



SVCW
Silicon Valley Clean Water

LONG RANGE FINANCIAL PLAN 2020



Presented January 2020 by:

Matthew Anderson
Chief Financial Officer / Assistant Manager
Silicon Valley Clean Water
1400 Radio Road
Redwood City, CA 94065
manderson@svcw.org
(650) 832-6261

Silicon Valley Clean Water Commissioners

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

Member Entity Staff

<u>Name</u>	<u>Title</u>	<u>Member Agency</u>
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	City Manager	City of Belmont
Rebecca Mendenhall	Administrative Services Director	City of San Carlos
Grace Le	City Engineer	City of San Carlos
Steven Machida	Public Works Director	City of San Carlos
Phil Scott	District Manager	West Bay Sanitary District
Donald Sturman	Finance Manager	West Bay Sanitary District
Bill Kitajima	Projects & IT Manager	West Bay Sanitary District

THIS PAGE INTENTIONALLY LEFT BLANK



Silicon Valley Clean Water Staff

Name

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

Title

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

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

SECTION 1 – EXECUTIVE SUMMARY AND INTRODUCTION	1
Purpose of Long-Term Financial Planning	5
Organizational and Business Structure.....	7
Governance & Management.....	7
Financial Oversight and Control	8
Financial Modeling.....	10
SECTION 2 – GUIDING DOCUMENTS AND PRINCIPLES.....	13
Audited Financial Reports	13
Operating Budgets	13
Expenditure Allocation.....	14
Debt and Capital Financing	19
Cash Reserves Policy	19
Investment Policy.....	19
SECTION 3 – MODELING ASSUMPTIONS	22
Debt Structure.....	22
Economic Factors	23
SECTION 4 – HISTORICAL FINANCIAL PERFORMANCE.....	30
Historical Expenditures	30
<i>Revenue-Funded Capital Expenditures</i>	30
SECTION 5 – TEN-YEAR FINANCIAL PROJECTIONS	34
Operating Expenditures	34
Revenue-Funded Capital Expenditures	39
Debt Service	36
Cash Reserves Contributions.....	39
Total Cash Flow Projections	39
SECTION 6 – SENSITIVITIES	45
Capital Improvement Program Adherence.....	45
SRF Loan Availability	45
Inflation.....	46
Interest Rates	46
SECTION 7 – CONCLUSIONS & RECOMMENDATIONS	48

THIS PAGE INTENTIONALLY LEFT BLANK

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 up-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 twelfth year, the CIP has completed over 120 projects and spent \$370 million through October 2019. The CIP is the Authority's guiding document and a recent update in October 2019 estimates that, inclusive of spending to date, the program will cost \$931.6 million over 22 years.

This Plan incorporates the guidelines from the SVCW Joint Powers Agreement, the adopted 2019-20 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's 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 2019 LRFP, this Plan incorporates three significant changes:

- **CIP Update:** SVCW has concurrently updated its CIP document to incorporate changes in project cost estimates and to add or delete projects. It also recognized regulations by the Regional Water Quality Control Board as it determines how to manage nutrient-loading in the San Francisco Bay. Combined, these factors added \$81 million and bring total anticipated CIP expenditures (over the 22 years since inception) to \$931.6 million.
- **Construction Timing:** Over the past year, construction commenced on two significant conveyance projects that are part of the RESCU initiative (Regional Environmental Sewer

Conveyance Upgrade). Using the Progressive Design-Build (PDB) project delivery method, the two RESCU projects in construction (Gravity Pipeline and the Front of Plant) remain on schedule. Design of the final element (Pump Station Improvements) is nearly complete and construction is now anticipated to commence by summer 2020. There is also timing associated with nutrient removal projects, which is now anticipated to occur after 2030.

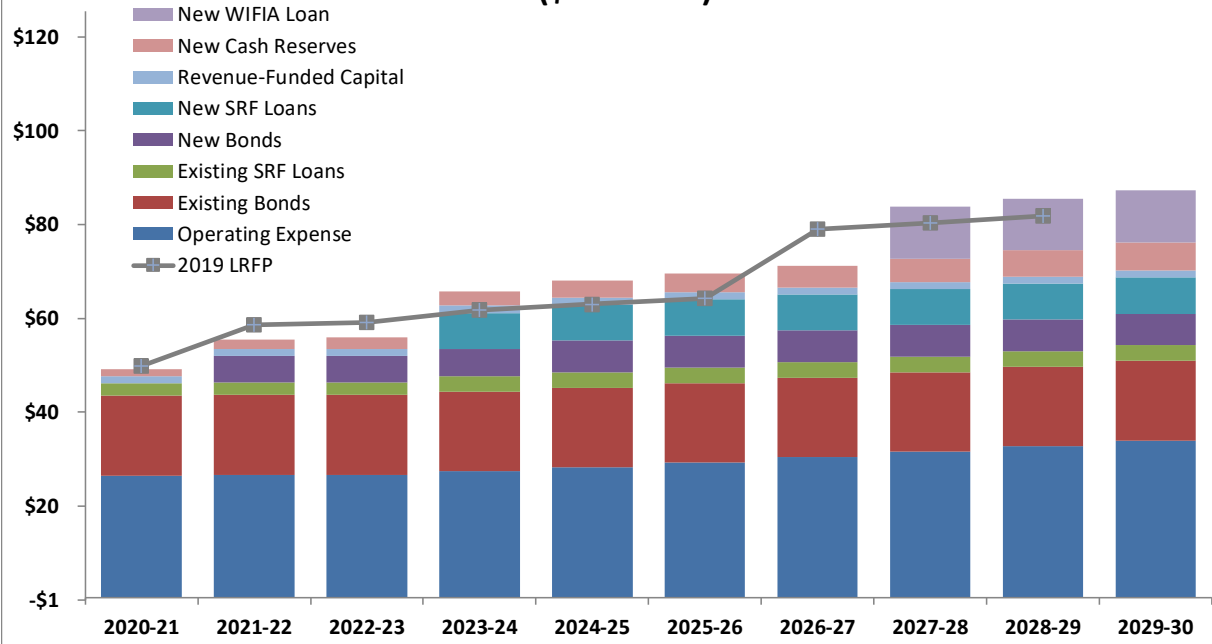
- **Financing Sources and Rates:** In addition to adjustments to the size and rates of remaining bond issuances, this 2020 update also reflects an increased State Revolving Fund (SRF) loan from \$141 million to \$169 million. It also recognizes final WIFIA loan rates executed in July 2019 at 2.4%, considerably lower than the 3.45% assumed last year.

Like many other water treatment agencies, SVCW infrastructure was originally funded by the 1972 Clean Water Act. As assets aged, the absence of a capital replacement 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 enacted strategies to increase sewer rates. Regular updates to the SVCW CIP and this LRFPP keeps Member Entities informed of the next decade's cash flow requirements and, as a result of their steady rate adjustments, forecasted rate increases are likely modest.

SVCW annual cash flow requirements in FY 2020-21 are estimated at \$48.6 million. Cash flow requirements are thereafter projected to reach \$86.8 million by FY 2029-30. The largest increase in expenditures over the next decade is for debt service payments, estimated to peak at \$45.8 million annually once fully in place. Other non-debt related expenditures are less impactful; the average annual increase in Operating Expense is less than 4%. This LRFPP informs SVCW Member Agencies of SVCW cash flows anticipated over the next decade.

Projected Cash Flow Requirements - SVCW Aggregate (\$ Millions)



Projected SVCW Cash Flow Requirements - Aggregate (\$ Millions)										
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Operating Expense	\$ 25.99	\$ 26.17	\$ 26.14	\$ 26.91	\$ 27.69	\$ 28.76	\$ 29.87	\$ 31.02	\$ 32.22	\$ 33.46
Existing Bonds	17.02	17.01	17.00	17.00	17.01	16.98	16.98	16.98	16.97	16.96
Existing SRF Loans	2.63	2.63	2.63	3.32	3.32	3.32	3.32	3.32	3.32	3.32
New Bonds	-	5.69	5.69	5.69	6.71	6.71	6.71	6.71	6.71	6.71
New SRF Loans	-	-	-	7.75	7.75	7.75	7.75	7.75	7.75	7.75
New WIFIA Loan	-	-	-	-	-	-	-	11.06	11.06	11.06
Revenue-Funded Capital	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
New Cash Reserves	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00
TOTAL	\$ 48.63	\$ 55.00	\$ 55.46	\$ 65.18	\$ 67.48	\$ 69.03	\$ 70.63	\$ 83.34	\$ 85.03	\$ 86.76

THIS PAGE INTENTIONALLY LEFT BLANK

INTRODUCTION

Purpose of Long-Term 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-term financial plan combines financial projections with strategy. The Government Finance Officers Association (GFOA) recommends that all governments regularly engage in long-term financial planning as a collaborative process to consider future scenarios and help navigate challenges. By aligning financial capacity with long-term 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-term 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-term financial plan includes the following elements:

- **Time Horizon:** The plan looks ten years into the future.
- **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-term 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-term 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. SVCW also provides recycled water to the City of Redwood City.

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 75% 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 Term 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-term 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.

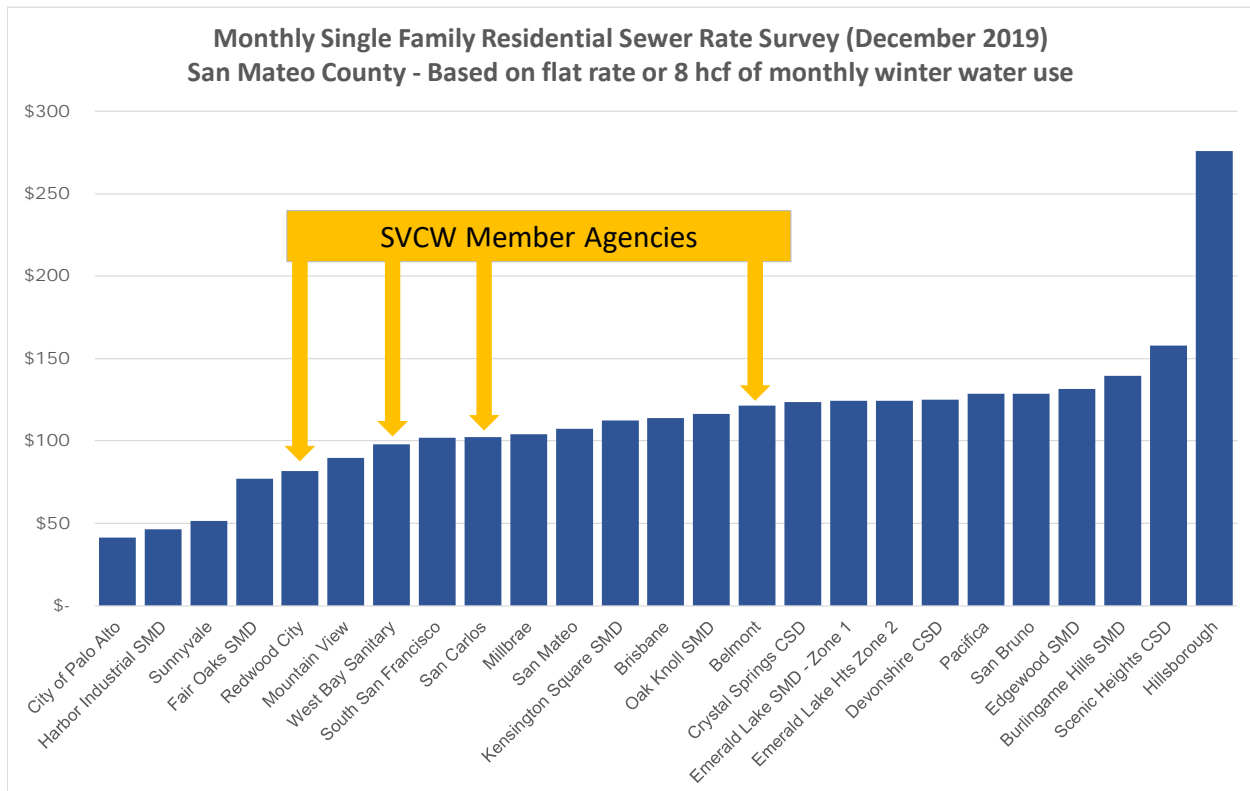
Comparative Residential Sewer Charges

Member Entities have adopted significant rate increases and currently generate adequate revenues to fund their share of the CIP and capital program costs. The below tables show Members' increases in single family residential monthly sewer rates over the past decade.

