

Budget

FY20-21



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Budget FY20-21

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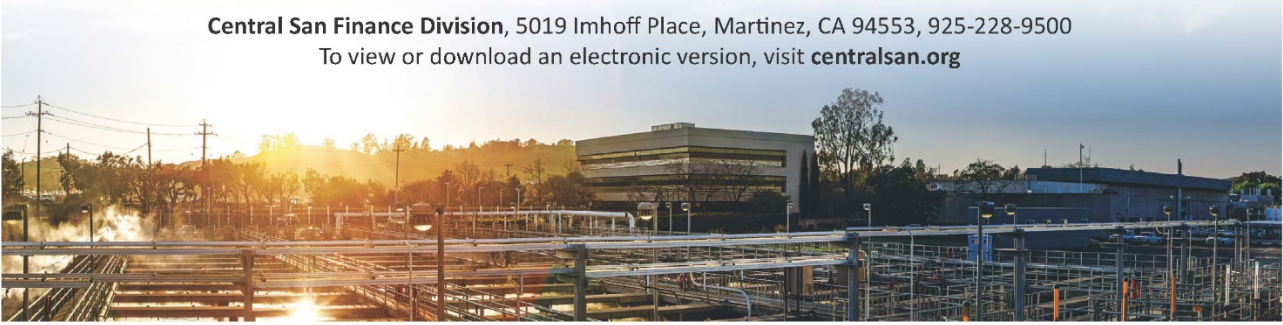
Ann Sasaki, Deputy General Manager/
Director of Operations

Kenton Alm, Counsel for the District

Katie Young, Secretary of the District

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To view or download an electronic version, visit centralsan.org



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VISION, MISSION, & VALUES

OUR MISSION

To protect public health and the environment

OUR VISION

To be an industry-leading organization known for environmental stewardship, innovation, and delivering exceptional customer service at responsible rates

OUR VALUES

PEOPLE

- Respect customers and employees
- Work effectively and efficiently as a team
- Celebrate our successes and learn from our challenges

COMMUNITY

- Collaborate with water sector partners
- Foster community relationships
- Be open, transparent, and accessible
- Understand service level expectations

PRINCIPLES

- Be truthful and honest
- Be fair, kind, and friendly
- Take ownership and responsibility

LEADERSHIP AND COMMITMENT

- Promote a passionate and empowered workforce
- Encourage continuous growth and development
- Inspire dedication and top-quality results
- Provide a safe and healthful environment



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GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Central Contra Costa Sanitary District
California**

For the Fiscal Year Beginning

July 1, 2019

Christopher P. Morill

Executive Director

The Government Finance Officers Association (GFOA) of the United States and Canada presented a Distinguished Budget Presentation Award to Central San for its Annual Budget for the fiscal year beginning July 1, 2019. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device. Central San believes this budget document continues to conform to program requirements.

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General Manager's Message

Honorable Members of the Board of Directors:

I am proud to present the Central Contra Costa Sanitary District's (Central San's) Fiscal Year (FY) 2020-21 combined budget. This budget reflects Central San's continuing commitment to protecting public health and the environment, while providing outstanding service to the people of central Contra Costa County at fair and reasonable rates.

A Year of Milestones

This was a year of noteworthy accomplishments for Central San. We celebrated more than two decades of 100% compliance with our National Pollutant Discharge Elimination Permit — the longest successful streak of any wastewater agency in California and among the top 20 in the nation. Through optimizing our pipeline inspection, maintenance, and replacement schedules, we reduced our sewer overflows and achieved one of the best reliability records in the state, ensuring that more than 99.9999% of the wastewater we collected made it to our treatment plant without incident. And we implemented numerous infrastructure projects in alignment with our 20-year master plan, including the following:



- Replaced 5 miles of aging neighborhood sewer pipes.
- Completed the seismic upgrade of our Plant Operations Building, which houses our Control Center—a state-of-the-art computerized system that monitors and controls every phase of the wastewater cleaning process, 24 hours a day.
- Made significant headway on a project to rehabilitate the structures and equipment where wastewater enters the treatment plant and in the primary treatment areas.
- Completed the first phase of our steam and aeration system assessments, which will allow us to evaluate options to improve safety and reliability, extend the useful life of this critical equipment, and reduce operating costs.

In addition, we provided exceptional customer service through innovative recycled water, household hazardous waste (HHW), and pharmaceutical collection programs, as well as award-winning public outreach and student educational programs.

Finally, we rose to the challenge of the COVID-19 pandemic, ensuring uninterrupted wastewater collection and cleaning services for our community during this critical time.

Embracing the Future

As we approach our 75th year, Central San continues to pursue new methods and technologies to ensure we are making the most of each customer dollar, without compromising service. We continue to evaluate and implement projects to improve asset management, increase energy efficiency, enhance safety, and reduce operations and maintenance costs. We also continue to realize cost

savings through our transition to California Public Employees’ Retirement System health benefits and have made significant progress toward implementation of a new Enterprise Resource Planning (ERP) system. The new ERP system will streamline processes, increase functionality, and provide better reporting tools to help Central San manage our resources.

These efforts have helped us lay a solid foundation for the future and achieve timely cost savings that will be applied to critical infrastructure projects, including renovations to our solids handling and recycled water production and storage facilities. We also are investing in upgrades to our pumping stations and continue proactively replacing aging neighborhood sewer pipes, to ensure reliable, trouble-free service for our customers for decades to come.

Accomplishments within our Strategic Plan Goals

As we strive to provide exceptional service at reasonable rates, our two-year Strategic Plan serves as a guidepost to keep us focused on our vision and goals. Below are some of Central San’s major accomplishments under each of the six goals in the Strategic Plan:



Provide exceptional customer service and maintain an excellent reputation in the community

- Developed a state and national award-winning student education program, Pipe Protectors, and increased the number of students served with this addition
- Renewed California Special Districts Leadership Foundation Transparency Certificate of Excellence
- Presented results of a customer survey results to the Board, which researched evaluated awareness, satisfaction, desire to learn more about Central San, and preferred methods of receiving information
- Expanded social media outreach and began posting on Instagram to further position Central San as a community and environmental leader
- Continued to produce outreach and videos showcasing infrastructure reliability and Wipes Clog Pipes messaging
- Oversaw over 57,000 visits to the Household Hazardous Waste (HHW) Collection Facility and Residential Recycled Water Fill Station by residents, small businesses, reuse customers, retail partners, and fill station users
- Provided wastewater treatment and collection service without interruption during the COVID-19 pandemic





Strive to meet regulatory requirements

- Achieved 22 consecutive years of 100% compliance with Central San's National Pollutant Discharge Elimination System (NPDES) Permit, governing wastewater discharge
- Reduced sanitary sewer overflows from a high of 162 in 2012 to a low of 22 in 2019
- Cleaned 569 miles and televised 108 miles of sanitary sewers, completing 12,714 sewer maintenance work orders on schedule 99% of the time
- Collected 1,577,000 pounds of household hazardous waste prior to the Household Hazardous Waste Facility's closure on March 16 due to the COVID-19 pandemic
- Collected 6,386 pounds of pharmaceuticals through the Pharmaceutical Disposal Program
- Actively engaged in regulatory issues through involvement with Bay Area Clean Water Agencies (BACWA) and the California Special Districts Association (CSDA) Legislative Committee



Be a fiscally responsible and effective wastewater utility

- Achieved 19 consecutive years of receiving the GFOA Certificate of Achievement for Excellence in Financial Reporting
- Awarded the GFOA Distinguished Budget Presentation Award for the FY 2019-20 Budget for the second consecutive year after applying for the first time two years ago
- Delivered a benchmarking study comparing Central San's performance over the past three fiscal years to comparable agencies' performances statewide and nationwide
- Restructured the chart of accounts based on the GFOA's best practice guidelines for greatly improved reporting functionalities
- Successfully increased the funding amount of State Revolving Fund loans for the Solids Handling Facility Improvements Project from \$89.6 million to \$120 million
- Developed the FY 2020-21 Budget with a seventh year (FY 2014-15 through FY 2020-21) of stable Operations and Maintenance budgeted costs in a range of \$87.5 to \$91.7 million



Recruit, develop, and retain a highly trained and safe workforce

- Hosted bi-monthly HR @ Your Service trainings for employees, in addition to periodic financial and wellness seminars
- Completed the third Management Academy, which for the first time included participants from sister agencies
- Paired seven mentees with mentors in the third year of the BOOST Mentorship Program
- Deployed an employee survey to gauge engagement levels
- Began tracking labor management committee action items to record resolution of issues through collaborative discussions
- Operated safely with zero Cal/OSHA violations
- Collection Systems Operations Division, Administration Department, and Engineering and Technical Services Department completed calendar year 2019 with zero lost workdays

Maintain a reliable infrastructure



- Renovated sewers in Walnut Creek, Lafayette, Orinda, and other nearby communities
- Began the Annual Infrastructure Replacement Project and construction of the Pumping Station Upgrades, Phase 1
- Completed several critical infrastructure improvement projects at the treatment plant, including the Piping Renovations, Phase 9; Plant Operations Building Seismic Improvements; and Server Room Relocation Projects
- Continued comprehensive two-year program to perform condition assessments for the Steam and Aeration and Blower Systems Renovations Project



Embrace technology, innovation, and environmental sustainability

- Made significant progress in the replacement of the decades-old ERP software for increased automation, improved record keeping, and ease of reporting
- Implemented the first stages of the new Oracle ERP system, including the Core Human Resources module and most of the Core Financial modules
- Completed preliminary design of a new payroll system to transition employees from a monthly payday to biweekly pay
- Completed a filter plant pilot under the Filter Plant and Clearwell Improvements Project
- Formed a Central San Smart Initiative Steering Committee to review and champion initiatives to leverage data to improve operations and reduce costs
- Designed new paperless workflows for key financial business processes to improve internal control structure, operational efficiency, and transparency
- Distributed approximately 130 million gallons of recycled water to businesses and residents
- Continued to work toward advancing the Refinery Recycled Water Exchange Project partnership
- Continued involvement in the Hydrothermal Processing of Wastewater Solids (HYPOWERS) Project to investigate the potential to turn wastewater solids into biofuels

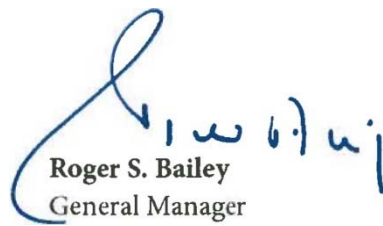
We take great pride in the critical work we do at Central San and in our dedication to excellence. This budget reflects that continued dedication and our pursuit of the highest levels of reliability and service for the residents of central Contra Costa County.

Continuing our Progress

The priorities identified in this FY 2020-21 Budget will allow us to build upon these successes and meet our goals for FY 2020-21 as outlined in the Strategic Plan. I want to thank the Board for providing the vision, resources, and support necessary to achieve these goals and address current and future challenges. I also want to thank our staff for working so diligently to develop this budget, helping to ensure we are well-positioned financially to meet our goals and confront the obstacles to come. We recognize that the communities within our service area rely on us for a very basic but essential service. Accordingly, this proposed budget represents our commitment to serving them with excellence while providing the highest value.

The Road Ahead

In response to the COVID-19 pandemic, we face new and unprecedented challenges. The coronavirus has underscored the centrality of public health to our communities, our economy, and our way of life. At the same time, our country faces one of its deepest economic crisis since the Great Depression. The full impacts of the recession are yet to be seen, but we will continue to monitor the situation and be ready to respond. The road ahead may be rough, but even in this unsettled time, we remain committed to protecting public health and the environment by providing household hazardous waste collection, recycled water services and wastewater collection and treatment services to our community.

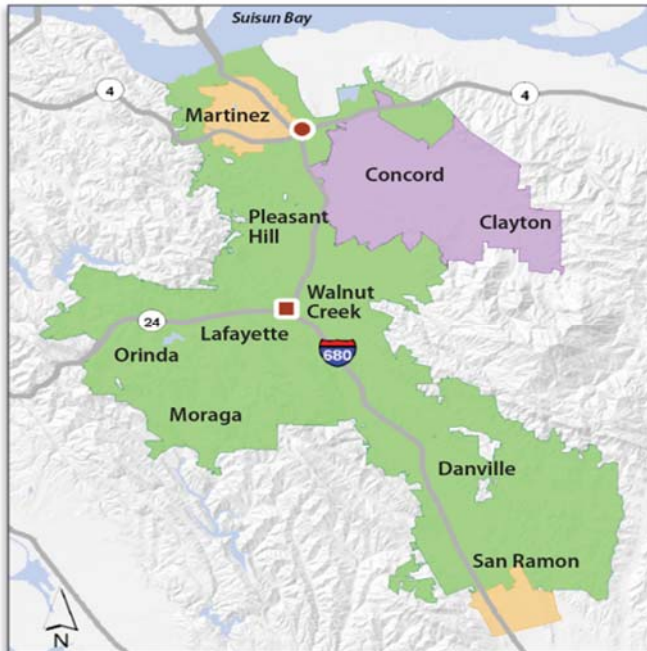


Roger S. Bailey
General Manager



About Central San

Established in 1946, Central San is located about 30 miles northeast of San Francisco and provides wastewater services for nearly 500,000 residents and more than 3,000 businesses in central Contra Costa County. This service territory covers 145 square miles and includes Alamo, Clyde, Danville, Lafayette, Martinez, Moraga, Orinda, Pacheco, Pleasant Hill, San Ramon, Walnut Creek, and unincorporated areas within central Contra Costa County. Central San also treats wastewater from an additional 37 square miles for residents of Concord and Clayton under a 1974 contract with the City of Concord.



- Sewage collection and wastewater treatment; household hazardous waste (HHW) disposal
- Wastewater treatment and HHW disposal for residents in Concord and Clayton by contract
- HHW disposal only
- Central San headquarters, treatment plant, HHW Facility, and Residential Recycled Water Fill Station
- Collection System Operations headquarters

Central San by the numbers



- Serves nearly **500,000 residents** and more than **3,000 businesses** in central Contra Costa County
- Maintains over **1,500 miles** of sewer pipelines and **18 pumping stations** to carry wastewater to our regional treatment plant in Martinez
- Cleans more than **13 billion gallons** of wastewater per year
- Produces more than **500 million gallons** of recycled water every year for irrigation and industrial uses
- Collects **1.5 million pounds** of household hazardous waste per year, and reuses or recycles about **90%** of those materials
- Collects more than **6,000 pounds** of unwanted medications per year through the Pharmaceutical Disposal Program
- Achieves an average **3.9 out of 4.0** customer satisfaction rating for sewer emergency response (as of Q3 in FY 2019-20)
- Serves more than **6,000 students** through school education programs every year
- Welcomes more than **500 participants** to treatment plant tours and speakers bureau presentations per year

Community Profile

For over 70 years, Central San has been proud to serve its customers in the San Francisco Bay Area's central Contra Costa County region. The service area is located at the foot of Mount Diablo (3,848 feet), whose state park and foothills offer hiking trails and open space preserves that are frequently used by the neighboring residents.

