

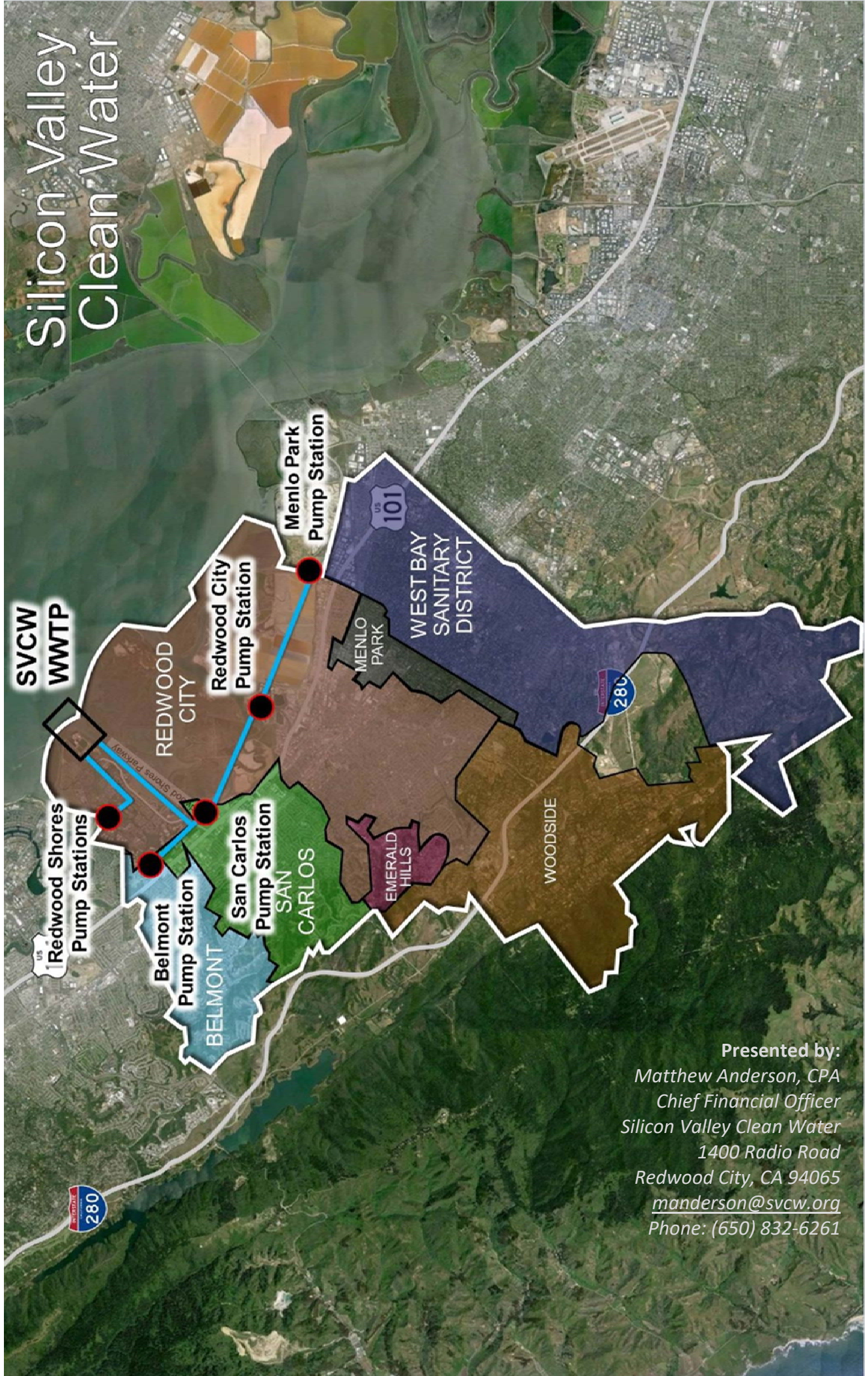


Silicon Valley Clean Water

2019-20 Operating Budget

Adopted April 15, 2019

Silicon Valley Clean Water



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Commissioners

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

SVCW Staff

<u>Name</u>	<u>Title</u>
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Matthew Anderson	Assistant Manager & Chief Financial Officer
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Kim Hackett	Authority Engineer
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Cindy Hui	Accounting Supervisor
Krista Politzer	Financial Analyst

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SECTION 1 – OVERVIEW

Organization and Business

Silicon Valley Clean Water (SVCW, or “the Agency”) was founded in 1975 as the successor to the Strategic Consolidation Sewerage Plan, from which SVCW took title to property including sanitary sewerage pumping stations, as well as transmission and outfall facilities originally constructed by that plan. SVCW now provides wastewater transmission, treatment, and effluent disposal services for the surrounding communities including the Cities of Belmont, Redwood City, and San Carlos as well as West Bay Sanitary District (Member Entities).

The regional wastewater treatment plant has 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 SVCW Member Entities to five pump stations, the treatment plant, 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.

SVCW is a joint exercise of powers agency reporting to the Member Entities located in the northern part of Silicon Valley between the cities of San Francisco and San Jose. The Agency’s wastewater treatment plant is in the City of Redwood City and serves more than 200,000 people and businesses 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.

Governance & Management

The Agency is governed by a four-member “Commission” consisting of one appointed member from each of the Member Entities’ governing bodies. Current Commission Members are:

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

Voting is proportional to the Member Entities' respective ownership interests in the Agency's wastewater system. There is currently a total of 100 votes which are 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 SVCW 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 (CIP) and the Long Range Financial Plan (Financial Plan). The Adopted 2018-19 Budget is consistent with those goals and reflects a progressive approach to controlling costs, minimizing unplanned expenditures, limiting risks, and investing in projects and programs that benefit the community.

SVCW has no taxing power. The Agency receives nearly all of its funding, other than interest earnings and other miscellaneous revenues, from payments made by the Member Entities. Each month, Member Entities make payments for operations, capital repairs, and cash reserves. Debt service payments are made according to schedules set by SRF loans and Bond issuances. After the close of the fiscal year, the annual payments made by each Member are reconciled against the actual expenditures allocated to each Member, and any difference is applied toward fund reserves held by the Agency on behalf of each Member.

Debt Reserves

The Agency has debt reserves as well a Commission-adopted reserve policy that was established to 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 is equal to 10% of the approved Operating and Capital Budget plus \$1 million. The Capital Improvement Program Reserve is set at an amount equal to the annual calculated depreciation of SVCW facilities to meet the long-term

needs of replacing capital assets upon reaching the end of their useful life. Each year, if the funds held in the above reserves fall below targeted levels, the Commission considers budget adjustments to return reserves to their target levels. The Agency has the ability to amend its reserve policy at any time.

Long Range Financial Plan

SVCW Member Entities' sewer rates provide the underlying repayment security for all SVCW financing. As such, SVCW developed a Long Range Financial Plan (LRFP) to provide a roadmap for funding the CIP and ongoing operating costs. The Financial Plan is updated annually and presented to the Commission for approval. It also informs Member Entities when considering sewer rates.

A LRFP combines financial projections with strategy. The Governmental 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, SVCW Member Entities can balance objectives and financial challenges.

SVCW has a goal to manage its finances and meet critical funding needs, while recognizing the need to maintain reasonable wastewater rates. Going forward the LRFP is enacted through setting of annual budgets, achieving financial performance measures, and incorporating Commission-directed actions. The Financial Plan is derived from planning models that forecast 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 when funding capital projects and raising rates.

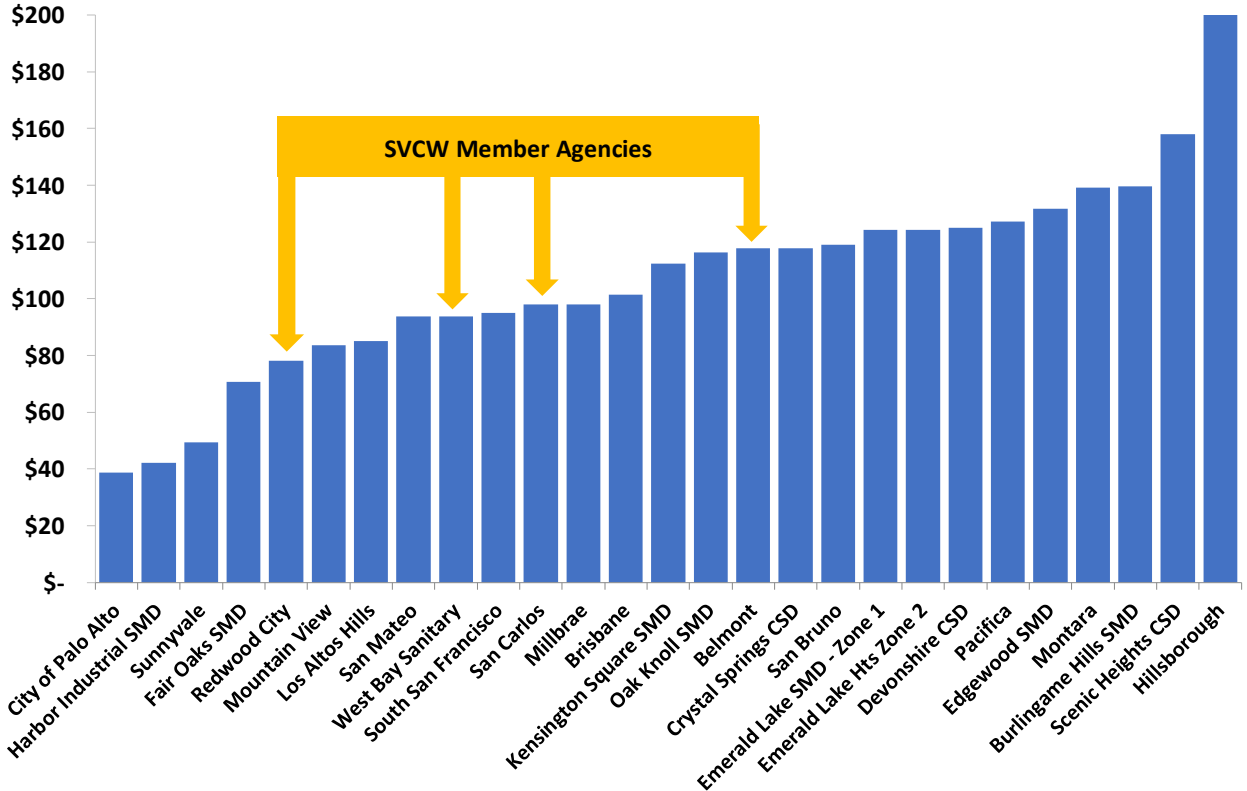
Comparative Residential Sewer Charges

Since the introduction of the CIP, Member Agencies have been proactively raising sewer rates to support their allocable share of SVCW expenditures, as well as their own sewer operating and capital programs. While to date, rate increases have been substantial, going forward only modest increases are anticipated. The following table shows residential monthly sewer rates of Member Entities 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
Redwood City	\$44.70	\$48.72	\$53.10	\$57.88	\$63.09	\$68.77	\$74.95	\$75.11	\$76.68	\$78.24
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

Member Agencies' rates are among the middle tier of San Mateo County sewer rates, as shown in the following chart of regional monthly sewer service charges for a typical single family. It should be noted that many of these other agencies are now initiating their own large capital improvement programs, and are anticipated to face significant rate increases going forward.

Monthly Single Family Residential Sewer Rate Survey (December 2018)
San Mateo County - Based on flat rate or 8 hcf of monthly winter water USE



Accomplishments:

Each year, SVCW management sets goals to ensure its communities' wastewater is conveyed and treated in a safe and dependable manner. Key achievements during the past year include:

Operations:

- Renewed SVCW's five-year National Pollutant Discharge Elimination Systems (NPDES) permit from the U.S. EPA. This permit expires March 31, 2023.
- Treated over 5.2 billion gallons of sewage from member agencies in compliance with NPDES permit
- Processed 10,796 wet tons of biosolids.
- Completed all 2018 bioassay tests successfully to validate effluent quality.
- Contracted a study of Nutrient Removal Technologies to consider alternative ways to meet future NPDES discharge requirements.
- Completed installation and functional testing of new Rotary Drum Thickener process equipment.
- Installed new Hypochlorite and Bisulfite dosing Carrier Water Systems.
- Installed new food waste handling facility at grease septic pit to support pilot study.
- Completed Food Waste study with Kennedy Jenks Engineering and California Energy Commission.
- Completed site visits and final selection for Pump Station Design Project.
- Attended Water Technology Alliance Fact Finding technology tour in Denmark
- Purchased new Forklift to better handle chemical and grit bin positioning.
- Adjusted treatment processes to support Chlorine Contact Tank Pass #1 recoating and crack repair.
- Participated in development of Stage 2 Chlorine Contact tank Pass 2 and 3 recoating, valve replacement and installation of new overflow wall in wet pit "B" for 1st pass level control.
- Drafted operations and maintenance guidance document for use in all upcoming projects (FOP, PSI, GP and Plant Reliability)
- Implemented new e-logger Anywhere solution on mobile devices for remote logging.
- Developed and incorporated the solids process reads into e-logger to eliminate paper-based read sheets.
- Participated in plant automation planning and design decisions.
- Partnered with Kennedy Jenks Engineering and Stanford University in pilot project for Anaerobic Fluidized Bed Membrane Bio Reactor for treating wastewater.
- Replaced SCPS 48" V4 force main valve and MPPS Flow Equalization Valve 404.
- Joined Information Technology Division to install SCADA video wall for improved monitoring of plant processes and security.
- Attended Design Build Industry Conference in Portland Oregon.