Residential Sewer Rates by Member Agency Based on 8 HCF of flow										
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Belmont	\$51.34	\$72.13	\$77.33	\$82.77	\$88.13	\$ 88.13	\$ 99.47	\$ 105.35	\$ 116.14	\$ 121.28
Redwood City	\$48.72	\$53.10	\$57.88	\$63.09	\$68.77	\$74.95	\$75.11	\$76.68	\$78.24	\$81.76
San Carlos	\$46.82	\$50.10	\$53.10	\$67.29	\$80.75	\$88.82	\$88.82	\$93.26	\$97.93	\$102.32
West Bay SD	\$54.17	\$57.50	\$62.67	\$68.33	\$74.42	\$81.08	\$85.92	\$89.33	\$93.83	\$98.08

Residential Sewer Rate Year-over-Year % Increase, by Member Agency										
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Belmont	6.8%	40.5%	7.2%	7.0%	6.5%	0.0%	12.9%	5.9%	10.2%	4.4%
Redwood City	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	0.2%	2.1%	2.0%	4.5%
San Carlos	7.0%	7.0%	6.0%	26.7%	20.0%	10.0%	0.0%	5.0%	5.0%	4.5%
West Bay SD	16.1%	6.1%	9.0%	9.0%	8.9%	8.9%	6.0%	4.0%	5.0%	4.5%

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 was 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 \$561 million remains to be spent on capital expenditures over the next ten fiscal years. This 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.

THIS PAGE INTENTIONALLY LEFT BLANK

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-term resources needed for the community.

Used as a baseline for this study, the 2019-20 Budget was \$48.2 million. This includes \$25.2 million in operating expenditures, \$1.68 million for revenue-funded capital projects, additional cash reserve contributions of \$1.1 million, and debt service payments estimated at \$20.3 million.

2019-20 Budget - Total Contributions by Member Agency						
Description	City of Belmont	Redwood City	City of San Carlos	West Bay San District	TOTAL	
Net Operating Expenditures	\$ 3,004,200	\$ 11,999,297	\$ 3,341,409	\$ 6,864,371	\$ 25,209,277	
Revenue-Funded Capital Expenditures	159,169	818,077	255,007	452,073	1,684,325	
Reserve Contributions	99,469	511,240	159,361	282,513	1,052,583	
Projected Debt Service	178,425	10,999,297	3,477,413	5,632,324	20,287,459	
Total Contributions to SVCW	\$ 3,441,263	\$ 24,327,911	\$ 7,233,190	\$ 13,231,281	\$ 48,233,645	

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. 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. Specific Pump Station maintenance and operation costs are tracked as actual costs by coding to each pump station and borne by the Member Agency served by that particular pump station. However, maintenance and operation costs of the booster station are split on a percentage basis between West Bay Sanitary District and Redwood City at 92% and 8%, respectively.

Using these allocations, the 2019-20 Operating Budget assigns costs using the following three-year flow and loading averages:

2019-20 Budget Revenue Allocation to Member Agencies - Adopted									
Description	Weightings			Belmont	Redwood City	San Carlos	West Bay San District	TOTAL	
Allocation Factors									
Flow				11.82%	49.49%	14.45%	24.24%	100%	
Biochemical Oxygen Demand (BOD)				12.29%	44.89%	12.83%	29.99%	100%	
Suspended Solids (SS)				11.72%	47.62%	12.19%	28.47%	100%	
Operating Expenditures									
	Flow	BOD	SS						
Operations	26.5%	33.5%	40.0%	\$ 1,167,495	\$ 4,616,307	\$ 1,271,736	\$ 2,724,566	\$	9,780,104
Maintenance	26.5%	33.5%	40.0%	772,899	3,056,065	841,909	1,803,704		6,474,578
Laboratory	26.5%	33.5%	40.0%	211,372	835,772	230,245	493,276		1,770,665
Environmental Services	26.5%	33.5%	40.0%	148,127	585,699	161,353	345,682		1,240,862
Engineering	26.5%	33.5%	40.0%	96,585	381,901	105,209	225,400		809,095
Safety	100.0%	0.0%	0.0%	57,165	239,347	69,884	117,231		483,627
Information Services	26.5%	33.5%	40.0%	216,440	855,811	235,765	505,103		1,813,120
Administrative Services	100.0%	0.0%	0.0%	460,593	1,928,490	563,077	944,567		3,896,727
Subtotal				\$ 3,130,677	\$ 12,499,392	\$ 3,479,178	\$ 7,159,529	\$	26,268,777
Subtract Miscellaneous Income	26.5%	33.5%	40.0%	\$ 126,477	\$ 500,095	\$ 137,770	\$ 295,158	\$	1,059,500
2019-20 Net Operating Revenue Required				\$ 3,004,200	\$ 11,999,297	\$ 3,341,409	\$ 6,864,371	\$	25,209,277
2018-19 Net Operating Revenue Required				2,973,317	11,245,294	3,067,987	6,927,025		24,213,623
\$ Increase / (Decrease)				30,883	754,003	273,422	(62,654)		995,654
% Increase / (Decrease)				1.04%	6.71%	8.91%	(0.90%)		4.11%

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 SD</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.

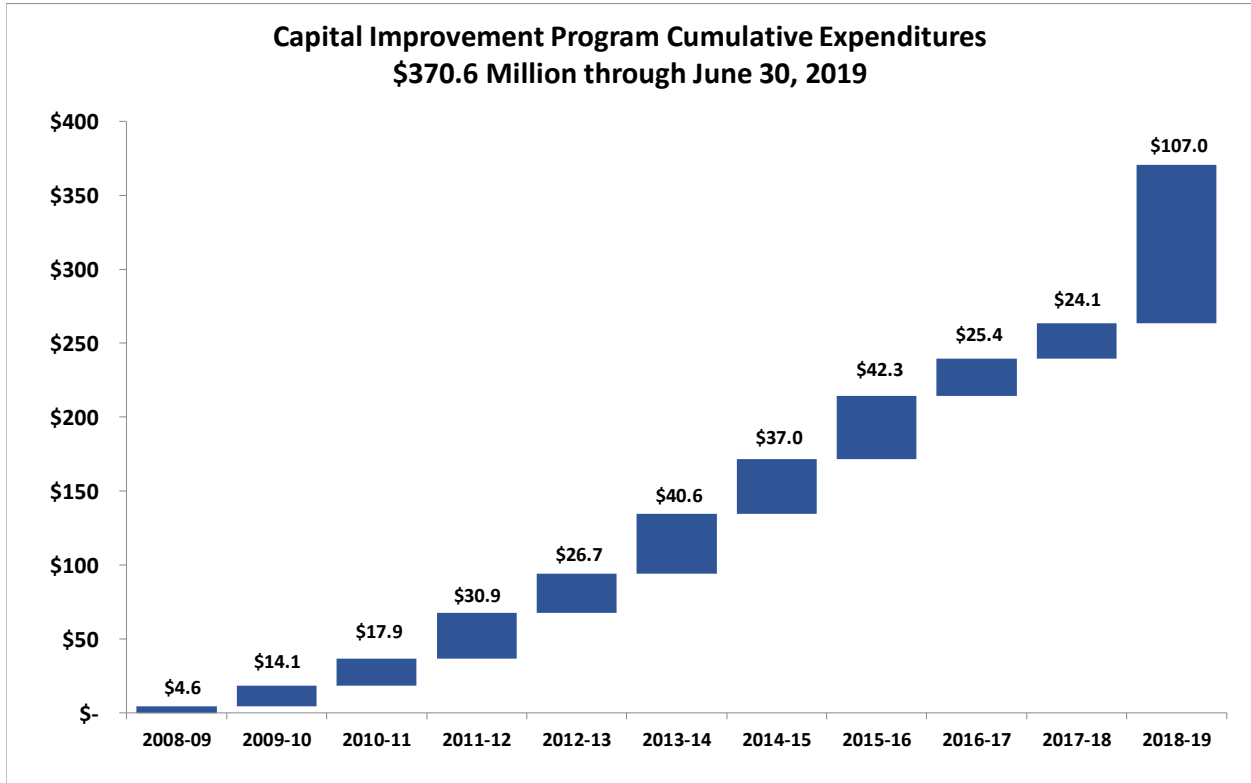
Capital costs associated with the Joint Facilities include improvements resulting from reconstruction, replacement, rehabilitation, remodeling or relocation. This includes all costs meeting the definition of a capital expense as defined in SVCW’s Capital Expense Policy.

2019-20 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%
CAPITAL IMPROVEMENT					
Plant (cash-funded capital)	\$ 46,241	\$ 237,665	\$ 74,084	\$ 131,335	\$ 489,325
Pump Stations	-	-	-	-	-
Force Main	-	-	-	-	-
Equipment	112,928	580,412	180,923	320,738	1,195,000
Subtotal	\$ 159,169	\$ 818,077	\$ 255,007	\$ 452,073	\$ 1,684,325
RESERVE CONTRIBUTIONS					
Operating Reserve	\$ 4,969	\$ 25,540	\$ 7,961	\$ 14,113	\$ 52,583
CIP Reserve	94,500	485,700	151,400	268,400	1,000,000
Subtotal	\$ 99,469	\$ 511,240	\$ 159,361	\$ 282,513	\$ 1,052,583
Contributions for Capital & Reserves	\$ 258,638	\$ 1,329,316	\$ 414,368	\$ 734,586	\$ 2,736,908

Capital Improvement Program (CIP)

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. The CIP was originally developed in 2008 to proactively address near-term and long-term 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.

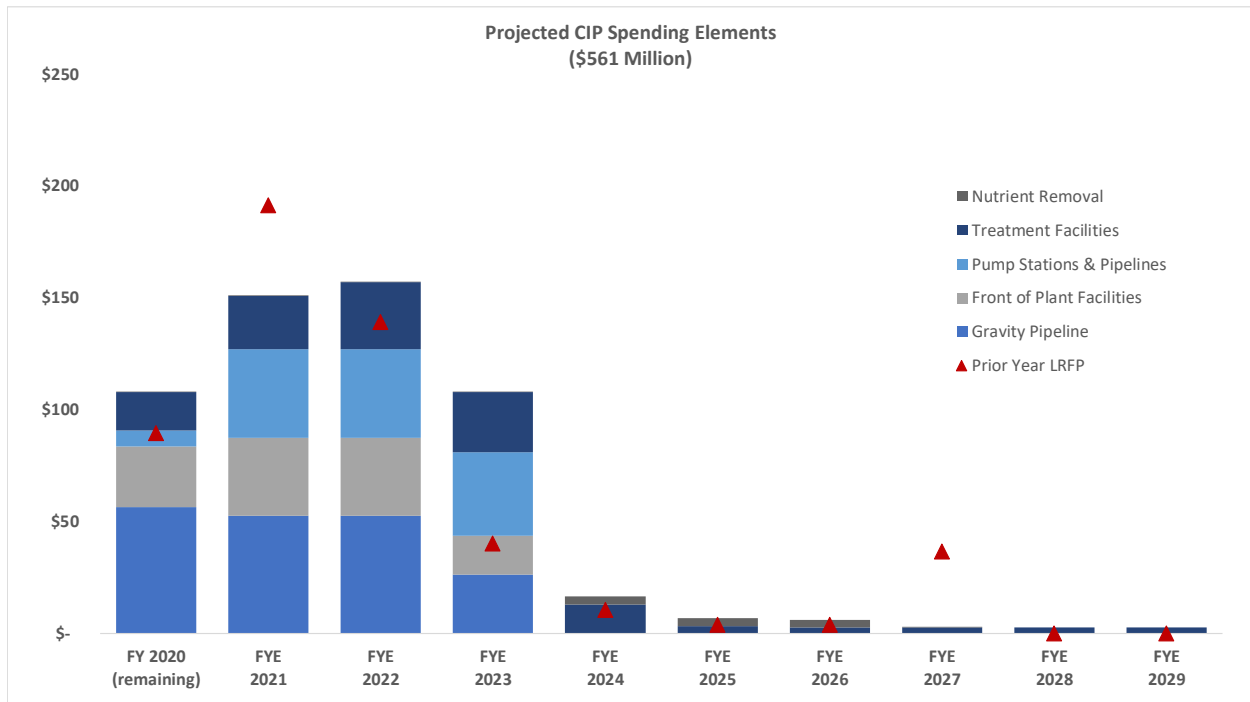
Charges to the CIP include all capitalized components of projects such as planning, design, engineering, construction, and construction management. The costs also include certain administrative costs like insurance and engineering labor directly related to projects. Since the inception of the CIP, SVCW spent approximately \$370.6 million through June 2019. Expenditures during the 2018-19 fiscal year were the highest on record, reflecting the beginning of construction on two significant Regional Environmental Sewer Conveyance Upgrade (RESCU) projects.



