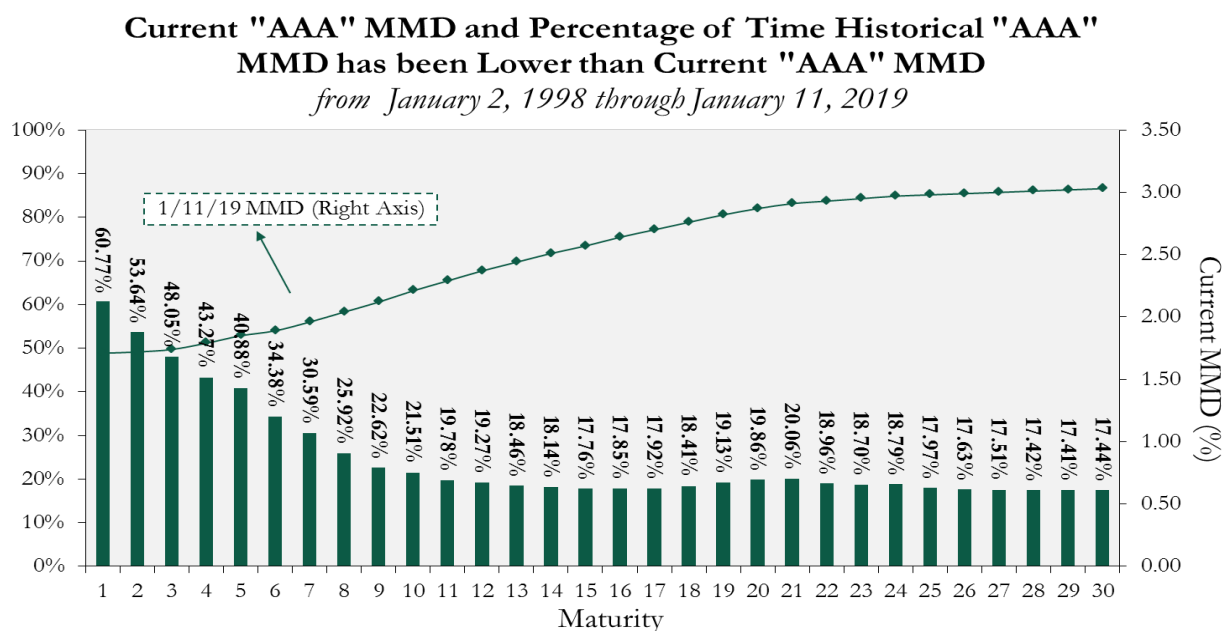
## 2018 Effective Buying Income



## Interest Rates

Based upon market conditions, every financing tool has projected interest rates depending on the type of the debt whether it is fixed or variable. For example, the anticipated SRF loan rate for the RESCU program, based on discussions with the State, is 1.22%. WIFIA loan rate is tied to the treasury rate and is forecasted at 3.45%. As fixed rate bonds are subsequently used, SVCW anticipates a projected interest rate of 4.25% for bonds issued in 2021. Short-Range Note Obligations are assumed to be at a rate of 2.25%. Finally, the Model uses a total projected variable rate of 3.40% inclusive of annual liquidity fees. At present, tax-exempt rates have remained above the near-historical lows of July 2016.

The table below provides tax-exempt interest rates for the Municipal Market Index as of January 4, 2019 and compares current rates to historical rates by Range. The data demonstrates that interest rates, while near historical lows throughout the yield curve, were lower historically in the shorter maturities than in the later years, i.e., years 20 through 30.

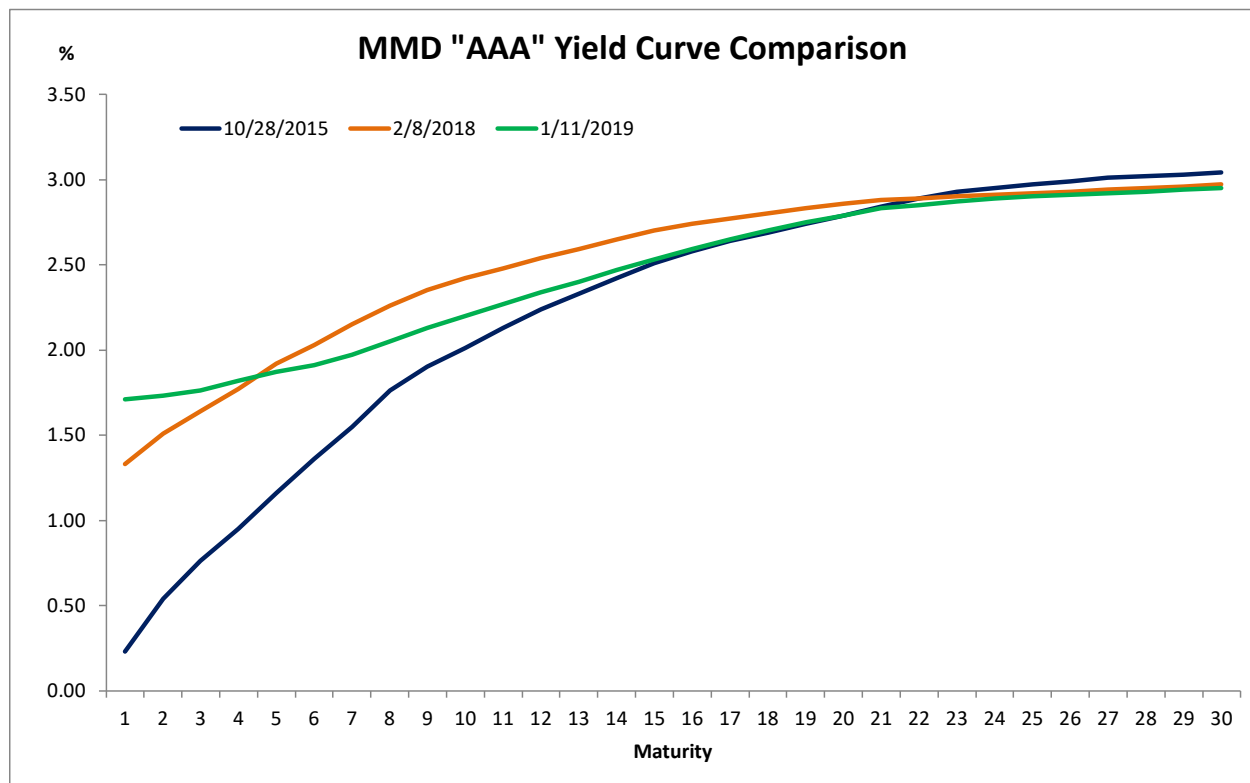


Source: Thomson Municipal Market Monitor

The two yield curves shown below represents the interest rates for the maturity years 1 - 30 for October 28, 2015 (the sale date of SVCW's last Bond issuance) and February 8, 2018 (sale date of SVCW's 2018 Bond issuance) in comparison to January 4, 2019. The most notable change is the rising of rates along the short end of the yield curve since 2015, as 2019 short-Range rates in 1 to 10-year maturities have risen sharply while longer maturities have decreased from 2015 levels.

Until 2016, slow national economic recovery prompted central banks to keep interest rates low to spur economic recovery. The Federal Reserve has continued to increase the Fed Funds rate by

¼ percent seven times since and is expected to raise rates three additional times during 2019. However, with interest rates still near historical lows it remains an advantageous time to finance projects as recommended by the Plan.