- Began dosing ferric chloride into Redwood Shores force main to better manage plant odors and inhibit concrete corrosion by reducing hydrogen sulfide gas.
- Installed barscreen debris compactor at Redwood City Pump Station to improve safety and reduce labor requirements.
- Hosted Hach WIMS (water information management system) Bay Area user group.
- Hosted meetings with Consulate General of Denmark to improve wastewater treatment processes.
- Participated in U.S. EPA 2018 Anaerobic Digester Data Collection Study.
- Witnessed Clemson Hydraulic Modeling Study for RESCU Program Front of Plant Receiving Lift Station.
- Participated in planning sessions to configure Cogsdale Operations and Maintenance Corrective and Preventative Maintenance Work Order Development

Maintenance:

- Completed a total of 10,061 corrective and predicted work orders.
- Installed trash compactor at RWCPs to compact trash removed from incoming flow at this location. This greatly improved operators' safety by not having to load and offload buckets of rags to truck and haul them to plant. Also improved men power efficiency.
- Completed PLC upgrade to Controllogix PLC system at the Redwood city pump station Facility. All equipment controls completed, tested and new graphics generated and integrated.
- Completed PLC upgrade to Controllogix PLC system at the San Carlos pump station Facility and Booster station. All equipment controls completed, tested and new graphics generated and integrated.
- Completed PLC upgrade to Controllogix PLC system at the Belmont pump station Facility. All equipment controls completed, tested and new graphics generated and integrated.
- Completed installation and repairs of all sewage pumps discharge and check valves at the San Carlos Pump Station.
- Completed installation of upgraded Hypo Diffuser system and carrying dosing water to the chlorination dosing system in "CL2 Mix Box".
- Installed PH and conductivity sensors system at the Menlo Park PS to monitor incoming waste water flow to the station.
- Installed PH and conductivity sensors system at the Redwood City PS to monitor incoming waste water flow to the station.
- Installed PLC controls and integrated to SCADA to the Redwood City PS odor control hypo dosing system.
- Replaced aged compressor that supply dry air to the Laboratory building.

- Replaced unreliable "Hot water loop" 3-way mix valve actuators and controls with new and improved technology (LINAX actuators)
- Replaced an existing sewage chopper pump at the Redwood City pump station with a higher flow and discharge head pressure capacity to improve wet weather pumping conditions at this pump station.
- Modified digesters tanks condensation traps with self-drain p-traps system to ensure condensation is continuously draining.
- Installed digester gas conditioning wireless gas temperature monitoring system for process controls.
- Replaced an old 30" valve on the force main that returns flow from the "Flow Equalization Facility" (FEF) to the Menlo Park pump station.
- Replaced an old Force main 48" valve that diverts flow to the San Carlos Booster Station during high wet weather flows.

Environmental Services:

- Performed 144 industrial sampling events.
- Reissued 4 mandatory wastewater discharge permits which provided succession training for staff.
- Partnered with lab staff to perform 100 pump station sampling events, sampling continues to include the Port of Redwood City dedicated sampling location, allowing more accurate data from the Port which contributes to overall Redwood City total.
- Evaluated and permitted approximately 35 non-routine and groundwater requests for discharge. Requests for Groundwater Discharge from construction sites has increased due to increased construction activity in Belmont, Menlo Park and San Carlos. The requests for Low Volume Discharge permit increased. Low Volume Discharges are ongoing non-hazardous wastewater discharges. These types of discharges are originating from the new biotechnology laboratory facilities moving into Menlo Park, Redwood City and San Carlos. This has provided opportunity for staff succession training.
- ES staff partnered with the Engineering department to develop a discharge strategy for the discharge of high salinity groundwater from the SVCW Front of the Plant construction projects. ES staff is involved with permitting the discharge of groundwater from the SVCW RESCU Project sites. This includes coordinating discharge requests from non SVCW contractors. This has provided opportunity for staff succession training.
- A local limits update has been started. This update identifies pollutants in the plant incoming wastewater and provides a technical base to develop limits for these compounds. The last local limits study was performed in 1989. This provides opportunity for staff succession training.

- Coordinated water conservation presentations made to 4,852 students, teachers and parents. Conveyed pollution prevention message to over 120 elementary students.
- Performed 639 Fats, Oils and Grease inspections and visits at commercial restaurants in Redwood City, San Carlos and unincorporated San Mateo County. Outreach for proper disposal of grease removal devices was done also at these sites.
- Taught sewer science course to 900 local high school students.
- Sponsored two Marine Science Institute voyages for schools.
- Staffed a booth at the Marine Science Institute's Earth Day event attended by 2,700 community members, and 150 members at the Belmont Earth Day event.
- Conducted multiple treatment plant tours for over 360+ community members.

Laboratory:

- With the issuance of a new 5-year NPDES Permit in April of 2018, the Laboratory staff successfully implemented changes to the sampling frequency and testing of the SVCW Influent and Effluent. The NPDES Permit is extremely detailed concerning compliance.
- Two Laboratory Analyst Is were promoted to Laboratory Analyst IIs and are being trained in the more sophisticated laboratory methods due to the retirement of a senior laboratory member.
- The Laboratory supported the Operations Department with around-the-clock testing for new process equipment and projects including the Rotary Drum thickeners, Gravity Thickeners, and Food Waste Project.
- Laboratory Staff generated 30,000 reportable results during 2018 in support of Plant Operations, Permit Regulations, Environmental Services, and customer projects. These results included daily pH measurements of the Effluent to trace metal analysis of Industrial User samples collected by SVCW Environmental Inspectors.

Safety:

- Developed and implemented new system to track safety issues, capture accident details, and streamline incident reporting to actively identify and eliminate or control health and safety hazards.
- Trained and certified 5 employees through a 40 hour Confined Space Rescue Class to provide additional confined space rescue expertise during emergencies.
- Collaborated with O&M Directors and Supervisors to develop and implement a daily safety moment awareness program by employees for employees to encourage more buy-in to improve our safety culture.

- Continued to refine the SMART system and observed employee usage to help prevent injuries and accidents. Provided additional SMART posters, banners, stickers, and trainings to staff to raise safety awareness to reduce injuries.
- Achieved 100% completion of bi-monthly tailgates on targeted areas by supervisors to improve safety mindfulness.
- Maintained Experience Modification to 64%, resulting in a 36% discount in our workers' compensation insurance rate; thus, saving over \$132 thousand in premiums.

Engineering:

- Completed 6 Construction Projects, improving the reliability and efficiency of the treatment processes. Projects included installing pump station valve replacement, food waste receiving pilot project, Front of Plant site preparation project, Primary Sedimentation Tank rehabilitation project and phase 1 of chlorine contract tank rehabilitation.
- Completed the work to address the emergency conditions related to 12 kV vault repair.
- Negotiated contracts and completed Stage 2 design work with two Design-Build firms for implementation of two high-profile RESCU projects: Gravity Pipeline and Front of Plant Improvements. Both projects are under construction.
- Completed the selection of design-build team for Pump Station Improvements and negotiated the Stage 1 contract for design work.
- Completed the assessment of photo-voltaic system and energy storage using a battery system.
- Negotiated the contract for design and installation of a 1MW/2MWh energy storage system using Tesla batteries to shave electrical utility demand. SVCW has been awarded a \$1 million SGIP (Self-Generation Incentive Program) incentive for implementation of this project.
- Started construction for a new 12kV Switchgear that will allow redundancy to the electrical supply throughout the plant, enable export-import to fully utilize all biogas generated, and power the Front of the Plant Improvements. The new switchgear will also be located on elevated platform above the 100-year flood level.
- Completed construction of Food Waste Receiving Pilot project. This California Energy Commission (CEC) sponsored project faced numerous challenges including permitting challenges from BAAQMD and CalRecycle as well as challenges in securing feedstock. SVCW continues to progress on its commitment to organic codigestion and is working

with its sister agency SBWMA to explore the implementation of its full-scale organics codigestion project.

- Progressed discussions with regional partners on feasibility of developing potable reuse as a new water supply.
- Completed construction of rehabilitation of Phase 1 of chlorine contact tank project.
- Started construction of Control Building HVAC system.
- Completed selection of a design-build team for WWTP Reliability Improvements, negotiated contract and completed the 100% design work. Also started construction of the project. This project includes replacement of both DMF backwash pumps, replacement of all four aeration blowers with high efficiency turbo blowers, and replacement of centrifuge with two high-efficiency rotary presses amongst other improvements.

Information Systems:

- Solved SCADA Multicasting issue that had inhibited redundancy at the Programmable Logic Controller (PLC) level.
- Helped configure the hosted environment for the new financial system infrastructure to meet security and access requirements.
- Configured SDWAN Viptela Solution for Azure to monitor bandwidth of the hosted financial system.
- Assisted Instrumentation team to upgrade new Building Management System that monitors the air handling in the control building.
- Upgraded Cisco IP Phone System to latest version, extending its useful life for another year.
- Configured new front gate keycard and access systems.
- Upgraded TRAPS Anti-malware/Antivirus to a cloud-based solution with reporting features.
- Oversaw SCADA emergency fiber project to ensure redundant connectivity at the PLC level.
- Installed and Configured Cisco Hyperflex system and Fabric Interconnects to provide additional processing and memory capacity, as well as improve fault tolerance.

- Fully updated Vcenter and Unified Computing System infrastructure to support virtual networking and computing solutions.
- Installed new multimedia displays in lunch room, worked with administration to implement hardware & software solutions.
- Implemented Security Mentor training program to raise staff awareness of their role in ensuring computer security.
- Implemented Microsoft Teams product to introduce new audio-conferencing functionality.
- Increased forensic logging thru SPLUNK, which improves diagnostic capabilities in the event of security events or hardware failures.
- Introduced online Emergency Console Server to add diagnostic tools used in the event of hardware failure.

Administration & Finance:

- Effective July 01, 2018, implemented Phase I of the new Microsoft Dynamics financial system. SVCW is now using the system for all general ledger, purchasing, accounts payable, and inventory management activity.
- Submitted Letter of Interest for a Water Infrastructure Finance and Innovation Act (WIFIA) loan to the U.S. Environmental Protection Agency and, once selected, completed the formal WIFIA application process.
- Completed the 2017-18 financial statement audit, including capitalization of \$4 million in construction projects completed during the year and \$40 million in Construction-in-Progress.
- Updated the Long-Range Finance Plan in January 2019 for changes in debt mix, construction schedule, and inflationary factors. If SVCW successfully secures its new debt structure from the U.S. Environmental Protection Agency and the state of California Water Resources Control Board, it may reduce borrowing costs by an estimated Net Present Value \$40 million.

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SECTION 2 – OPERATING BUDGET SUMMARY

The 2019-20 Operating and Revenue-Funded Budget anticipates approximately \$25.21 million in Net Operating Expenses and \$1.68 million for Revenue-Funded Capital projects next year. Reserve Designations are aligned with Agency policy and include \$1.05 million in Cash Reserve Contributions. Debt Service Payments are budgeted to be \$20.29 million in 2019-20.

Year-over-year Budgeted Member Entity Contributions				
Description	2018-19 Adopted Budget	2019-20 Adopted Budget	\$ Increase/ (Decrease)	% Increase/ (Decrease)
Gross Operating Expenses	\$ 24,979,821	\$ 26,268,777	\$ 1,288,956	5.16%
Less Miscellaneous Revenue	(766,198)	(1,059,500)	293,302	38.28%
Net Operating Expenses	\$ 24,213,623	\$ 25,209,277	\$ 995,654	4.11%
Revenue-Funded Capital	1,485,500	1,684,325	198,825	13.38%
Reserve Designations	984,034	1,052,583	68,549	6.97%
Total Contributions before Debt Service	\$ 26,683,157	\$ 27,946,185	\$ 1,263,028	4.73%
Debt Service, Participating members	\$ 20,389,946	\$ 20,287,459	\$ (102,487)	(0.50%)
Total Member Contributions	\$ 47,073,103	\$ 48,233,645	\$ 1,160,542	2.47%

- Gross Operating Expenditures will increase by \$1.29 million (5.16%), of which \$694 thousand was from ordinary inflationary pressures on wages and other personnel costs. Non-personnel cost increases were caused by price increases for chemicals and biosolids disposal.
- Miscellaneous Revenue will be \$293.3 thousand higher next year as SVCW initiates a stormwater monitoring program, recognizes higher volume in food grease receipts, and raises the rates SVCW charges for laboratory and source control services.
- Revenue-funded capital spending will be \$1.68 million, or \$199 thousand more than the 2018-19 Budget to address immediate needs for technology, facilities, and equipment.
- Reserve Designations will increase by \$63.6 thousand next year. The 2019-20 Budget follows Reserve Policy and contributes \$1 million annually to the CIP Reserve and \$47.6 thousand to Operating Reserves.
- Debt Service Payments are relatively unchanged, a \$102 thousand decrease from current year. Further description in Section 5 draws its analysis from SVCW’s January 2019 Long-Range Financial Plan. While a significant amount of new debt is being secured to finance \$559 million in capital improvement projects over the next several years, this debt will largely be sourced from federal and state loans which are structured to be repaid after completion of construction.

Expenditure Allocations:

Operating Revenues are allocated according to the Joint Powers Agreement (JPA) between Member Entities. The allocation methodology uses a combination of three flow and loading factors: Flow, Biochemical Oxygen Demand (BOD), and Suspended Solids (SS). These factors are based on three-year averages and updated annually. SVCW applies the JPA-defined formula to allocate annual budgeted operating costs to Member Entities.

The updated three-year flow and loading factors below illustrate how flow and loading figures changed proportionate to Member Agencies' absolute figures.

Three-year Average Flow and Loading Averages - by Member				
Agency	Factor	2018-19 Adopted Budget	2019-20 Adopted Budget	Point Increase/ (Decrease)
Belmont	Flow	12.43%	11.82%	(0.61)
	Biochem. Oxygen Demand	12.44%	12.29%	(0.15)
	Suspended Solids	11.97%	11.72%	(0.25)
Redwood City	Flow	47.49%	49.49%	2.00
	Biochem. Oxygen Demand	44.63%	44.89%	0.26
	Suspended Solids	46.74%	47.62%	0.88
San Carlos	Flow	13.89%	14.45%	0.56
	Biochem. Oxygen Demand	12.29%	12.83%	0.54
	Suspended Solids	11.57%	12.19%	0.62
WBSD	Flow	26.19%	24.24%	(1.95)
	Biochem. Oxygen Demand	30.64%	29.99%	(0.65)
	Suspended Solids	29.72%	28.47%	(1.25)

The above year-over-year changes reflect relative flow and loading behaviors between Member Entities. These metrics are presented to the SVCW Technical Committee for validation.

Member Agency Operating Contributions Calculation:

Flow and Loading factors are incorporated in the below table to allocate budgeted operating expenditures:

2019-20 Budget Revenue Allocation to Member Agencies - Adopted									
Description				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%	
Weightings									
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%	

Miscellaneous Revenue:

Miscellaneous Revenue is derived from grease and septic receipts, property leases, and services performed by the Laboratory and Environmental Services Divisions. In 2017-18 SVCW will continue to receive Pacific Gas & Electric grant revenue associated with electricity production from the cogeneration engines.