The cities served by Central San are also some of the most historic in California. Martinez, where the headquarters is located, was a key crossing point over the Carquinez Strait for the Pony Express, and its downtown is notable for its preserved historic buildings, including the John Muir National Historic Site. A short distance away, Concord, Walnut Creek, and San Ramon boast revitalized shopping districts, drawing retailers and restaurants from other parts of the state to open locations there. One of Central San's largest customers, the City of Concord, is working on converting a former Naval Weapons Station into a Community Reuse Project, which will include parks, housing, office, retail, and the restoration of Mt. Diablo Creek. Central San is proud to be part of the effort to make the project as sustainable as possible by supplying recycled water for irrigation in this development.



In recent years, the population of the service area has boomed, partially due to its accessibility to San Francisco and Silicon Valley via public transit. Most of the population of Contra Costa County lies along the busy I-680 corridor that connects the North Bay to Silicon Valley. As shown in the following tables, the area in which Central San operates is a growing community to whom this agency is honored to provide its core services, including educational messaging to instill the environmental values foundational to Central San as an organization.

Service Area Population (Last Ten Years)

As of January 1	Inside District	Concord / Clayton	Total Served	% Change
2010	319,377	135,378	454,755	-0.32%
2011	321,800	133,600	455,400	0.14%
2012	326,900	134,200	461,100	1.25%
2013	332,600	134,900	467,500	1.39%
2014	335,009	135,856	470,865	0.72%
2015	339,029	137,357	476,386	1.17%
2016	340,667	140,916	481,583	1.09%
2017	344,591	139,654	484,245	0.55%
2018	348,333	140,590	488,923	0.97%
2019	352,733	141,542	494,275	1.09%

Population by Community (2010 and 2019)

Community*	As of January 1, 2010	As of January 1, 2019
Clayton	10,936	11,653
Concord	124,442	129,889
Danville	43,110	45,270
Lafayette	24,206	26,327
Martinez	21,078	21,745
Moraga	14,701	16,939
Orinda	17,799	19,475
Pleasant Hill	33,384	35,055
San Ramon	51,099	69,143
Walnut Creek	65,443	70,121
Unincorporated Contra Costa County**	48,557	48,658
Total Service Area	454,755	494,275
Contra Costa County Total	1,073,055	1,155,879

* Central San shares service of these communities with other agencies, and adjustments for the populations served by those other agencies have been made

**Includes Alamo, Clyde, and Pacheco

Source: California Department of Finance, Demographic Research Unit and local agency service records

Ten Largest Customers by Sewer Service Charge (FY 2018-19)

Customer	Operating Revenue	Rank	% of Operating Revenue
City of Concord*	\$15,205,292	1	16.44%
First Walnut Creek Mutual	\$521,550	2	0.56%
Park Regency Apartments	\$489,708	3	0.53%
Sunvalley Shopping Center	\$453,512	4	0.49%
John Muir Health**	\$413,900	5	0.45%
Second Walnut Creek Mutual Apartments	\$411,750	6	0.45%
Bishop Ranch City Center	\$315,106	7	0.34%
San Ramon Unified School District	\$266,550	8	0.29%
Branch Creek Vista Apartments	\$244,180	9	0.26%
Contra Costa County General Services**	\$219,600	10	0.24%
Total	\$18,541,148		20.05%

* Contract with the City of Concord to treat and dispose of wastewater for Concord and Clayton

**Contra Costa County General Services and John Muir Health are permitted industries

Active Service Accounts and FY Sewer Service Charge Billings (FY 2018-19)

User Group *	Accounts**	2018-19 Sewer Service Charge Billings	% of Total
Residential	114,101	\$77,787,351	80.2%
Mixed Use	428	\$6,322,681	6.5%
Office	964	\$2,498,062	2.6%
Hotel/Motel	23	\$1,374,546	1.4%
Food Service	163	\$1,113,313	1.1%
Government	175	\$871,268	0.9%
Schools	251	\$846,826	0.9%
Businesses	387	\$705,933	0.7%
Recreation/Entertainment	135	\$711,653	0.7%
Automotive/Car Wash	242	\$715,534	0.7%
Market/Supermarket	39	\$559,623	0.6%
Industrial/Permitted	11	\$513,846	0.5%
All Other User Groups	576	\$3,511,832	3.6%
Partial Year Charges and Prior Year Adjustments		\$226,911	
Total	117,495	\$97,245,533	100%

* Categories were updated in FY 2018-19; data published in FY 2018-19 CAFR had inaccuracies that have been corrected here

** Accounts are defined as dwelling units for residential customers and meters for non-residential customers

Ten Largest Employers in Contra Costa County (2018 and 2019)

Employers	Estimated Employees	2018 % of Total County Employment	2019 % of Total County Employment
Chevron Corporation	10,000+	1.82%	1.84%
Bay Alarm Company	1,000-4,999	0.56%	0.56%
St. Mary's College	1,000-4,999	0.56%	0.55%
Bio-Rad Laboratories	1,000-4,999	0.56%	0.55%
Job Connections	1,000-4,999	0.56%	0.55%
John Muir Medical Center	1,000-4,999	0.56%	0.55%
Kaiser Permanente	1,000-4,999	0.56%	0.55%
La Raza Market	1,000-4,999	0.56%	0.55%
Martinez Medical Offices	1,000-4,999	0.56%	0.55%
USS-POSCO Industries	1,000-4,999	0.56%	0.55%
All Others	In 2018: 511,900 In 2019: 506,800	93.14%	93.20%

Source: County of Contra Costa, California, California Annual Financial Report for June 30, 2019, Statistical Section, principal employers excludes government employers

Economic Statistics for Contra Costa County (Last Ten FYs)

FY Ended June 30	Population*	Personal Income*	Per Capita Personal Income*	Average Annual Unemployment Rate**
2010	1,052,875	\$56,882,501,000	54,030	11.3%
2011	1,066,126	\$61,498,902,000	57,681	10.4%
2012	1,079,093	\$66,772,041,000	61,878	9.0%
2013	1,096,310	\$67,290,115,000	61,435	7.4%
2014	1,110,971	\$71,164,468,000	64,056	6.2%
2015	1,126,027	\$77,914,957,000	69,195	5.0%
2016	1,138,645	\$82,204,425,000	72,195	4.4%
2017	1,147,439	\$87,810,279,000	76,527	3.8%
2018	1,150,215	\$94,900,003,000	82,506	3.5%
2019	1,155,879	N/A	N/A	3.2%

* Source: U.S. Department of Commerce, Bureau of Economic Analysis, "CAINC1" figure. Estimates for 2010-2016 reflect county population estimates available as of March 2018

**Source: State of California Employment Development Department, annual calendar figure, except 2018, which is June.

Organizational Structure

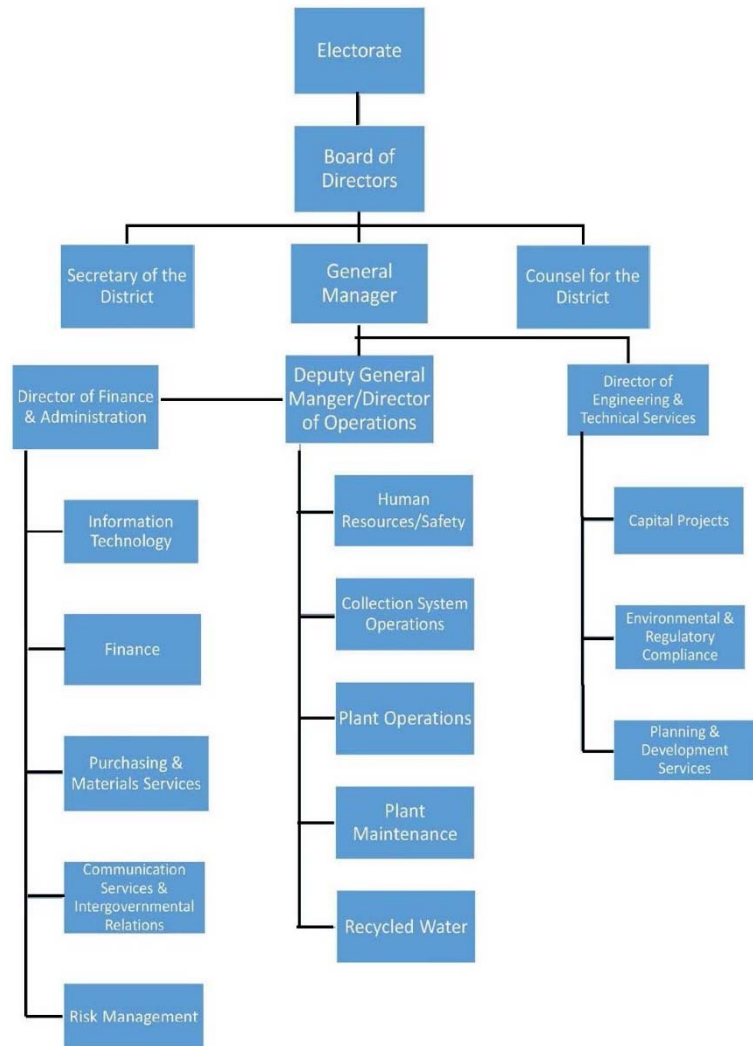
Central San is governed by a Board of Directors whose five members are elected at-large on a non-partisan basis and serve a four-year term.

The Board appoints the General Manager, the Counsel for the District, and the Secretary of the District.

Central San is organized into three departments: Administration, Engineering and Technical Services, and Operations.

Central San currently has 291 budgeted full-time employees, and this number has remained the same for the past four years. Two additional positions were authorized by the Board during FY 2019-20 which are expected to be transitional for a period of not more than two years.

This team of employees is led by a General Manager, a Deputy General Manager, two Department Directors, and 11 Division Managers.



The chart on the right depicts the operating divisions and programs that are funded in the budget.

Central San's main headquarters, Board Room, and treatment plant are located at 5019 Imhoff Place in Martinez. Central San's Collection System Operations are headquartered at 1250 Springbrook Road in Walnut Creek.



Budgeting Calendar, Process, and Spending Authorities

The budget development process for FY 2020-21 started midway through FY 2019-20 with the updated financial plan. Board review of the financial plan took place in two workshops, on November 4, 2019, and March 12, 2020. Board input was used in the budget development during this time period, and through the preparation of the budget book in April.

Initial budget proposals were input in Pass One, after which the General Manager, Director of Finance and Administration, and each division manager met to review results. Several cycles, or passes, of budget development took place thereafter. Required changes were input in Pass Two, another review session was held, and final changes were input in the Final Pass. Development of the budget was finalized in April, producing a draft which was provided to the Board in May. The Operations and Maintenance sections were reviewed by the Board Finance Committee, and the capital budget was reviewed by the Board Engineering & Operations Committee prior to Board adoption of the final budget in June.

The budget process typically is aligned with two other key planning processes: strategic planning, which covers a two-year window, and rate setting.

FY 2020-21 is the first year of a two-year Strategic Plan cycle. The strategic goals, strategies, initiatives, key success measures, and metrics of that plan were established during mid FY 2019-20 and provide guidance for funding activities in the budget. The budget proposes a level of funding that will enable and achieve the goals set forth in the FYs 2020-22 Strategic Plan.

During FY 2018-19, staff presented an update of the financial plan and commenced a discussion about the need for sewer service rate adjustments. During a financial workshop in January 2019, the Board provided staff with tentative direction to prepare a multi-year rate adjustment which would be announced through a Proposition 218 notification process in March and a public hearing on proposed rate adjustments on April 18. At that meeting, the Board adopted a four-year schedule of adjustments, with increases of 5.5%, 5.2%, 4.9%, and 4.2% for single family residential customers, and average increase across all customer classes of 5.25%, 5.25%, 4.75%, and 4.75%. Annual public hearings will be conducted for years two through four to determine if lesser rate adjustments are possible. The public hearing for FY 2020-21 was conducted on April 16, 2020, where the Board continued the current course for FY 2020-21. However, on May 7, the Board voted to waive collection of the 5.25% rate adjustment for July 1, 2020. A diagram summarizing the budget and rate development process is provided below.



A calendar of key intersecting events during the process for the FY 2020-21 budget is provided below, comprised of activities from the three aforementioned critical business areas of the planning process: the Strategic Plan, Budget, and Rate Setting.

Key Strategic Plan, Budget, and Rate Setting Events for FY 2020-21 Budget

Date	Strategic Plan	Budget	Rate Setting
January 2020	Workshop to collect input on the FYs 2020-22 Strategic Plan, guided by the Board’s revised Vision and Values and re-adopted Mission	N/A	N/A
February 2020	Incorporate staff updates into draft FYs 2020-22 Strategic Plan	Departments/divisions develop and submit operating budget proposals	N/A
March 2020	Administration Committee reviews draft FYs 2020-22 Strategic Plan. FY 2019-20 strategic performance up to the third quarter is incorporated into the budget	General Manager reviews operating budget with departments/divisions	April 16: Board Rate Workshop (Review of Financial Plan including updates to the Ten-Year CIP and CIB)
April 2020	FYs 2020-22 Strategic Plan is graphically designed	Draft operating budget finalized with departments/divisions Draft Ten-Year Capital Improvement Plan (CIP) finalized by Department of Engineering and Technical Services	Board meeting to review potential changes to previously adopted rates for FY 2020-21
May 2020	Administration Committee reviews and Board receives final FYs 2020-22 Strategic Plan	Draft Operating Budget presented to the Finance Committee and the Board Draft Capital Improvement Budget (CIB) and Ten-Year CIP presented to the Engineering and Operations Committee and Board	N/A
June 2020	Staff reviews FY 2019-20 accomplishments and begins production of FY 2019-20 Strategic Plan Annual Report	Public Hearing on adoption of final budget	Public Hearing on adoption of Capacity and Developer-Related Fees, Rates, and Charges

Once the budget is adopted, the General Manager has the authority to spend within the respective budgets. Payments are governed by the limits set in the General Manager Delegation of Authority (Board Policy No. BP-038).

Individual supervisors and managers are granted authority for purchase requisitions, approvals, and payment authorizations consistent with the signature limit matrix by position that serves as a partial

delegation of some of the General Manager authority. Certain expenditures over \$200,000 require Board approval.

Spending is monitored monthly by staff and by the Board; variances of more than 10% on individual budget line item categories are highlighted and subject to discussion by the Finance Committee. All expenditures are submitted monthly to the Finance Committee and the Board for review and approval. Monthly financial statements are issued internally and to the Board. Monthly and annual variance explanations are presented to the Board. The Board also reviews year-end variance explanations and determines how available funds from favorable variances are used.