Source: Thomson Municipal Market Monitor

#### *Interest earnings on Project Funds and Reserves:*

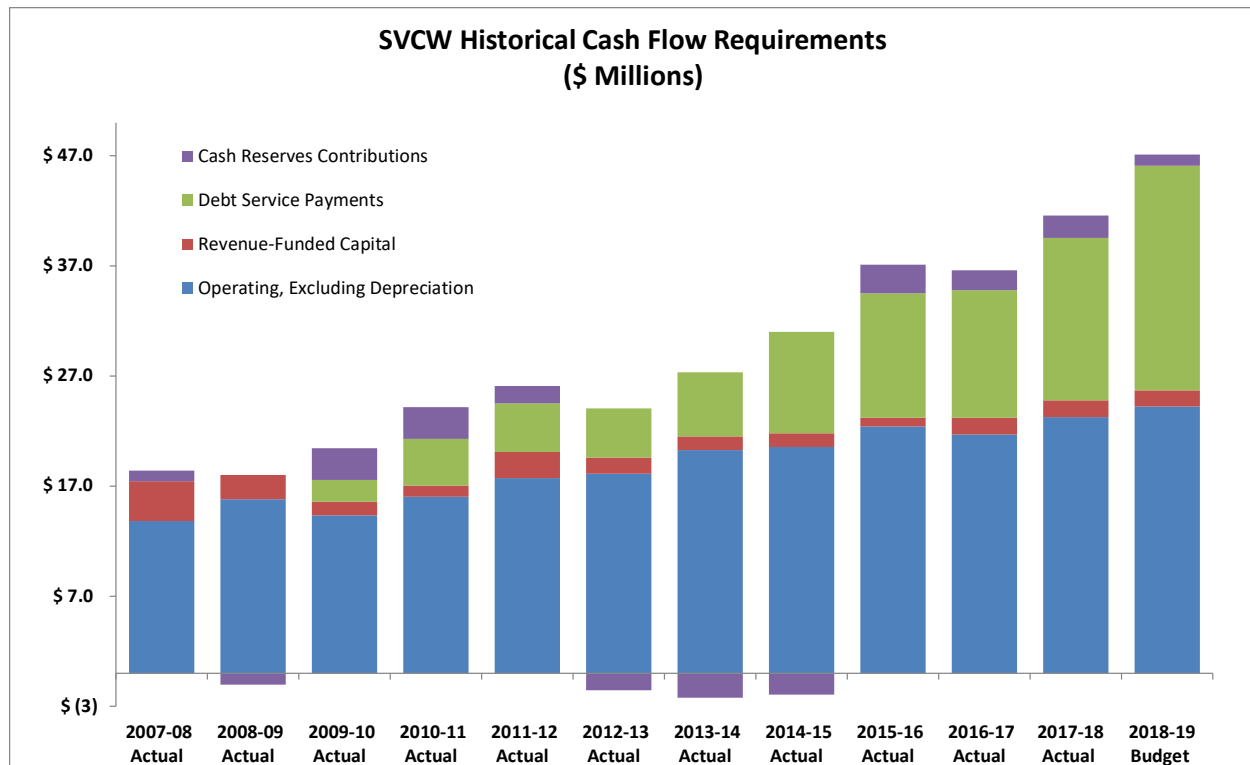
It is estimated that funds held by SVCW related to the CIP, including reserve funds required by the SRF Loan program, will receive investment earnings of 1.5% annually over the long Range.

## SECTION 4 – HISTORICAL FINANCIALS

### Historical Cash Flow Requirements

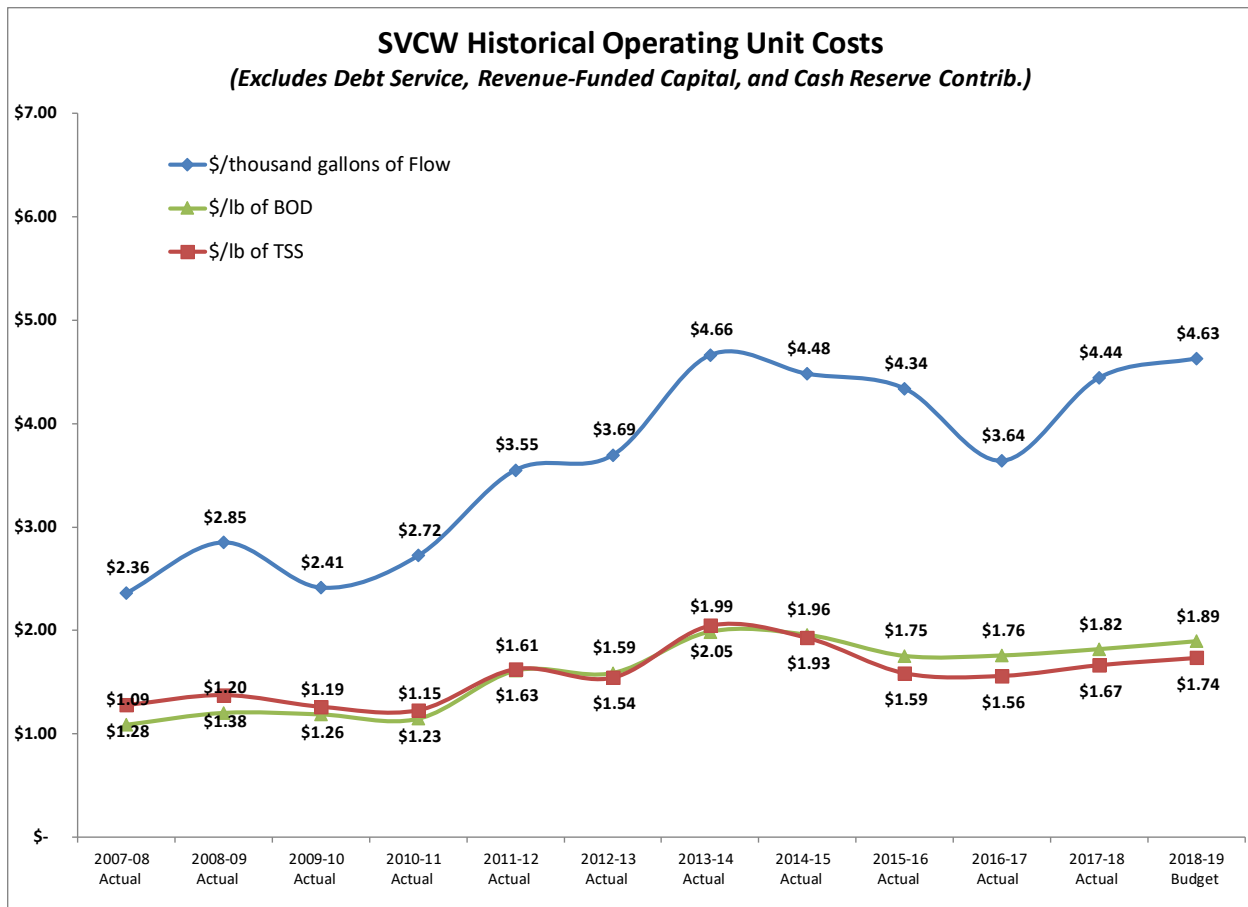
#### *Total Cash Flow Requirements*

SVCW annual cash flow requirements from Members have more than doubled over the past decade, mostly due to higher debt service payments needed to finance its CIP.