2019-20 Budget Miscellaneous Revenue						
Description	2017-18 Actual	2018-19		2019-20 Adopted Budget	\$ Incr/(Decr) v. Forecast	% Incr/(Decr) v. Forecast
		Adopted Budget	2018-19 Forecast			
Grease & Septic Receiving	\$ 324,150	\$ 275,000	\$ 325,000	\$ 325,000	\$ -	0.0%
Cell Tower Lease	25,276	26,034	25,000	25,000	-	0.0%
Property Lease	32,857	15,163	48,000	48,000	-	0.0%
Equipment Sales	42,000	30,000	30,000	30,000	-	0.0%
Source Control	72,782	65,000	70,000	87,500	17,500	25.0%
Laboratory Services	25,696	30,000	35,000	50,000	15,000	42.9%
Interest Earnings	38,968	25,000	40,000	40,000	-	0.0%
Cogen Performance Incentive	262,635	275,000	275,000	275,000	-	0.0%
Stormwater Monitoring	-	-	-	154,000	154,000	-
Other	65,367	25,000	25,000	25,000	-	0.0%
TOTAL	\$ 889,731	\$ 766,198	\$ 873,000	\$ 1,059,500	\$ 186,500	21.4%

Capital and Reserve Contributions:

As described in Section 4 of this budget, Revenue-financed Capital projects are estimated at \$1.68 million in 2019-20. Those costs are allocated to Members according to JPA-defined percentages, which are based on each Member Agency's dry weather capacity owned and its allocated share of future dry weather capacity.

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

Section 5 of this Budget briefly reviews the CIP and its associated debt service payments, which vary as certain Members opt to self-finance a portion of the CIP rather than participate in SVCW debt. Cash reserves, discussed in Section 6, reflect SVCW policy.

Total Member Entity Contributions:

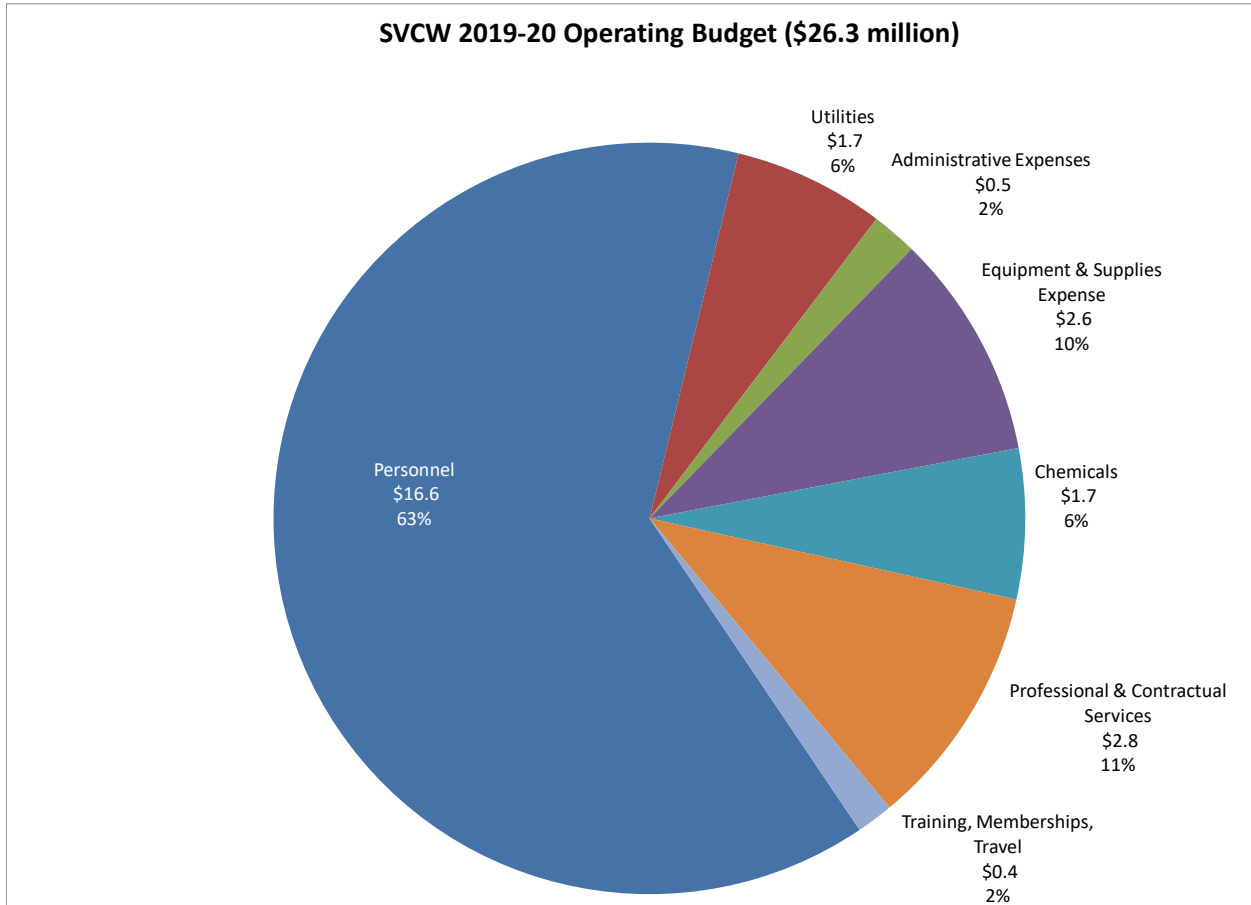
Total 2019-20 contributions (including debt service) will be \$48.2 million, as allocated in the table below:

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	

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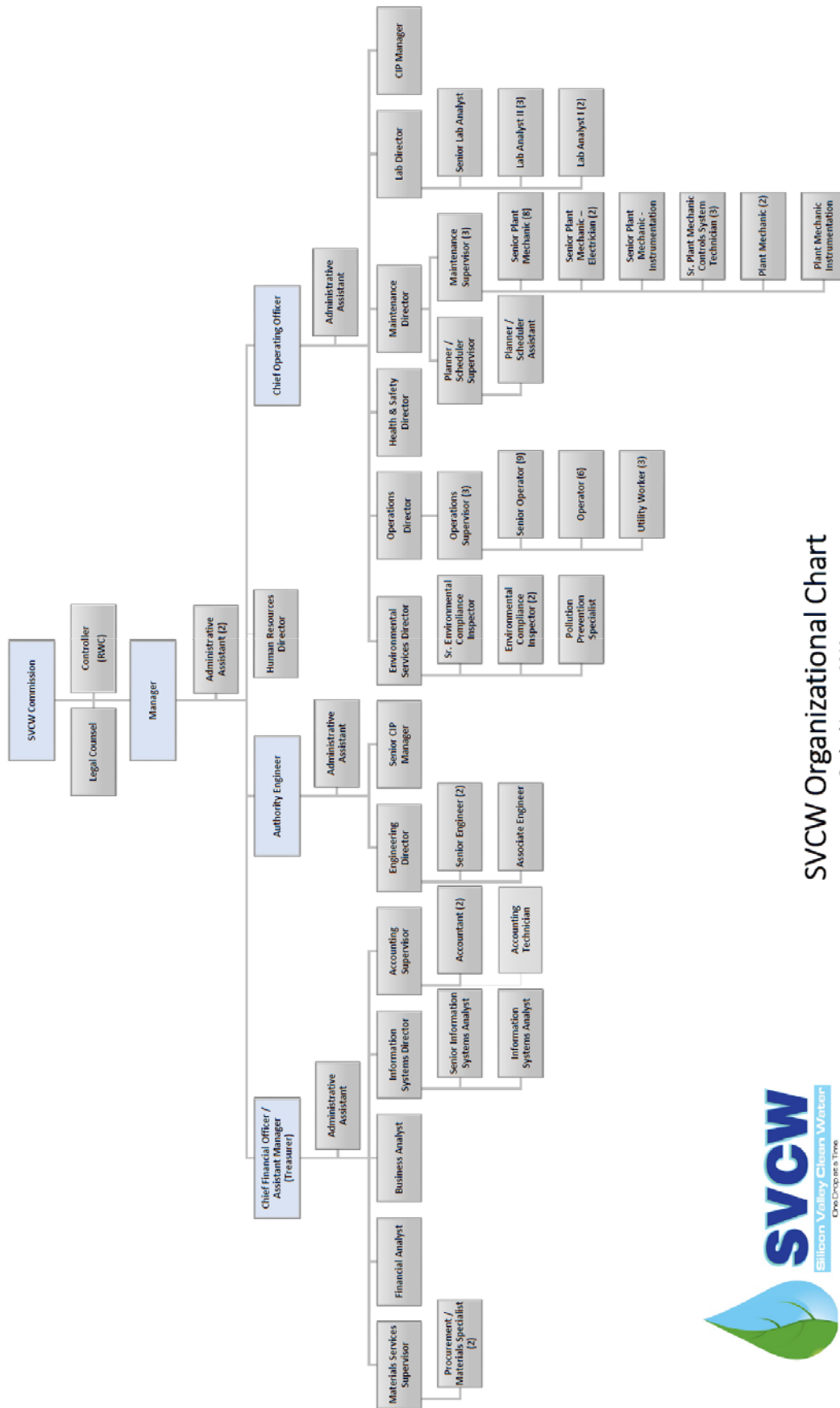
SECTION 3 – GROSS OPERATING EXPENDITURES

The FY 2019-20 Gross Operating Budget will be \$26.3 million. The below chart illustrates the significant expenditure categories, showing 63% of expenditures are for personnel-related costs associated with approximately 79 full-time equivalent employees in the Operating Budget.



Personnel:

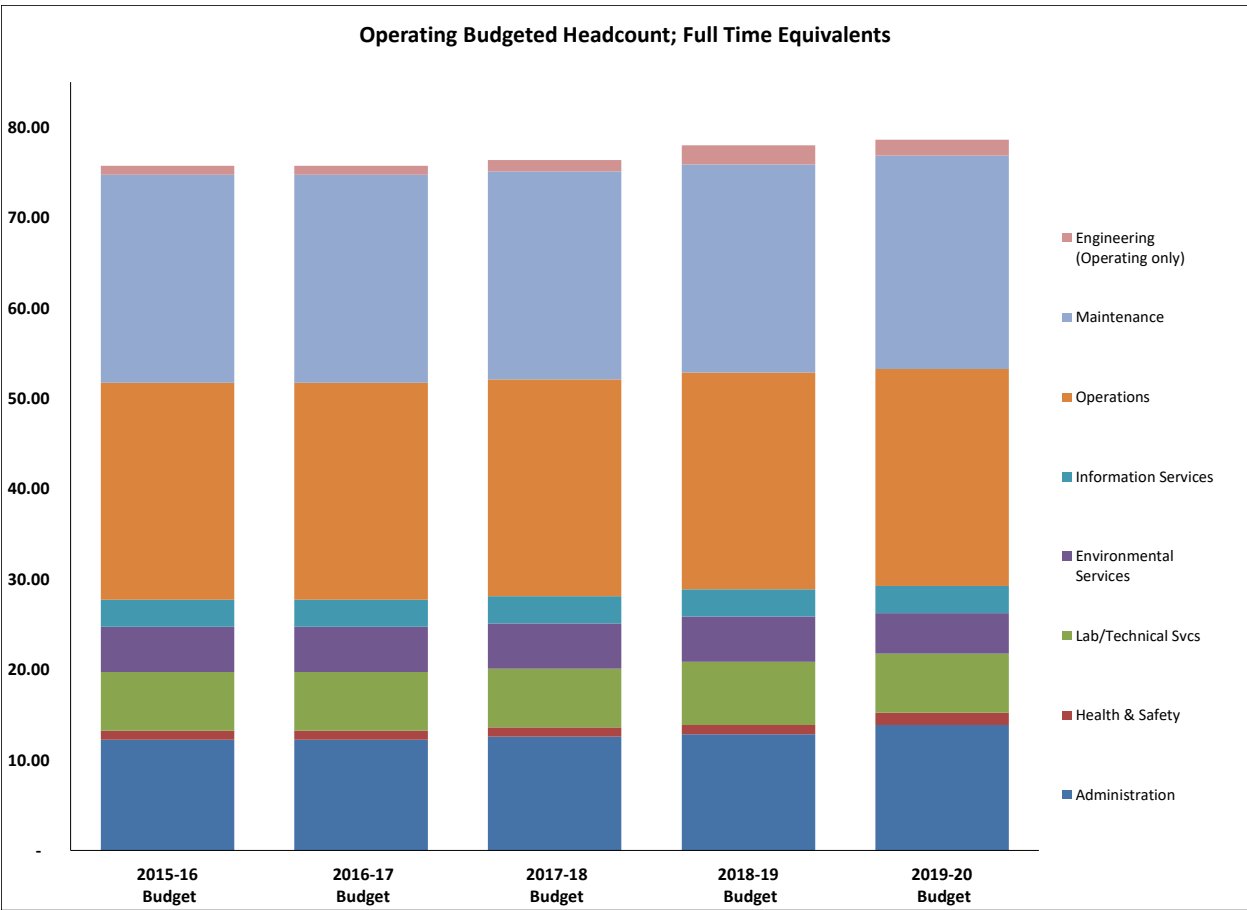
Operating Budget staffing levels have ranged from 72 to 79 full time equivalents across eight divisions since 2010 when SVCW increased staffing to address critical maintenance matters and develop a capital improvement program. Those positions, as well employees dedicated to the Capital Improvement Program, are illustrated in the following organization chart.