Should it become necessary to spend more than the overall Operations and Maintenance, Capital, Debt Service or Self-Insurance budget, formal Board action would be required to adopt an amended budget. For the Capital Improvement Program, budgets for projects are set on an annual basis. The General Manager has the authority to reallocate funds up to \$500,000 between projects. Reallocations above that amount require approval by the Board. The Capital Improvement Budget also includes a \$2.5 million contingency, which is subject to the same General Manager transfer limits. Transfers above that amount, or the creation of a new, unbudgeted capital project, would require approval by the Board.

The General Manager has the authority to spend up to the budgeted amounts for Debt Service. The General Manager may also spend Self-Insurance Fund reserves to pay claims and claim expenses within the self-insured retention (\$500,000) during the fiscal year.

General Manager and Board roles in the administration of financial limits related to expenditures are summarized in the two tables below:

Capital Improvement Program Authorization Limits

Action		General Manager	Board of Directors
Approve Capital Improvement Plan and Capital Improvement Budget (CIP/CIB)		None	No Limit
Transfer Funds to Individual Project Budgets		\$500,000 or Less ¹	No Limit
Enter Into Agreements	Professional Consulting Services	\$200,000 or Less	Greater than \$200,000
	Technical Consulting Services	\$200,000 or Less	Greater than \$200,000
	Professional Engineering Services	\$200,000 or Less	Greater than \$200,000
Amend Agreements less than or equal to \$2 million		\$100,000 or Less	Greater than \$100,000
Amend Agreements greater than \$2 million		\$200,000 or Less	Greater than \$200,000
Transfer Funds from CIB Contingency Account to Projects Not Included in the CIB		\$200,000* or Less per Project ²	Greater than \$200,000*
Authorize purchase of individual equipment items		Up to Amount Specified in Equipment Budget	No limit
Authorize Supplemental Funds to Program Budgets and Contingency Account		None	No limit / Sewer Construction Fund Balance
Award Construction Contracts ³		\$200,000* or Less	Greater than \$200,000*
Authorize Construction Change Orders	Additive	\$200,000* or Less	Greater than \$200,000*
	Deductive	No Limit	No Board Authorization Required
Authorize Subcontractor Substitutions		All Substitutions Unless Protested by Subcontractor	Substitutions Protested by Subcontractor
Accept Construction Projects		All Projects	Informational Announcement to the Board
Close Out Projects		All Projects	Memo Provided to the Board at End of Fiscal Year
Acquire Easements		\$200,000 or less	Greater than \$200,000

¹ Limited by the remaining balances of the applicable program and contingency account.

² Limited by the remaining balance of the applicable contingency account.

³ Bid protests and rejection of all bids must go to the Board with the exception of those under \$200,000 and which fall under the provisions of the California Uniform Public Construction Cost Accounting Act (UPCCAA) (§§ 22042 and 22042.5).

* These limits shall be raised concurrently with changes to the UPCCAA (California Public Contract Code §§22032(a), representing the threshold above which formal bidding is required under the UPCCAA).

Contracting Authority Limits

Value	Category of the Procurement		
	Goods and Services	Professional Consulting Services	Public Works Projects ¹
> \$0	General Manager Delegated Authority ¹		
> \$0 and ≤ \$200,000		General Manager Delegated Authority	General Manager Delegated Authority
> \$200,000		Board Authorization Required	Board Authorization Required
Amending Agreements ≤ \$2,000,000: Changes less than \$100,000		General Manager Delegated Authority	General Manager Delegated Authority
Amending Agreements > \$2,000,000: Changes less than \$200,000		General Manager Delegated Authority	General Manager Delegated Authority
Amendments Causing Agreement total to Exceed \$200,000		Board Authorization Required	

¹ The Board delegates authority to the General Manager, or their designee, to award and enter into contracts for goods and services within the Board's adopted operating budget, excluding labor, provided purchasing policy and procedures are adhered to.

Strategic Plan Summary

Central San develops its Strategic Plans on a two-year cycle, while tracking progress quarterly and producing performance reports annually. The Strategic Plans establish policy direction, outline core commitments, focus initiatives, and track performance with key performance metrics. This budget relates to the first year in the FYs 2020-22 Strategic Plan and reports strategic accomplishments and performance for the second year of the FYs 2018-20 Strategic Plan.

The development of the FYs 2020-22 Strategic Plan began with the Board's re-adoption of Central San's Mission and adoption of revised Vision, Values, and Goals in December 2019. These updates emphasized the agency's commitment to the environment, innovation, optimization, and continuous improvement. Staff held a workshop the following month to update the FYs 2018-20 Strategic Plan to reflect current priorities.

The Strategic Plan contains five components: Goals, Strategies, Initiatives, Key Success Measures, and Key Metrics. The Strategies outline Central San's approach to achieve its Goals, overcome its challenges, accomplish its mission, and meet the community's needs in the most efficient and effective ways. The Initiatives describe the actions staff will take, and the Key Success Measures delineate the tasks to fulfill those Initiatives. The Key Metrics set targets, track progress, and evaluate performance. To view a complete copy of the Strategic Plan, please visit www.centernalsan.org.

Starting with the development of the FYs 2016-18 Strategic Plan, staff has used the Effective Utility Management (EUM) model as a tool to identify practices and procedures to improve operations and move toward continued sustainability. The EUM framework was originally developed in 2007 by the American Water Works Association (AWWA), U.S. Environmental Protection Agency (EPA), and nine other association partners representing the U.S. water and wastewater sector. It consists of 10 attributes that provide succinct focus areas for effectively managed utilities and what they should strive to achieve. These attributes are as follows:



Product Quality - Produces "fit for purpose" water that meets or exceeds full compliance with regulatory and reliability requirements and is consistent with customer, public health, ecological, and economic needs.



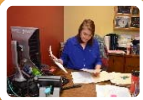
Customer Satisfaction - Provides reliable, responsive, and affordable services in line with explicit, customer-derived service levels.



Employee and Leadership Development - Recruits and retains a workforce that is competent, motivated, adaptive, and safety focused.



Operational Optimization - Ensures ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of its operations in service to public health and environmental protection.



Financial Viability - Understands the full life-cycle cost of utility operations and the value of water resources.



Infrastructure Strategy and Performance - Understands the condition of and costs associated with critical infrastructure assets.



Enterprise Resiliency - Ensures utility leadership and staff work together internally, and with external partners, to anticipate, respond to, and avoid problems.



Community Sustainability - Takes an active leadership role in promoting and organizing community sustainability improvements through collaboration with local partners.






Water Resource Sustainability - Ensures the availability and sustainable management of water for its community and watershed, including water resource recovery.




Stakeholder Understanding and Support - Engenders understanding and support from stakeholders, including customers, oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions.

Key Budget Priorities: Responding to Challenges

The Budget and Strategic Plan, as key planning documents, provide the resources and guidance necessary to accomplish Central San’s mission to protect public health and the environment and overcome its challenges. Central San is committed to improving the quality of services provided to its customers and will positively respond to major challenges through its key budget priorities as linked to the FYs 2020-22 Strategic Plan goals, as follows:

Key Budget Priority	Primary Response	FY 2020-21 Budgeted Project(s)
 GOAL ONE CUSTOMER AND COMMUNITY Provide exceptional customer service and maintain an excellent reputation in the community		
Balancing the need for financial resources against impacts to the customer	<p>Implement a customer relief program to assist in alleviating hardships due to COVID-19 by providing savings on sewer service charges for residential, school, and commercial customers</p> <p>Continue commitment to educating customers about required revenue and resources needed to replace aging infrastructure and meet regulatory requirements</p>	<p>Assist residential, school, and commercial customers through one-year waiver of incremental sewer service charge rate adjustment and provide sewer service charge reductions to K-12 schools to reflect decreases in water use for the time period they were closed</p> <p>Public outreach, including the highly successful Central San Academy, student education programs, facilities tours, <i>Pipeline</i> community newsletter, and social media engagement</p>
 GOAL TWO ENVIRONMENTAL STEWARDSHIP Meet regulatory requirements and promote sustainability		
Evolving regulatory requirements	Anticipate changing regulations and plan for alternatives to maintain reliability and meet requirements	Proactive participation with regulatory agencies and replacement of wet scrubber as part of the Solids Handling Facilities Improvement Project
Maintaining a sustainable water supply	Partner with agencies to find creative water solutions benefiting the region and state, and identify ways to maximize cost-effective resource recovery and sustainability	Continue pursuing the Refinery Recycled Water Exchange Project to utilize recycled water at nearby refineries in place of potable water to increase the amount of potable water available to the community
 GOAL THREE FISCAL RESPONSIBILITY Manage finances wisely and prudently		
Maintaining responsible rates at an affordable level	Balance capital spending with affordability and rate impact concerns, and offset infrastructure replacement, regulatory responses, and other expenses with cost-saving efforts, efficiencies, optimizations, and innovations	Financial planning to forecast needs and sensible spending, as well as the continued push to become a more cost-effective and efficient operation

Key Budget Priority	Primary Response	FY 2020-21 Budgeted Project(s)
 WORKFORCE DEVELOPMENT Recruit, empower, and engage a highly trained and safe workforce		
Driving employee performance and rewarding excellence	Develop, retain, and equip high quality employees with the tools needed to succeed, including meaningful feedback via timely performance evaluations	Employee recognition, training and development programs, outside conferences, and professional association memberships to inspire continuous education and improvement
 INFRASTRUCTURE RELIABILITY Maintain facilities and equipment to be dependable, resilient, and long lasting		
Aging infrastructure and climate resiliency	Make investments in capital improvement and internal resources to deliver on increased levels of capital spending	Major projects include the Solids Handling Facility Improvements; Pumping Station Improvements, Phase 1; and Outfall Pipeline Inspection and Improvements
 INNOVATION AND OPTIMIZATION Explore new technologies for continuous improvement		
System optimization and utilization of Big Data	Continue to champion and initiate projects through the Central San Smart initiative to optimize operations, improve asset management, increase energy efficiency and safety, and reduce facility management costs	<p>Optimizations include the Steam and Aeration Blower Systems Project to evaluate efficiency options for one of the major energy sources of the treatment process</p> <p>Smart initiative projects include optimization of the treatment plant asset handover process and development of an asset health indicator tool</p>
 AGILITY AND ADAPTABILITY Preserve business continuity during pandemic events or major natural disasters		
Adjusting operations in response to the COVID-19 pandemic	Provide a safe working environment for employees and the public, continue to provide essential services, maintain customer service and productivity levels, and plan ahead for any potential financial effects	Investment in cost-effective technologies to support teleworking as needed, enhancement of customer-facing programs with contactless procedures, procurement of personal protective equipment, and modifications to the workplace to facilitate social distancing and reduce the risk of transmission

COVID-19 Budget Impacts / Responses

The COVID-19 pandemic has impacted and is expected to continue to impact Central San’s finances in several areas, including revenues and, to a lesser degree, costs. These impacts are summarized in the table below. With respect to the impact on revenues, the full extent of the impacts of the recession are yet to be seen and it is unclear whether the impact of the downturn will be short lived or persist for longer. In any event, Central San will continue to monitor the situation and be ready to respond.

Area	Impact / Response
Revenue Impacts to the FY 2020-21 budget	<ul style="list-style-type: none"> • Reduced interest revenue on cash and investments from \$2 million to \$0.6 million. • Reduced budgeted capacity fees from \$8.6 million to \$6.3 million. • Customer Relief Program: Board approved on May 7 a waiver for collection of the sewer service rate adjustment effective July 1, 2020. Sewer Service Charge revenue reduced by \$5.2 million. • Customer Relief Program: Board approved on May 21 a credit for fees paid by schools in FY 2019-20 to be provided against FY 2020-21 revenues; Sewer Service Charge revenue reduced by approximately \$0.2 million.
Cost Impacts to the FY 2020-21 budget	<ul style="list-style-type: none"> • Costs of buying safety supplies and office modifications necessary to ensure safety of employees with social distancing have been charged to the FY 2019-20 budget; similar types of additional costs are anticipated in the FY 2020-21 budget. • Conference participation and other travel-related costs may be reduced if current travel and social distancing restrictions are maintained or if participation in planned events is moved online. Table 8 in Financial Summary shows “Training, Conferences & Meetings” budgeted at \$0.5 million. • Other impacts, including additional janitorial services, administrative fees for online services, etc.
Longer Term Revenue Impacts in the 10-Year Financial Plan	<ul style="list-style-type: none"> • If additional Stay-At-Home orders are issued as a result of future outbreaks or “waves” of COVID-19, further revenue impacts from non-residential water consumption in future years may result. A negative impact to FY 2021-22 sewer service revenues is likely. • Estimates for ad valorem tax revenue assume an annual increase of 3%. Every 0.5% change in that rate would alter these estimates by approximately \$0.1 million per year. • Under existing County Orders, sewer facilities are identified as “Essential Infrastructure” and operation and maintenance of these facilities as an “essential” service. However, County Health Orders have addressed construction activities in differing ways on a per-Order basis. As a result, the timing and duration of capital project schedules could be impacted by restrictions included in future Orders. • The effect of inflation on capital project costs is estimated at 3% per year, but actual costs may differ depending on future market conditions and costs of construction materials (e.g., concrete, steel, etc.).

	<ul style="list-style-type: none"> • Interest rates for debt financing may be lower than estimated depending on future changes in economic conditions, reducing estimated borrowing, and debt service costs. • There may be difficulty in accessing borrowing if capital markets are generally reluctant to lend. However, the District’s high credit rating makes its offerings more attractive to potential investors, and the District expects to apply for State Revolving Fund loans for capital projects where possible. • Unfunded Liabilities may be impacted by lower than actuarially assumed returns related to pension and Other Post-Employment Benefits (OPEB) investments. • Capital projects have been prioritized with scores, in the event that changes to the Capital Improvement Budget and 10-Year Plan need to be made due to revenue shortfalls.
Monitoring	<ul style="list-style-type: none"> • County collections of Sewer Service Charge & Ad Valorem Taxes regarding collectability and timing issues (none to minimal impact expected, in light of Teeter Plan and secured nature of taxes). • Forecasts of other revenue items potentially impacted by reduced economic activity such as Permit, Inspection, and Developer fees. • Continue monitoring monthly revenues, operating, and capital costs for other impacts and reporting to the Board of Directors on such impacts.