#### *Historical Unit Costs*

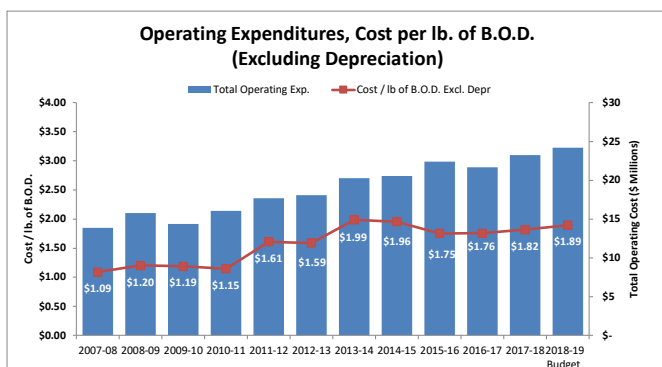
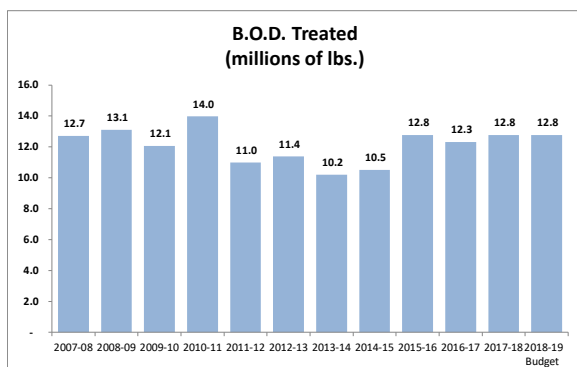
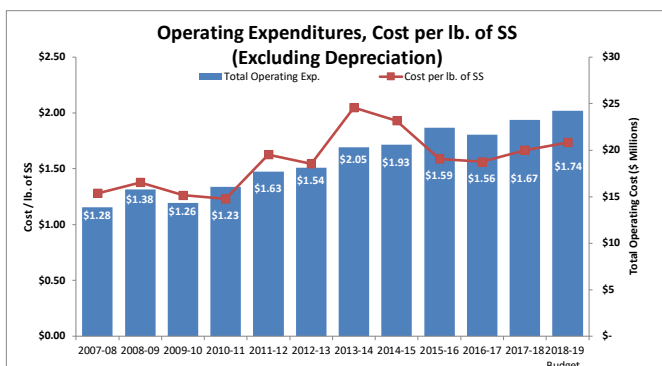
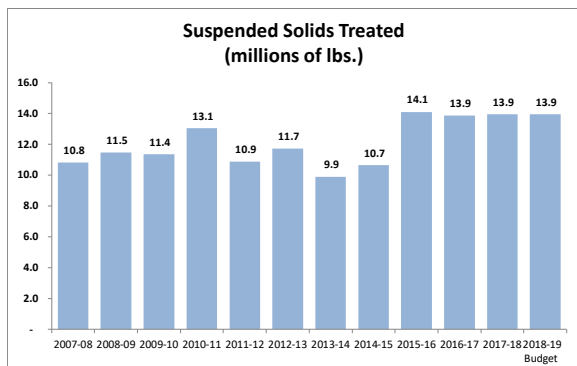
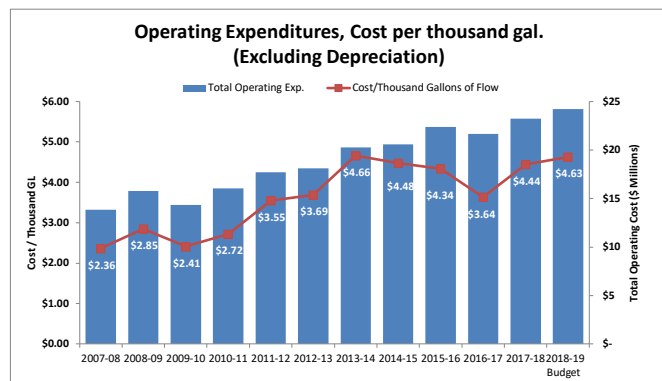
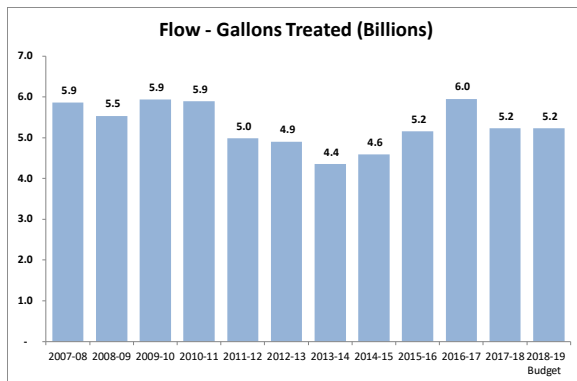
When isolated to only Operating Expenditures (excluding Depreciation), SVCW historical operating unit costs have increased 75% since the pivotal year 2007-08 eleven years ago. Since then SVCW has experienced ordinary inflationary pressures, increased Maintenance staff to better service SVCW assets, and established an Engineering Division to develop and manage the CIP.



In addition to the change in wastewater flows caused by droughts, the characteristics of the wastewater stream have also changed as local communities added housing and commercial developments. Low-flush toilets have introduced higher concentrations in wastewater, and both Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) have been at all-time highs beginning 2016-17. The following charts provide a side-by-side comparison of operating volumes and unit cost trends.

Another influencing factor on unit costs is volatility of operating volumes (Flow, Biological Oxygen Demand, and Total Suspended Solids). Drought conditions from 2011 to 2016 contributed to a rise in Unit Costs, then afterwards returned to “normal” levels in 2017. These Unit Costs are defined as Operating Cost per thousands of gallons treated, Operating Costs per pound of TSS, and Operating Costs per pound of BOD.



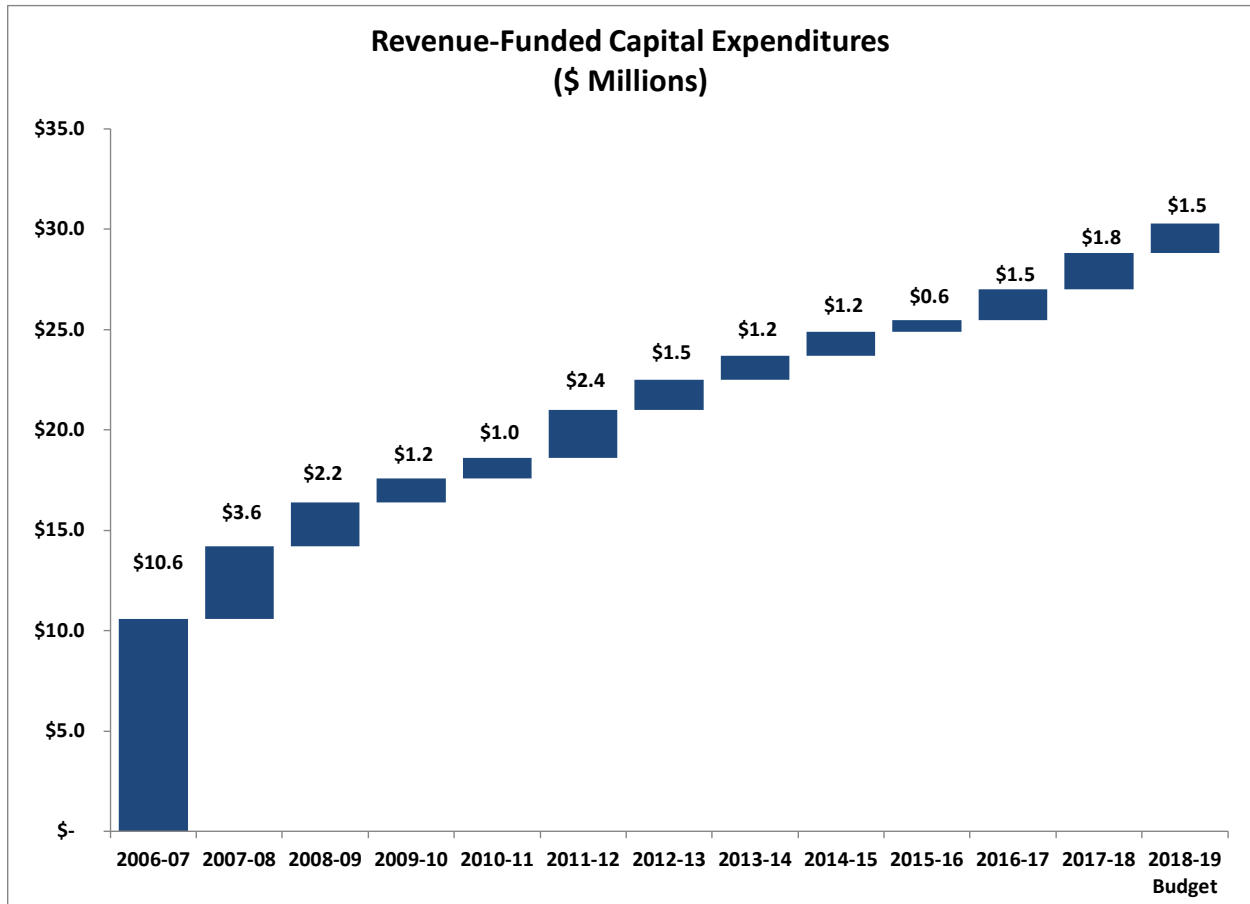


### Revenue-Funded Capital Expenditures

Revenue-Funded Capital Expenditures are for capital projects that are generally below \$1 million and completed within one year. Revenue-funded capital projects may include minor construction, purchase of vehicles or heavy equipment, maintenance repairs that improve an asset's useful life, as well as planning studies or preliminary engineering analysis for major capital improvements. Due to their relatively minor cost, it is appropriate to fund these items using cash rather than long-range debt.

Since 2006-07, SVCW has spent approximately \$28.8 million on Revenue-Funded Capital. Prior to formally adopting the Capital Improvement Program in fiscal year 2007-08, Member Entities made

relatively large cash contributions to address SVCW's immediate capital project needs. Since 2008-09, however, SVCW has averaged \$1.4 million annually in Revenue-Funded capital expenditures.