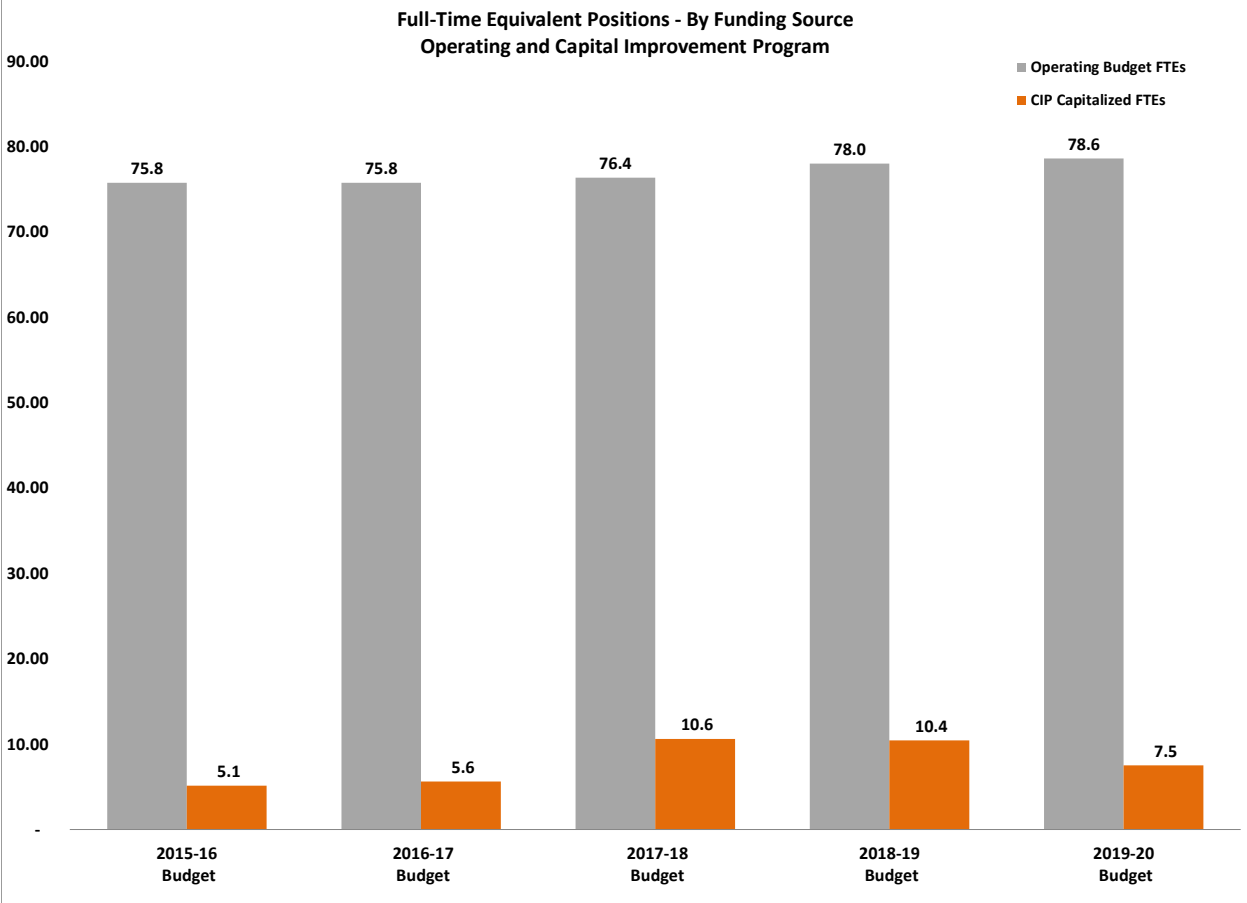
SVCW Organizational Chart
Revised January 2019

As noted in the table below, the number of positions in the Operating Budget will increase by less than one Full Time Equivalent position. The Maintenance Division will replace a consultant's retirement with an instrumentation mechanic to build expertise on industrial control systems. Concurrently, Maintenance has agreed to reassign 40% of a mechanic to focus on safety matters. The Environmental Services Department will retire next fiscal year and management is considering effective ways to manage the organization. The Engineering Division will reduce one part-time engineering position, and Administration recently hired an Accounting Technician to respond to increased RESCU-related volume and prepare for implementing an in-house payroll solution.

Full-time Equivalent Headcount - Operating Budget						
Department	2015-16 Budget	2016-17 Budget	2017-18 Budget	2018-19 Budget	2019-20 Budget	Increase/ (Decrease)
Operations	24.00	24.00	24.00	24.00	24.00	-
Maintenance	23.00	23.00	23.00	23.00	23.60	0.60
Lab/Technical Svcs	6.50	6.50	6.50	7.00	6.50	(0.50)
Environmental Services	5.00	5.00	5.00	5.00	4.50	(0.50)
Engineering (Operating only)	1.00	1.00	1.25	2.15	1.75	(0.40)
Health & Safety	1.00	1.00	1.00	1.00	1.40	0.40
Information Services	3.00	3.00	3.00	3.00	3.00	-
Administration	12.25	12.25	12.63	12.88	13.88	1.00
TOTAL Full Time Equivalents	75.75	75.75	76.38	78.03	78.63	0.60



In addition to the Operating Budget headcount figures, certain Engineering Division positions are dedicated to capital improvement projects. It should be noted that the Operating Budget excludes those costs. As SVCW is now in a critical phase of its Capital Improvement Program, projects are now much larger and complex and require additional departmental administration. The chart below defines the number of positions that have been traditionally charged to capital projects versus operating costs, and further illustrates how the 2019-20 Budget continues to dedicate approximately seven staff to manage increasingly large and complex projects.



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Operating Costs Summary by Objective:

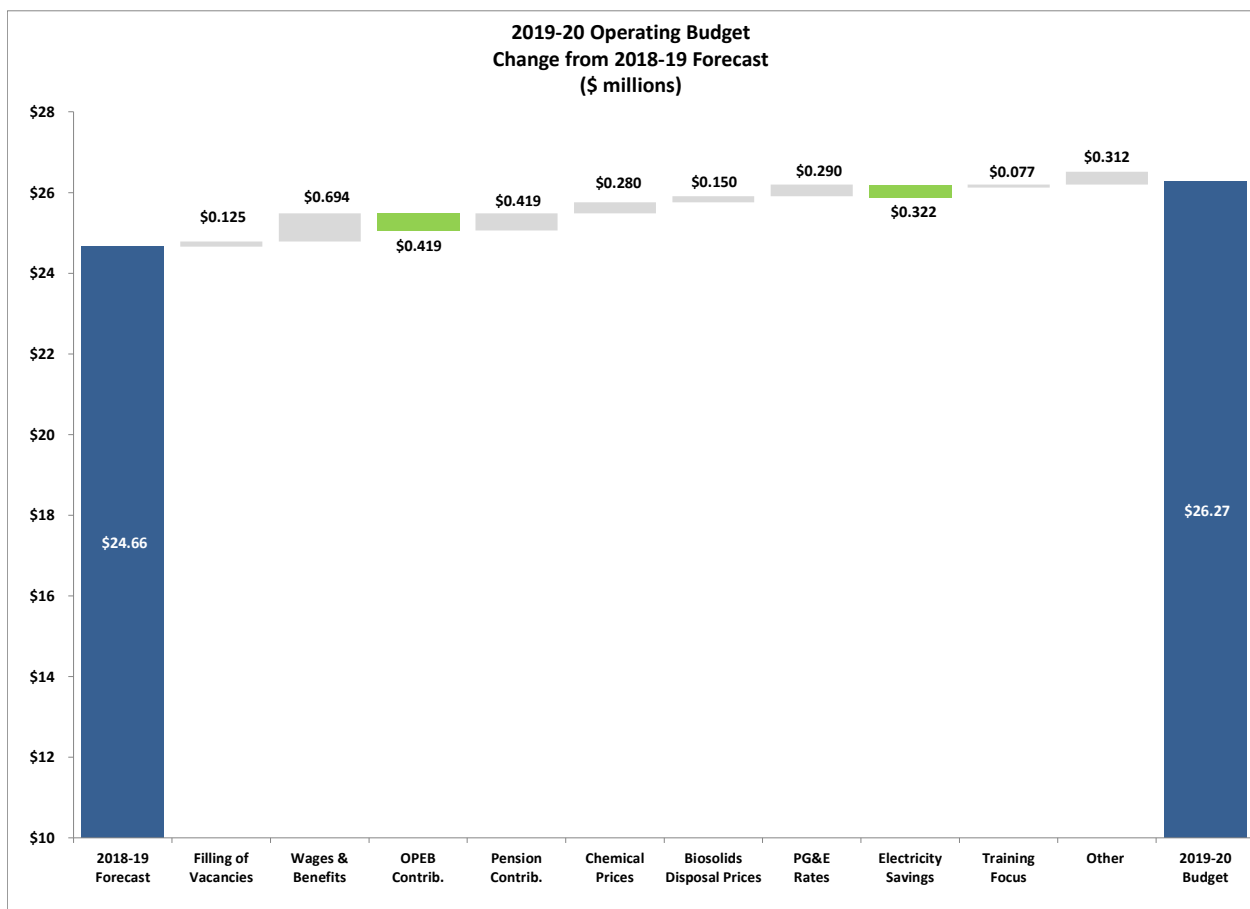
Gross Operating Expenses (compared to 2018-19 Forecast) increases by \$1.56 million, or 6.3%.

Silicon Valley Clean Water Expenditure Summary - By Objective						
Description	2017-18	Adopted	2018-19	Adopted	\$	%
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast
Personnel	\$ 15,207,143	\$ 15,733,910	\$ 15,698,059	\$ 16,617,606	\$ 919,547	5.9%
Utilities	1,687,808	1,722,015	1,664,548	1,707,756	43,208	2.6%
Administrative Expenses	294,882	475,993	524,270	516,149	(8,121)	(1.5%)
Equipment & Supplies Expense	2,983,773	2,663,872	2,568,308	2,552,722	(15,586)	(0.6%)
Chemicals	1,132,356	1,521,768	1,304,688	1,697,916	393,228	30.1%
Professional & Contractual Services	2,451,240	2,492,590	2,563,998	2,760,886	196,888	7.7%
Training, Memberships, Travel	300,671	369,673	338,708	415,742	77,034	22.7%
TOTAL	\$ 24,057,873	\$ 24,979,821	\$ 24,662,570	\$ 26,268,777	\$ 1,606,207	6.5%

Comparing the 2019-20 Budget to the 2018-19 Forecast:

- Personnel costs will increase by \$919 thousand, or 5.6% compared to the 2017-18 Forecast. Approximately \$175 thousand of this increase is due to vacant positions during the first half of 2018-19. The remaining increase is largely due to the combination of cost-of-living and step adjustments which, in the case of represented employees, is contractual. Note that, in 2019-20, SVCW anticipates its Other Post-Employment Benefits (OPEB) liability will become fully-funded. This Budget therefore redirects \$419 thousand of OPEB contributions towards SVCW's Net Pension Liability.
- Utilities costs are increasing by \$41.5 thousand, or 2.5%, substantially below the anticipated 7% increase in PG&E's rates. This modest increase is achievable by increasing the amount of energy currently produced by cogeneration engines. Whereas currently in-house cogeneration on average provides 67% of the treatment plant's energy, this will increase to approximately 80% upon completion of a new 12kV switchgear project and reduce costs by \$166 thousand next fiscal year. Additionally, energy reductions of a new thickening processes will further reduce costs by \$41 thousand next fiscal year.
- Administrative Expense will decrease by \$8.1 thousand (1.5%), due to timing. SVCW does not anticipate certain recruiting costs to reoccur next fiscal year.
- Chemicals will increase by \$393.2 thousand, or 30%. Chemical providers have advised that prices will increase significantly next fiscal year. Additionally, SVCW has increased its use of corrosion-arresting chemicals to slow deterioration in outer sections of its conveyance system. SVCW management is currently seeking ways to address the significant chemical price increase.

- Professional & Contractual Services will increase by \$196.9 thousand, or 7.7%, the majority of which was caused by increased price of biosolids disposal. As a growing number of counties regulate biosolid disposal sites, the distance and costs of disposal have increased. SVCW Management will pursue new biosolids drying technologies to reduce this cost.
- Training, Memberships, and Travel will increase by \$77 thousand (22.7%). SVCW is emerging from a period of employees being heavily involved in project design and operational shutdowns to support projects. The organization intends to provide training and education to ensure employees perform effectively.



Silicon Valley Clean Water Operating Expenditures						
Description	2017-18	Adopted	2018-19	Adopted	\$	%
	Actual	2018-19 Budget	2018-19 Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast
Personnel:						
Salaries	\$ 10,514,212	\$ 11,223,994	\$ 11,412,567	\$ 11,690,427	\$ 277,861	2.4%
Overtime	292,501	250,149	204,090	278,675	74,584	36.5%
Other Employee Benefits	2,419	-	-	-	-	-
Retirement Benefit Contributions	1,867,219	1,367,491	1,420,376	2,192,917	772,541	54.4%
Health Insurance	1,478,494	1,693,869	1,510,744	1,634,875	124,131	8.2%
Payroll Tax	3,106	-	-	-	-	0.0%
Workers' Compensation	190,997	238,464	229,337	246,798	17,461	7.6%
Health Insurance - Retiree	701,108	791,213	753,934	396,865	(357,069)	(47.4%)
Medicare	157,087	168,730	167,011	177,049	10,038	6.0%
Subtotal: Personnel Costs	15,207,143	15,733,910	15,698,059	16,617,606	919,547	5.9%
Utilities	1,687,808	1,722,015	1,664,548	1,707,756	43,208	2.6%
Administrative Expenses	294,882	475,993	524,270	516,149	(8,121)	(1.5%)
Equipment & Supplies Expense:						
Office Supplies	46,220	16,800	48,764	23,012	(25,752)	(52.8%)
Rentals & Leases	71,665	64,224	59,245	81,328	22,083	37.3%
Supplies & Expenses	733,213	527,031	498,795	607,424	108,629	21.8%
Equipment Maint - Materials	941,114	821,834	761,251	869,628	108,377	14.2%
Equipment Maint - Services	1,041,146	1,086,775	1,089,122	898,742	(190,380)	(17.5%)
Non-Capital Equipment	150,415	147,208	111,131	72,588	(38,543)	(34.7%)
Subtotal: Equipment & Supplies	2,983,773	2,663,872	2,568,308	2,552,722	(15,586)	(0.6%)
Chemicals	1,132,356	1,521,768	1,304,688	1,697,916	393,228	30.1%
Professional Services	1,027,371	848,506	888,172	870,182	(17,990)	(2.0%)
Contractual Services	1,423,869	1,644,084	1,675,826	1,890,704	214,878	12.8%
Memberships & Meetings	69,107	87,544	70,296	78,317	8,021	11.4%
Conferences & Travel	91,354	119,533	111,032	125,273	14,241	12.8%
Training	140,210	162,596	157,381	212,152	54,772	34.8%
TOTAL EXPENDITURES	\$ 24,057,873	\$ 24,979,821	\$ 24,662,580	\$ 26,268,777	\$ 1,606,197	6.5%

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Total Operating Expenditures by Division

Compared to the 2018-19 Forecast, Divisional changes in budget ranged according to individual strategies. Analysis of each Division is described on the following several pages.