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Financial Overview

Central San uses an enterprise fund to account for its operations. The single enterprise fund is further segmented into four primary internal sub-funds and three other funds and accounts as described below:

Primary Internal Sub-Funds

- **Operations and Maintenance (O&M) Running Expense Fund** – This fund provides for the general operations, maintenance, and administration of Central San. Sewer Service Charge (SSC) revenues are collected by the Contra Costa County Tax Collector's Office and are remitted to Central San in two installments in April and December of each year. Central San provides several services, including wastewater treatment, to its customers and, by contract, to the cities of Concord and Clayton. Central San is reimbursed annually for the treatment services provided to Concord and Clayton residents. Central San reserves five months (41.7%) of its gross operating expenditures at the start of each fiscal year to pay its ongoing expenses throughout the year.
- **Sewer Construction Fund (Capital Fund)** – This fund provides for treatment plant and collection system asset renewal and replacement expenditures, as well as office facilities renewal, vehicle and equipment replacement, information systems replacement, and miscellaneous capital expansion needs. The City of Concord reimburses Central San for its share of expenses related to projects impacting the services the City has contracted with Central San to provide, proportional to flow. Property tax (ad valorem taxes) and a portion of SSC revenues, which comprise a significant portion of annual capital project revenues, are collected by the Contra Costa County Tax Collector's Office and remitted to Central San in two installments in April and December of each year. In addition, Capacity Fees received from permits are allocated to this capital fund. In order to meet the cash flow needs of the Capital Projects program, Central San reserves 50% of the annual cash-funded portion of the Capital Projects budget at the start of each fiscal year. In FY 2020-21, the Capital Projects budget will be funded through current year rate collections (cash funded), as well as a State of California Revolving Fund loan for the Solids Handling Facilities Improvements Project. The Capital Projects section of this document provides a table showing the various sources of revenue funding for each type of capital project.
- **Self-Insurance Fund (SIF)** – This fund accounts for interest earnings on cash balances in this fund and cash allocations from other funds, as well as for costs of insurance premiums and claims not covered by Central San's insurance coverage. Central San has self-insured a portion of its liability and property risks since July 1, 1986, when the Board of Directors (Board) approved the establishment of the SIF. Central San is self-insured for three events up to \$500,000 per occurrence for its general and automobile liability program, for a total of \$1.5 million. Maintaining a self-insured retention reduces Central San's insurance premium expense. In order to help mitigate the financial impacts and maintain uninterrupted service in the event of an emergency or catastrophic event, Central San maintains an Emergency Fund Reserve balance of \$5 million in the SIF. Actuarial studies are performed every other year and are used to set the Governmental Accounting Standards Board (GASB) 10 liability amount.

- **Debt Service Fund** – This fund accounts for activity associated with the payment of Central San’s long-term bonds and loans. Central San’s total debt service for FY 2020-21 is \$2.5 million, a decrease of approximately \$0.5 million from the \$3.0 million budgeted in FY 2019-20. The debt service reduction is in accordance with the amortization schedule of the 2018 bonds issued in September 2018 to refund previously existing 2009 bonds. A portion of Central San’s ad valorem tax revenue is the primary funding source for the Debt Service Fund.

Other Funds and Accounts

Other tracking mechanisms to segregate funds restricted for specific purposes include:

- **Pension Prefunding Trust Fund** – This Section 115 secondary pension trust was established by the Board in 2017. Deposits into or withdrawals from the trust require approval of the Board of Directors. The trust does not have a specified target size. The trust holds assets that would be available for use to meet pension obligations to the Contra Costa County Employees’ Retirement Association (CCERA). For financial reporting purposes, this budgetary “other fund” is consolidated into Central San’s single entity enterprise fund pursuant to generally accepted accounting principles (GAAP). However, for budgetary purposes the Pension Prefunding Trust Fund is tracked separately due to its significance for long-term financial planning and debt management.
- **Other Post-Employment Benefits (OPEB) Trust Fund** – This irrevocable trust was established by the Board in 2009. Deposits into the trust requires Board approval. The trust does not have a specified target size. The trust holds assets that are specified for meeting employee related post-employment benefits, primarily retiree healthcare coverage. For financial reporting purposes, effective FY 2020-21 pursuant to the implementation of GASB 84, this budgetary “other fund” is no longer reported in Central San’s Comprehensive Annual Financial Report (CAFR) as a fiduciary fund. However, for budgetary purposes the OPEB Trust Fund will continue to be tracked separately due to its significance for long-term financial planning and debt management.
- **Rate Stabilization Fund Reserve Account** – This restricted-use account was authorized by the 2018 Revenue Bonds and established by the Board in 2019. Deposits into the Rate Stabilization Fund Reserve Account would reduce the revenues specified for calculating the debt service coverage ratio metric, while withdrawals would increase revenues for calculating that metric. Rate Stabilization Fund Reserve Accounts were created in both the O&M Sub-Fund and the Sewer Construction Sub-Fund and use of proceeds held in the accounts requires specific Board action. The accounts do not have specified target sizes.

Financial Planning Policies

The significant policies that play a role in managing Central San's finances are summarized below:

Fiscal Reserves Policy

There is a strong emphasis placed on maintaining adequate reserves, and having a reserve policy ensures long-term financial stability. In 2015, the Board adopted Board Policy No. BP 017-Fiscal Reserves, which set targets for each of Central San's reserve funds. This policy was reviewed and updated by the Board during FY 2019-20. Key provisions remained generally unchanged, with updates primarily focusing on defining the term "working capital," providing detail about the usage of the reserves and recognizing new accounts since the initial policy. Fiscal reserves provide working capital for O&M activities; funding for long-term capital improvement requirements; fulfillment of legal, regulatory, and contractual obligations; mitigation of risk and liability exposures; and cash flow emergencies. Table 14 shows projected reserve balances as of June 30, 2020, and June 30, 2021.

- **O&M Fund** – Working capital reserves, the Board has set a target of five months (41.7%) of gross operating expenses at the start of each fiscal year.
- **Sewer Construction Fund (Capital Improvement)** – Working capital reserves, the Board has set a target of 50% of the annual Capital Projects budget at the start of each fiscal year, excluding capital projects that are to be funded with bond proceeds or loans.
- **SIF Reserves** – The Board has set a target of three times the annual retention, currently at \$500,000. In addition, to help mitigate the financial impacts and maintain uninterrupted service in the event of an emergency or catastrophic event, Central San maintains an Emergency Fund Reserve balance of \$5 million in the SIF.
- **Debt Service Reserve (Bond Reserve)** – The previously outstanding 2009 certificates of participation (a type of borrowing) required the establishment and maintenance of a debt service reserve fund defined in the loan documents. With the refinancing of that debt with 2018 revenue bonds, the Debt Service Reserve Fund was eliminated in September 2018, with the then \$4.86 million balance used to reduce the required issuance amount of the refunding debt. No debt service reserve fund is now outstanding.

Other Significant Financial Accounts

- **Rate Stabilization Fund Reserve Account** – The 2018 Revenue Bond documents provided that Central San could establish and fund a discretionary rate stability fund reserve account. During FY 2019-20, the Board established Rate Stabilization Fund Reserve Accounts, and made initial contributions of \$2.61 million from available monies remaining from the financial close of FY 2018-19. Rate Stabilization Fund Reserve Accounts were created within the O&M Sub-Fund and the Sewer Construction Sub-Fund.
- **Pension Prefunding Trust** and **OPEB Trust** fund provisions are also described in the Financial Reserves Policy. Investment Guideline documents also specify investment parameters to be followed by the external investment manager.

Basis for Budgeting

The basis for budgeting refers to the method of recognition of revenue and expenses in budgetary reporting, which differs from the basis of accounting used in financial reporting. Central San's CAFR provides detail about the actual expenses of the four sub-funds in place as of June 30, 2019, which consolidate into the single Central San enterprise fund reported on a full accrual basis of accounting. In contrast, Central San's budgets are prepared on a modified cash flow basis which projects the District's cash inflow and outflows over the course of a fiscal year (July 1 through June 30) excluding physical and intangible assets such as depreciation expense. Revenues are recognized as they are received and accounted for while obligations for expenditures are recognized when a commitment is made through an encumbered purchase order or actual expense. As part of its implementation of a new ERP, Central San plans to implement encumbrance accounting effective July 1, 2020.

Central San's accounts and transactions are tracked on a full accrual basis, which is the basis of accounting under generally accepted accounting principles (GAAP). Under this method, all assets and liabilities associated with operations are included on the balance sheet, revenues are recorded when earned, and expenses are recorded when the underlying services are performed and/or goods are delivered.

Depreciation and amortization are handled differently in budgetary reporting versus financial reporting. In budgetary reporting, depreciation and amortization are excluded, and capital outlays as well as the repayment of debt used to finance capital assets are included and reported as expenses. In the financial reporting (i.e. CAFR), depreciation and amortization are included, and capital outlays as well as the repayment of debt used to finance said capital assets are excluded for income statement reporting purposes.

Pension and OPEB are also handled differently in budgetary reporting versus financial reporting. In budgetary reporting, pension and OPEB expense adjustments as determined by GASB 68 and GASB 75 actuarial reports are excluded, and employer contributions to the underlying irrevocable plan trusts are included and reported as expenses. In the financial reporting (i.e. CAFR), pension and OPEB expense adjustments are included, and employer contributions to the underlying irrevocable plan trusts are excluded for income statement reporting purposes.

This table illustrates the differences between the budget and accounting basis as reflected on the income statement as described previously:

	BUDGETARY Modified Cash Flow Basis	ACCOUNTING Accrual Basis
Revenues	Recognized when received and accounted for	Recorded when earned
Obligations	Recognized when a commitment is made through encumbrance or expense	Recorded at the time commitments are incurred (i.e., services rendered and/or goods delivered)
Depreciation and amortization	Excluded	Included
Capital outlays	Included	Excluded
Pension / OPEB expense	Excluded	Included
Pension / OPEB plan contributions	Included	Excluded
Debt service principal payments	Included	Excluded

Through this budget and its adoption by the Board, funds are appropriated to each of the sub-funds. Each of the sub-funds presents a budget in the form of revenues, expenses, and an overall contribution to or draw from reserves.

Central San presents a “balanced budget” each year, defined as a budget in which:

Budgeted revenues and planned draws from the applicable reserve meet or exceed budgeted expenditures, and where any planned draws from the reserve will leave the reserve at or above the policy targeted level.

Implementation of a New Chart of Accounts

This budget has also been prepared to reflect the updated chart of accounts designed by Central San as part of the Oracle Cloud ERP project, which is scheduled to be in place during FY 2020-21. The new chart of accounts is based on the previous chart of accounts with certain modifications to improve parent-child relationship rollups and logical structure of both organizational units and accounts (i.e., expenses, revenues, etc.). The new chart of accounts is largely based on best practice guidance published by the GFOA.

For this reason, there may be differences in expenditure line items and groupings in this book compared to previous budget books. As a result of these changes, to improve comparability, certain prior year expense categories have been reclassified in accordance with the new categories and groupings. The total budget figures for the given years remain the same, but expenditures by category may differ. Examples of changes include the following:

Type of Change	Examples
Movements of particular expenditures from one category to another	<ul style="list-style-type: none"> Board of Director fees and benefits were previously classified as “Other Expenditures”. In this budget presentation, Board fees are included in the “Salaries & Wages” parent category, and Board benefits are in the Employee Benefits category, although both continue to be tracked separately for accounting purposes.
Changes in expenditure line items	<ul style="list-style-type: none"> Professional & Legal Fees, Outside Services, and Repair & Maintenance Costs are now reallocated between two new categories reported as “Purchased Property Services” and “Other Purchased Services” pursuant to GFOA guidelines.
Changes in Organizational Units (Org Units)	<ul style="list-style-type: none"> <i>Org Unit Splits</i> – Some org units have been split apart to provide further detail. For example, the previously reported budgetary org unit “Office of the General Manager & Office of the Secretary of the District” has been split into several sub-categories for improved reporting purposes. New sub-categories reported in the budget book resulting from this change include: General Manager, Secretary of the District, Board of Directors, and Director of Finance & Administration. <i>Creation of New Org Units</i> – New org units for Directors have been created for each of Central San’s three departments to better reflect Central San’s organizational chart and to prevent Director-related costs from being reported within one of the Departments’ many child units as was the case in prior budget books (i.e., Director of Engineering & Technical Services was reported within the Planning & Development Services Division previously). <i>Consolidation of Org Units</i> – The Safety org unit reported in the prior year budget book has been consolidated into the Human Resources division.

Debt Management and Continuing Disclosure Policy

In August 2017, the Board adopted Board Policy No. BP 029 – Debt Management and Continuing Disclosure, which sets the parameters for the responsible and prudent use of debt to fund a part of Central San’s capital spending in the coming years. Central San has primarily used a pay-as-you-go philosophy but has, occasionally, used some debt financing for large capital improvements brought about by regulatory changes or other unforeseen factors. The Debt Management Policy provides for the conservative use of debt. The funding allocated toward pipeline replacement in general is to be collected through SSC rates, capacity fees, and/or taxes, while debt is permitted for the remaining portion of the capital program.

Currently, Central San is repaying 2018 Revenue Bonds. As of June 30, 2019, total outstanding debt associated with infrastructure improvements was \$19.45 million. As noted in the “Debt” section of this document, borrowings under a State Revolving Fund loan are anticipated to begin in FY 2020-21 for the Solids Handling Facilities Improvements Project. Central San’s ten-year financial plan anticipates also additional borrowing (subject to Board approval) which may be in the form of either revenue bonds or an additional loan from the Clean Water State Revolving Fund and Water Recycling Funding Programs of the State Water Resources Control Board.

Debt restrictions currently include the following:

- **Revenue Pledge and Covenant** – Central San pledges property tax revenue, along with its net revenues consisting of gross revenues less the cost of operating the wastewater system.
- **Debt Service Coverage Ratios** of at least 1.0x (gross revenues including capacity fees and after payment of O&M, plus tax revenues / total debt service) and 1.25x (gross revenues excluding capacity fees and after payment of O&M plus tax revenues / total debt service) are adhered to.

Central San's Debt Service Coverage Ratio is strong and benefits from minimal debt service as a result of the District's current pay-as-you-go philosophy. This favorable coverage ratio is a factor in Central San's very strong AAA and Aa1 credit ratings issued by Standard & Poor's and Moody's, respectively.

Investment Policy

Central San's investment policy, Board Policy No. BP 005 – Statement of Investment Policy, last updated in the fall of 2019, is based on state law and prudent money management. All investments are in accordance with this policy and Sections 53646 and 53601 of the California Government Code. Central San has formal agreements with Contra Costa County, allowing them to act as Central San's banker. The County invests all Central San funds. Securities are held in a custodial account separate from the County. The investment policy applies to all Central San funds and investment activities, apart from the OPEB Trust and Pension Prefunding Trust, which are governed by separate specific investment guidelines also approved by the Board of Directors.

The investment policy is presented to the Board annually, and its priorities are safety, liquidity, and yield. The policy addresses issues such as permitted investments, banks and dealers, maturities, diversification, risk, delegation of authority, prudence, controls, reporting, and performance evaluation.