Forecasted CIP Expenditures

Concurrent with this Long-Range Financial Plan update, the CIP was updated in December 2019. It estimates expenditures will be approximately \$932 million over a 22-year period from inception to completion. As of June 2019, remaining CIP expenditures were \$561 million.

SVCW Capital Improvement Program Expenditures (\$ Millions)			
Description	Spent thru		Total
	FYE 2019	Remaining	
Gravity Pipeline	\$ 72.6	\$ 187.6	\$ 260.3
Front of Plant Facilities	48.7	114.7	163.4
Pump Stations & Pipelines	5.0	123.8	131.3
Non-RESCU Conveyance	50.0	0.3	50.3
Treatment Plant Improvements	193.5	124.1	314.9
Nutrient Removal	0.8	10.7	11.5
TOTAL	\$ 370.6	\$ 561.1	\$ 931.6



Capital expenditures are allocated per the Joint Powers Authority Agreement, as follows.

SVCW Remaining Capital Expenditures - By Fiscal Year End and Member Allocation (\$ Millions)											
Description	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	Total
Redwood City	\$ 52.4	\$ 73.3	\$ 76.3	\$ 52.5	\$ 8.0	\$ 3.3	\$ 3.0	\$ 1.3	\$ 1.3	\$ 1.3	\$ 272.5
West Bay SD	29.0	40.5	42.2	29.0	4.4	1.8	1.6	0.7	0.7	0.7	150.6
San Carlos	16.3	22.8	23.8	16.4	2.5	1.0	0.9	0.4	0.4	0.4	84.9
Belmont	10.2	14.3	14.8	10.2	1.6	0.6	0.6	0.2	0.2	0.2	53.0
TOTAL	\$ 108.0	\$ 150.8	\$ 157.1	\$ 108.0	\$ 16.5	\$ 6.8	\$ 6.1	\$ 2.6	\$ 2.6	\$ 2.6	\$ 561.1

The majority of remaining CIP expenditures is attributed to replacement of the RESCU program. RESCU is comprised of three significant elements with a combined remaining expenditures estimate of approximately \$426 million. These projects include:

1. Gravity Pipeline: Replaces the influent force main with a gravity pipeline;
2. Front of Plant: Constructs a headworks facility comprised of a receiving lift station, screening and grit removal, peak flow and storm water handling facilities, and an influent connector pipeline; and
3. Pump Station Improvements: Replaces, rehabilitates, decommissions SVCW pump stations.

Cash Reserves Policy

In 2013, the SVCW Commission adopted a cash reserves policy that protects its fiscal solvency and funds future long-term 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-term 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, 2019 the amount held in this reserve was \$3.7 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 term 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 until fiscal year 2020-21, when it increases by \$500 thousand each year until the balance reaches an inflation-adjusted value equivalent to \$50 million in 2019 dollars. As of December 31, 2019 this reserve was \$19.6 million.
- Stage 2 Capacity Reserve is utilized to pay for capital projects that increase the treatment capacity of SVCW facilities. This fund income is from fees paid by new connections that use the excess capacity of SVCW facilities. Projects that enhance capacity may be built using these cash reserves at the discretion of the SVCW Commission. As of December 31, 2019 the amount in this reserve was \$13.1 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 term 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-term 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-term 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-term debt has terms 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-term 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-term 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 approximately \$561 million of capital projects requires funding over the next decade. The Model produces 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 terms, caps on debt service levels, deferred repayment, and changes in interest rate assumptions.

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 illustrates the height and length of the debt service “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

Using the Model, SVCW staff generated and compared multiple debt financing scenarios that could fund the remaining 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.

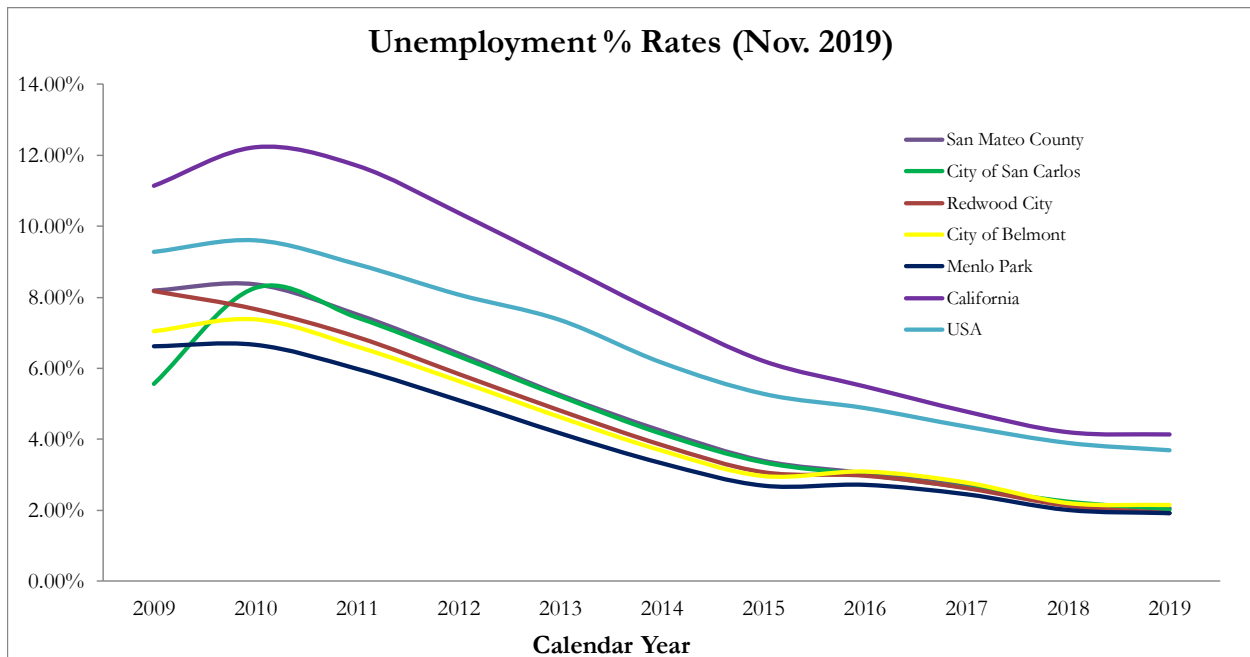
Government loan programs like SRF and WIFIA have at times been uncertain, but were pursued for their attractive low interest rates and flexible repayment structures. While both structures similar to revenue bonds, the SRF loan amortizes over 30 years at an interest rate equal to half the California General Obligation Bonds rate. The WIFIA loan amortizes over 35 years at a rate equal to Treasury rates plus one basis point.

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.

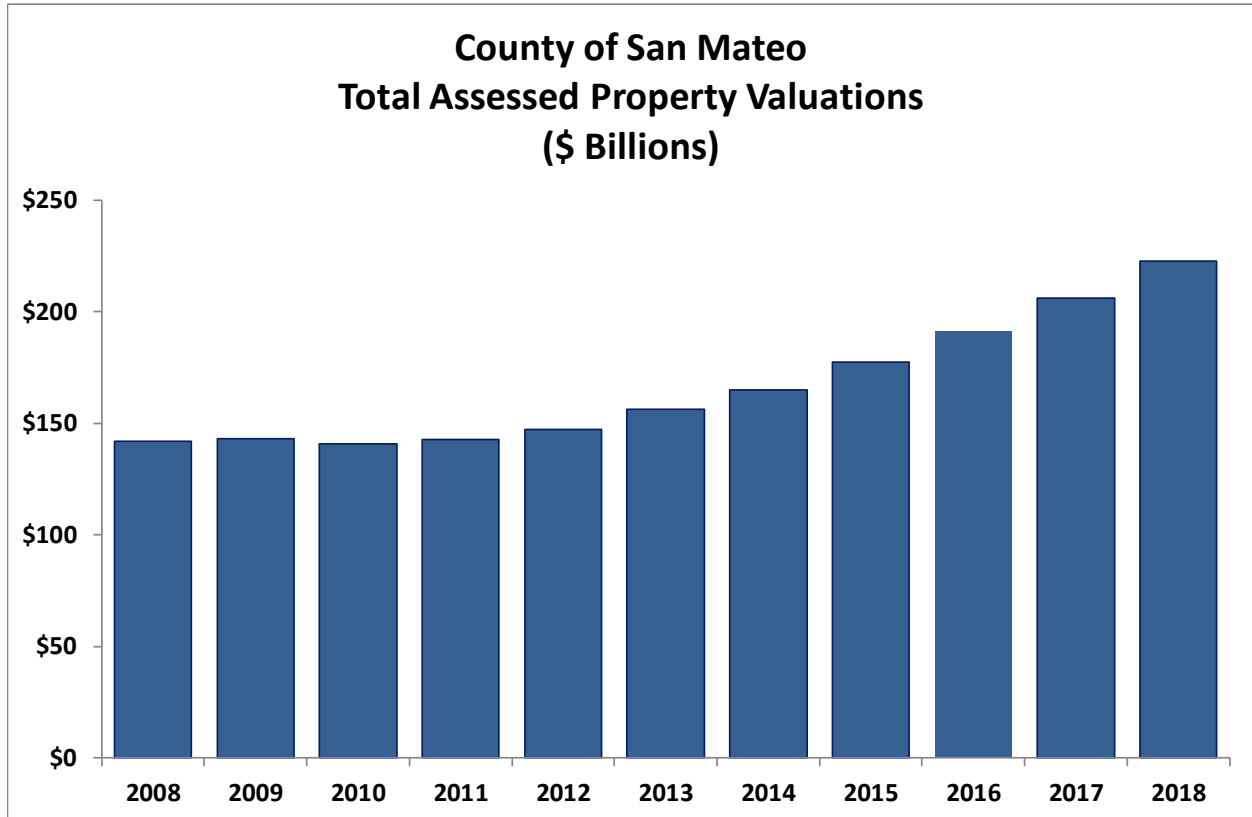
Unemployment

Reflective of the Bay Area's strong economy, recent 2019 data from the United States Bureau of Labor Statistics shows unemployment rates for San Mateo County and SVCW Member Agencies at approximately 2%, well below California and National rates, respectively.



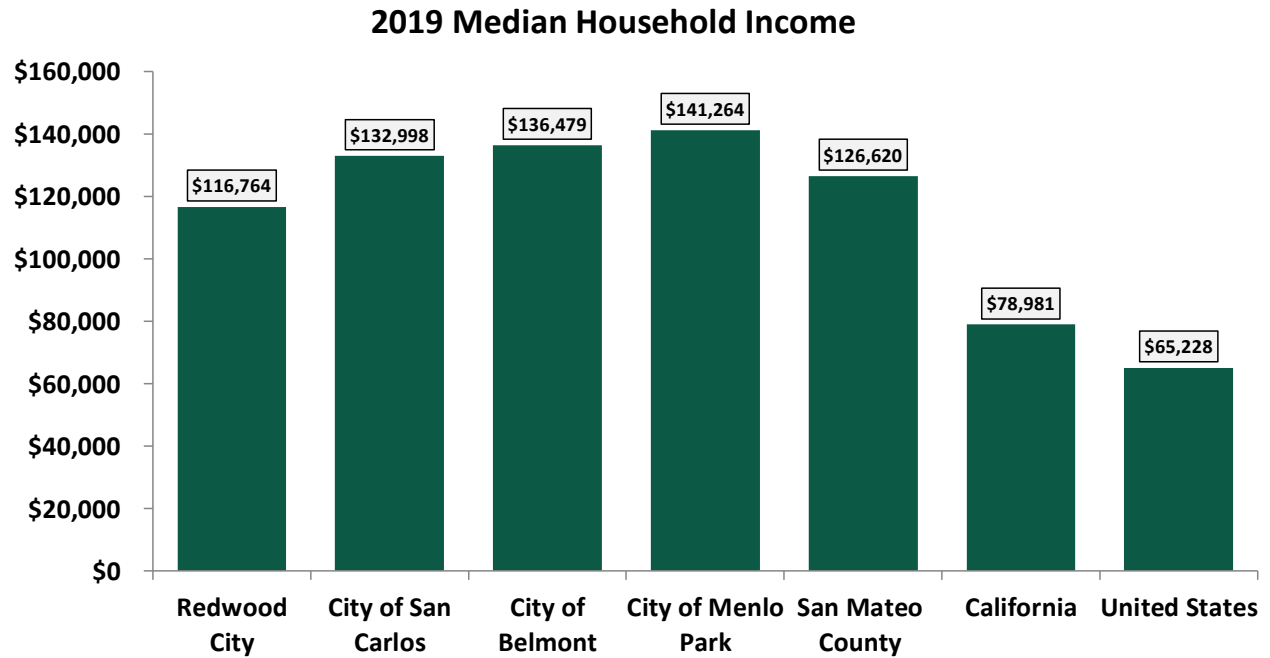
County Assessed Valuations

San Mateo County had approximately \$223 billion in total assessed 2018 real property valuation, an increase of \$16.5 billion (or 8.0%) from the previous year.