Silicon Valley Clean Water Expenditure Summary - By Division							
Description	2017-18	Adopted	2018-19	Adopted	\$	%	
	Actual	2018-19	Forecast	2019-20	Incr/(Decr)	Incr/(Decr)	
		Budget		Budget	v. Forecast	v. Forecast	
Operations	\$ 8,362,803	\$ 9,187,056	\$ 8,969,185	\$ 9,780,104	\$ 810,920	9.0%	
Maintenance	6,472,619	6,359,611	6,241,824	6,474,578	232,753	3.7%	
Laboratory Services	1,665,523	1,758,907	1,755,478	1,770,665	15,187	0.9%	
Environmental Services	1,074,415	1,173,532	1,164,815	1,240,862	76,047	6.5%	
Engineering	648,525	763,033	716,731	809,095	92,364	12.9%	
Safety	377,629	401,813	414,866	483,627	68,761	16.6%	
Information Services	1,596,401	1,687,833	1,612,257	1,813,120	200,863	12.5%	
Administration	3,859,958	3,648,035	3,787,415	3,896,727	109,302	2.9%	
TOTAL	\$ 24,057,873	\$ 24,979,821	\$ 24,662,570	\$ 26,268,777	\$ 1,606,207	6.5%	

Operations

The Operations Division treats the wastewater of the Member Agencies economically and efficiently while meeting or exceeding all requirements of the National Pollutant Discharge Elimination System (NPDES) permit. A stable, well-trained work force monitors and controls process stability while striving to develop new and better operating methods.

The Division has a total of 24 full-time equivalent positions including an Operations Director and three Operations Supervisors. Staff also includes eight Senior Operators, seven Operators, three Utility Workers, and an Administrative Assistant. The Division also includes costs associated with the Wastewater Superintendent position. There are no changes in headcount planned next year.

Operations Department Expenditures						
Description	2017-18	Adopted	2018-19	Adopted	\$	%
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast
Personnel:						
Salaries	\$ 3,032,581	\$ 3,298,328	\$ 3,361,307	\$ 3,456,955	\$ 95,648	2.8%
Overtime	151,070	148,103	126,985	156,977	29,992	23.6%
Retirement Benefit Contributions	528,282	394,653	424,682	674,084	249,402	58.7%
Health Insurance	470,402	497,786	470,884	546,182	75,298	16.0%
Workers' Compensation	65,232	82,519	79,470	84,065	4,595	5.8%
Health Insurance - Retiree	218,959	242,208	233,545	124,100	(109,445)	(46.9%)
Medicare	45,613	50,471	50,170	52,882	2,712	5.4%
Subtotal: Personnel Costs	4,512,139	4,714,068	4,747,043	5,095,244	348,202	7.3%
Utilities	1,521,136	1,551,375	1,498,010	1,535,916	37,906	2.5%
Administrative Expenses	703	-	-	-	-	-
Equipment & Supplies Expense:						
Rentals & Leases	7,239	-	920	4,404	3,484	378.7%
Supplies & Expenses	15,793	702	5,826	3,300	(2,526)	(43.4%)
Equipment Maint - Materials	8,190	-	32,065	-	(32,065)	(100.0%)
Equipment Maint - Services	89	-	-	-	-	0.0%
Non-Capital Equipment	4,668	15,096	7,565	-	(7,565)	(100.0%)
Subtotal: Equipment & Supplies	35,979	15,798	46,376	7,704	(38,672)	(83.4%)
Chemicals	1,132,356	1,521,768	1,304,688	1,697,916	393,228	30.1%
Professional Services	48,484	-	22,002	-	(22,002)	(100.0%)
Contractual Services	1,067,563	1,316,019	1,277,810	1,387,620	109,810	8.6%
Memberships & Meetings	3,742	7,884	5,210	8,304	3,094	59.4%
Conferences & Travel	7,708	22,104	22,387	300	(22,087)	(98.7%)
Training	32,993	38,040	45,659	47,100	1,441	3.2%
TOTAL EXPENDITURES	\$ 8,362,803	\$ 9,187,056	\$ 8,969,185	\$ 9,780,104	\$ 810,920	9.0%

As compared to the 2018-19 Forecast, significant increases / decreases in the operating budget for Operations include:

- Personnel costs will increase \$335.6 thousand, or 7.1%, representing annual adjustments in compensation. Overtime increases by \$30 thousand and are based on a three-year trailing average, driven by an increased frequency and intensity of wet weather events.
- Budgeted Utilities Expense will marginally increase by \$36.2 thousand, or 2.4%. This increase is less than a projected PG&E rate increase of 10%, worth \$330 thousand. Additionally, cogeneration engine savings increases by \$167 thousand next year as SVCW completes a switchgear project to allow increase power production. SVCW has also replaced thickening process equipment which operates more efficiently and saves \$41 thousand in electricity.
- Chemical costs will increase by \$393.2 thousand (30%) next year. The majority of this increase is attributable to higher prices, recently confirmed by chemical vendors. Over the past three years SVCW had been able to lower chemical prices through participation in a purchasing consortium comprised of Bay-area wastewater plants. Recently, this pricing power seems to have weakened as providers are selectively responding to bids. While budgeting for the higher prices, SVCW will pursue alternative purchasing methods to address these increases. Additionally, SVCW has increased its use of nitrate to inhibit corrosion that otherwise occurs in the conveyance pipes.
- Contractual Services will increase by \$140.6 thousand (11%) in 2019-20. The cost of biosolids removal will increase as more California counties move to regulate disposal sites, thereby affecting the costs and distance involved.

Maintenance

The Maintenance Division is a service and support function whose objective is to assure that all equipment and facilities operate in a reliable and safe manner through well-planned and administered programs of preventative maintenance, corrective maintenance, replacement, and modification. Maintenance programs are implemented by a well-trained staff utilizing modern administrative and technical tools and skills.

There are 23.6 full-time equivalent positions in the Maintenance Division. It works under the direction of the Maintenance Director, three Maintenance Supervisors, and a Planner/Scheduler Supervisor. Staff includes nine Senior Plant Mechanics, two Plant Mechanics, four Instrumentation Mechanics, and three Senior Electrical Mechanics. In response to a consultant no longer being available next year, Maintenance headcount increases by one Instrumentation Mechanic to deepen in-house knowledge. Additionally, next year SVCW will dedicate 0.40 of a Maintenance position to the Safety division to strengthen the safety program.

Maintenance Services Department Expenditures							
Description	2017-18	Adopted	2018-19	Adopted	\$	%	
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast	
Personnel:							
Salaries	\$ 3,013,481	\$ 3,211,494	\$ 3,273,098	\$ 3,326,069	\$ 52,971	1.6%	
Overtime	67,390	61,810	40,569	71,155	30,586	75.4%	
Retirement Benefit Contributions	535,492	394,649	420,987	664,241	243,253	57.8%	
Health Insurance	482,968	542,043	485,926	532,126	46,200	9.5%	
Workers' Compensation	66,356	81,740	78,648	85,535	6,887	8.8%	
Health Insurance - Retiree	211,970	232,116	223,303	117,810	(105,493)	(47.2%)	
Medicare	44,845	48,098	47,775	50,832	3,057	6.4%	
Subtotal: Personnel Costs	4,422,797	4,571,951	4,570,306	4,847,768	277,461	6.1%	
Utilities	9,069	-	636	-	(636)		
Administrative Expenses	15	-	2,557	-	(2,557)		
Equipment & Supplies Expense:							
Office Supplies	178	-	103	-	(103)	(100.0%)	
Rentals & Leases	15,161	26,496	20,746	26,004	5,258	25.3%	
Supplies & Expenses	263,566	122,392	89,518	93,972	4,454	5.0%	
Equipment Maint - Materials	910,875	810,084	714,124	760,584	46,460	6.5%	
Equipment Maint - Services	723,077	742,272	665,341	538,320	(127,021)	(19.1%)	
Non-Capital Equipment	18,840	24,000	23,380	25,596	2,216	9.5%	
Subtotal: Equipment & Supplies	1,931,697	1,725,244	1,513,212	1,444,476	(68,736)	(4.5%)	
Contractual Services	55,325	6,396	87,664	92,574	4,910	5.6%	
Memberships & Meetings	5,233	5,880	4,257	6,576	2,319	54.5%	
Conferences & Travel	5,986	10,475	11,551	10,980	(571)	(4.9%)	
Training	42,497	39,665	51,641	72,204	20,563	39.8%	
TOTAL EXPENDITURES	\$ 6,472,619	\$ 6,359,611	\$ 6,241,824	\$ 6,474,578	\$ 232,753	3.7%	

As compared to the 2018-19 Forecast, significant increases / decreases in the operating budget for Maintenance include:

- Personnel costs will increase \$277.4 thousand, or 6.1%, largely due to contractual increases in wages (step increases and cost-of-living adjustments) and associated benefits.
- Total Equipment & Supplies expenses will decrease by \$68 thousand (4.5%) as certain costs for facilities management, fleet repairs, and fuel are shifted from Maintenance to the Purchasing group in the Administration Division. This change in responsibility allows the Maintenance Division to better focus on wastewater activities.
- Training increases by \$20.6 thousand (39%), as the Maintenance Division strives to deepen its knowledge of critical investments being made in automation and instrumentation.

Laboratory Services

The Laboratory Services Division performs all laboratory support for process control and regulatory compliance. Staff is scientifically trained and technically experienced to perform the collection and analysis of wastewater samples.

The Laboratory Director oversees two Water Quality Specialists, a Lab Analyst I, a Lab Analyst II, a Senior Lab Analyst, and a Lab Assistant.

Laboratory Services Department Expenditures						
Description	2017-18	Adopted	2018-19	Adopted	\$	%
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast
Personnel:						
Salaries	\$ 760,974	\$ 849,969	\$ 865,589	\$ 856,429	\$ (9,160)	(1.1%)
Overtime	26,416	17,756	15,283	20,689	5,406	35.4%
Retirement Benefit Contributions	129,670	98,386	103,125	145,349	42,224	40.9%
Health Insurance	101,163	138,623	101,287	101,478	191	0.2%
Payroll Tax	-	-	-	-	-	0.0%
Workers' Compensation	17,254	22,456	21,280	22,783	1,503	7.1%
Health Insurance - Retiree	57,039	64,680	65,174	33,150	(32,024)	(49.1%)
Medicare	11,657	13,217	12,951	13,464	513	4.0%
Subtotal: Personnel Costs	1,104,173	1,205,086	1,184,690	1,193,342	8,652	0.7%
Administrative Expenses	223,822	281,593	299,535	291,990	(7,545)	(2.5%)
Equipment & Supplies Expense:						
Office Supplies	180	-	-	-	-	-
Rentals & Leases	1,305	996	498	-	(498)	(100.0%)
Supplies & Expenses	111,869	105,000	97,180	99,996	2,816	2.9%
Equipment Maint - Materials	8,825	8,004	10,002	18,000	7,998	80.0%
Equipment Maint - Services	49,385	46,779	50,011	50,514	503	1.0%
Non-Capital Equipment	38,382	23,112	25,943	31,200	5,257	20.3%
Subtotal: Equipment & Supplies	209,946	183,891	183,634	199,710	16,076	8.8%
Professional Services	8,717	6,000	3,000	6,000	3,000	100.0%
Contractual Services	82,581	55,221	71,172	50,228	(20,944)	(29.4%)
Memberships & Meetings	8,138	7,982	1,850	10,438	8,588	464.2%
Conferences & Travel	12,042	8,500	7,094	8,170	1,076	15.2%
Training	16,104	10,634	4,503	10,787	6,284	139.6%
TOTAL EXPENDITURES	\$ 1,665,523	\$ 1,758,907	\$ 1,755,478	\$ 1,770,665	\$ 15,187	0.9%

As compared to the 2019-20 Forecast, significant increases / decreases in the operating budget for Laboratory Services include:

- Due to the organizational considerations, Personnel costs are anticipated to increase only \$8.6 thousand, or 0.7%.
- Contractual Services will decline by \$20.9 thousand (29%). During the current year SVCW incurred costs associated with finalizing its NPDES permit renewal. Those costs will not be needed next year.

Environmental Services

The Environmental Services Division supports process control and regulatory compliance. The experienced staff collects samples from on site and in the field, and also administers the Industrial Pretreatment and the Pollution Prevention Programs. The Division issues permits to entities that handle wastewater, groundwater discharge, septic and restaurant grease. It also conducts sanitary sewer complaint response, fats oils and grease inspections and performs public and educational outreach for the communities within our service area.

The current Director of Environmental Services will retire after the first quarter of the new fiscal year, and Management is considering organizational strategies. The Director oversees three Environmental Compliance Inspectors and a Pollution Prevention Specialist.