The GASB 45 (OPEB) Trust and Pension Prefunding Trust Investment Guidelines are also presented to the Board annually. The investments of these trusts are longer-term investments, with the GASB 45 (OPEB) Trust adopting a "moderate" investment strategy, and the Pension Prefunding Trust adopting a "moderately conservative" investment strategy. With respect to both trusts, U.S. Bank is the Trustee, HighMark Capital is the Investment Manager, and Public Agency Retirement Services is the Trust Administrator and Consultant. As of April 30, 2020, the GASB 45 (OPEB) Trust had a balance of \$66.3 million, up from the \$58 million in the account one year earlier.

The IRS Section 115 Pension Prefunding Trust was adopted during FY 2017-18 and was initially funded with \$3.4 million. With the adoption of this trust, Central San may make optional payments to the Pension Prefunding Trust rather than direct any extra payment(s) to CCCERA, giving Central San greater retirement payment flexibility in the future, while still reducing overall pension liability. As an example of this flexibility, Central San could elect to draw down the Pension Prefunding Trust to meet its payment obligations to CCCERA in order to smooth payment obligations and mitigate rate volatility. Since its inception, additional payments to the Section 115 Pension Prefunding Trust included:

Year	Amount	Source
FY 2017-18	\$2,000,000	Favorable year-end variance from FY 2016-17
FY 2018-19	\$2,500,000	Budgeted funds in O&M Budget
FY 2019-20	\$1,250,000	Budgeted funds in O&M Budget

As of April 30, 2020, the balance in the fund was \$9.7 million.

Current Financial Plan

Central San has a multi-year financial plan that projects anticipated spending, debt issuances, customer data, tax collections, and resulting rate increases. Factors considered in the long-range forecast include the impact of state legislation and mandates, regulatory compliance, GASB requirements, negotiated or forecasted salary increases and employee benefit changes (including anticipated changes in healthcare and retirement costs), energy costs, development in the service area, and infrastructure renewal and replacement needs.

The financial plan undergoes substantial development and review by staff, and various scenarios are presented to the Board during financial planning and rate-setting workshops. The financial plan covers a period of twenty years, although the assumptions for setting rates for four years are more focused on the first ten years.

The current financial plan reflects the proposed Ten-Year Capital Improvement Plan (CIP) spending levels identified in the Comprehensive Wastewater Master Plan, as updated during periodic reviews of the spending plan. The most recent review was presented at the March 12, 2020 Board Financial Planning Workshop. The financial plan for FY 2020-21 estimated O&M spending at \$92.1 million and capital spending at \$96.8 million, based on the following assumptions:

Operations and Maintenance

- Funding for the initiatives addressed in the two-year Strategic Plan. Accordingly, Central San's various planning documents are integrated and consistent.
- Updated O&M costs based on inflation and other cost-growth factors, including labor costs per the maximum inflation assumptions in the memoranda of understanding with the bargaining units and agreements with unrepresented employees.

Once the proposed budget is adopted, the individual line items in the O&M portion of the financial plan will be updated to reflect the final budget. The approved budget is then used as a baseline for future years' planning.

Capital

The Ten-Year CIP was rolled forward one year (changing from \$867 million to \$878.7 million), then inflated by 3%, to \$902.1 million so that the total is stated in 2020 dollars. The amount was then updated by reshaping cash flows over the ten-year period, while increasing overall spending by \$5.4 million. This results in a Ten-Year CIP of \$907.5 million. This update reflects a detailed assessment of Central San's latest needs and expected project timing. The Capital Improvement section of this budget book provides detail about the FY 2020-21 capital budget and the Ten-Year CIP.

The financial plan has also been updated to reflect the COVID-19 customer relief program elements described in the "Financial Summary" section of this document, including waiving the collection of additional SSC for the FY 2020-21 rate adjustment.

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Financial Summary

The FY 2020-21 Budget provides the resources necessary to advance the Strategic Plan and meet the challenges Central San faces as it strives to increase service quality and minimize costs. At the same time, the budget allows Central San to accomplish its mission in the most cost-effective and financially sustainable manner to ensure the best value to its customers.

Central San’s total budget for FY 2020-21 is \$182.4 million, representing an increase of \$24.5 million, or 15.6%, compared to the FY 2019-20 budget of \$157.8 million, which changes by individual spending category as follows:

- The FY 2020-21 O&M Budget is \$90.7 million, an increase of \$3.1 million from the current FY 2019-20 budget of \$87.6 million.
- The main driver of the increase in the total budget is a 33.0% increase in sewer construction investment, from \$66.2 million in FY 2019-20 to \$88.0 million in FY 2020-21.
- Debt service is reduced by \$0.5 million, a result of lower principal amortization compared to FY 2019-20.
- The Self-Insurance Fund (SIF) is set at \$1.2 million for the costs of premiums and estimated losses based on historical trends and represents a slight increase from the \$1.1 million funding level of the FY 2019-20 Budget.

Table 1 – FY 2020-21 Total Budget

Fund	Expenditures Trend				Budget to Budget Variance	% Variance
	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2020-21 Budget		
Operations and Maintenance (O&M)	\$89,720,456	\$85,342,786	\$87,584,775	\$90,666,338	\$3,081,563	3.5%
Sewer Construction	45,319,000	36,696,049	66,176,000	88,024,000	21,848,000	33.0%
Debt Service	3,611,038	3,505,006	2,982,415	2,517,605	(464,810)	-15.6%
Self-Insurance	924,500	697,793	1,073,700	1,153,500	79,800	7.4%
Total Budget	\$139,574,994	\$126,241,634	\$157,816,890	\$182,361,443	\$24,544,553	15.6%

Sources of Funds

The sources of funds (revenues) for FY 2020-21 are shown in Figure 1. A comparison of the major revenue sources for FY 2020-21, the current year, and prior years is shown in Figure 2.

Figure 1 – Total Funding Sources – FY 2020-21 Proposed Budget

FY 2020-21 Total Budgeted Funding Sources of \$182,361,443

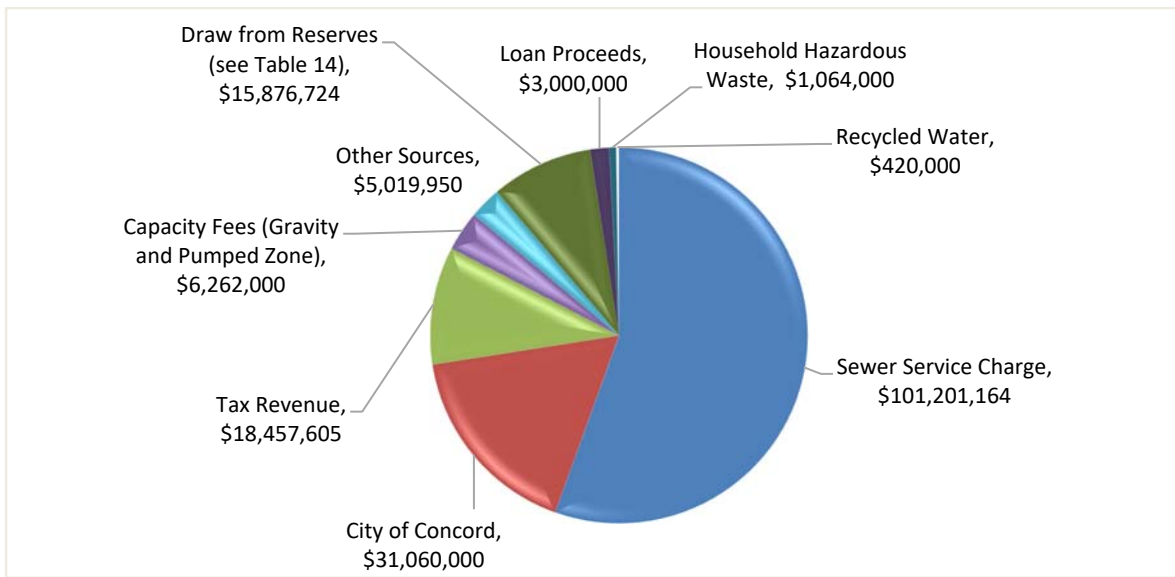
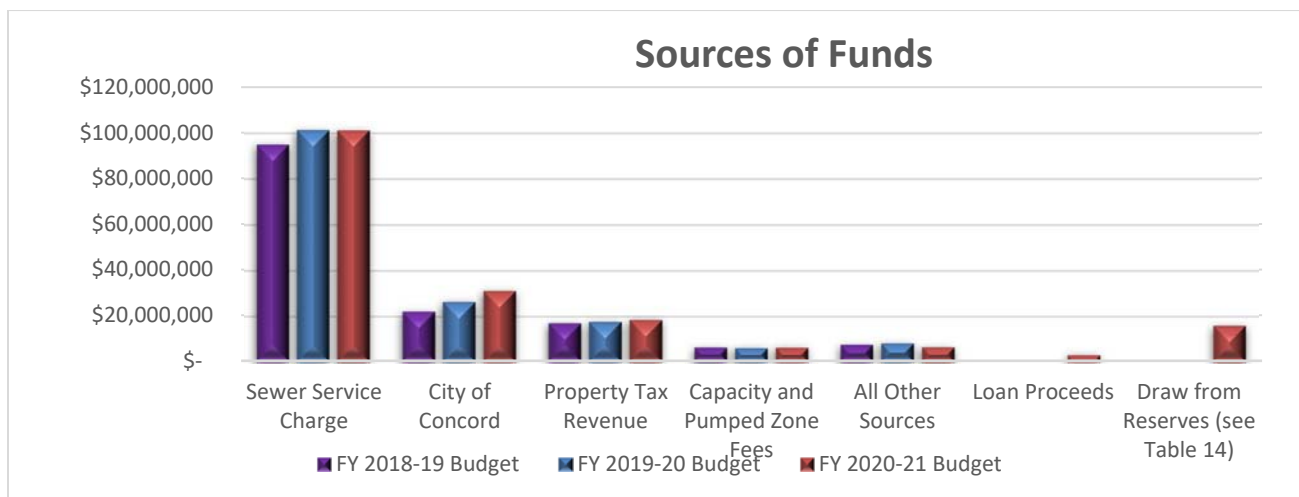


Figure 2 – Total Funding Sources – Three-Year Budget Comparison

FY 2018-19	FY 2019-20	FY 2020-21
\$147,386,287	\$159,166,815	\$182,361,443



The SSC is the largest source of revenue for FY 2020-21 at \$101.2 million, followed by the City of Concord at \$31.1 million, ad valorem property tax at \$18.5 million, and Capacity and Pumped Zone Fees at \$6.3 million. All other sources of revenue are \$6.5 million. Non-revenue sources of funds for FY 2020-21 include use of reserves at \$15.9 million (see Table 14 for detail), and expected borrowing of \$3.0 million. They are described elsewhere in this section.

A brief description of Central San's revenue sources and how they are forecasted follows:

- **Sewer Service Charge (SSC)** – Each customer in Central San's service area pays the SSC, which applies to both residential and non-residential customers. It is assessed annually on the customer's property tax bill, or, for those customers who do not receive a property tax bill, billed directly by Central San, to pay for the collection and treatment of wastewater. The SSC is based on customer class. The basis for the charge is the strength and volume of the wastewater discharged, and customers are assigned to various classes for billing purposes. SSCs vary by customer class and have been developed to ensure that each class pays its proportionate share of operating, maintaining, repairing, and upgrading the sewer collection and treatment system. Periodic cost of service studies reviews and adjust the allocation of costs to individual customer classes based on their impact to the sewer system. For residential customers, separate rates are charged to single family and multi-family residences. Non-residential customers are typically billed based on their water consumption and business type. For budgetary purposes, the forecast for the SSC is based on prior year revenue, estimated growth derived from anticipated residential construction, and predicted changes in non-residential water consumption.
- **City of Concord** – Central San receives revenues from the City of Concord which are calculated and billed in accordance with the terms of a contractual agreement for the treatment of wastewater from both the City of Concord and the City of Clayton. The Cities are responsible for paying their flow-proportional share of the operating and maintenance costs for Central San's treatment plant. The amount of revenue is forecast annually for budgeting purposes by multiplying the City of Concord's estimated flow percentage by the budgeted treatment plant and associated costs. Under the current arrangement, the City of Concord reimburses Central San once a year on a fiscal year basis. Following the close of the fiscal year, the Finance Division submits an invoice to the City of Concord which is generally paid by August/September.
- **Property Tax Revenue** – Central San receives a share of the ad valorem property taxes collected by Contra Costa County on properties within the service area. These taxes are used to pay debt service requirements, and the remaining funds are allocated to the Capital Improvement Program. This revenue is forecast by reviewing historic property tax revenue and adjusting for anticipated changes in property value.
- **Capacity Fees (Gravity and Pumped Zone)**– These fees are collected from new construction and expansion of non-residential facilities which result in an added wastewater burden. The fee is calculated as an equity buy-in. Residential parcels are charged a flat per-unit fee, and non-residential parcels are typically charged based on the business type and building square footage, which represents their anticipated wastewater burden. The amounts due are collected before plans are approved. The budgeted amount is estimated by the Planning & Development Services Division based on trend analysis and anticipated construction activity for the upcoming year. A specific type of capacity fees are **Pumped Zone Fees** for new developments or expansion in areas where Pump Stations are required to move wastewater to the Central San treatment plant pay an additional capacity fee to cover pumping infrastructure costs. These fees are budgeted by

multiplying the incremental Pumped Zone Fee times the number of development units anticipated to be subject to such fees.