Median Household Income

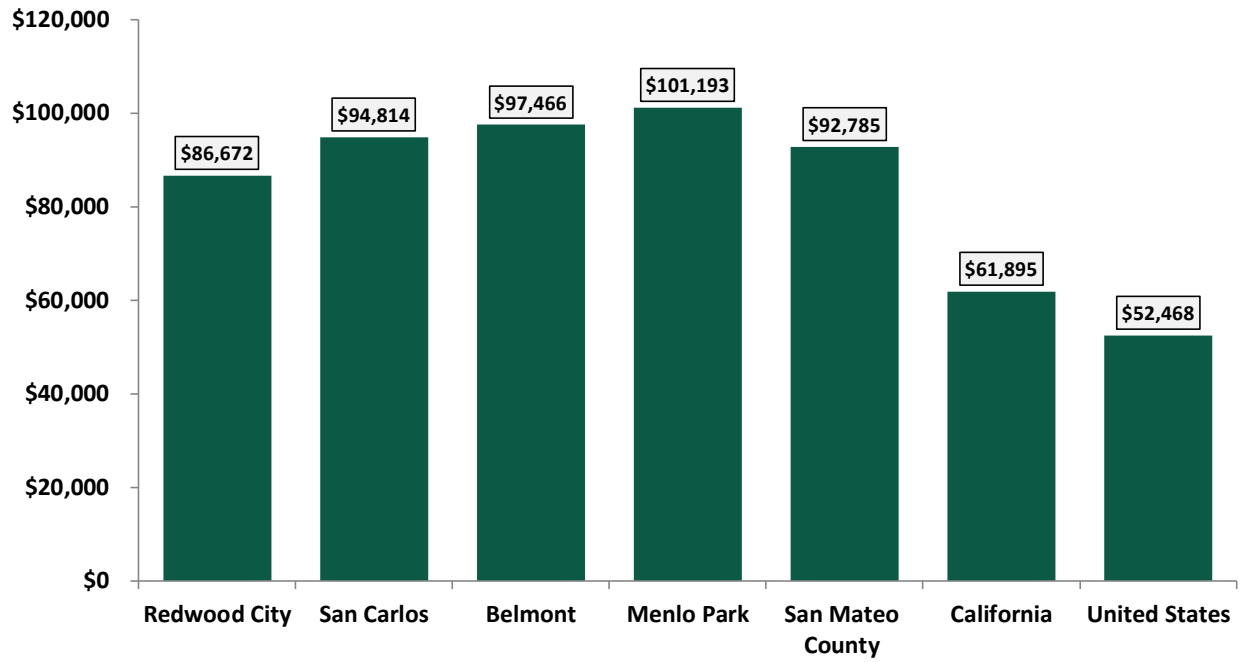
The median household incomes and effective buying incomes of Member Entities are consistently above the State and National levels. Public 2019 economic data shows that the median household income of San Mateo County, at \$126.6 thousand, is 194% and 160% of the Nation’s and State’s median household income, 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 retain after taxes. The following chart shows that SVCW communities have Effective Buying Incomes of \$86 thousand to \$101 thousand, which is 165% to 193% of the National levels, and 140% to 163% of California levels.

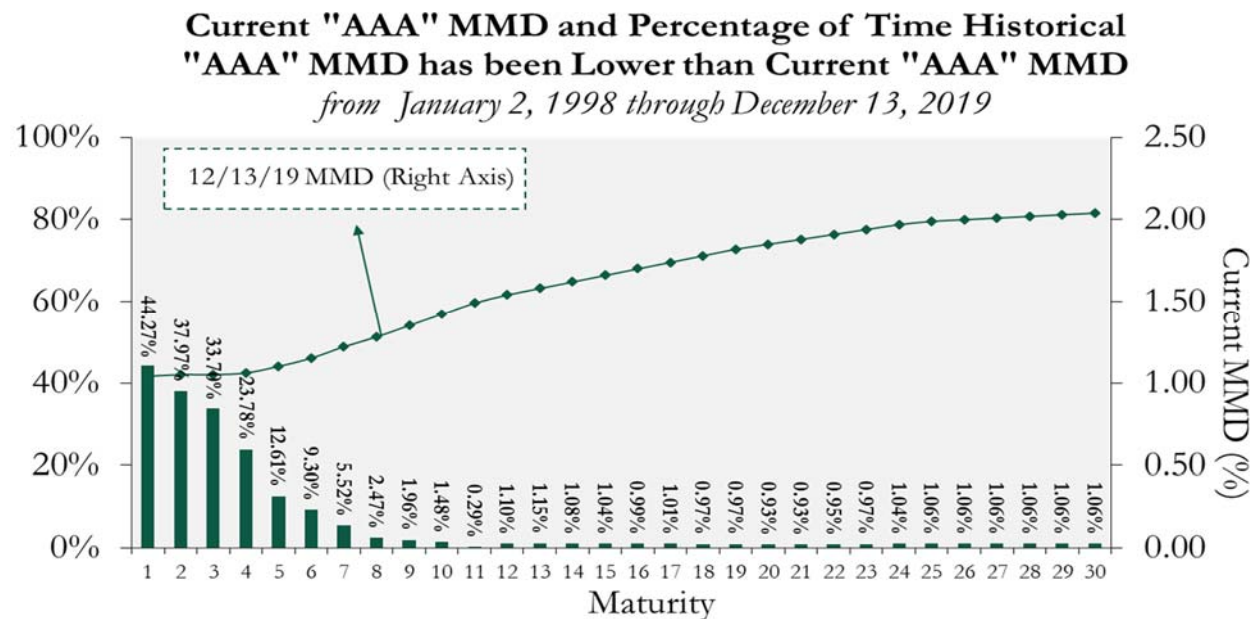
2018 Effective Buying Income



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, may be as low as 1.4%. The WIFIA loan rate was indexed to the treasury rate and, though forecasted last year at 3.45%, closed in July 2019 at 2.40%. As fixed rate bonds are subsequently used, SVCW anticipates a projected interest rate of 3.8% for bonds issued in summer of 2020. Finally, the Model uses a total projected variable rate of 3.40% inclusive of annual liquidity fees by the time they are issued in 2024. At present, tax-exempt rates remain not far above near-historical lows of July 2016.

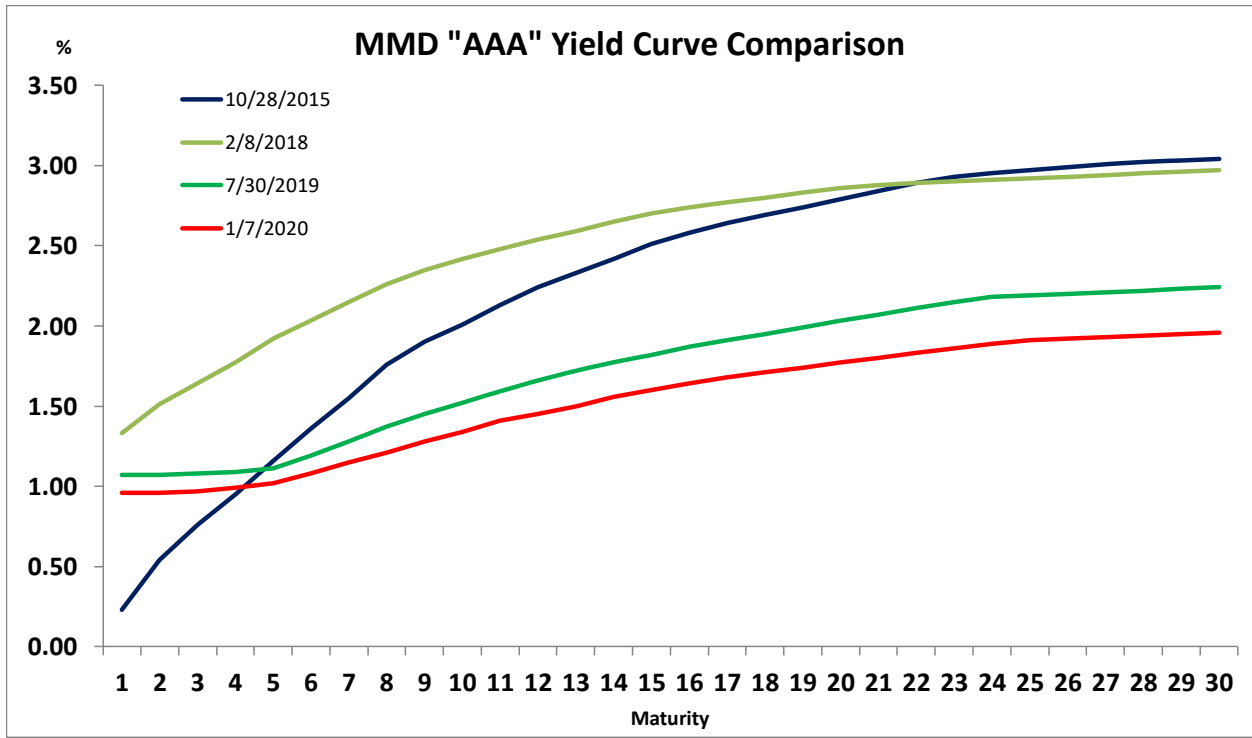
The table below provides tax-exempt interest rates for the Municipal Market Index as of December 13, 2019 and compares current rates to historical rates by term. The data demonstrates that interest rates are lower historically in the longer maturities greater than five years, suggesting advantageous market conditions for issuing long-term debt.



Source: Thomson Municipal Market Monitor

The four yield curves shown below are a snapshot of interest rates when SVCW issued three series of Bonds or Notes, with a comparison to January 7, 2020. Notably, current rates are the lowest throughout the 30-year maturities.

The Federal Reserve decreased the Fed Funds rate by a quarter percent three times in the past year. In the upcoming election year, significant changes in rates are not anticipated. With interest rates near historical lows, however, it remains an advantageous time to finance projects.



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 achieve investment earnings of 1.75% annually over the long term.