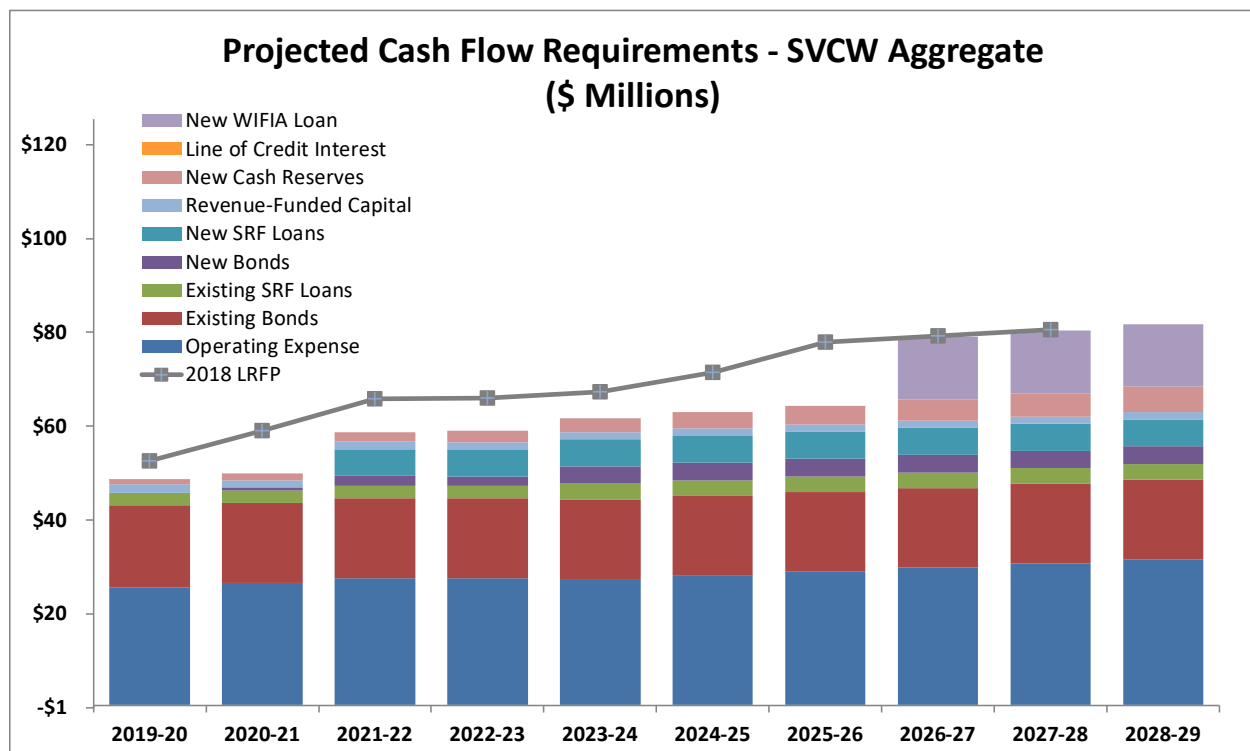
### *Cash Reserves*

The SVCW Commission has adopted cash reserve policies that document the goals and amounts intended to be held in reserves. Each year, the SVCW budget process reviews reserve balances and makes adjustments necessary to meet the policy. In 2017-18, \$1 million was contributed to the Capital Improvement Program Reserve.

## SECTION 5 – TEN-YEAR FINANCIAL PROJECTIONS

In fiscal year 2019-20 SVCW anticipates total expenditures will be \$48.2 million for all costs of operations, debt service, revenue-funded capital, and reserve contributions. This figure is anticipated to grow to \$81.3 million over the next ten years:

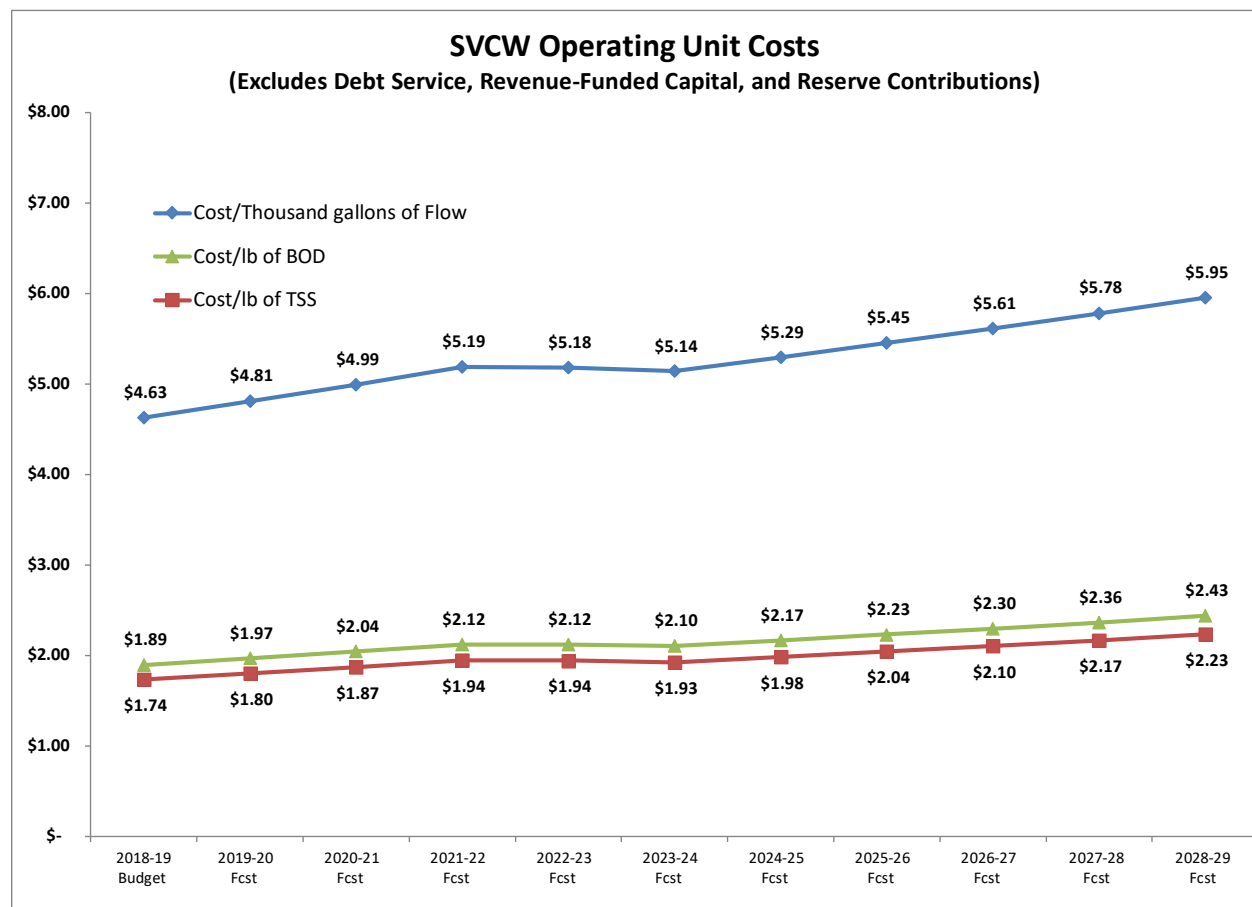
Projected SVCW Cash Flow Requirements - Aggregate (\$ Millions)										
Description	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Operating Expense	\$ 25.15	\$ 26.09	\$ 27.13	\$ 27.09	\$ 26.87	\$ 27.68	\$ 28.51	\$ 29.36	\$ 30.23	\$ 31.12
Existing Bonds	17.46	17.02	17.01	17.00	17.00	17.01	16.98	16.98	16.98	16.97
Existing SRF Loans	2.63	2.63	2.63	2.63	3.32	3.32	3.32	3.32	3.32	3.32
New Bonds	-	0.68	2.12	2.12	3.77	3.77	3.77	3.77	3.77	3.77
New SRF Loans	-	-	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Line of Credit Interest	0.20	-	-	-	-	-	-	-	-	-
New WIFIA Loan	-	-	-	-	-	-	-	13.36	13.36	13.36
Revenue-Funded Capital	1.80	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
New Cash Reserves	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50
TOTAL	\$ 48.24	\$ 49.42	\$ 58.14	\$ 58.60	\$ 61.22	\$ 62.53	\$ 63.83	\$ 78.54	\$ 79.91	\$ 81.30



## Operating Expenditures

Total operating expenses will increase by approximately 3.65 percent annually over the next decade. The Financial Plan has incorporated future benefits of power generation, revenues from food waste, and improved productivity from automation.