- **Household Hazardous Waste (HHW) Reimbursement** – Central San provides a facility where residents and businesses within the service area may dispose of specified hazardous wastes. Additionally, residents from specified cities (Concord, Clayton, San Ramon, and parts of Martinez served by the Mt. View Sanitary District) also have the right to use the facility, and these cities pay a contractually agreed amount for this service. The amounts due are invoiced by Accounting in August for the prior fiscal year. The budgeted amounts are based on projected total costs of the facility, to be shared pro rata by all users within the service area.
- **Recycled Water** – This represents revenue from the sale of recycled water to customers in Central San’s service area who have recycled water meters. The amounts due are invoiced by Accounting bi-monthly based on monthly meter readings. The Planning & Development Services Division forecasts the revenue from recycled water based on projected changes in recycled water consumption. Other internal use of Recycled Water is not included in reported revenues, but a calculated ascribed value of this water based on production costs is shown in the Operating Departments section of this document under the Recycled Water division discussion.
- **All Other Revenue Sources** – This includes the following:
 - **Permit and Inspection Fees** – These are fees for sewer permits, plan review, inspections, and related activities, including environmental compliance fees. The amounts are forecast by the Development Services Supervisor based on anticipated construction activity for the upcoming year.
 - **Lease Rental Income** – This represents rental income from buffer properties (buildings and undeveloped land) owned by Central San and rented to third parties through multi-year agreements. Leases are reviewed by Accounting and Right-of-Way to identify any changes to multi-year lease rates. Budgeted lease revenue is based on the terms of those leases.
 - **Stormwater/Pollution Prevention** – These are fees collected from Contra Costa County and certain cities for performing stormwater inspections as required by Contra Costa County’s National Pollutant Discharge Elimination System permit. These services are provided by Central San’s Environmental Compliance group under contract with the Contra Costa Clean Water Program. Amounts are invoiced by Accounting based on the number of inspections completed. The budgeted amount is based on a targeted number of inspections to be performed during the fiscal year.
 - **Interest Income** – This is based on forecast cash levels multiplied by estimated interest rates over the course of the fiscal year. Given the Federal Reserve’s measures in March 2020, interest income is expected to be below FY 2019-20 levels.
 - **Developer Fees** – These are charges for plan review and inspection of mainline extension projects by developers and other property owners. The amounts are collected by the Permit Counter and are budgeted based on estimates by the Planning & Development Services Division based on trend analysis and anticipated construction activity for the upcoming fiscal year.
 - **Other** – This includes annexation fees, other service charges, and miscellaneous fee revenue. Amounts are collected by various departments depending on the source of revenue. For the

SIF, other revenue includes an allocation from the O&M fund in an amount necessary to replenish the SIF to the targeted level after projected expenses in the budget year

- **Use of Reserves** – Use of, or contribution to, reserves is determined by sub-fund. A contribution to reserves results from budget year revenues exceeding budget year expenditures. A draw from reserves results if the reverse is true. Table 14 shows the reserve status by sub-fund and overall status of the Central San Enterprise Fund.
- **Loan Proceeds** – Use of anticipated borrowing proceeds to fund the Capital Improvement Budget, of \$3.0 million, for FY 2020-21 is shown in Table 13.

Tables 2 and 2a below show the overall funding sources of Central San and how those funding sources are applied to each sub-fund for FY 2020-21 and FY 2019-20.

Table 2 – Allocation of Funds – FY 2020-21 Budget

Funding Sources FY 2020-21 Budget	Fund 10	Fund 20	Fund 30	Fund 40	Total
	O&M	Capital	Self-Insurance	Debt Service	FY 2020-21 Budget
Sewer Service Charge	\$44,527,762	\$56,673,402	\$-	\$-	\$101,201,164
City of Concord	15,760,000	15,300,000	-	-	31,060,000
Tax Revenue	-	15,940,000	-	2,517,605	18,457,605
Capacity Fees-Gravity	-	6,000,000	-	-	6,000,000
Capacity Fees- Pumped Zone	-	262,000	-	-	262,000
HHW Reimbursement	1,064,000	-	-	-	1,064,000
Recycled Water	420,000	-	-	-	420,000
Other Revenue Sources Including:					
Permit & Inspection Fees	1,952,400	-	-	-	1,952,400
Lease Rental Income	719,000	-	-	-	719,000
Stormwater/Pollution Prevention	390,000	-	-	-	390,000
Interest Income	190,000	293,500	112,050	-	595,550
Developer Fees	-	484,000	-	-	484,000
Other	409,000	-	470,000	-	879,000
Total Other Revenue Sources	\$3,660,400	\$777,500	\$582,050	\$-	\$5,019,950
Subtotal Funding Sources prior to Reserve Draws and Loan Proceeds	\$65,432,162	\$94,952,902	\$582,050	\$2,517,605	\$163,484,719
Use of (or Contribution to) Reserves (See Table 14)	\$25,234,176	\$(9,982,902)	\$571,450	\$-	\$15,876,724
State Revolving Fund Loan Proceeds	-	3,000,000	-	-	\$3,000,000
Total Funding Sources	\$90,666,338	\$88,024,000	\$1,153,500	\$2,517,605	\$182,361,443

* Fund numbers correspond to the fund designations in the new chart of accounts to be implemented July 1, 2020.

Table 2a – Allocation of Funds – FY 2019-20 Budget

Funding Sources FY 2019-20 Budget	Fund 10	Fund 20	Fund 30	Fund 40	Total
	O&M	Capital	Self-Insurance	Debt Service	Proposed FY 2019-20 Budget
Sewer Service Charge	\$69,090,870	\$32,219,130	\$-	\$-	\$101,310,000
City of Concord	14,570,000	11,630,000	-	-	26,200,000
Tax Revenue	-	14,520,000	-	2,982,415	17,502,415
Capacity Fees-Gravity	-	5,750,000	-	-	5,750,000
Capacity Fees- Pumped Zone	-	291,000	-	-	291,000
HHW Reimbursement	968,000	-	-	-	968,000
Recycled Water	420,000	-	-	-	420,000
Other Revenue Sources Including:					
Permit & Inspection Fees	1,870,000	-	-	-	1,870,000
Lease Rental Income	703,500	-	-	-	703,500
Stormwater/Pollution Prevention	370,000	-	-	-	370,000
Interest Income	1,231,000	674,000	179,900	-	1,803,900
Developer Fees	-	514,000	-	-	514,000
Other	337,000	-	846,000	-	1,183,000
Total Other Revenue Sources	\$4,230,500	\$1,188,000	\$1,025,900	\$-	\$6,444,400
Total Funding Sources	\$89,560,370	\$65,598,130	\$1,025,900	\$2,982,415	\$159,166,815

* Fund numbers correspond to the fund designations in the new chart of accounts to be implemented July 1, 2020

Sewer Service Charge

Tables 3 and 4 show the SSC for FY 2020-21 compared to the FY 2019-20 rates for residential and non-residential customers. These rates were approved by the Board after a public hearing on April 18, 2019, through the adoption of a four-year rate ordinance. Since then, two financial workshops have been held (on November 4, 2019, and March 12, 2020) to discuss Central San’s financial outlook and to receive preliminary Board direction on key financial planning matters. As committed to in the adoption of the four-year rate ordinance, the Board on April 16, 2020, deliberated on whether to adjust the previously adopted rates for FY 2020-21, and did not adopt changes. However, on May 7, 2020, the Board revisited the matter given the severity of the economic downturn that appeared to be unfolding and voted to not collect the incremental rate increase for Fiscal Year 2020-21, while leaving the entire rate structure in place adopted by Ordinance No. 304, effectively creating a rate increase holiday for FY 2020-21. This change, along with the adoption of a credit for K-12 schools reflective of the reduced number of school days in 2020, is summarized in Figure 2a.

Figure 2a – Customer Relief Program

Customer Relief Program



Central San understands that these are tough times for everyone, and we want to do our part to help alleviate a small bit of the hardships we all are facing. To that end, our Board of Directors voted to create the Customer Relief Program to provide savings on sewer service charges for our customers. Be assured that we continue working 24/7 to provide the essential wastewater collection and cleaning services that our customers rely upon.



RESIDENTIAL

To assist our residential customers, we are waiving the scheduled rate increase (approx. 5%) for one year, resulting in about \$30 in savings for every household.

During Contra Costa County's Shelter-in-Place Order, most area construction, including our own critical infrastructure work and associated planning and operations efforts, was slowed or halted for several weeks. Less construction has meant lower costs for Central San, and we are passing these savings back to you, our customers. While \$30 is not a big number, we know every dollar counts right now, and this is something that we can do for our customers at this time. You do not need to request the credit; the savings will be applied automatically on your upcoming 2020-21 property tax bill.



SCHOOLS

We are refunding sewer service charges to reflect a drop in water use for the time period when schools were closed, as well as waiving the scheduled rate increase (approx. 5%) for one year.

In response to COVID-19, most of our local schools were closed for part of the school year. The sewer service charges for schools are calculated per pupil per day. We are refunding the sewer service charge for the period when schools were closed and not using our sewer services. Central San will return approximately \$180,000 to schools in our service area. In addition, we are waiving the scheduled rate increase, resulting in a savings of approximately 5% on the remaining charges. Schools do not need to request a refund or credit; both savings will be applied automatically to your bill.



COMMERCIAL

We are waiving the scheduled rate increase (approx. 5%) for one year for all commercial and other non-residential customers.

Many businesses in our community are facing challenges due to COVID-19 and the Shelter-in-Place Order. To assist our local businesses, we are waiving the scheduled rate increase for all our commercial customers this year. This will result in a savings of approximately 5% of your regular sewer service charges, which are based on the previous year's water usage. Commercial customers do not need to request the credit; these savings will be applied automatically to your bill.

For any questions you may have: Call 925-228-9500 or go to centralsan.org



Customer Group	Approved for July 1, 2020	Increase Not Collected	To be Collected July 1, 2020
Single Family Homes	\$629.00	\$31.00	\$598.00
Apartments, Condominiums, Duplexes, Second Living Units, Mobile Homes	\$596.00	\$30.00	\$566.00
Non-residential (per Hundred Cubic Feet or HCF)			
LOW Standard Commercial and other groups not listed below	\$6.56	\$0.33	\$6.23
MEDIUM-LOW Delis, Yogurt and Ice Cream Shops, Coffee Shops, Bars, shared water meter with less than 50% food service	\$8.05	\$0.40	\$7.65
MEDIUM Shared water meter with less than 50% food service by flow	\$10.09	\$0.50	\$9.59
MEDIUM-HIGH Restaurants, Supermarkets	\$11.26	\$0.56	\$10.70
HIGH Restaurants with Grinders or Emulsifiers, Bakeries, Mortuaries	\$14.92	\$0.74	\$14.18
Minimum Annual Charge	\$596.00	\$30.00	\$566.00

Table 3 – Approved Annual SSC-Residential

Customer Type	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*
Single Family Residence	\$503	\$530	\$567	\$598	\$629
Other Residences – Apartments, Condominiums, Duplexes, Second Living Units, Mobile Homes	\$487	\$513	\$549	\$566	\$596
Effective Date	07/01/16	07/01/17	07/01/18	7/01/19	7/01/20

* On May 7, 2020 the Board voted to not collect the incremental rate increase for Fiscal Year 2020-21, while leaving the entire rate structure in place adopted by Ordinance No. 304, effectively creating a rate increase holiday for FY 2020-21.

In April 2019, the Board approved the consolidation of most of Central San’s prior non-residential customer classes into five classes (shown below) based on combined strength limits, defined as the sum of biochemical oxygen demand and total suspended solids. These customer classes are now “Low,” “Medium-Low,” “Medium,” “Medium-High,” and “High” and fairly charge those customers for the proportionate cost of collecting and treating their wastewater, based on an updated cost of service study competed in FY 2018-19. The change was effective July 1, 2019.

Table 4 – Approved Annual SSC-Non-Residential

User Group	Description	Combined Strength Limits	FY 2019-20	FY 2020-21*
Low	Non-residential uses not listed below (no food service)	Up to 350 mg/l	\$6.23	\$6.56
Medium-Low	Food service without Type 1 hood, shared water meter with less than 50% food service	351 to 700 mg/l	\$6.72	\$8.05
Medium	Shared water meter with 50% or greater food service	701 to 1,000 mg/l	\$9.59	\$10.09
Medium-High	Food service with Type 1 hood, supermarkets, hotels and motels with food service, shared water meters with bakery	1,001 to 1,300 mg/l	\$10.70	\$11.26
High	Mortuaries, bakeries, restaurants with grinders or emulsifiers, breweries with Best Management Practices permit	Greater than 1,300 mg/l	\$14.18	\$14.92
Minimum Annual Charge			\$566.00	\$596.00

Customer Type	FY 2019-20	FY 2020-21*
Schools		
Schools – Daycare, Preschool, University (per hundred cubic feet)	\$6.23	\$6.56
Schools – Elementary (per student)	\$7.43	\$7.82
Schools – Intermediate and High School (per student)	\$14.68	\$15.45
Industrial Permit (including food processing)		
Wastewater Flow (per hundred cubic feet)	\$4.82	\$5.08
Biological Oxygen Demand (BOD) (per 1,000 pounds)	\$1,275.00	\$1,342.00
Total Suspended Solids (TSS) (per 1,000 pounds)	\$666.00	\$701.00
Fixed	\$93.69	\$98.61
Special Discharge Permits and Contractual Agreements	Determined Individually	Determined Individually

* On May 7, 2020 the Board voted to not collect the incremental rate increase for Fiscal Year 2020-21, while leaving the entire rate structure in place adopted by Ordinance No. 304, effectively creating a rate increase holiday for FY 2020-21.

Below is a diagram of the five customer classes showing the combined strength limits and the representative businesses that are contained within each category:

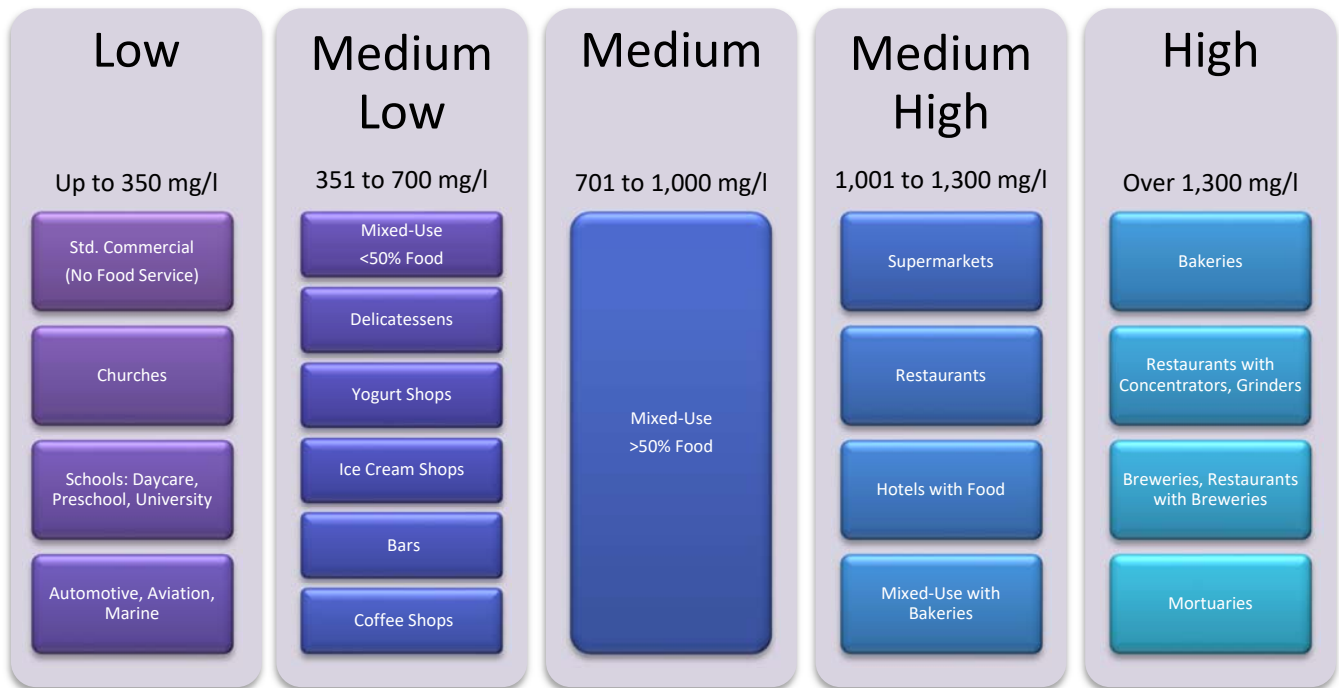


Table 5 indicates the total collected SSC and how such funds are allocated to the O&M and Capital Budgets. The allocation of the SSC to Capital increases from 31.8% in FY 2019-20 to 56.0% in FY 2020-21. All the revenue generated by the FY 2020-21 SSC rate increases will be directed to the CIP and will be used to fund capital spending in FY 2020-21 and subsequent years.