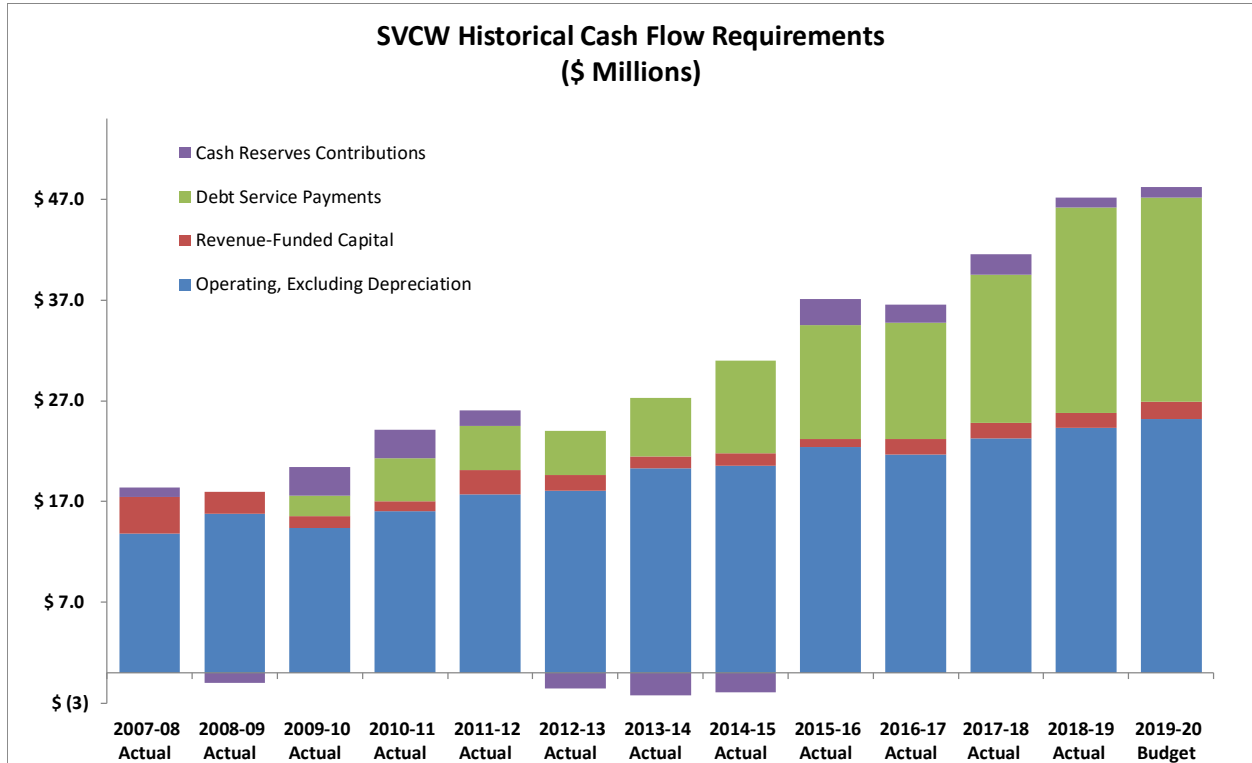
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 4 – HISTORICAL FINANCIALS

Historical Cash Flow Requirements

Total Cash Flow Requirements

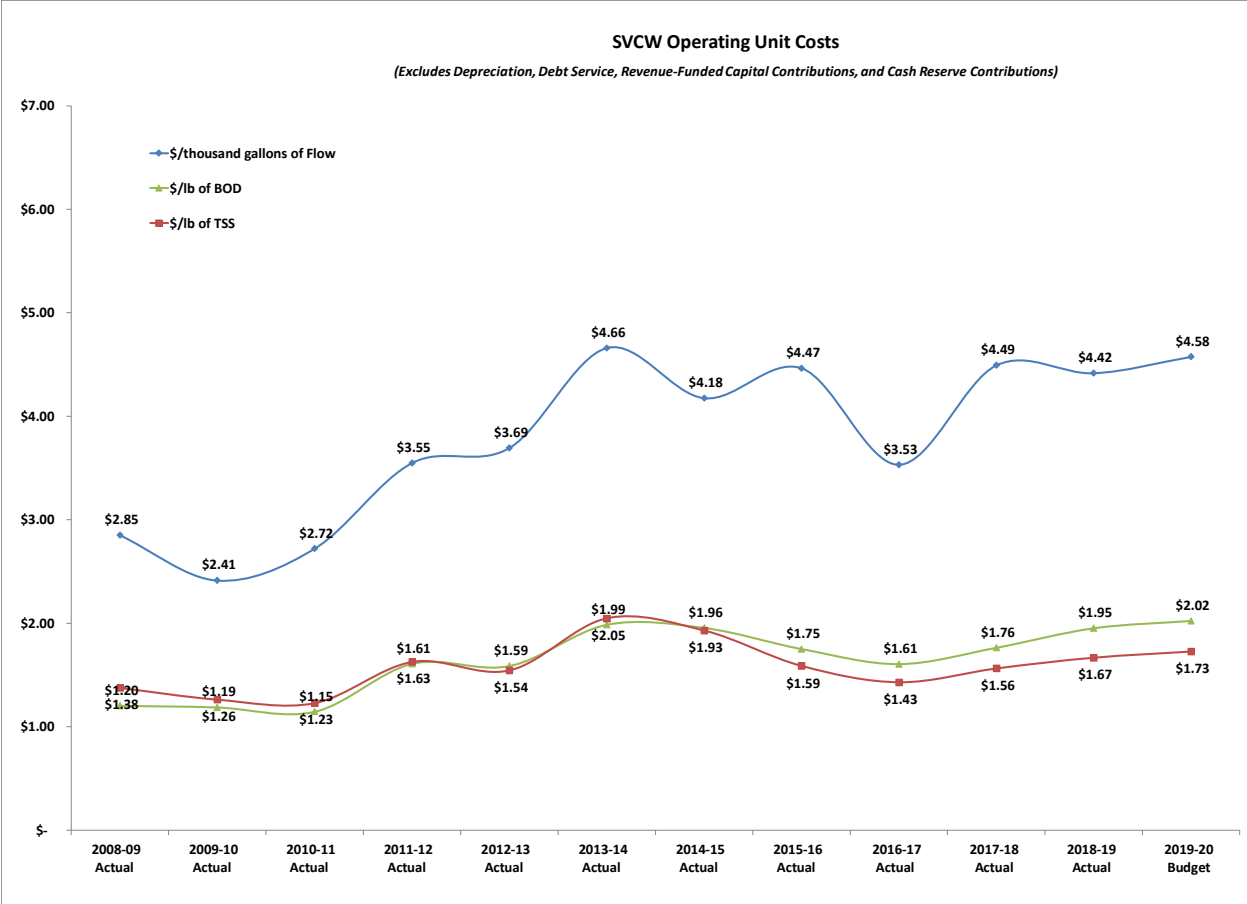
SVCW annual cash flow requirements from Members have more than doubled over the past decade, mostly due to higher debt service payments needed to finance its CIP.



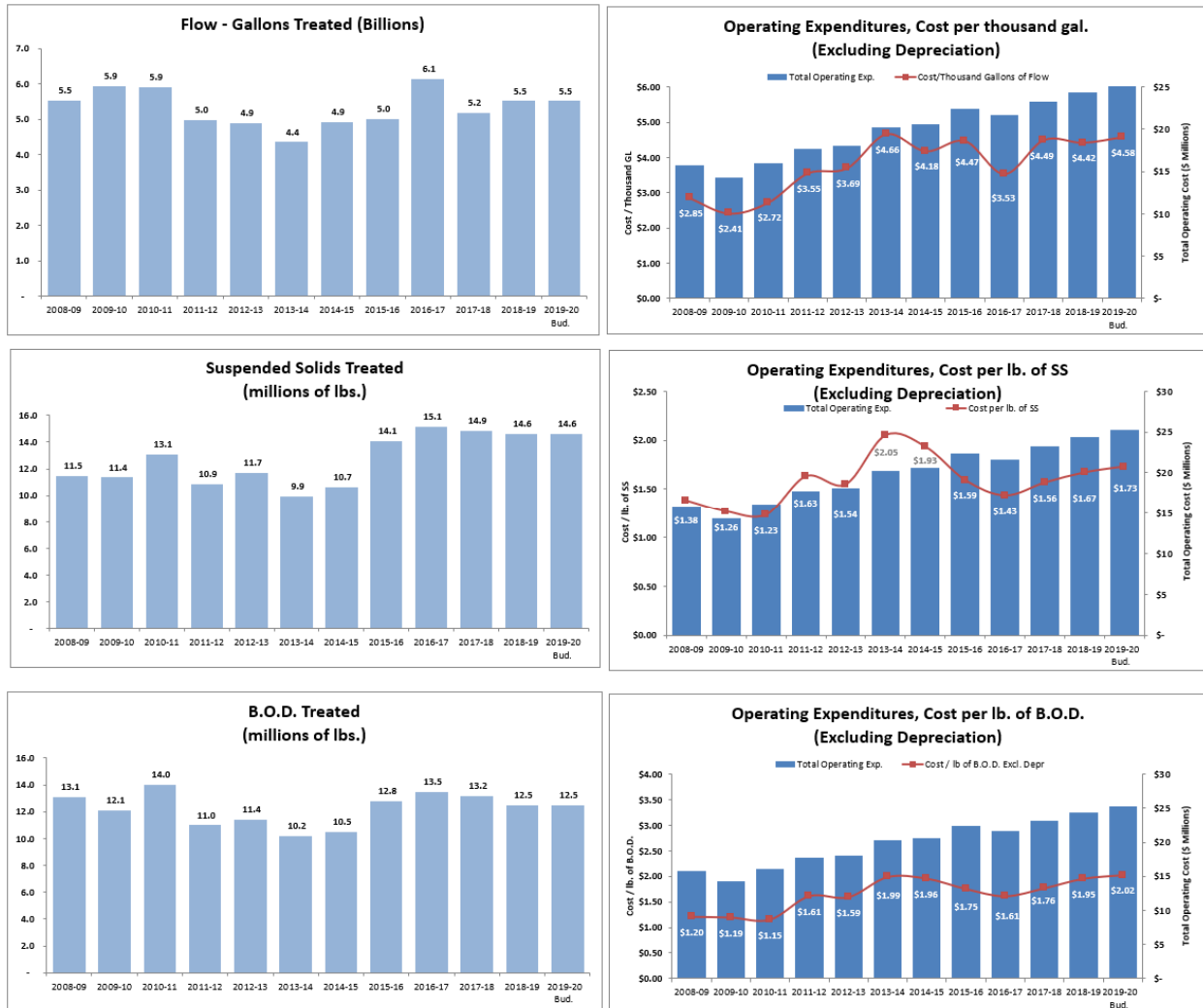
Historical Unit Costs

When isolated to only Operating Expenditures (excluding Depreciation), SVCW historical operating unit costs have increased 82% since the 2008 CIP was first initiated. These increases were driven by ordinary inflationary pressures, increased staffing to better operate and maintain SVCW assets, and creating 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. The following charts provide a side-by-side comparison of operating volumes and unit cost trends.



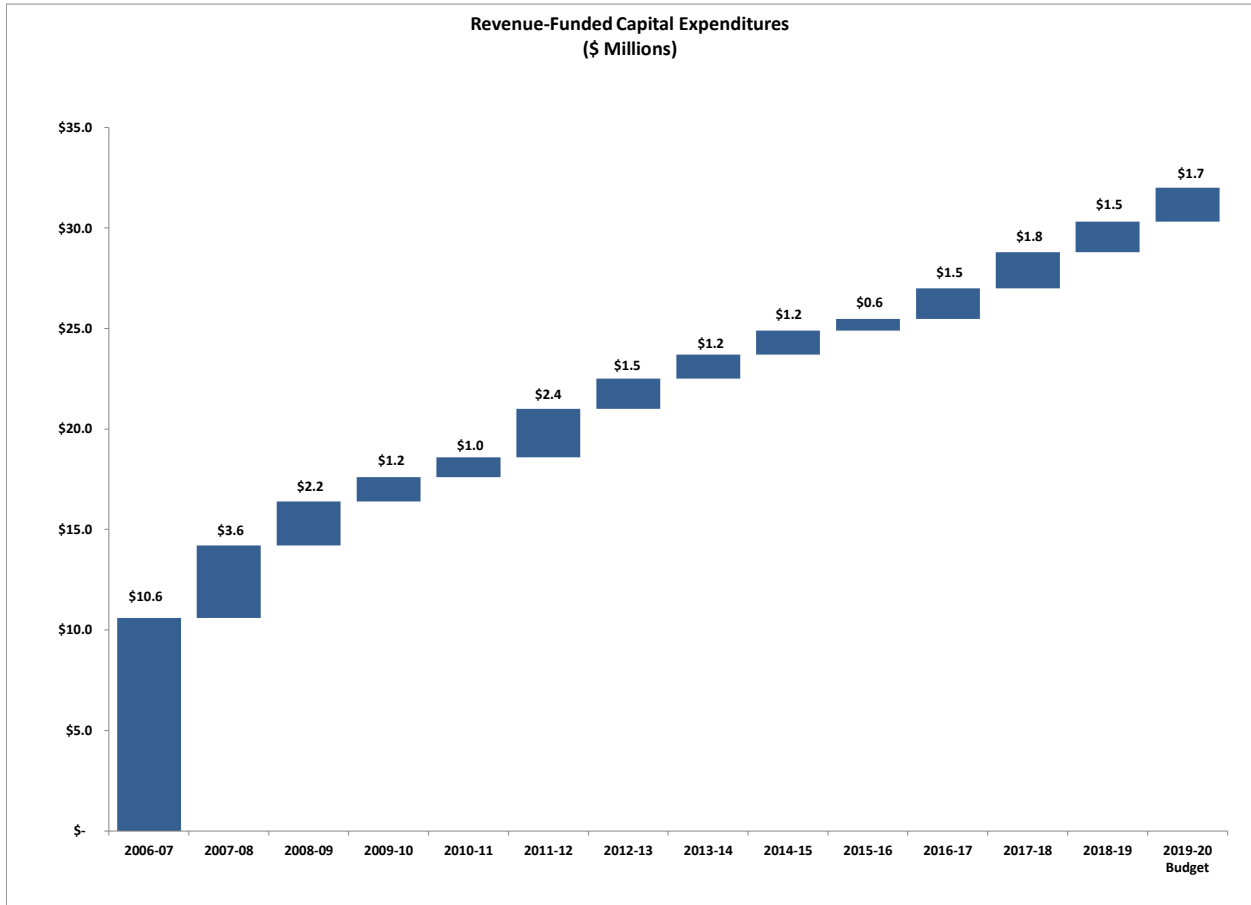
Another influencing factor on unit costs is volatility of operating volumes including Flow, Biological Oxygen Demand (BOD), and Total Suspended Solids (TSS). Drought conditions from 2011 to 2016 contributed to a rise in Unit Costs, then after a significant rain year in fiscal year 2016-17, flows returned to “normal” levels. Operating Unit Costs are measured per thousands of gallons treated, per pound of TSS, and 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-term debt.