Environmental Services Department Expenditures						
Description	Adopted		Adopted		\$	%
	2017-18 Actual	2018-19 Budget	2018-19 Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast
Personnel:						
Salaries	\$ 681,367	\$ 717,491	\$ 736,151	\$ 748,487	\$ 12,336	1.7%
Overtime	9,894	8,303	4,701	9,830	5,129	109.1%
Retirement Benefit Contributions	123,233	90,202	99,318	158,756	59,438	59.8%
Health Insurance	79,596	85,451	78,914	79,926	1,012	1.3%
Workers' Compensation	14,619	18,165	17,551	17,727	175	1.0%
Health Insurance - Retiree	45,922	50,460	48,325	24,650	(23,675)	(49.0%)
Medicare	9,770	10,662	10,644	11,129	485	4.6%
Subtotal: Personnel Costs	964,401	980,734	995,603	1,050,503	54,900	5.5%
Administrative Expenses	30,952	40,757	33,289	37,961	4,672	14.0%
Equipment & Supplies Expense:						
Rentals & Leases	-	1,320	660	1,320	660	100.0%
Supplies & Expenses	5,706	10,500	18,430	19,746	1,316	7.1%
Equipment Maint - Materials	-	996	498	-	(498)	(100.0%)
Equipment Maint - Services	-	1,200	600	1,200	600	100.0%
Non-Capital Equipment	7,184	6,600	9,930	12,996	3,066	30.9%
Subtotal: Equipment & Supplies	12,890	20,616	30,118	35,262	5,144	17.1%
Professional Services	20,405	50,000	50,500	33,000	(17,500)	(34.7%)
Contractual Services	32,256	55,244	39,459	57,824	18,365	46.5%
Memberships & Meetings	2,343	3,813	1,668	2,264	596	35.7%
Conferences & Travel	5,096	12,900	7,245	9,200	1,955	27.0%
Training	6,072	9,468	6,933	14,848	7,915	114.2%
TOTAL EXPENDITURES	\$ 1,074,415	\$ 1,173,532	\$ 1,164,815	\$ 1,240,862	\$ 76,047	6.5%

As compared to the 2019-20 Forecast, significant increases / decreases in the operating budget for Environmental Services include:

- Personnel costs will increase \$54.9 thousand, or 5.5% the net post-reorganization result of anticipated increases in pay and associated benefits.
- Administrative Expenses include annual permit fees for air quality, fire, and hazardous materials. They will increase by \$4.7 thousand, due to recent price increases.
- Professional Services will decrease by \$17.5 thousand, reflecting work that is being done in the current fiscal year to study local pollution limits and draft language for a new ordinance. This work will not be needed next year.
- Contractual Services will increase by \$18.4 thousand for costs associated with the new stormwater monitoring program.

Engineering

The Engineering Division is responsible for improvements and replacement of SVCW capital facilities. Engineering staff provides oversight, direction, and management of the capital improvement projects. It works to build safe, innovative, sustainable, efficient, and cost-effective infrastructure that ensures the longevity of SVCW facilities and protects the investments made by customers. Engineering achieves this through building successful partnerships with peers, consultants, and contractors from a project's inception through construction and into start-up with the highest levels of professionalism, integrity, and fairness.

The Division is currently focused on the RESCU program and improvements to the wastewater treatment plant. It works under the direction of the Authority Engineer and an Engineering Director, whose staff includes three Senior Engineers, one CIP Manager, two Administrative Assistants, and one Engineering Intern during the summer. Engineering labor is predominantly charged to capital projects; therefore the 2019-20 Operating Budget contains 75% of the Engineering Director and 25% of a Senior Engineer.

Engineering Department Expenditures							
Description	2017-18	Adopted	2018-19	Adopted	\$	%	
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast	
Personnel:							
Salaries	\$ 167,889	\$ 389,184	\$ 361,658	\$ 404,877	\$ 43,220	12.0%	
Overtime	351	-	-	-	-	-	
Retirement Benefit Contributions	82,317	44,546	33,235	54,086	20,850	62.7%	
Health Insurance	21,658	51,979	47,183	46,538	(645)	(1.4%)	
Payroll Tax	534	-	-	-	-	0.0%	
Workers' Compensation	525	897	1,082	1,054	(28)	(2.6%)	
Health Insurance - Retiree	10,253	21,698	21,034	8,415	(12,619)	(60.0%)	
Medicare	2,642	5,643	5,148	5,871	723	14.0%	
Subtotal: Personnel Costs	286,169	513,947	469,340	520,841	51,501	11.0%	
Utilities	585	-	196	-	(196)	(100.0%)	
Administrative Expenses	39	-	3,229	5,004	1,775	55.0%	
Equipment & Supplies Expense:							
Office Supplies	1,527	-	1,748	924	(824)	(47.1%)	
Supplies & Expenses	29,310	8,616	4,436	3,600	(836)	(18.8%)	
Equipment Maint - Services	7,133	-	-	-	-	-	
Subtotal: Equipment & Supplies	37,970	8,616	6,184	4,524	(1,660)	(26.8%)	
Professional Services	254,213	189,000	193,541	204,000	10,459	5.4%	
Contractual Services	10,050	-	-	-	-	-	
Memberships & Meetings	9,551	20,870	12,688	20,146	7,458	58.8%	
Conferences & Travel	38,704	24,000	24,483	45,700	21,217	86.7%	
Training	11,244	6,600	7,070	8,880	1,810	25.6%	
TOTAL EXPENDITURES	\$ 648,525	\$ 763,033	\$ 716,731	\$ 809,095	\$ 92,364	12.9%	

As compared to the 2019-20 Forecast, significant increases / decreases in the operating budget for Engineering include:

- Personnel costs will increase \$51.5 thousand, approximately \$10 thousand of which is due to the increasing assignment of labor to the Operating Budget. As the CIP matures and completes projects, the Engineering Division is shifting resources to support wastewater operations. The remaining increase represents ordinary inflationary pressures.
- Professional Services expense will increase by \$10.5 thousand next fiscal year, as consulting services may be needed after the reduction in one Engineering position.
- Conferences expense will increase by \$21 thousand. Additional funds are needed for the Engineering Director who was elected Vice President of the California Water Environment Association (CWEA), a wastewater education authority that certifies, trains, and develops wastewater professionals. Additionally, the Engineering department intends to attend several conferences focused on the topics of water reuse and nutrient removal, both of which are critical engineering issues for SVCW.

Safety

The Safety Division develops, implements, and oversees all safety programs for the agency. It is staffed with one Health and Safety Director. To deepen safety preparedness from the perspective of an operations and maintenance employee, 40% of one mechanic has been assigned to safety matters.

Safety Department Expenditures							
Description	2017-18	Adopted	2018-19	Adopted	\$	%	
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast	
Personnel:							
Salaries	\$ 167,164	\$ 183,951	\$ 194,334	\$ 244,829	\$ 50,495	26.0%	
Retirement Benefit Contributions	16,580	13,099	14,717	33,838	19,121	0.0%	
Health Insurance	26,959	28,735	28,441	29,513	1,072	3.8%	
Workers' Compensation	3,543	4,562	4,367	6,053	1,686	38.6%	
Health Insurance - Retiree	9,275	10,092	9,804	7,140	(2,664)	(27.2%)	
Medicare	2,378	2,667	2,733	3,550	817	29.9%	
Subtotal: Personnel Costs	225,899	243,106	254,396	324,923	70,527	27.7%	
Administrative Expenses	14,121	25,500	27,436	25,500	(1,936)	(7.1%)	
Equipment & Supplies Expense:							
Rentals & Leases	622	-	-	-	-	0.0%	
Supplies & Expenses	76,429	70,682	70,235	70,685	450	0.6%	
Equipment Maint - Materials	4,632	2,750	3,927	2,748	(1,179)	(30.0%)	
Equipment Maint - Services	2,777	6,000	1,562	6,000	4,438	284.1%	
Non-Capital Equipment	597	2,800	6,513	2,796	(3,717)	(57.1%)	
Subtotal: Equipment & Supplies	85,057	82,232	82,237	82,229	(8)	(0.0%)	
Professional Services	4,553	-	-	-	-		
Contractual Services	23,672	26,400	20,927	26,404	5,477	26.2%	
Memberships & Meetings	1,350	2,760	7,169	2,760	(4,409)	(61.5%)	
Conferences & Travel	2,873	3,815	3,636	3,815	179	4.9%	
Training	20,104	18,000	19,065	17,996	(1,069)	(5.6%)	
TOTAL EXPENDITURES	\$ 377,629	\$ 401,813	\$ 414,866	\$ 483,627	\$ 68,761	16.6%	

As compared to the 2019-20 Forecast, significant increases / decreases in the operating budget for Safety include:

- Personnel costs will change \$70.5 thousand (27%). Approximately \$65 thousand is the 40% reassignment of a mechanic's time to safety matters. The balance of the increase is inflationary pressure on pay and associated benefits.

Information Services

The Information Services Division manages all technology and information systems of the agency. The Information Services Director oversees two Senior Information System Analysts.

Information Services Department Expenditures							
Description	2017-18	Adopted	2018-19	Adopted	\$	%	
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast	
Personnel:							
Salaries	\$ 470,853	\$ 512,648	\$ 535,992	\$ 550,517	\$ 14,525	2.7%	
Overtime	15,661	-	-	-	-	-	
Retirement Benefit Contributions	101,823	88,115	89,997	124,596	34,599	38.4%	
Health Insurance	43,308	46,656	36,329	45,859	9,530	26.2%	
Workers' Compensation	10,589	13,186	12,758	14,065	1,306	10.2%	
Health Insurance - Retiree	27,740	30,276	28,992	15,300	(13,692)	(47.2%)	
Medicare	7,182	7,710	7,797	8,249	452	5.8%	
Subtotal: Personnel Costs	677,156	698,590	711,866	758,586	46,720	6.6%	
Utilities	157,018	170,640	165,706	171,840	6,134	3.7%	
Equipment & Supplies Expense:							
Office Supplies	32,106	-	30,353	900	(29,453)	(97.0%)	
Administrative Expenses	143	-	1,265	-	(1,265)	-	
Rentals & Leases	43,860	34,200	34,347	40,800	6,453	18.8%	
Supplies & Expenses	134,465	132,900	101,303	222,080	120,777	119.2%	
Equipment Maint - Services	236,784	257,380	309,325	223,700	(85,625)	(27.7%)	
Equipment Maint - Materials	-	-	499	88,296	87,797	17594.6%	
Non-Capital Equipment	73,464	75,600	37,800	-	(37,800)	(100.0%)	
Subtotal: Equipment & Supplies	520,822	500,080	514,892	575,776	60,884	11.8%	
Professional Services	197,715	231,000	198,533	218,504	19,971	10.1%	
Contractual Services	39,792	64,000	7,005	67,700	60,695	866.5%	
Memberships & Meetings	1,761	1,523	1,980	1,523	(457)	(23.1%)	
Conferences & Travel	472	7,000	3,744	5,000	1,256	33.5%	
Training	1,665	15,000	8,531	14,191	5,660	66.3%	
TOTAL EXPENDITURES	\$ 1,596,401	\$ 1,687,833	\$ 1,612,257	\$ 1,813,120	\$ 200,863	12.5%	

As compared to the 2019-20 Forecast, total expenditures in the Information Services Division will increase by \$200.8 thousand. Significant variances include:

- Personnel costs will increase \$46.7 thousand, or 6.6%, for anticipated increases in pay and associated benefits.
- Utilities will increase by \$6 thousand as telecommunication rates increase for remote connectivity to pump stations.
- Overall equipment and supply costs will increase next year as timing of multi-year software licenses are paid.
- The Information Services Department has added approximately \$96 thousand to professional and contractual services in anticipation of initiatives to improve SCADA solutions.

Administrative Services

The Administrative Services Division provides legal, financial, personnel, and administrative support to the Commission, General Manager, and other Divisions. It is committed to presenting a positive and professional image of SVCW to the general public and Member Agencies. The Division is responsible for human resources, accounting, purchasing, risk management, and asset management. All costs associated with the Commission, Manager's office, General Counsel, and CFO are included in the Administrative Services Division. Additionally, certain accounting and payroll processing services provided by Redwood City are included.

Administrative staff includes one Human Resources Director, one Materials Services Supervisor (with a staff of two Purchasing Coordinators), and 1.63 Assistants. The Chief Financial Officer manages an Accounting Supervisor, two Accountants, one Accounting Technician, a Financial Analyst, and a Business Analyst.

Administrative Services Department Expenditures						
Description	2017-18	Adopted	2018-19	Adopted	\$	%
	Actual	2018-19 Budget	Forecast	2019-20 Budget	Incr/(Decr) v. Forecast	Incr/(Decr) v. Forecast
Personnel:						
Salaries	\$ 2,219,903	\$ 2,060,928	\$ 2,085,784	\$ 2,102,264	\$ 16,480	0.8%
Overtime	21,719	14,178	15,207	20,025	4,817	31.7%
Other Employee Benefits	2,419	-	-	-	-	-
Retirement Benefit Contributions	349,822	243,842	231,444	337,968	106,524	46.0%
Health Insurance	252,440	302,595	264,649	253,254	(11,396)	(4.3%)
Payroll Tax	2,277	-	-	-	-	0.0%
Workers' Compensation	12,879	14,940	14,180	15,517	1,337	9.4%
Health Insurance - Retiree	119,950	139,683	123,757	66,300	(57,457)	(46.4%)
Medicare	33,000	30,262	29,794	31,073	1,279	4.3%
Subtotal: Personnel Costs	3,014,409	2,806,427	2,764,816	2,826,400	61,584	2.2%
Administrative Expenses	25,087	128,143	156,947	155,694	(1,253)	(0.8%)
Equipment & Supplies Expense:						
Office Supplies	12,229	16,800	16,234	21,188	4,954	30.5%
Rentals & Leases	3,478	1,212	2,074	8,800	6,726	324.3%
Supplies & Expenses	96,075	76,239	112,205	94,045	(18,160)	(16.2%)
Equipment Maint - Materials	8,592	-	16,708	-	(16,708)	(100.0%)
Equipment Maint - Services	21,901	33,144	45,711	79,008	33,297	72.8%
Non-Capital Equipment	7,280	-	-	-	-	-
Subtotal: Equipment & Supplies	149,555	127,395	192,932	203,041	10,109	5.2%
Professional Services	493,284	372,506	420,596	408,678	(11,918)	(2.8%)
Contractual Services	112,630	120,804	171,789	208,354	36,565	21.3%
Memberships & Meetings	36,989	36,832	35,474	26,306	(9,168)	(25.8%)
Conferences & Travel	18,473	30,739	30,892	42,108	11,216	36.3%
Training	9,531	25,189	13,979	26,146	12,167	87.0%
TOTAL EXPENDITURES	\$ 3,859,958	\$ 3,648,035	\$ 3,787,425	\$ 3,896,727	\$ 109,302	2.9%

As compared to the 2018-19 Forecast, significant increases / decreases in the operating budget for Administrative Services include:

- Personnel costs will increase \$61.5 thousand, or 2.2%. The Division experienced the retirement of the Executive Manager which was filled internally. One position was added (an Accounting Technician) at a cost of \$104 thousand to help manage the increased volume and complexity associated with the RESCU program. Ordinary inflationary increases for step and cost-of-living adjustments were budgeted as normal.
- Administrative expenses will decrease as the current year experienced a placement fee associated with recruiting an accounting position.
- Professional services costs will decline by \$11.9 thousand (2.8%) as SVCW expects to conclude legal matters not expected to recur next year.
- Contractual Services will increase by \$31.6 thousand, specifically for services related to public relations and management reporting for RESCU-related activities.