Table 5 – Allocation of SSC

	FY 2018-19 Budget	%	FY 2018-19 Actual	%	FY 2019-20 Budget	%	FY 2020-21 Budget	%	Change
To O&M	\$67,073,732	70.6%	\$68,656,908	70.6%	\$69,090,870	68.2%	\$44,527,762	44.0%	(\$24,563,108)
To Capital	\$27,926,268	29.4%	\$28,588,625	29.4%	\$32,219,130	31.8%	\$56,673,402	56.0%	\$24,454,272
Total Collected	\$95,000,000	100.0%	\$97,245,533	100%	\$101,310,000	100.0%	\$101,201,164	100.0%	(\$108,836)

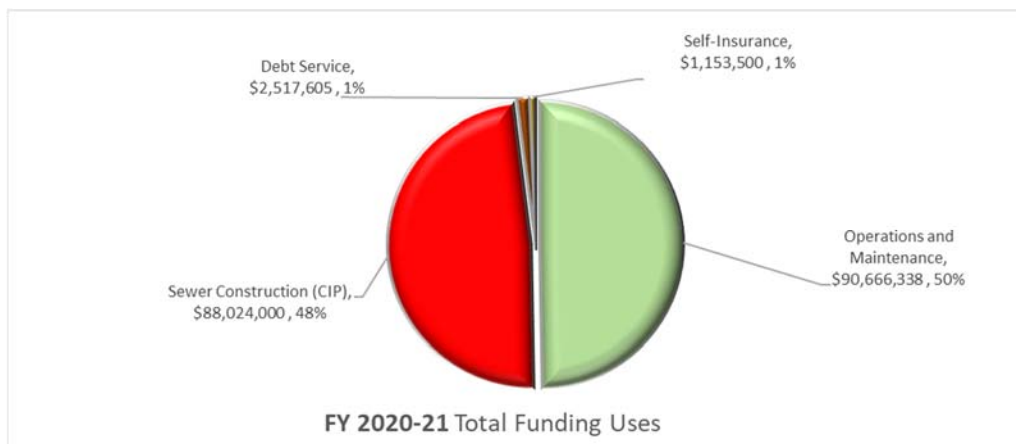
The allocation of SSC between O&M and capital fluctuates each year, and is based on spending levels, other revenue sources, and reserve balances in each fund. The significant decrease in the proportion of total SSC being allocated to the O&M fund is attributable to a projected \$26.6 million in available O&M working capital reserves above the policy required level as of June 30, 2020. This amount is attributable to several factors, including lower than anticipated spending and higher than anticipated revenues in FY 2019-20, and a revision in the reserve definition. In November 2019, the Board of Directors approved an amendment to the District’s Fiscal Reserves Policy, which in addition to other changes, clarified the definition of “working capital” to include other current assets and liabilities, in addition to unrestricted cash and investments, pursuant to best practice guidance published by the GFOA. The largest component of net increase in available working capital reserves of the O&M fund is the inclusion of current accounts receivable of \$15 million, which includes the significant receivable due from the City of Concord for treatment services on the books at the close of each fiscal year, but which relates to the prior year. As a one-time transitional issue, this change in reserve definition has limited impacts on long-term financial planning and rate setting as the inclusion of this current receivable asset largely addresses a year-to-year payment timing issue. Refer to Table 14 for additional information on Reserves.

Uses of Funds

The uses of funds (expenditures and contributions to reserves) for FY 2020-21 are shown in Figure 3. Two expenditure categories, O&M and Sewer Construction, account for 98% of the total uses. These funds will be applied to the Sewer Construction Fund (Capital Improvement Program) to help offset the need for related to the increased capital spending planned for FY 2020-21 and future years.

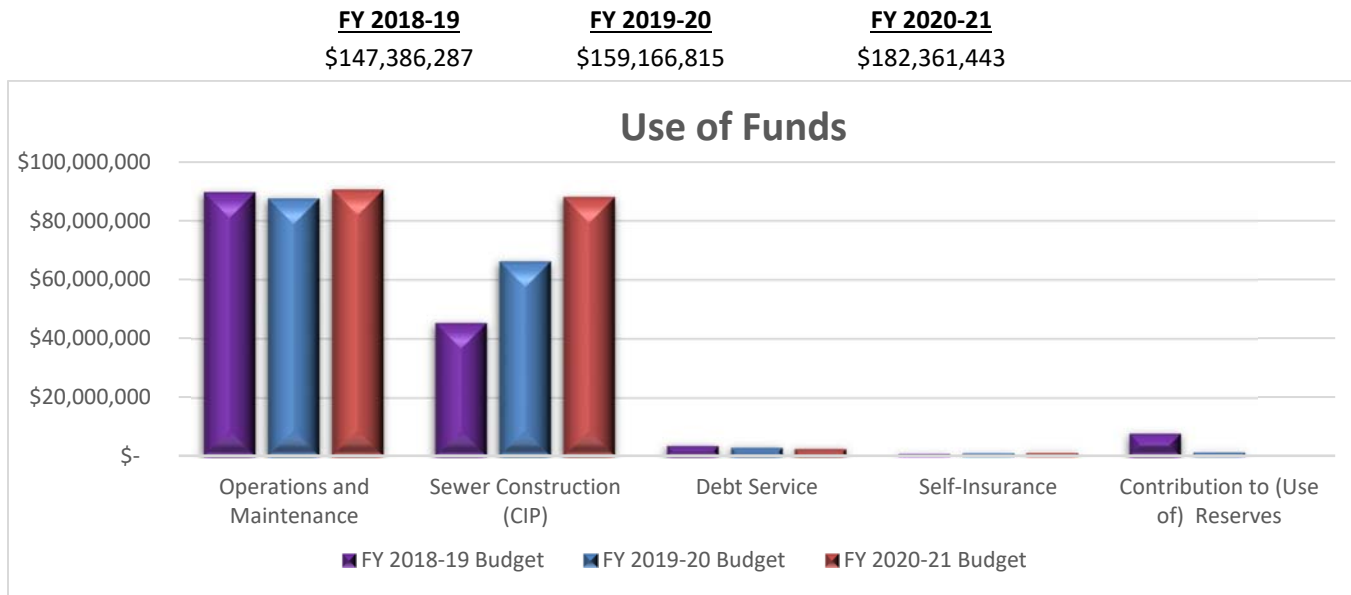
Figure 3 – Total Funding Uses – FY 2020-21 Budget

Total FY 2020-21 Budgeted Expenditures and Contributions of Reserves: \$182,361,443



The uses of funds for three budgeted years are shown in Figure 4.

Figure 4 – Where the Money Goes



Operations & Maintenance Budget Overview

Excluding the draw from reserves, total O&M revenue for FY 2020-21 is projected to be \$66.7 million, compared to the FY 2019-20 budget amount of \$86.9 million, as shown in Table 6.

Table 6 – FY 2020-21 Budgeted O&M Revenues

Account Description	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	% Variance
O&M Revenue							
Sewer Service Charge	\$67,073,732	\$68,656,908	\$69,090,870	\$70,270,344	\$44,527,762	(\$24,563,108)	-35.6%
City of Concord	14,800,000	15,205,292	14,570,000	15,460,000	15,760,000	1,190,000	8.2%
Permit & Inspection Fees	1,783,000	2,278,394	1,870,000	2,031,000	1,952,400	82,400	4.4%
Lease Rental Income	627,000	689,337	703,500	713,000	719,000	15,500	2.2%
HHW Reimbursement	929,000	914,195	968,000	953,000	1,064,000	96,000	9.9%
Stormwater / Pollution Prevention	360,000	434,964	370,000	400,000	390,000	20,000	5.4%
Interest Income	600,000	1,279,133	1,231,000	555,000	190,000	(1,041,000)	-84.6%
Recycled Water	420,000	430,045	420,000	488,000	420,000	-	0.0%
Other	333,000	488,836	337,000	390,500	409,000	72,000	21.4%
Total Revenue	\$86,925,732	\$90,377,103	\$89,560,370	\$91,260,844	\$65,432,162	(\$24,128,208)	-26.9%

O&M revenue decreases by \$24.1 million, or 26.9%, due primarily to the following:

- In November 2019, the Board approved a revised Fiscal Reserve Policy, which amongst other matters clarified the definition and calculation of “minimum working capital” to include other

elements of the balance sheet beyond unrestricted cash and investments in line with GFOA recommended best practices. Pursuant to this revision, O&M reserves are projected to exceed the minimum working capital reserve requirement as of June 30, 2020, providing for a draw-down of excess reserve funds of \$25.2 million while still maintaining the projected minimum working capital reserve balance of five-twelfths (5/12) the following year's budget for FY 2020-21. This has the positive outcome of being able to allocate a larger proportion of FY 2020-21 SSC revenues to the Sewer Construction Fund for much needed long-term capital investment purposes.

- System-wide average SSC rates were to increase by 5.25% effective July 1, 2020. However, this adjustment has been deferred until July 1, 2021. The O&M allocation of the SSC decreases from 68.2% in FY 2019-20 to 44.0% in FY 2020-21, with the amount allocated to capital projects increasing from 31.8% to 56.0%.
- The City of Concord is allocated a share proportional to their flow to the treatment plant and environmental and regulatory compliance expenses and is billed for administrative overhead and a finance charge. City of Concord revenue toward O&M costs is expected to be \$15.8 million in FY 2020-21, a 8.2% increase compared to \$14.6 million in FY 2019-20. This increase is attributable to increased O&M spending for wastewater treatment and other costs eligible for reimbursement.
- Decrease in forecasted interest income due to Federal Reserve rate actions in early 2020.

As shown in Table 7, total O&M expenses are projected to be \$90.7 million in FY 2020-21, an increase of \$3.1 million from the \$87.6 million budget in FY 2019-20. This figure includes the costs related to all Central San services including wastewater collection and treatment, HHW collection, and recycled water production and distribution. Central San has maintained a relatively flat O&M budget for six years in a row (FY 2014-15 to FY 2019-20), with only a modest increase above \$90 million for FY 2020-21. The budget continues to provide funding for strategic initiatives and key activities. Table 7 and Figure 5 show the FY 2020-21 O&M Budget by expense category. Significant savings from a transition to CalPERS health benefits has enabled this reduction in O&M spending, despite inflationary pressures in other expense categories.

O&M salaries and benefits (labeled categories A and B in the table) comprise 56.3% of the overall O&M Budget. Contributions toward unfunded liabilities (category C) are another 17.5%. Total labor related costs including Salary, benefits, and Unfunded Actuarial Accrued Liability (UAAL) and additional contributions are 73.8% of the O&M Budget. All other expenses (category D) comprise 26.2%.

Table 7 – FY 2020-21 Budgeted O&M Expenditures and Contribution to / (Draw from) Reserve

Account Description	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	% Variance	FY 2020-21 % of Total
A. Salaries & Wages								
Salaries & Wages	\$36,075,687	\$35,830,512	\$38,565,093	\$36,932,653	\$39,543,191	\$978,098	2.5%	43.6%
B. Benefits								
Benefits & Capital Overhead Credit	\$13,115,332	\$13,227,221	\$11,982,565	\$11,634,912	\$11,545,173	(\$437,392)	-3.7%	12.7%

Salary & Benefits (Active Employees)	\$49,191,019	\$49,057,733	\$50,547,658	\$48,567,565	\$51,088,364	\$540,706	1.1%	56.3%
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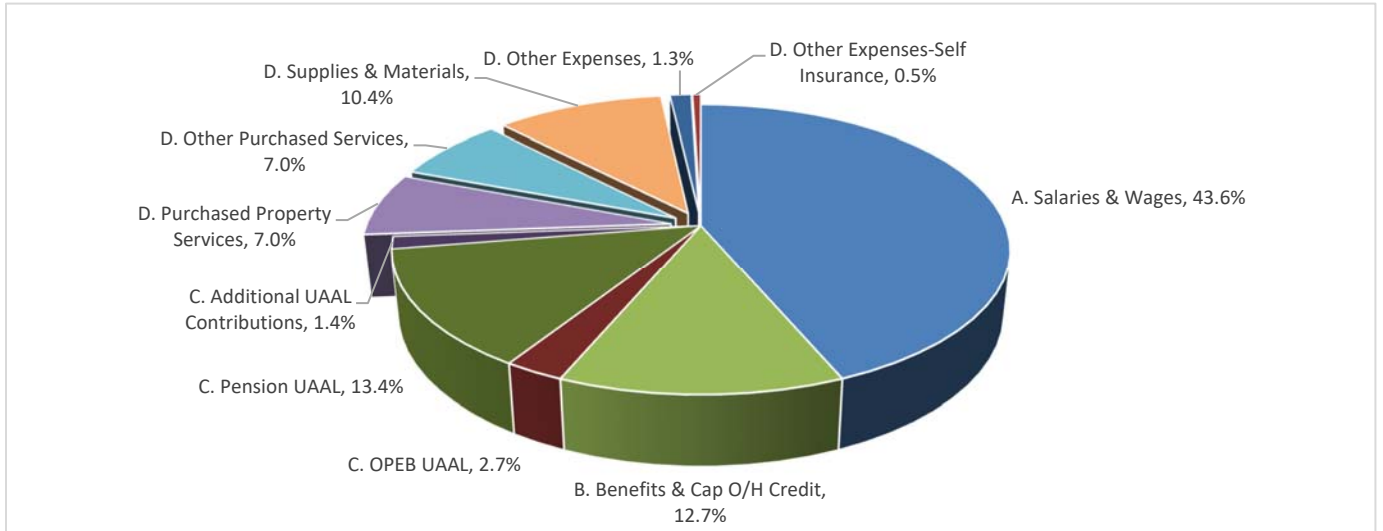
C. OPEB and Pension UAAL and Additional Contributions								
OPEB UAAL	\$5,100,284	\$4,934,255	\$2,346,076	\$2,314,000	\$2,451,000	\$104,924	4.5%	2.7%
Retirement UAAL / Unfunded Liabilities	\$10,720,478	\$11,206,313	\$11,186,841	\$11,254,802	\$12,126,016	\$939,175	8.4%	13.4%
Additional UAAL Contributions*	\$2,500,000	\$2,500,000	\$1,250,000	\$1,250,000	\$1,250,000	\$0	0.0%	1.4%
Total UAAL and Additional Contributions	\$18,320,762	\$18,640,568	\$14,782,917	\$14,818,802	\$15,827,016	\$1,044,099	7.1%	17.5%

Total Labor Related Costs including UAAL and Additional Contributions A+B+C	\$67,511,781	\$67,698,301	\$65,330,575	\$63,386,367	\$66,915,380	\$1,584,805	2.4%	73.8%
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D. Other O&M Expenses								
Purchased Property Services	\$5,415,371	\$4,787,875	\$4,483,744	\$4,566,303	\$6,334,577	\$1,850,833	41.3%	7.0%
Other Purchased Services	\$5,670,507	\$4,415,486	\$6,418,232	\$5,310,202	\$6,305,477	(\$112,755)	-1.8%	7.0%
Supplies & Materials	\$9,095,174	\$9,335,587	\$9,322,677	\$9,156,583	\$9,466,300	\$143,623	1.5%	10.4%
Other Expenses	\$1,248,123	\$826,032	\$1,204,547	\$994,390	\$1,194,604	(\$9,943)	-0.8%	1.3%
Other Expenses-Self Insurance	\$779,500	\$779,505	\$825,000	\$825,000	\$450,000	(\$375,000)	-45.5%	0.5%
**Total Other O&M	\$22,208,675	\$20,144,485	\$22,254,200	\$20,852,478	\$23,750,958	\$1,496,758	6.7%	26.2%
Total Expenditures	\$89,720,456	\$87,842,786	\$87,584,775	\$84,238,845	\$90,666,338	\$3,081,563	3.5%	100.0%
Contribution to / (Draw From) Reserve	(\$2,794,724)	\$2,534,317	\$1,975,595	\$7,021,999	(\$25,234,176)	(\$27,209,771)	-1377%	

* FY 2018-19 actual column includes contributions made to section 115 secondary pension trust (\$2.5 million) for improved transparency in this table, despite these being contributions excluded for financial reporting purposes in the CAFR pursuant to GAAP in that fiscal year.