SVCW Operating Expenditures (\$ Millions)												
Description	2018-19 Budget	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast	2028-29 Forecast	
Personnel	\$ 15.7	\$ 16.4	\$ 17.0	\$ 17.7	\$ 18.4	\$ 18.9	\$ 19.5	\$ 20.0	\$ 20.5	\$ 21.1	\$ 21.7	
Utilities	1.7	1.8	1.9	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.3	
Administrative Costs	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	
Equipment & Supplies	2.7	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	
Chemicals	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	
Professional Services	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	
Contractual Services	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	
Regulatory and Training	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	
<b>Total Expenditures</b>	<b>\$ 25.0</b>	<b>\$ 25.9</b>	<b>\$ 26.9</b>	<b>\$ 27.7</b>	<b>\$ 28.7</b>	<b>\$ 29.5</b>	<b>\$ 30.4</b>	<b>\$ 31.3</b>	<b>\$ 32.2</b>	<b>\$ 33.1</b>	<b>\$ 34.1</b>	
Less Misc. Revenue	(0.8)	(0.8)	(0.8)	(0.5)	(1.6)	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(3.0)	
<b>Net Operating Expend.</b>	<b>\$ 24.2</b>	<b>\$ 25.1</b>	<b>\$ 26.1</b>	<b>\$ 27.1</b>	<b>\$ 27.1</b>	<b>\$ 26.9</b>	<b>\$ 27.7</b>	<b>\$ 28.5</b>	<b>\$ 29.4</b>	<b>\$ 30.2</b>	<b>\$ 31.1</b>	



## Debt Service Structure / Annual Debt Service Payments

SVCW uses debt as necessary to fund its CIP. Through its Member Entities, SVCW has already funded or has received funding commitments of \$457 million for capital improvements. Sources of funds include Wastewater Revenue Bonds, Member Entity cash contributions, SRF Loans, and grants.

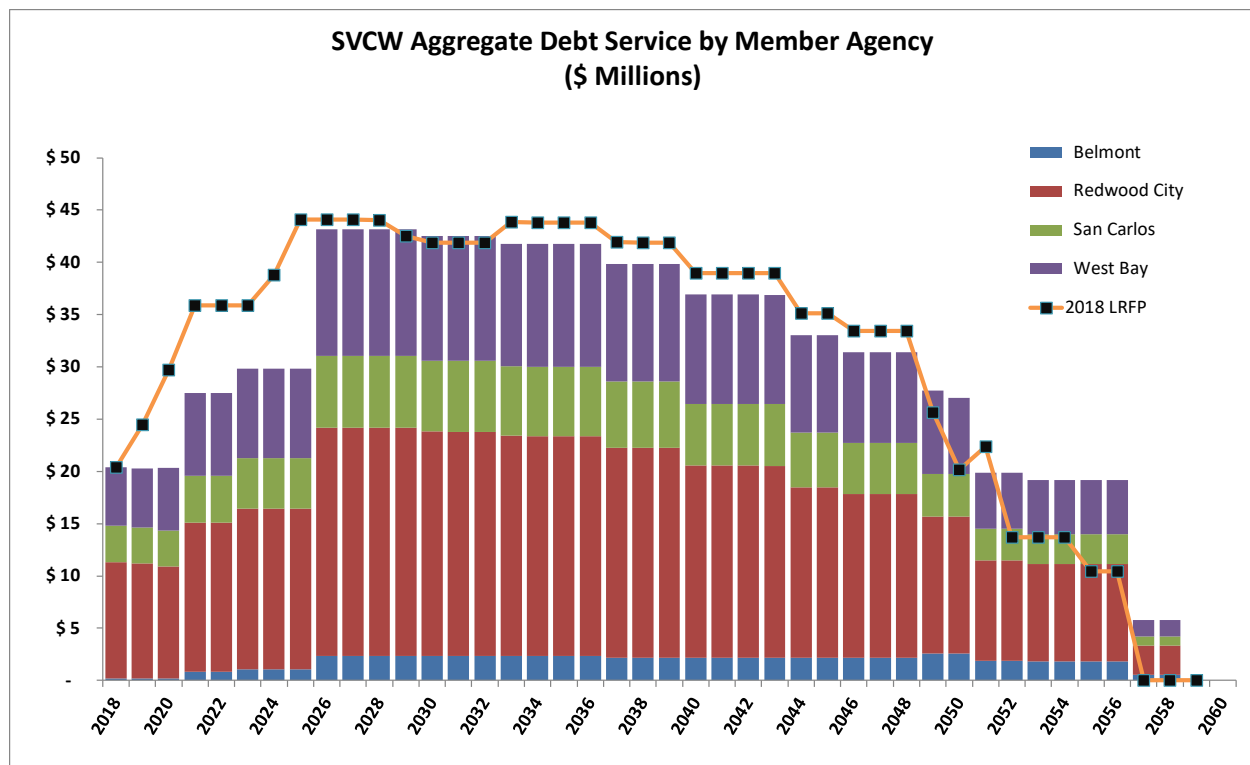
Source of CIP Funds to date (\$ millions)			
Description	All-in TIC / Interest Rate	Max Proceeds	Available Proceeds at 10/31/18
<b>Bonds</b>			
2008 Wastewater Revenue Bonds	5.03%	\$ 10.01	\$ -
2009 Wastewater Revenue Bonds	5.12%	55.86	-
2014 Wastewater Revenue Bonds	4.18%	65.54	-
2015 Wastewater Revenue Bonds	3.75%	30.00	-
2018 Wastewater Revenue Bonds	3.43%	148.98	101.12
Subtotal - Bonds		310.38	101.12
<b>Cash Contributions in lieu of Debt</b>			
Belmont		34.15	10.10
Redwood City		10.00	-
West Bay Sanitary District		13.02	13.02
Subtotal - Cash		57.16	23.12
<b>State Revolving Fund Loans</b>			
Control Building	2.60%	11.36	-
WWTP Improvements	1.80%	31.55	-
Conveyance Planning	1.60%	14.00	2.78
Subtotal - SRF		56.91	2.78
<b>Line of Credit</b>			
Wells Fargo LOC	LIBOR-based	65.00	51.30
<b>Grant Funding</b>			
PG&E Cogeneration Grant		2.40	0.60
California Energy Commission		0.50	-
Subtotal - Grant Funding		2.90	0.60
<b>TOTAL</b>		<b>\$ 492.36</b>	<b>\$ 178.91</b>

Looking forward, approximately \$559 million of the CIP remains to be funded. This LRFP recommends the following debt structure, with a comparison to the prior year's LRFP:

Description	2018 LRFP	2019 LRFP
<b>Remaining CIP to be funded</b>	<b>\$581 Million</b>	<b>\$559 Million</b>
Fixed Rate Bonds / % of New Debt	\$371M / 65%	\$24M / 4.3%
Variable Rate Bonds / % of New Debt	\$115M / 19%	\$48M / 8.5%
Government Loans / % of New Debt	\$65M / 11%	\$349M / 62.4%
Proceeds or Cash / % of New Debt	\$30M / 5%	\$139M / 24.8%
Weighted Average Cost of Capital %	3.64%	2.88%

The updated debt structure, compared to 2018 estimates, will reduce service payments through the next 23 years. These savings are significant especially over the next seven years due to unique WIFIA structure that allows debt amortization to be deferred for up to five years after completion of construction.

Over the entire 41-year period displayed below, total aggregate debt service is now estimated at \$1.28 billion, or approximately \$40 million (in nominal dollars) less than the prior year's LRFP. If discounted to today's dollars, this difference is valued at a Net Present Value of \$46 million.



### *SVCW Wastewater Revenue Bonds*

Financing Agreements adopted between SVCW and its Member Entities obligate each of these agencies to make payments to SVCW for their respective allocable share of debt service. The City of Belmont has, to date, not participated in SVCW Bond financing and is therefore not obligated to make debt service payments on bonds currently outstanding.

Existing bond debt service payments are \$17.5 million in fiscal year 2019-20, including four issuances from 2009, 2014, 2015, and 2018. Only one new Bond Debt issuance is planned in 2021, and a variable-rate issuance in 2023.