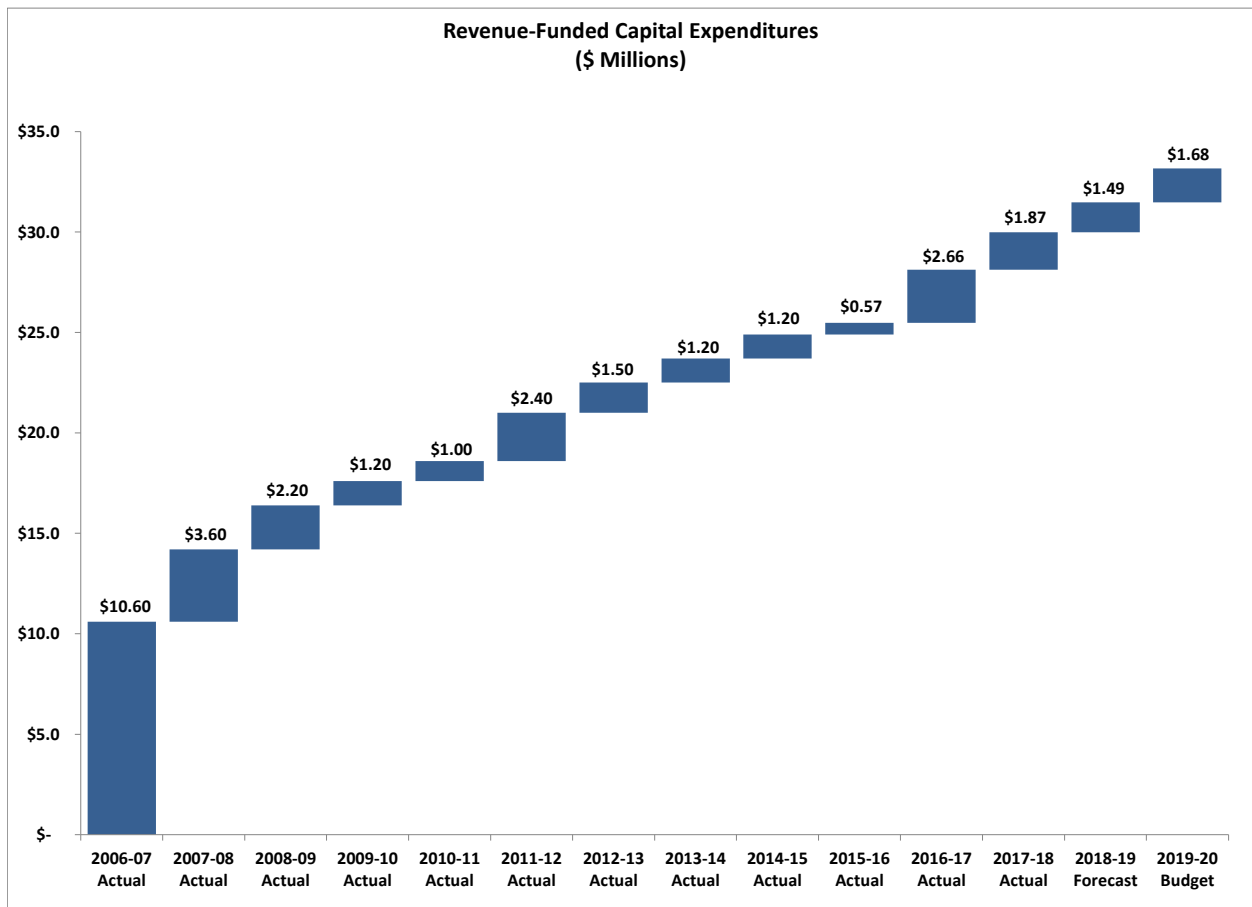
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SECTION 4 – REVENUE-FUNDED CAPITAL EXPENDITURES

Summary:

Revenue-Funded Capital Expenditures are for capital projects that less than \$1 million and completed within one year. These projects offer identifiable improvements in the short term. Revenue-funded capital expenditures may include minor construction projects, major maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements. It is therefore the practice to fund such projects using available cash funds rather than financing them over 30 years.

Since 2006-07, SVCW has spent approximately \$30 million on Revenue-Funded capital expenditures. Prior to formally adopting the Capital Improvement Program in fiscal year 2008-09, Member Agencies made large cash contributions of \$10.6 million to address immediate project needs. Since 2008-09, however, SVCW has averaged \$1.7 million annually in Revenue-Funded capital expenditures.



The 2019-20 Budget of \$1.64 million for Revenue-Funded capital expenditures includes:

2019-20 Budget, Revenue-Funded Capital	
Description	One-time Cost
CISCO Application Centric Infrastructure (ACI) Software-Defined Network solution	\$ 650,000
SCADA Networking Solutions	545,000
Concrete leveling at 109 deck (3 areas identified)	100,000
Lab ICP Mass Spectrometer Instrument	95,000
Primary Sedimentation Tanks 1 and 2 equipment replacement	80,000
Grade and baserock Maintenance storage area	75,000
Old SHB polymer storage area & compressor room modifications.	45,000
HP air compressor to replace back-up unit #3	40,000
Electrical /instrumentation shop relocation	30,000
Reach Lift Equipment (157")	24,325
GRAND TOTAL, REVENUE-FUNDED CAPITAL	\$ 1,684,325

The above projects are needed to maintain critical operations, increase productivity.

- The current information technology network was designed and installed over a decade ago and needs replacement. This budget includes replacement of existing technology equipment including core switches, load balancers, and servers. As an added benefit, the software-defined solution includes concurrent redundancy to better meet business continuity needs, avoids the future replacement of expensive storage devices, and will handle higher data transfer rates in the future.
- As RESCU capital program is being planned and built, it is significantly increasing the number of connected devices and adding complexity to SVCW’s industrial network. SVCW must invest to ensure a robust SCADA (Supervisory Control and Data Acquisition) solution can accommodate existing and future environments.
- The laboratory has a ten-year-old Inductively-Coupled Plasma (ICP) optical emission spectrometer that is due for replacement. This instrument performs trace level analysis of metals in wastewater and is used to certify water quality.
- Concrete resurfacing is needed to address uneven surfaces on the operating deck that create tripping hazards and/or water puddling.
- Primary Sedimentation Tank equipment, used to separate scum and solids from wastewater, is scheduled to be replaced in 2019-20.

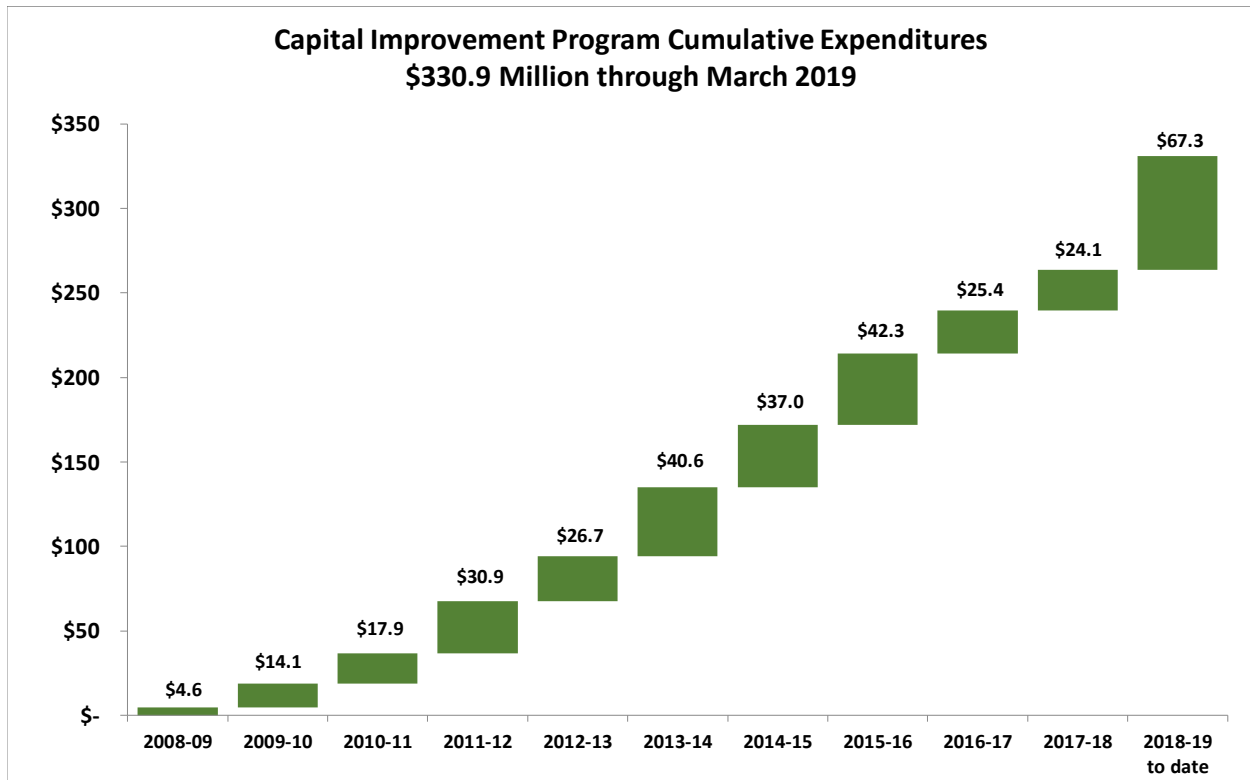
- Space for storage and operational support has grown as new treatment processes require more instrumentation support, more chemical staging area, and new maintenance equipment.
- Standard equipment replacements schedules include a compressor and a standup warehouse pallet jack.

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SECTION 5 – CAPITAL IMPROVEMENT PROGRAM & DEBT SERVICE

Background:

SVCW’s wastewater treatment plant was constructed in 1980 and connected to an influent conveyance 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 CIP to replace and rehabilitate wastewater conveyance and treatment systems in a structured and prioritized manner. Now in its eleventh year, the CIP has completed over 120 projects and spent \$330.9 million to date.

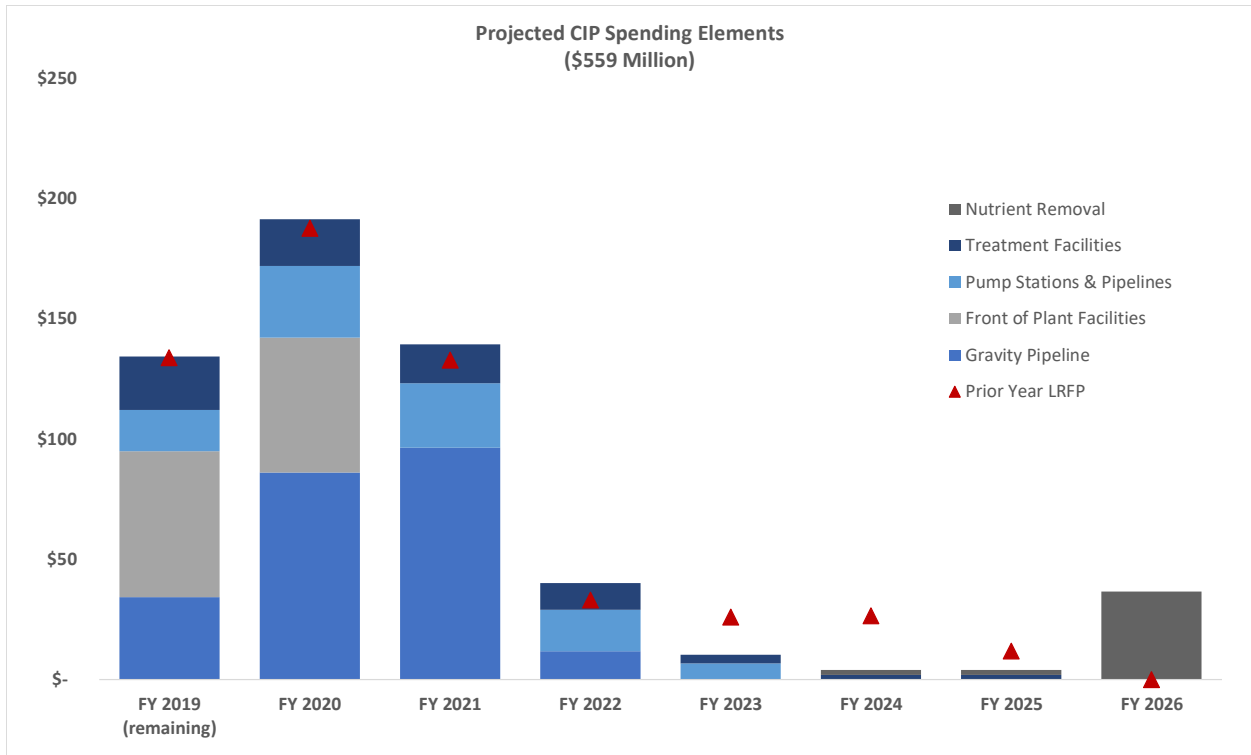


CIP Expenditures Since Inception (\$ Millions) March 2019	
Program	Value
Conveyance System	\$ 141.75
Energy & Automation	87.57
General Plant Facilities	35.25
Plant Process	22.36
Solids Handling	21.49
Corrosion & Odor Control	14.32
CIP Support	7.49
Nutrient Removal	0.67
TOTAL	\$ 330.90

CIP Projected Expenditures:

Each year, SVCW produces a LRFP to describe the total cash flows required by SVCW over the next decade. This includes funding for all SVCW operations, revenue-funded capital projects, Capital Improvement Program projects and their associated debt service payments, and necessary cash reserve contributions. Meant to encourage discussion and support decision making, the LRFP provides up-to-date financial information so that Member Entities have the information needed to understand the financial implications of those decisions and to communicate with internal and external stakeholders.