Since 2006-07, SVCW has spent approximately \$30 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 averages \$1.5 million annually in Revenue-Funded capital expenditures.



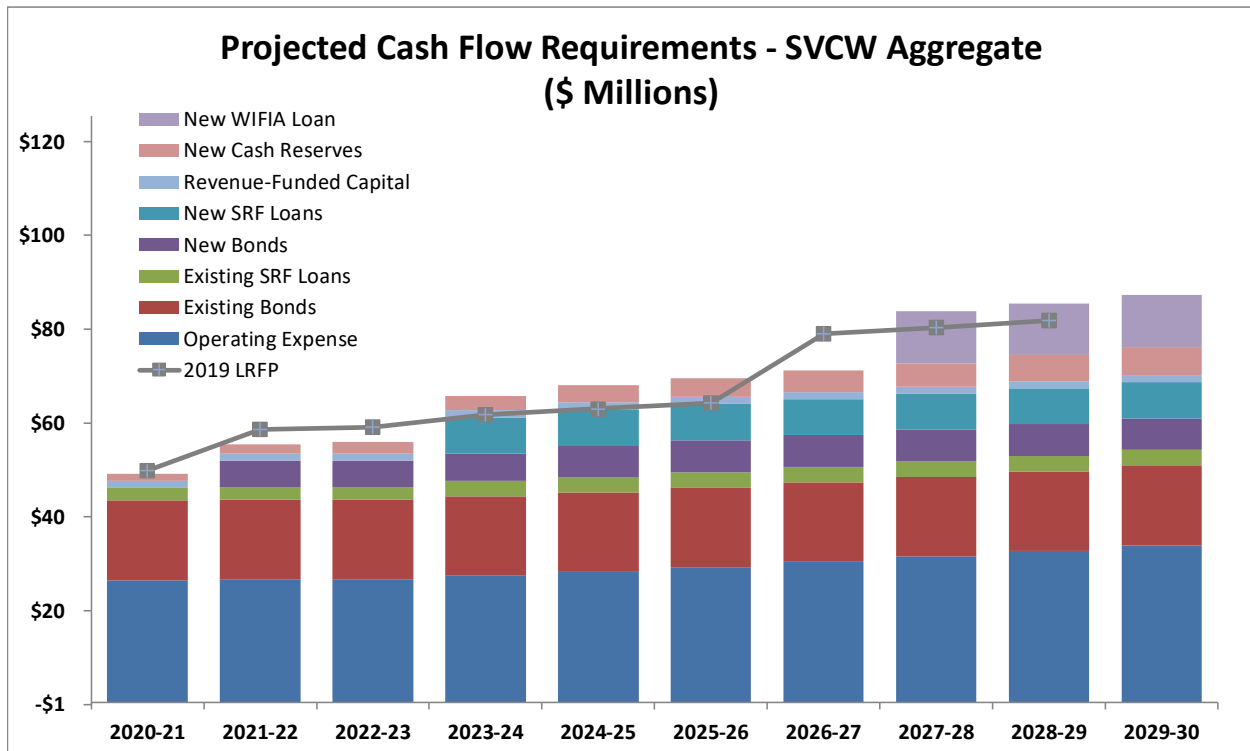
Cash Reserves

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 2018-19, \$1 million was contributed to the Capital Improvement Program Reserve.

SECTION 5 – TEN-YEAR FINANCIAL PROJECTIONS

In fiscal year 2020-21 SVCW anticipates total expenditures will be \$48.6 million (excluding any cash contributions in lieu of Bonds) for all costs of operations, debt service, revenue-funded capital, and reserve contributions. This figure is anticipated to grow to \$86.8 million over the next ten years:

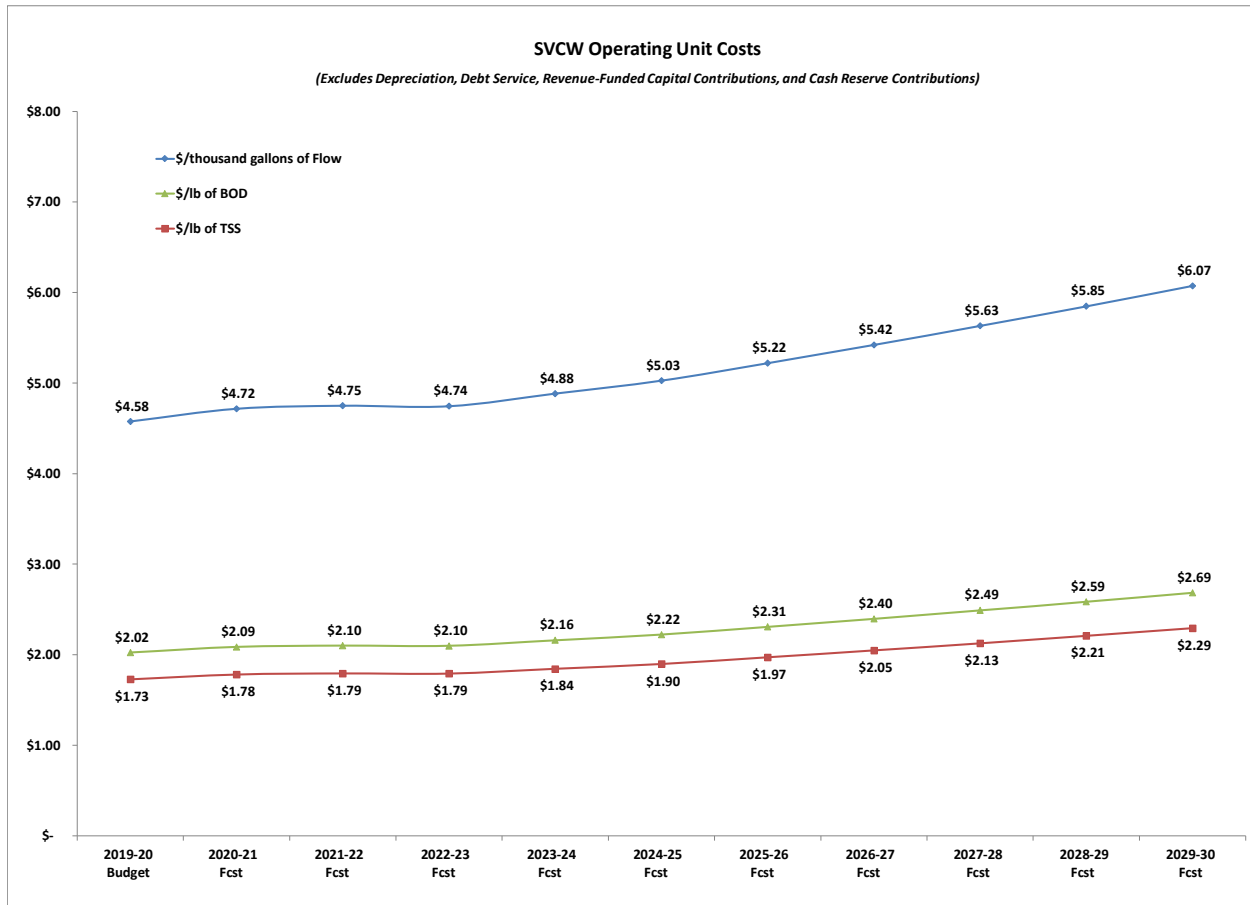
Projected SVCW Cash Flow Requirements - Aggregate (\$ Millions)										
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Operating Expense	\$ 25.99	\$ 26.17	\$ 26.14	\$ 26.91	\$ 27.69	\$ 28.76	\$ 29.87	\$ 31.02	\$ 32.22	\$ 33.46
Existing Bonds	17.02	17.01	17.00	17.00	17.01	16.98	16.98	16.98	16.97	16.96
Existing SRF Loans	2.63	2.63	2.63	3.32	3.32	3.32	3.32	3.32	3.32	3.32
New Bonds	-	5.69	5.69	5.69	6.71	6.71	6.71	6.71	6.71	6.71
New SRF Loans	-	-	-	7.75	7.75	7.75	7.75	7.75	7.75	7.75
New WIFIA Loan	-	-	-	-	-	-	-	11.06	11.06	11.06
Revenue-Funded Capital	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
New Cash Reserves	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00
TOTAL	\$ 48.63	\$ 55.00	\$ 55.46	\$ 65.18	\$ 67.48	\$ 69.03	\$ 70.63	\$ 83.34	\$ 85.03	\$ 86.76



Projected SVCW Operating Expenditures

SVCW operating expenses will increase as expected, by approximately 3.5% annually over the next decade. This includes future benefits derived from more power generation and additional miscellaneous revenues of a food waste-to-energy program.

SVCW Operating Expenditures (\$ Millions)												
Description	2019-20 Budget	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	2029-30 Forecast	
Personnel	\$ 16.6	\$ 17.3	\$ 18.0	\$ 18.7	\$ 19.2	\$ 19.7	\$ 20.5	\$ 21.3	\$ 22.2	\$ 23.1	\$ 24.0	
Utilities	1.7	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.3	
Administrative Costs	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	
Equipment & Supplies	2.6	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.4	
Chemicals	1.7	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.2	2.3	
Professional Services	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	
Contractual Services	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.5	2.5	
Regulatory and Training	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	
Total Expenditures	\$ 26.3	\$ 27.0	\$ 28.0	\$ 29.1	\$ 29.9	\$ 30.8	\$ 31.9	\$ 33.1	\$ 34.3	\$ 35.6	\$ 36.9	
Less Misc. Revenue	(1.1)	(1.1)	(1.9)	(2.9)	(3.0)	(3.1)	(3.2)	(3.2)	(3.3)	(3.4)	(3.5)	
Net Operating Expend.	\$ 25.2	\$ 26.0	\$ 26.2	\$ 26.1	\$ 26.9	\$ 27.7	\$ 28.8	\$ 29.9	\$ 31.0	\$ 32.2	\$ 33.5	



Debt Service Structure / Annual Debt Service Payments

SVCW and its Members have used debt as needed to fund the CIP. Approximately \$647 million of funding has been raised to date. 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 6/30/2019
Bonds			
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	29.30
Subtotal - Bonds		310.38	29.30
Cash Contributions in lieu of Debt			
Belmont		46.84	14.83
Redwood City		10.00	-
West Bay Sanitary District		13.02	13.02
Subtotal - Cash		69.85	27.84
Government Loans			
SWRCB SRF - Control Building	2.60%	11.36	-
SWRCB SRF - WWTP Improvements	1.80%	31.55	-
SWRCB SRF - Conveyance Planning	1.60%	14.00	-
U.S. EPA WIFIA - RESCU Program	2.40%	207.33	207.33
Subtotal - Government Loans		264.24	207.33
Grant Funding			
PG&E Cogeneration Grant		2.40	0.32
California Energy Commission		0.50	-
Subtotal - Grant Funding		2.90	0.32
TOTAL		\$ 647.38	\$ 264.79

* Assumes certain funds agreed upon with WBSD and WIFIA, respectively, were available at June 30, 2019