### *State Revolving Fund Loans*

SVCW has thus far financed certain projects by entering into three separate sale-repurchase agreements with the State Water Resources Control Board (SWRCB). This program is funded from the California State Revolving Fund (SRF) program. The project funds, including any accrued interest, are repaid in annual installments commencing one year after construction.

Current SRF loan payments will peak at \$3.3 million. These loans financed the Control Building, certain Wastewater Treatment Improvements loans, and conveyance system planning efforts.

SVCW is currently in discussions with the SWRCB to secure a \$140.8 million SRF loan for the gravity pipeline element of RESCU, anticipated to close in 2019.

### *Line of Credit*

SVCW holds a \$30 million Line of Credit (LOC), with the ability to increase it to \$65 million. This LOC provides bridge financing for CIP projects. It remains a valuable tool to manage cash flow and to date has reduced overall borrowing costs. Specifically, the LOC furnishes interim cash flows between bond issuances or when SVCW awaits reimbursement of construction costs funded by the SRF program. When borrowing through SRF, SVCW pays for services and afterwards submits paid invoices to the state for reimbursement. Reimbursement generally takes 90 to 120 days and the LOC acts as a bridge loan during this period.

## Revenue-Funded Capital Expenditures

SVCW anticipates investing approximately \$1.5 million annually in critical projects to maintain ongoing operations. These projects are purchased and may be installed and managed by staff, examples of which include vehicles, valves, pumps, motors, gear assemblies, technology devices, or maintenance equipment.

## Cash Reserves Contributions

The table below shows the projected annual cash reserve contributions to the Capital Improvement Program Fund, its earnings, and the balances. After ten years SVCW is projected to have nearly \$53 million in cash reserves that could be used for the next generation of capital improvements.

CIP Cash Reserves Forecast (\$ Millions)											
Description	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	
Beginning Balance	\$ 17.1	\$ 18.3	\$ 20.0	\$ 22.2	\$ 25.0	\$ 28.3	\$ 32.1	\$ 36.4	\$ 41.3	\$ 46.8	
Contributions	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	
Earnings	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	
Ending Balance	\$ 18.3	\$ 20.0	\$ 22.2	\$ 25.0	\$ 28.3	\$ 32.1	\$ 36.4	\$ 41.3	\$ 46.8	\$ 52.8	

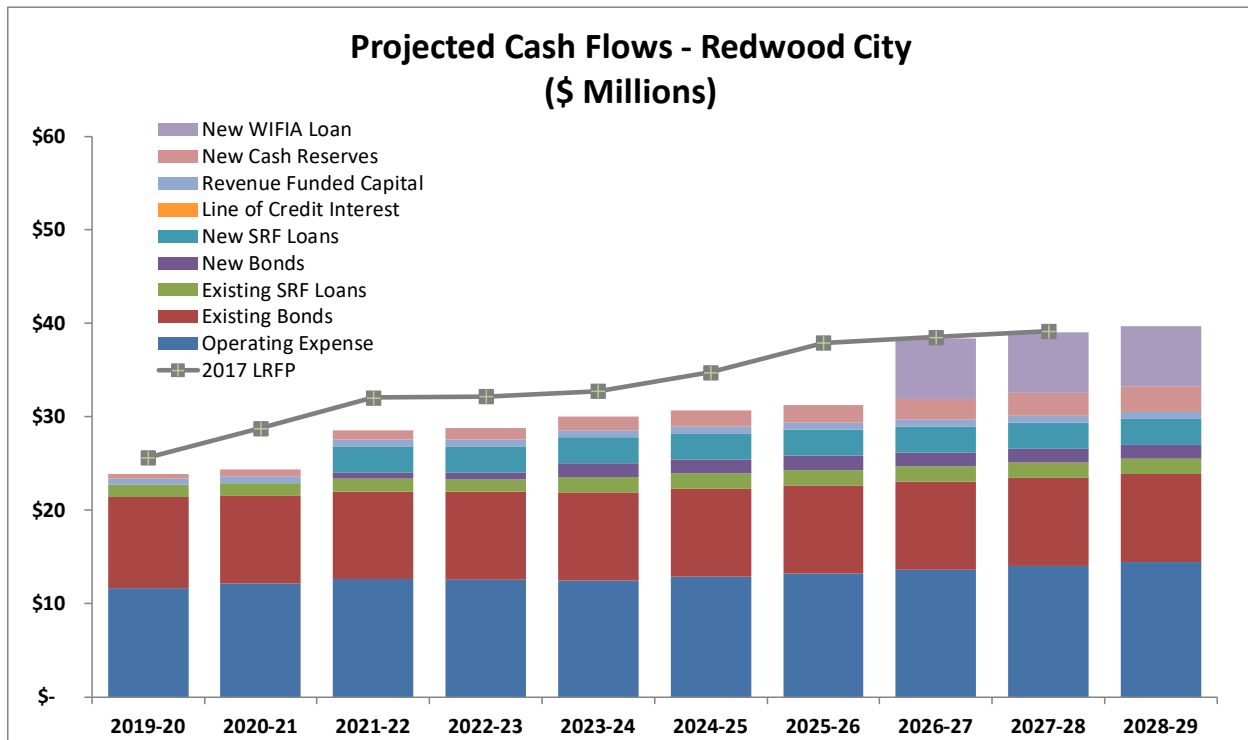
Cash Reserve contributions follow SVCW policy at \$1 million contributed annually through fiscal year 2020-21, after which it increases annually by \$500 thousand until contributions match annual depreciation expense.



## Total Cash Flow Projections by Member Entity

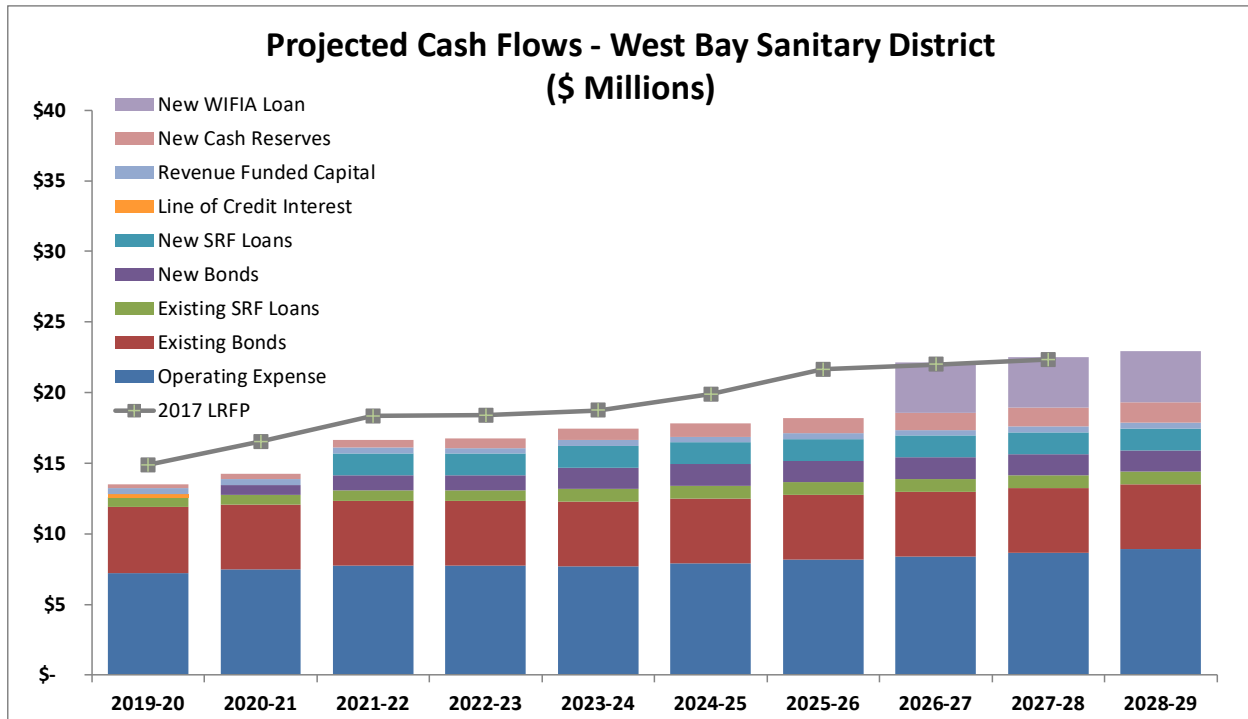
The following charts and tables describe the cash flow projections required for all SVCW expenditures. Each Member Entity is also provided with a detailed description for their own planning purposes.