The CIP is a guiding document of the LRFP, and is currently estimated at \$849 million from inception, with the remaining expenditures inflated to midpoint of construction. At the time of the CIP update in fall of 2018, when approximately \$290 million had been spent to date, approximately \$559 million in expenditures remains to be spent through 2026:



The largest projects comprised in the RESCU program together produce capital expenditures above \$100 million over the next three consecutive years. As construction is completed, fixed assets of each Member Entity will increase by allocable percentages as follows:

SVCW Remaining Capital Expenditures - By Fiscal Year End and Member Allocation (\$ Millions)																		
Description	FY 2018 (remaining)		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total								
Redwood City	\$	65.2	\$	92.9	\$	67.7	\$	19.4	\$	5.0	\$	1.9	\$	1.9	\$	17.7	\$	271.6
West Bay SD		36.0		51.3		37.4		10.7		2.8		1.0		1.0		9.8		150.1
San Carlos		20.3		29.0		21.1		6.1		1.6		0.6		0.6		5.5		84.7
Belmont		12.7		18.1		13.2		3.8		1.0		0.4		0.4		3.4		52.8
TOTAL	\$	134.2	\$	191.3	\$	139.3	\$	40.0	\$	10.3	\$	3.8	\$	3.8	\$	36.5	\$	559.2

Debt Service:

Due to the compressed timing and large cost to complete the CIP, as well as the lack of significant cash reserves, the most practical funding method has been the use of long-term debt. SVCW updates its LRFP each year to reassess its financial position relative to anticipated cash flows needed from SVCW's Member Entities. It also incorporates CIP construction and expenditure schedules, as well as the current borrowing environment. After considering these factors, the January 2019 LRFP recommended a strategy that recognizes governmental loans are available.

Compared to the January 2018 LRFP, the 2019 LRFP incorporated 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.

To fund CIP projects to date, SVCW has secured approximately \$492 million from a combination of Wastewater Revenue Bonds, Member Cash Contributions, SRF Loans, and Government Grants. Debt service payments associated with this budget are derived from these borrowings.

Source of CIP Funds to date (\$ millions)			
Description	All-in TIC / Interest Rate	Max Proceeds	Available Proceeds at 2/28/2019
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	71.04
Subtotal - Bonds		310.38	71.04
Cash Contributions in lieu of Debt			
Belmont		34.15	8.06
Redwood City		10.00	-
West Bay Sanitary District		13.02	13.02
Subtotal - Cash		57.16	21.08
State Revolving Fund Loans			
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
Line of Credit			
Wells Fargo LOC	LIBOR-based	65.00	51.30
Grant Funding			
PG&E Cogeneration Grant		2.40	0.60
California Energy Commission		0.50	-
Subtotal - Grant Funding		2.90	0.60
TOTAL		\$ 492.36	\$ 146.79

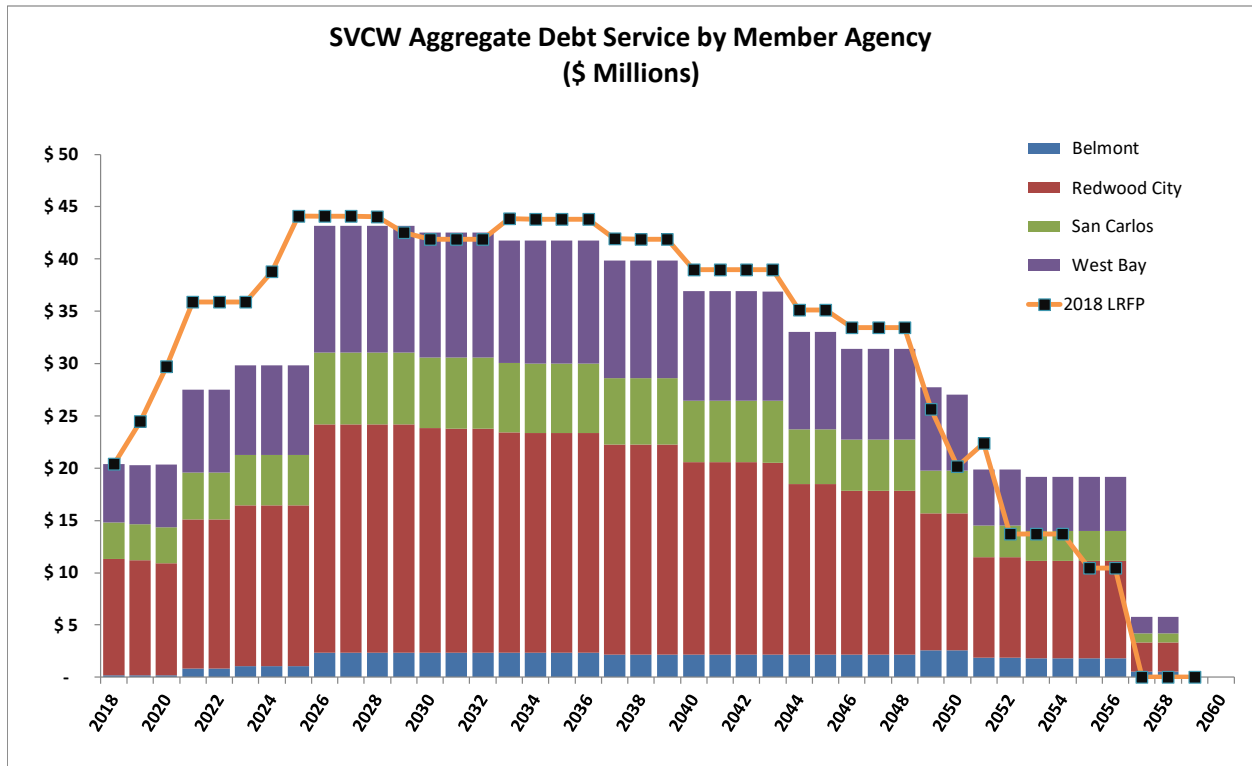
Due to the historical lack of a sinking fund and cash reserves, the recommended debt strategy is in lieu of a pay-go cash strategy. Debt allows SVCW to distribute costs over the expected useful lives of constructed assets and also provide fairness to Members' ratepayers by spreading costs across generations to facilitate moderate and consistent rate increases. The 2019 LRF recognizes that, for future debt, SVCW will mostly draw from governmental loans and modest amounts of wastewater revenue bonds.

The 2019 LRF recommends the following debt structure as compared to the prior year's LRF:

Description	2018 LRF	2019 LRF
Remaining CIP to be funded	\$581 Million	\$559 Million
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 will reduce debt service payments through the next 23 years. These savings are significant, especially over the next seven years, due to a unique WIFIA structure that allows debt amortization to be deferred for up to five years after completion of construction.

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



Debt Service in 2019-20 will be \$20.29 million and is allocated to Member Entities according to JPA-defined percentage of ownership as well as their participation. As SVCW continues to fund CIP construction, debt service payments will peak in 2027-28 once significant projects are complete and all necessary debt is secured.

SVCW Aggregate Debt Service Cost							
Fiscal year end	Current Bonds	Current SRF	New Bonds	New SRF Debt Service	New Line of Credit Int. Expense	New WIFIA Debt Service	TOTAL
2020	\$ 9,636,538	\$ 2,630,599	\$ 7,820,744	\$ -	\$ 199,579	\$ -	\$ 20,287,459
2021	9,195,000	2,630,599	8,500,619	-	-	-	20,326,217
2022	9,190,000	2,630,599	8,499,619	-	-	-	20,320,217
2023	9,186,875	2,630,599	9,205,285	5,772,203	-	-	26,794,962
2024	9,180,125	3,320,599	9,211,535	5,772,203	-	-	27,484,462
2025	9,189,125	3,320,599	9,205,910	5,772,203	-	-	27,487,837
2026	9,168,750	3,320,599	10,594,055	5,772,203	-	-	28,855,607
2027	9,159,000	3,320,599	10,598,805	5,772,203	-	-	28,850,607
2028	9,163,625	3,320,599	10,595,555	5,772,203	-	8,888,891	37,740,874
2029	9,157,125	3,320,599	10,594,055	5,772,203	-	8,888,891	37,732,874
2030	9,144,375	3,320,599	10,593,805	5,772,203	-	8,888,891	37,719,874

Detailed debt service payment schedules by Member are provided as follows:

Belmont:

Belmont Debt Service Cost							
Fiscal year end	Current Bonds	Current SRF	Future Bonds	New Line of Credit			TOTAL
				Interest Expense	New SRF Debt Service	New WIFIA Debt Service	
2020	\$ -	\$ 178,425	\$ -	\$ -	\$ -	\$ -	\$ 178,425
2021	-	178,425	-	-	-	-	178,425
2022	-	178,425	-	-	-	-	178,425
2023	-	178,425	66,886	-	545,473	-	790,785
2024	-	243,630	66,886	-	545,473	-	855,990
2025	-	243,630	66,886	-	545,473	-	855,990
2026	-	243,630	198,314	-	545,473	-	987,417
2027	-	243,630	198,314	-	545,473	-	987,417
2028	-	243,630	198,314	-	545,473	840,000	1,827,418
2029	-	243,630	198,314	-	545,473	840,000	1,827,418
2030	-	243,630	198,314	-	545,473	840,000	1,827,418

Redwood City:

Redwood City Debt Service Cost							
Fiscal Year end	Current Bonds	Current SRF	Future Bonds	New Line of Credit Interest			TOTAL
				Expense	New SRF Debt Service	New WIFIA Debt Service	
2020	\$ 9,683,971	\$ 1,315,327	\$ -	\$ -	\$ -	\$ -	\$ 10,999,297
2021	9,427,893	1,315,327	0	0	0	0	10,743,220
2022	9,420,607	1,315,327	0	0	0	0	10,735,933
2023	9,423,018	1,315,327	343,774	0	2,803,559	0	13,885,678
2024	9,416,936	1,650,460	343,774	0	2,803,559	0	14,214,729
2025	9,414,793	1,650,460	343,774	0	2,803,559	0	14,212,586
2026	9,411,079	1,650,460	1,019,271	0	2,803,559	0	14,884,369
2027	9,410,286	1,650,460	1,019,271	0	2,803,559	0	14,883,576
2028	9,409,098	1,650,460	1,019,271	0	2,803,559	4,317,335	19,199,722
2029	9,404,820	1,650,460	1,019,271	0	2,803,559	4,317,335	19,195,445
2030	9,392,195	1,650,460	1,019,271	0	2,803,559	4,317,335	19,182,820

San Carlos:

San Carlos Debt Service Cost							
Fiscal				New Line of			
Year end	Current Bonds	Current SRF	Future Bonds	Credit Interest	New SRF Debt	New WIFIA	TOTAL
				Expense	Service	Debt Service	
2020	\$ 3,067,409	\$ 410,004	\$ -	\$ -	\$ -	\$ -	\$ 3,477,413
2021	2,994,034	410,004	-	-	-	-	3,404,038
2022	2,989,491	410,004	-	-	-	-	3,399,496
2023	2,993,284	410,004	107,160	-	873,912	-	4,384,359
2024	2,999,157	514,470	107,160	-	873,912	-	4,494,699
2025	2,997,949	514,470	107,160	-	873,912	-	4,493,490
2026	2,984,991	514,470	317,722	-	873,912	-	4,691,095
2027	2,985,117	514,470	317,722	-	873,912	-	4,691,221
2028	2,986,950	514,470	317,722	-	873,912	1,345,778	6,038,832
2029	2,986,199	514,470	317,722	-	873,912	1,345,778	6,038,081
2030	2,982,824	514,470	317,722	-	873,912	1,345,778	6,034,706

West Bay Sanitary District:

West Bay Sanitary District Debt Service Cost							
Fiscal				New Line of			
Year end	Current	Current SRF	Future Bonds	Credit	New SRF Debt	New WIFIA	TOTAL
	Bonds			Interest	Service	Debt Service	
				Expense			
\$ 2,020	\$ 4,705,902	\$ 726,843	\$ -	\$ 199,579	\$ -	\$ -	\$ 5,632,324
2021	4,593,692	726,843	680,000	-	-	-	6,000,535
2022	4,599,521	726,843	680,000	-	-	-	6,006,363
2023	4,588,067	726,843	869,971	-	1,549,259	-	7,734,140
2024	4,587,775	912,039	869,971	-	1,549,259	-	7,919,045
2025	4,594,502	912,039	869,971	-	1,549,259	-	7,925,771
2026	4,588,173	912,039	1,243,254	-	1,549,259	-	8,292,725
2027	4,583,840	912,039	1,243,254	-	1,549,259	-	8,288,392
2028	4,584,572	912,039	1,243,254	-	1,549,259	2,385,778	10,674,902
2029	4,581,599	912,039	1,243,254	-	1,549,259	2,385,778	10,671,930
2030	4,584,599	912,039	1,243,254	-	1,549,259	2,385,778	10,674,930

SECTION 6 – CASH RESERVES DESIGNATION

SVCW has adopted a Cash Reserves Policy that describes the goals and amounts intended to be held in reserves. The reserves can help mitigate the negative impact of revenue shortfalls from economic fluctuations, fund unforeseen expense requirements, provide stable rates for member entities, and fund future long-term capital needs. Each year during the budget process, their balances are reviewed and adjusted as needed.

- The **Operating Reserve** must be maintained at a minimum balance of 10% of the approved Operating 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. The projected balance in Operating Reserves is \$3.57 million at June 30, 2019, including investment earnings. This amount is below the policy’s required balance of \$3.3 million by approximately \$52.6 thousand which, per policy, will be added to Member Agencies’ 2019-20 contributions.
- The **Capital Improvement Program Reserve (CIP Reserve)** 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 would allow major expenses in the future to be paid for on a “pay-go” basis and limit the need for borrowing. Each year, if funds held in these reserves fall below targeted levels, SVCW makes budget adjustments to return to the target level. The CIP Reserve is projected to be \$18.15 million balance by June 30, 2020, which meets SRF reserve requirements. Therefore, this budget calls for the ordinary 2019-20 reserve contributions of \$1 million, per Policy.

Based upon the above, total 2018-19 Reserve Designations are Adopted as follows:

Reserve Designations - 2019-20 Budget				
Description	Estimated June 30, 2019 Balance	Target June 30, 2020 Balance	Adopted 2019-20 Contributions	
Operating Reserve	\$ 3,574,295	\$ 3,626,878	52,583	
CIP Reserve	18,486,689	19,486,689	1,000,000	
TOTAL	\$ 22,060,983	\$ 23,113,566	\$	1,052,583

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