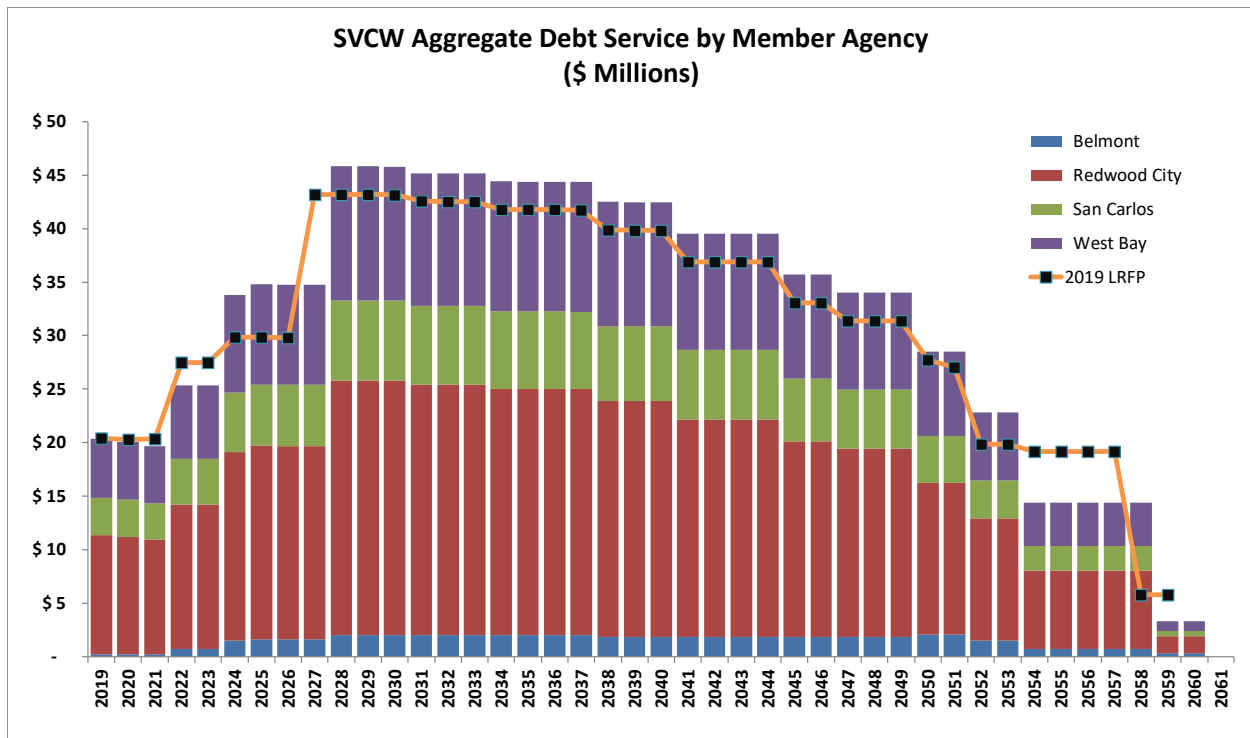
Looking forward, after recognizing \$264 million in currently-available funding at the beginning of the fiscal year, approximately \$561 million of CIP expenditures remains. This LRFPP recommends the following funding approach, with a comparison to the prior year’s LRFPP:

Description	2019 LRFPP	2020 LRFPP
Remaining CIP to be funded	\$560 Million	\$561 Million
\$ Fixed Bonds / % of New Debt	\$24M / 4%	\$99M / 18%
\$ Variable Bonds / % of New Debt	\$48M / 9%	\$29M / 5%
\$ SRF Loans* / % of New Debt	\$141M / 25%	\$169M / 30%
\$ WIFIA Loan / % of New Debt	\$208M / 37%	\$208M / 37%
Proceeds or Cash / % of New Debt	\$139M / 25%	\$56M / 10%
Weighted Average Cost of Capital %	2.88%	2.57%

The attractive interest rates of WIFIA and the attractive market conditions result in an improved Weighted Average Cost of Capital (WACC), now estimated at 2.57%.

Over the next four decades displayed below, total remaining aggregate debt service is \$1.28 billion, or approximately \$56 million more (in nominal dollars) than prior year’s Plan. If discounted to January 2020 dollars, this difference is a Net Present Value of \$22 million.

This Plan anticipates Maximum Annual Debt Service payments (MADS) will increase by \$2.6 million after fiscal year 2027-28. Over the next eight years through fiscal year 2026-27, however, cumulative debt service payments are net neutral.



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.

Bond debt service payments are \$17.5 million in fiscal year 2019-20 including four issuances from series 2019, 2014, 2015, and 2018. With this update, an additional \$99.6 million bond issuance is planned in summer 2020, with a subsequent variable-rate issuance of \$29.3 million in 2024.

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 \$168.8 million SRF loan for the gravity pipeline element of RESCU, anticipated to close in early 2020. It is likely the interest rate will be 1.4%, though the Long Range Finance Model conservatively assumes 1.9%.

Line of Credit

SVCW holds a \$30 million Line of Credit (LOC), with an accordion feature for up to \$65 million, providing bridge financing for CIP projects. The LOC remains a valuable tool to manage cash flow and reduce 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 30 to 90 days and the LOC acts as a bridge loan during this period.

Revenue-Funded Capital Expenditures

Over the next decade, until the CIP Cash Reserve balance reaches its target, SVCW anticipates investing approximately \$1.5 million annually revenue-funded capital projects. These projects are typically installed and managed by staff and include fleet, valve replacements, new pumps and motors, gear assemblies, technology upgrades, 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 \$63 million in cash reserves that could be used for the next generation of capital improvements.

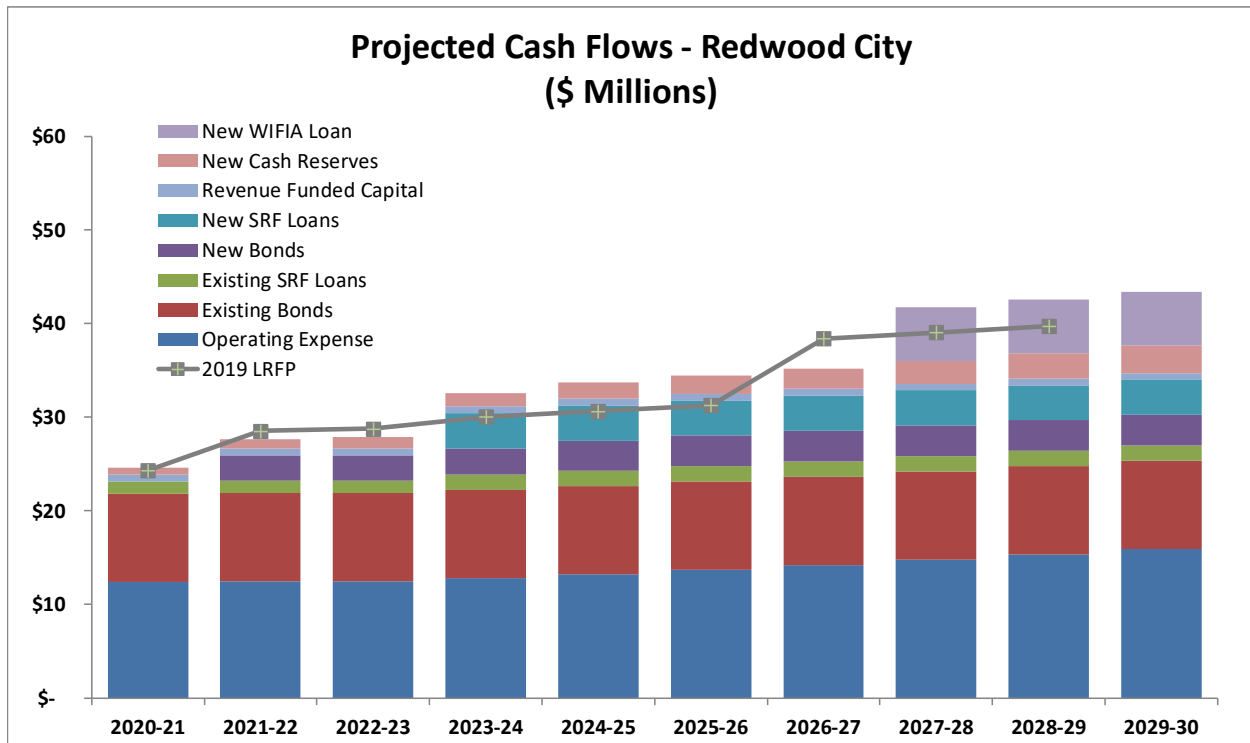
CIP Cash Reserves Forecast (\$ Millions)											
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Beginning Balance	\$ 19.5	\$ 21.4	\$ 23.8	\$ 26.7	\$ 30.2	\$ 34.3	\$ 39.0	\$ 44.3	\$ 50.1	\$ 56.6	
Contributions	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	
Earnings (at 1.75%)	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	
Ending Balance	\$ 21.4	\$ 23.8	\$ 26.7	\$ 30.2	\$ 34.3	\$ 39.0	\$ 44.3	\$ 50.1	\$ 56.6	\$ 63.7	

Cash Reserve contributions follow SVCW policy at \$1.5 million contributed annually in fiscal year 2020-21, after which contributions increase annually by \$500 thousand. Such contributions continue until cumulative CIP Reserves reaches an inflation-adjusted target of \$63.7 million, after which the contributions will be redirected to Revenue-Funded Capital projects.

Total Cash Flow Projections by Member Entity

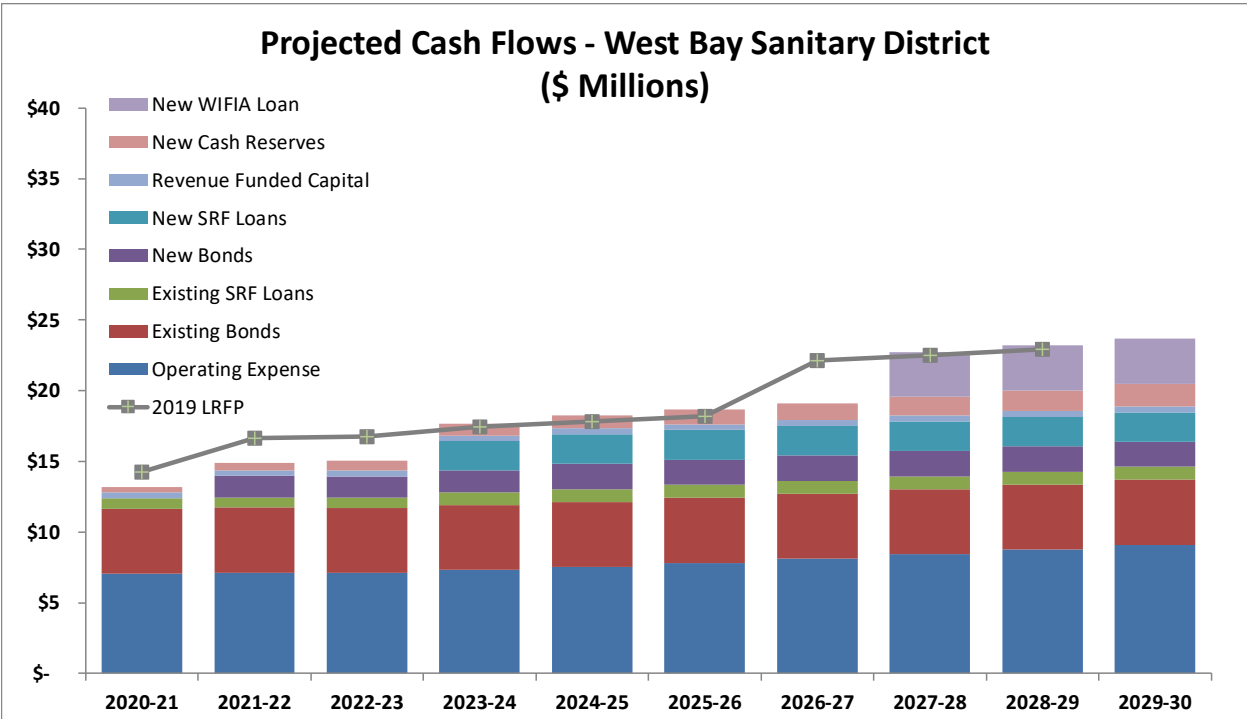
The following charts and tables describe the cash flow projections required for all SVCW expenditures. Each Member Entity is also provided with a detailed description for their own planning purposes.