### Redwood City

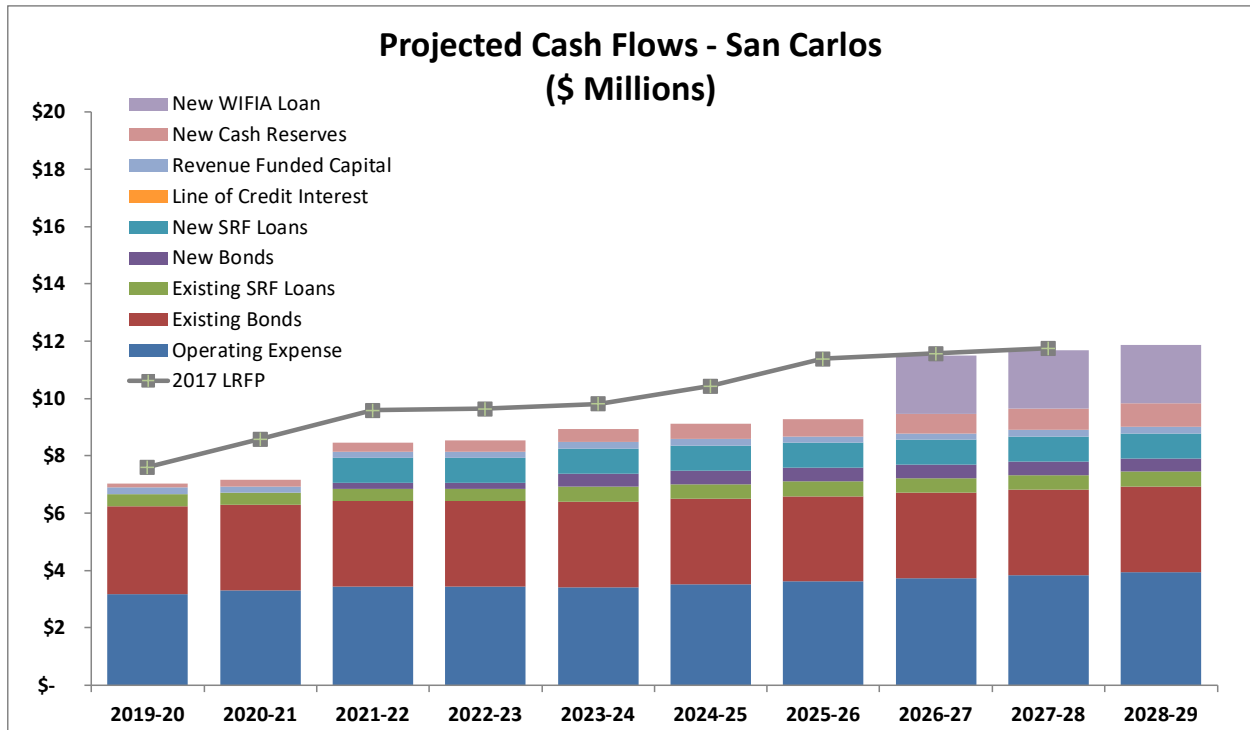


Projected SVCW Cash Flow Requirements - Redwood City (\$ Millions)										
Description	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Operating Expense	\$ 11.68	\$ 12.12	\$ 12.60	\$ 12.58	\$ 12.48	\$ 12.85	\$ 13.24	\$ 13.63	\$ 14.04	\$ 14.46
Existing Bonds	9.68	9.43	9.42	9.42	9.42	9.41	9.41	9.41	9.41	9.40
Existing SRF Loans	1.32	1.32	1.32	1.32	1.65	1.65	1.65	1.65	1.65	1.65
New Bonds	-	-	0.70	0.70	1.50	1.50	1.50	1.50	1.50	1.50
New SRF Loans	-	-	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79
Line of Credit Interest	-	-	-	-	-	-	-	-	-	-
New WIFIA Loan	-	-	-	-	-	-	-	6.49	6.49	6.49
Revenue Funded Capital	0.87	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
New Cash Reserves	0.49	0.73	0.97	1.21	1.46	1.70	1.94	2.19	2.43	2.67
TOTAL	\$ 24.04	\$ 24.32	\$ 28.53	\$ 28.76	\$ 30.03	\$ 30.64	\$ 31.27	\$ 38.39	\$ 39.04	\$ 39.69

West Bay Sanitary District



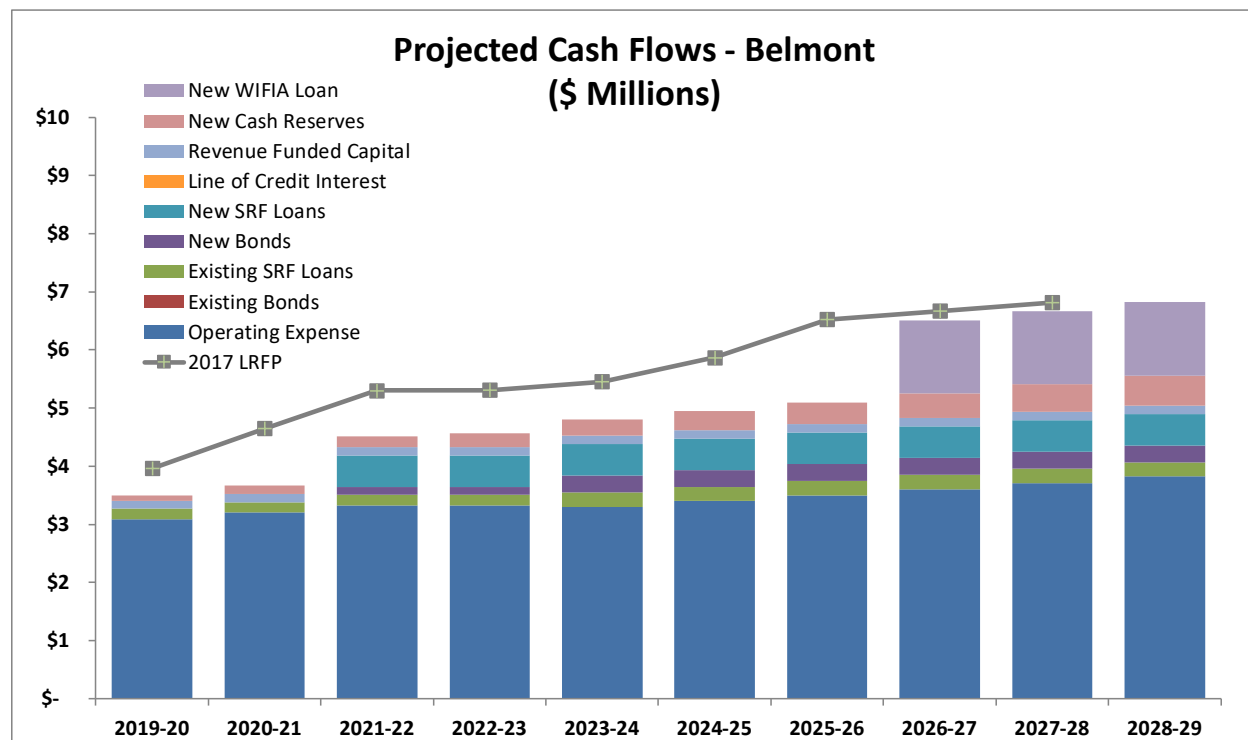
Description	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Operating Expense	\$ 7.19	\$ 7.46	\$ 7.76	\$ 7.75	\$ 7.69	\$ 7.92	\$ 8.16	\$ 8.40	\$ 8.65	\$ 8.90
Existing Bonds	4.71	4.59	4.60	4.59	4.59	4.59	4.59	4.58	4.58	4.58
Existing SRF Loans	0.73	0.73	0.73	0.73	0.91	0.91	0.91	0.91	0.91	0.91
New Bonds	-	0.68	1.07	1.07	1.51	1.51	1.51	1.51	1.51	1.51
New SRF Loans	-	-	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Line of Credit Interest	0.20	-	-	-	-	-	-	-	-	-
New WIFIA Loan	-	-	-	-	-	-	-	3.59	3.59	3.59
Revenue Funded Capital	0.48	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
New Cash Reserves	0.27	0.40	0.54	0.67	0.81	0.94	1.07	1.21	1.34	1.48
<b>TOTAL</b>	<b>\$ 13.58</b>	<b>\$ 14.27</b>	<b>\$ 16.64</b>	<b>\$ 16.75</b>	<b>\$ 17.45</b>	<b>\$ 17.82</b>	<b>\$ 18.18</b>	<b>\$ 22.14</b>	<b>\$ 22.53</b>	<b>\$ 22.92</b>