Redwood City

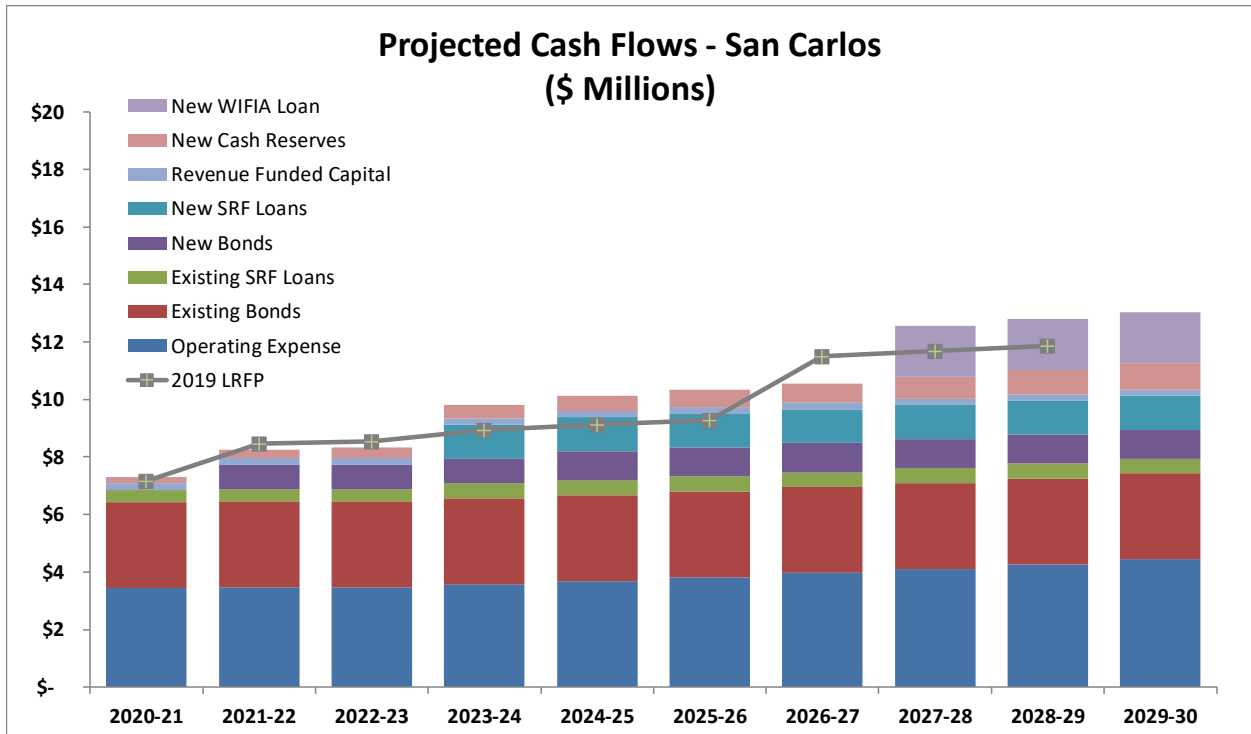


Projected SVCW Cash Flow Requirements - Redwood City (\$ Millions)										
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Operating Expense	\$ 12.37	\$ 12.46	\$ 12.44	\$ 12.81	\$ 13.18	\$ 13.69	\$ 14.22	\$ 14.77	\$ 15.34	\$ 15.93
Existing Bonds	9.43	9.42	9.42	9.42	9.41	9.41	9.41	9.41	9.40	9.39
Existing SRF Loans	1.32	1.32	1.32	1.65	1.65	1.65	1.65	1.65	1.65	1.65
New Bonds	-	2.76	2.76	2.76	3.26	3.26	3.26	3.26	3.26	3.26
New SRF Loans	-	-	-	3.77	3.77	3.77	3.77	3.77	3.77	3.77
New WIFIA Loan	-	-	-	-	-	-	-	5.72	5.72	5.72
Revenue Funded Capital	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
New Cash Reserves	0.73	0.97	1.21	1.46	1.70	1.94	2.19	2.43	2.67	2.91
TOTAL	\$ 24.57	\$ 27.66	\$ 27.89	\$ 32.59	\$ 33.70	\$ 34.45	\$ 35.22	\$ 41.72	\$ 42.53	\$ 43.35

West Bay Sanitary District



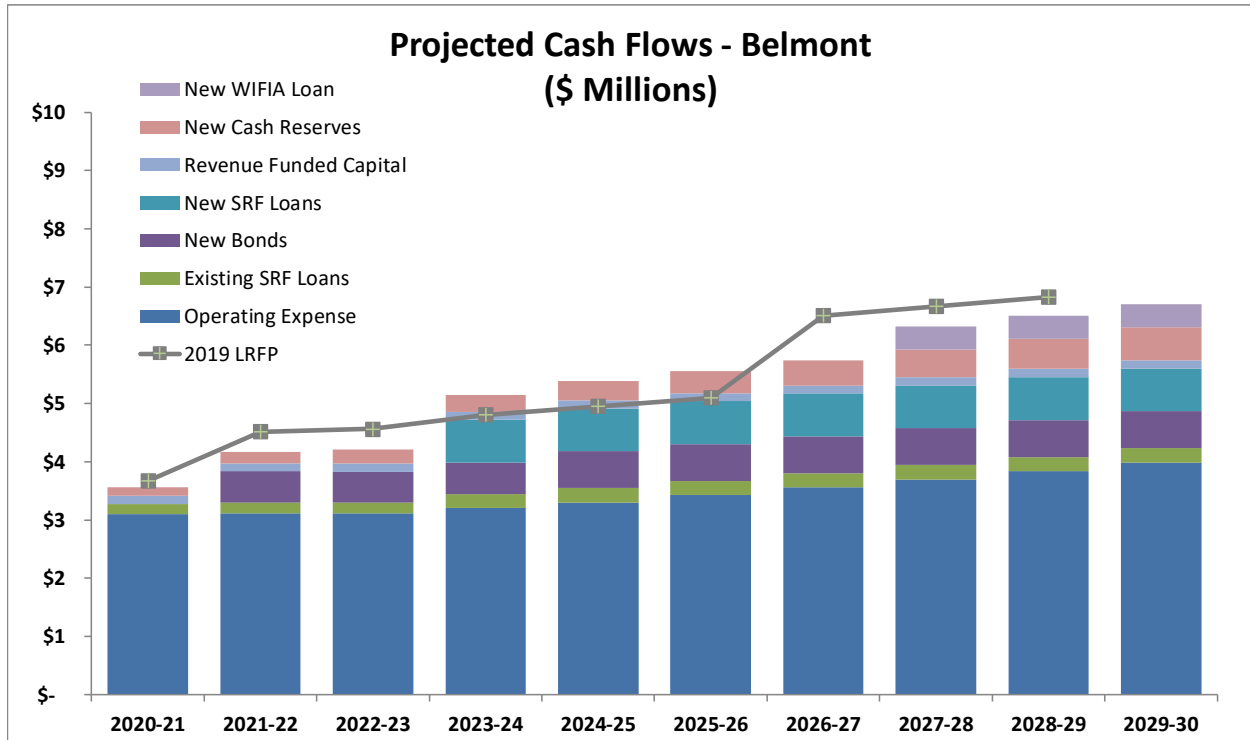
Projected SVCW Cash Flow Requirements - West Bay Sanitary District (\$ Millions)											
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Operating Expense	\$ 7.08	\$ 7.13	\$ 7.12	\$ 7.33	\$ 7.54	\$ 7.83	\$ 8.13	\$ 8.45	\$ 8.77	\$ 9.11	
Existing Bonds	4.59	4.60	4.59	4.59	4.59	4.59	4.58	4.58	4.58	4.58	
Existing SRF Loans	0.73	0.73	0.73	0.91	0.91	0.91	0.91	0.91	0.91	0.91	
New Bonds	-	1.53	1.53	1.53	1.80	1.80	1.80	1.80	1.80	1.80	
New SRF Loans	-	-	-	2.08	2.08	2.08	2.08	2.08	2.08	2.08	
New WIFIA Loan	-	-	-	-	-	-	-	3.16	3.16	3.16	
Revenue Funded Capital	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	
New Cash Reserves	0.40	0.54	0.67	0.81	0.94	1.07	1.21	1.34	1.48	1.61	
TOTAL	\$ 13.20	\$ 14.92	\$ 15.03	\$ 17.64	\$ 18.27	\$ 18.69	\$ 19.12	\$ 22.73	\$ 23.19	\$ 23.66	



Projected SVCW Cash Flow Requirements - San Carlos (\$ Millions)											
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Operating Expense	\$ 3.44	\$ 3.47	\$ 3.46	\$ 3.57	\$ 3.67	\$ 3.81	\$ 3.96	\$ 4.11	\$ 4.27	\$ 4.44	
Existing Bonds	2.99	2.99	2.99	3.00	3.00	2.98	2.99	2.99	2.99	2.98	
Existing SRF Loans	0.41	0.41	0.41	0.51	0.51	0.51	0.51	0.51	0.51	0.51	
New Bonds	-	0.86	0.86	0.86	1.02	1.02	1.02	1.02	1.02	1.02	
New SRF Loans	-	-	-	1.17	1.17	1.17	1.17	1.17	1.17	1.17	
New WIFIA Loan	-	-	-	-	-	-	-	1.78	1.78	1.78	
Revenue Funded Capital	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	
New Cash Reserves	0.23	0.30	0.38	0.45	0.53	0.61	0.68	0.76	0.83	0.91	
TOTAL	\$ 7.30	\$ 8.26	\$ 8.34	\$ 9.80	\$ 10.13	\$ 10.33	\$ 10.56	\$ 12.57	\$ 12.80	\$ 13.04	

Belmont

Belmont has not joined SVCW Bond issuances, instead contributing cash in lieu of debt participation. It has, however, fully participated in certain SRF loans and partially participated in the WIFIA government loan program. This decision reduces Belmont’s SVCW-associated debt service as compared to 2019 Long Range Finance Plan.



Projected SVCW Cash Flow Requirements - Belmont (\$ Millions)											
Description	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Operating Expense	\$ 3.10	\$ 3.12	\$ 3.11	\$ 3.21	\$ 3.30	\$ 3.43	\$ 3.56	\$ 3.70	\$ 3.84	\$ 3.99	
Existing SRF Loans	0.18	0.18	0.18	0.24	0.24	0.24	0.24	0.24	0.24	0.24	
New Bonds	-	0.54	0.54	0.54	0.63	0.63	0.63	0.63	0.63	0.63	
New SRF Loans	-	-	-	0.73	0.73	0.73	0.73	0.73	0.73	0.73	
New WIFIA Loan	-	-	-	-	-	-	-	0.40	0.40	0.40	
Revenue Funded Capital	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	
New Cash Reserves	0.14	0.19	0.24	0.28	0.33	0.38	0.43	0.47	0.52	0.57	
TOTAL	\$ 3.56	\$ 4.17	\$ 4.21	\$ 5.15	\$ 5.38	\$ 5.56	\$ 5.74	\$ 6.32	\$ 6.51	\$ 6.70	

THIS PAGE INTENTIONALLY LEFT BLANK

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 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 50 basis points (0.50%). Such an increase would result in a greater debt service cost of (Net Present Value) \$28 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, project costs and interest expense are both significant. Adhering to the budget and timing of the CIP is singularly the most cost-effective strategy to manage costs. As the regional economy continues to expand, inflationary pressures rise. It is estimated that a one-year delay to the RESCU program, for example, would increase costs by approximately \$27 million based upon a construction cost inflation factor of 4%. SVCW has shown that its Progressive Design-Build project delivery method is so far avoiding these schedule risks.

Government Loan Availability

The SWRCB has thus far secured \$57 million in SRF loans and a \$207 million WIFIA loan. The low cost of these government loans, with their flexible repayment terms, has significantly reduced interest expense. As an example, the recently-executed WIFIA loan was closed at a 2.4% interest rate and, when compared to traditional Wastewater Revenue Bonds, is estimated to save SVCW ratepayers \$43 million on a present value basis over the repayment period.

The SWRCB has also agreed the SVCW RESCU program is eligible for a \$168 million SRF loan. SVCW is actively working to close this loan in early 2020 and conservatively estimates an interest rate of 1.9%.

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 places upward pressure on the CIP. Additionally, the list of capital projects will evolve as SVCW’s wastewater infrastructure continues to age, new regulations are introduced, or project scopes change.

Interest Rates

It is impossible to predict interest rate levels or the timing of changes. What is known, however, is today’s interest rates are attractive. With tax-exempt interest rates 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 have been somewhat mitigated with Governmental Loan funding. Publicly issued debt, however, would likely bear the entire market increase with estimated rates.

If SVCW’s remaining 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 \$1.2 million. Over the entire amortization term, the cost of this change in interest rates would be a Net Present Value of \$34.5 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. a minimum of 0.4% higher than the series 2018 financing).

THIS PAGE INTENTIONALLY LEFT BLANK

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 term 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. This LRFP therefore is useful for Member Agencies as they consider budgets and analyze their sewer rates.

THIS PAGE INTENTIONALLY LEFT BLANK