Description	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Operating Expense	\$ 3.19	\$ 3.31	\$ 3.44	\$ 3.43	\$ 3.40	\$ 3.51	\$ 3.61	\$ 3.72	\$ 3.83	\$ 3.94
Existing Bonds	3.07	2.99	2.99	2.99	3.00	3.00	2.98	2.99	2.99	2.99
Existing SRF Loans	0.41	0.41	0.41	0.41	0.51	0.51	0.51	0.51	0.51	0.51
New Bonds	-	-	0.22	0.22	0.47	0.47	0.47	0.47	0.47	0.47
New SRF Loans	-	-	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Line of Credit Interest	-	-	-	-	-	-	-	-	-	-
New WIFIA Loan	-	-	-	-	-	-	-	2.02	2.02	2.02
Revenue Funded Capital	0.27	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
New Cash Reserves	0.15	0.23	0.30	0.38	0.45	0.53	0.61	0.68	0.76	0.83
<b>TOTAL</b>	<b>\$ 7.09</b>	<b>\$ 7.16</b>	<b>\$ 8.46</b>	<b>\$ 8.53</b>	<b>\$ 8.94</b>	<b>\$ 9.11</b>	<b>\$ 9.28</b>	<b>\$ 11.49</b>	<b>\$ 11.68</b>	<b>\$ 11.87</b>

## Belmont

Belmont has, to date, chosen to not participate in SVCW Bond issuances, including the 2018 Bond Issuance. This produces lower debt service payments for Belmont as compared to the 2018 LRFP, albeit the City of Belmont has financed \$22.5 million for SVCW-related capital needs on its own.



Projected SVCW Cash Flow Requirements - Belmont (\$ Millions)										
Description	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Operating Expense	\$ 3.09	\$ 3.20	\$ 3.33	\$ 3.33	\$ 3.30	\$ 3.40	\$ 3.50	\$ 3.60	\$ 3.71	\$ 3.82
Existing Bonds	-	-	-	-	-	-	-	-	-	-
Existing SRF Loans	0.18	0.18	0.18	0.18	0.24	0.24	0.24	0.24	0.24	0.24
New Bonds	-	-	0.14	0.14	0.29	0.29	0.29	0.29	0.29	0.29
New SRF Loans	-	-	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Line of Credit Interest	-	-	-	-	-	-	-	-	-	-
New WIFIA Loan	-	-	-	-	-	-	-	1.26	1.26	1.26
Revenue Funded Capital	0.17	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
New Cash Reserves	0.09	0.14	0.19	0.24	0.28	0.33	0.38	0.43	0.47	0.52
<b>TOTAL</b>	<b>\$ 3.53</b>	<b>\$ 3.67</b>	<b>\$ 4.52</b>	<b>\$ 4.56</b>	<b>\$ 4.80</b>	<b>\$ 4.95</b>	<b>\$ 5.10</b>	<b>\$ 6.51</b>	<b>\$ 6.67</b>	<b>\$ 6.83</b>

## **SECTION 6 – SENSITIVITIES**

Traditional risks to the efficient completion of large capital plans include unanticipated increases such as inflation and interest rate volatility. The risks of inflation and rising interest rates are outside the control of SVCW; however, strategies can mitigate these risks. The Plan, for instance, assumes a 4% inflation factor in operating costs. Further, interest rates utilized by the Model are conservative and generally based on historical averages and, as a result, are presumed to be higher than current market rates. As another example of cost preparedness, SVCW increased the CIP estimates by implementing cost inflators through the midpoint of construction.

To assess the impact of borrowing at interest rates higher than the conservative rates assumed in the recommendation, a sensitivity-analysis was conducted by increasing the weighted cost of capital by approximately 50 basis points (0.50%). Such an increase would result in a greater debt service cost of (Net Present Value) \$23.8 million over the life of the debt issued.

### **Capital Improvement Program Adherence**

The timing of the projects is considered achievable under present economic and operational assessments. Based upon the size of the CIP the cost is significant and the interest expense is also significant. Adhering to the timing of the CIP is singularly the most cost-effective strategy to minimize inflation and interest rate risks. As the regional economy continues to expand, costs will continue to rise. Delays to the CIP by one year will likely increase costs by approximately \$26.6 million based upon a construction cost inflation factor of 4%. SVCW has shown that its Progressive Design-Build project delivery method has so far managed to avoid such inflationary schedule risks.

### **Government Loan Availability**

The SWRCB has secured \$57 million in SRF loans thus far. The low cost of these loans, combined with attractive repayment Ranges, increased the competition from other agencies. While the SWRCB has been unable to meet its current demand for SRF loans, it has identified the SVCW RESCU program as eligible for a \$140.8 million SRF loan. SVCW is actively working to close this loan in mid-2019, though the agreement is not yet completed.

In October 2018 the Environmental Protection Agency (EPA) selected SVCW's Letter of Interest for a WIFIA loan. The Authority is now in negotiations with the EPA to secure \$208 million for the RESCU program, with potential flexibility to draw up to \$233 million.

## **Inflation**

Operating Expenditures - The LRFP includes inflationary assumptions of approximately 4% on operating costs. The Consumer Price Index (CPI) is a measure of the “average change in prices over time in a fixed market basket of goods and services” which translates to a guide for determining the prices on food, energy, fuel and other goods and services. CPI is a good indicator of how the economy holds up against inflation and surrounding economic changes.

Capital Expenditures – Construction costs of labor and materials continue to increase. While SVCW negotiates for best pricing on projects, the rise in material and labor costs will place upward pressure on the CIP. SVCW accounted for capital project inflation by increasing the CIP budget by a range of 3.7% to 4.25% through the midpoint of construction, adding \$42.6 million.

## **Interest Rates**

It is impossible to predict interest rate levels or the timing of changes. What is known, however, is today’s interest rates remain near historical lows. Since tax-exempt interest rates are already at historical low levels, a decrease in rates is unlikely. A more plausible outcome would be for the market to experience higher interest rates in the future.

Changes in interest rates would be somewhat mitigated with SRF Loan funding, since its rate is 50% of the State’s public borrowing cost. Publicly issued debt, however, would bear the entire market increase with estimated rates.

If SVCW’s Weighted-Average Cost of Capital was to increase by 50 basis points (or 0.5%), SVCW annual debt service payments (at its maximum aggregate point) would increase by \$2.18 million. Over the entire amortization Range, the cost of this change in interest rates would be a Net Present Value of \$23.8 million. It should be noted, however, that both the SRF Loan interest rates and publicly issued bond rates assumed in the Model have a significant cushion versus the current market (e.g. fixed rates are approximately 0.82% higher than the recent 2018 Fixed Bond rate).

## **SECTION 7 – SUMMARY**

SVCW provides this Long Range Financial Plan as a recommendation and implementation strategy to fund the next decade of capital improvements. The Plan documents the analysis of possible alternatives. Due to the extensive nature and cost of the CIP, leveraging long Range debt is the most practical funding method. Individual Members may of course determine that, for their own specific purposes, cash contributions may be appropriate.

Due to the historical lack of a sinking fund and cash reserves, the recommended debt strategy is in lieu of a pay-go cash strategy. Debt allows SVCW to distribute costs over the expected useful lives of constructed assets, and also provides fairness to Members' ratepayers by spreading costs across generations and facilitating moderate and consistent rate increases. In general, CIP funding sources include 1) Capital markets by issuing publicly traded revenue bonds; 2) government loans through SRF and WIFIA programs when available; and 3) cash that has been accrued by the Members Agencies.

This LRFP's recommendations and its outcomes are for planning purposes. SVCW believes it is a reasonable forecast of expenditures over the next year, including a well-informed position that SVCW will be able to access government loan programs from the SWRCB and the EPA. This LRFP therefore is useful for Member Agencies as they consider budgets and analyze their sewer rates.