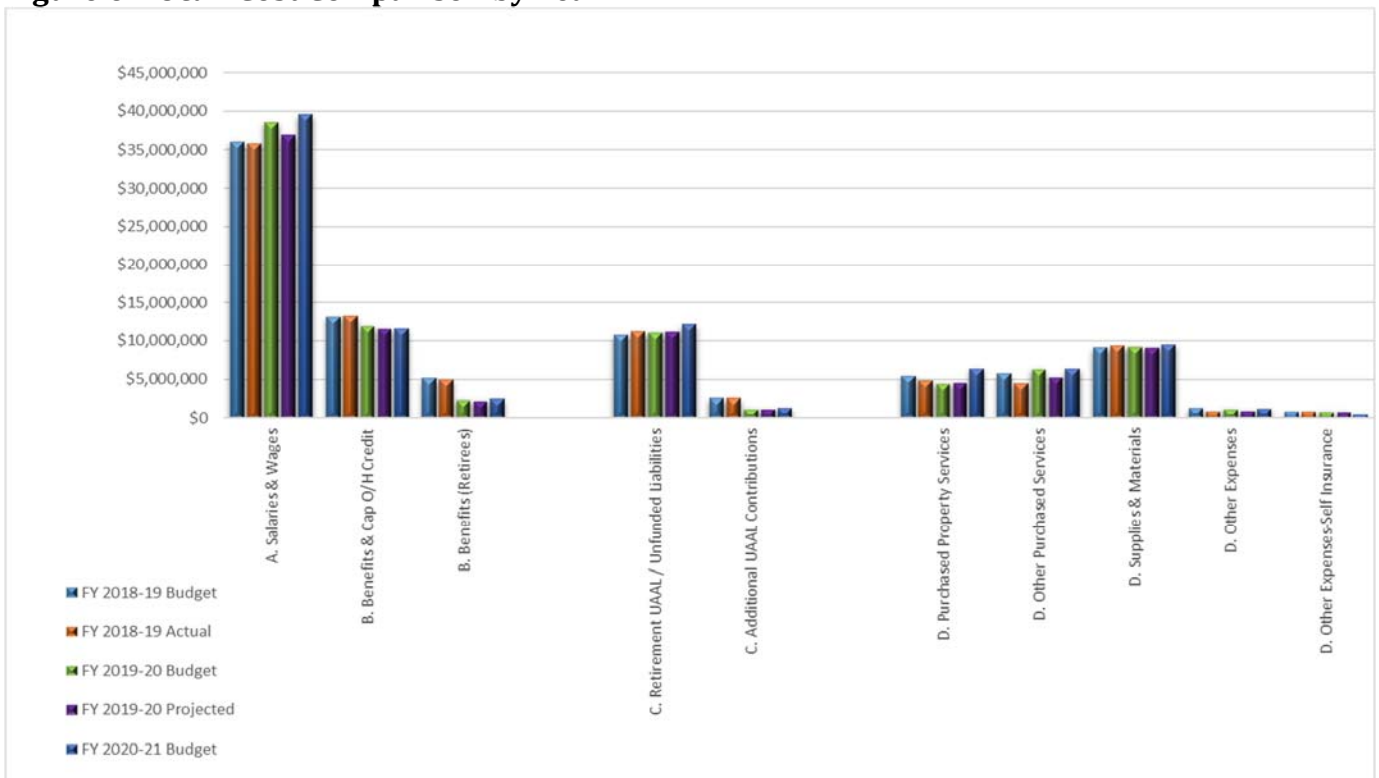
Figure 5 – FY 2020-21 Budgeted O&M Expenditures



Variations in the Operations & Maintenance Budget

O&M costs overall increase from FY 2019-20 to FY 2020-21 by \$3.1 million or 3.5%. Salaries increase by \$1.0 million, and UAAL costs increase by \$0.9 million, which are offset in part by benefit and retiree cost decreases of \$0.3 million. These changes are discussed below and illustrated in Figure 6.

Figure 6 – O&M Cost Comparison by Year



The lettered expense categories in the chart correspond to the descriptions below.

A. O&M Salaries & Wages

Central San’s budgeted salaries are \$39.5 million in FY 2020-21, compared to \$38.6 million in FY 2019-20, representing an increase of \$0.9 million, or 2.5%. The increase reflects the 2.9% salary adjustment effective April 2020, and assumed salary adjustment effective April 2021 of 3.75% (the actual adjustment will be based on the Bay Area Consumer Price Index change from February 2020 to February 2021), and step increases for newer employees. The vacancy factor of 2% is unchanged from the prior year.

B. Benefits and Capitalized Overhead

Total benefits and capitalized labor decreased from \$12.0 million in FY 2019-20 to \$11.5 million in FY 2020-21, which are discussed as follows:

Table 7a – Benefits and Capitalized Overhead Detail

	FY 2019-20 Budget	FY 2020-21 Budget	Budget to Budget Variance	% Change
Benefits for Active Employees	\$16,430,934	\$16,628,569	\$197,635	1.2%
Capitalized Administrative Overhead	(\$4,448,369)	(\$5,083,396)	(\$635,027)	14.3%
Total, Benefits for Active Employees net of Capitalized Administrative Overhead	\$11,982,565	\$11,545,173	(\$437,392)	3.7%

Benefits for active employees comprise healthcare costs, workers’ compensation costs, payroll taxes, normal costs for pension and OPEB, and benefit vacancy factor. These costs were \$16.4 million in the FY 2019-20 budget and rise to \$16.6 million in the FY 2020-21 budget, which represents a 1.2% increase.

- Previously, compensated absence payouts were included in this grouping, but have now been moved to O&M salaries and wages.
- The transition to CalPERS for medical benefits for active and retired employees was completed effective July 1, 2019, resulting in savings of approximately \$5.5 million annually.

Changes in benefit cost assumptions are listed below. Given the timing of the budget process, assumptions were made on program costs pending the availability of actual announced changes by the providers. These assumed cost changes for budget purposes, and the actual cost changes subsequently announced by the carriers, are discussed in the bullet points below.

- **CalPERS Medical** – No rate increase for the six months starting July 2020 and a 7.25% rate increase is assumed for the six months starting January 2021.
- **CCCERA** – The retirement normal cost contribution rate is decreasing 6.7% for legacy employees and increasing 2.1% for Public Employees’ Pension Reform Act employees. The overall contribution rate decreases slightly from FY 2019-20 to FY 2020-21. In FY 2020-21, the required total contribution percentage per the CCCERA 12/31/2018 valuation report is 49.86%, which is 19.2% for normal costs and 30.66% for UAAL. In FY 2019-20, the required total contribution percentage per the 12/31/2017 CCCERA actuarial report was 49.57%, which was

20.57% for normal costs and 29% for UAAL. These overall contribution rate changes include numerous factors based on actuarial assumptions and investment performance. As to the factors driving changes in normal costs (including legacy and PEPRA rates), this includes changes in retirement rates, demographic changes, and various other actuarial assumptions.

- **Delta Dental** – No rate increase for the six months starting July 2020 and a 3.75% rate increase is assumed for the six months starting January 2021.
- **Vision** – No rate increase for the six months starting July 2020 and a 3% rate increase is assumed for the six months starting January 2021.
- **Long-Term Disability** – No rate increase for the six months starting July 2020 and a 3% rate increase is assumed for the six months starting January 2021.
- **Employee Assistance Program** – No rate increase for the six months starting July 2020 and a 3% rate increase is assumed for the six months starting January 2021.
- **Workers' Compensation** – A 10% rate increase was assumed for budget purposes. The actual rates have not been finalized. No adjustments were made to the Experience Modification Factor that adjusts the gross rate of the collective pool to the member agency.
- **Life Insurance** – No rate increase for the six months starting July 2020 and a 3% rate increase is assumed for the six months starting January 2021.

The Capitalized Administrative Overhead rate, a credit given for capital work to the O&M Budget for non-work hours and overhead, changes from \$4.4 million to \$5.1 million in FY 2020-21, representing an increasing effort on internal labor allocated to the Capital Budget.

For improved financial planning and transparency purposes, the total budgeted cost for retiree health, dental, life and vision premiums is now split between its normal cost and UAAL components of the actuarially determined contribution (ADC) calculated by Central San's independent OPEB actuary. In FY 2020-21, the total budgeted cost of retiree health premiums is \$4.1 million, reflecting a modest increase (2.2%) from the \$4.0 million budgeted in the prior year. The normal cost component of OPEB, which is considered an active employee cost (not UAAL), decreased from \$1.7 million in FY 2019-20 to \$1.6 million in FY 2020-21. See Table 4 in Supplemental Financial Information.

C. Unfunded Liabilities

Central San has agreements with its employees to provide pension and post-employment healthcare benefits. Central San prefunds the pension/benefits in accordance with actuarial calculations that make certain economic and demographic assumptions. The goal is to grow these prefunded amounts into enough assets to cover the liabilities arising from the promised pension/benefits. An unfunded liability may occur when those economic/demographic assumptions are not met, those assumptions are changed, and/or the level of pension/benefits is adjusted.

The UAAL cost component of OPEB increased from \$2.3 million in FY 2019-20 to \$2.45 million in FY 2020-21.

The pension unfunded liability expense to be paid to CCCERA is \$12.1 million in FY 2020-21, which, compared to the budget of \$11.2 million in FY 2019-20, is an increase of \$0.94 million, or 8.4%. The UAAL payment does not yet reflect any impact on pension assets that the market downturn of March 2020 may cause. If persisting through the December 2020 valuation, UAAL payments could be impacted in FY 2022-23.

The budget also includes \$1.25 million for additional contributions toward either pension or OPEB obligations, to be determined by the Board during the fiscal year. This is a continuation of the \$1.25 million budgeted in FY 2019-20. To the extent that budget savings are available with the completion of both FY 2019-20 and FY 2020-21, the Board may choose to direct part of the savings toward additional unfunded liabilities funding. However, the amount of the FY 2019-20 budget variance as shown in the projection in Tables 6 and 7 have already been accounted for in the reserve calculation (Table 14); so for additional funds to be available, the favorable variance would need to exceed these levels.

D. All Other O&M Expenses

The remaining O&M non-labor expenses increase from \$22.3 million in FY 2019-20 to \$23.8 million in FY 2020-21, an increase of 6.7%. Additional information is included in the individual division budgets. The areas of most significant change include the following:

- **Purchased Property Services** – This expense category is reporting an increase of \$1,850,833, or 41.3%, largely resulting from increases in repairs & maintenance and security services. Increases in repairs & maintenance were largely attributable to new support and licensing costs for the new Oracle ERP system expected to “go-live” in July 2020, as well as security services being reclassified from the "Other Purchased Services" expense category pursuant to the new ERP's revised chart of accounts. Finally, greatly expanded on-site security measures will be necessary to accommodate the significant increase in non-employee foot traffic on the treatment plant premises in conjunction with large scale treatment plant improvement projects planned next year.
- **Other Purchased Services** – This expense decreased by \$112,755, or 1.8%, due to costs for professional and technical services remaining steady overall with the increase in costs expected from the 2020 election largely being offset by reclassifying security services under the “Purchased Property Services” category pursuant to the new chart of accounts.
- **Supplies & Materials** – This expense increased marginally by \$143,623, or 1.5%. Despite increases in general supplies and utilities & fuel costs, these increases were largely offset by savings realized in chemicals costs through the elimination of sodium hydroxide in the sewage treatment process.
- **Other Expenses (including self-insurance)** – This expense decreased by \$384,943, or 19.0%, reflecting a primarily caused by a decreased allocation from the O&M fund to cover anticipated estimated loss payments, legal services, and insurance premiums.
- **Technical Training, Conferences, & Meetings** – These costs are an element of the Other Expense category and are summarized in Table 8 below. They are reported separately in the Operating Departments divisional section. The increase of \$32,474, or 7%, reflects increased technical training for both new hires and succession planning efforts with existing staff. The amounts now include tuition reimbursement and professional expense reimbursements, and prior year amounts have been restated to reflect that.

Table 8 – Technical Training, Conferences, & Meetings *

	FY 2018-19 Budget	FY 2019-20 Budget	FY 2020-21 Budget	Variance from FY 2019-20	% Variance
Board of Directors	\$45,000	\$40,000	\$40,000	\$-	-%
Administration Department	151,650	163,200	169,000	5,800	4%
Engineering Department	141,625	152,725	159,350	6,625	4%
Operations Department	117,776	126,676	146,725	20,049	16%
Total	\$456,051	\$482,601	\$515,075	\$32,474	7%

* Includes tuition reimbursement and professional expense reimbursements

Operations & Maintenance Budget by Operating Department

Table 9 and Figure 7 provide a summary of the operating budgets by department. Further details are included in the Operating Departments Section.

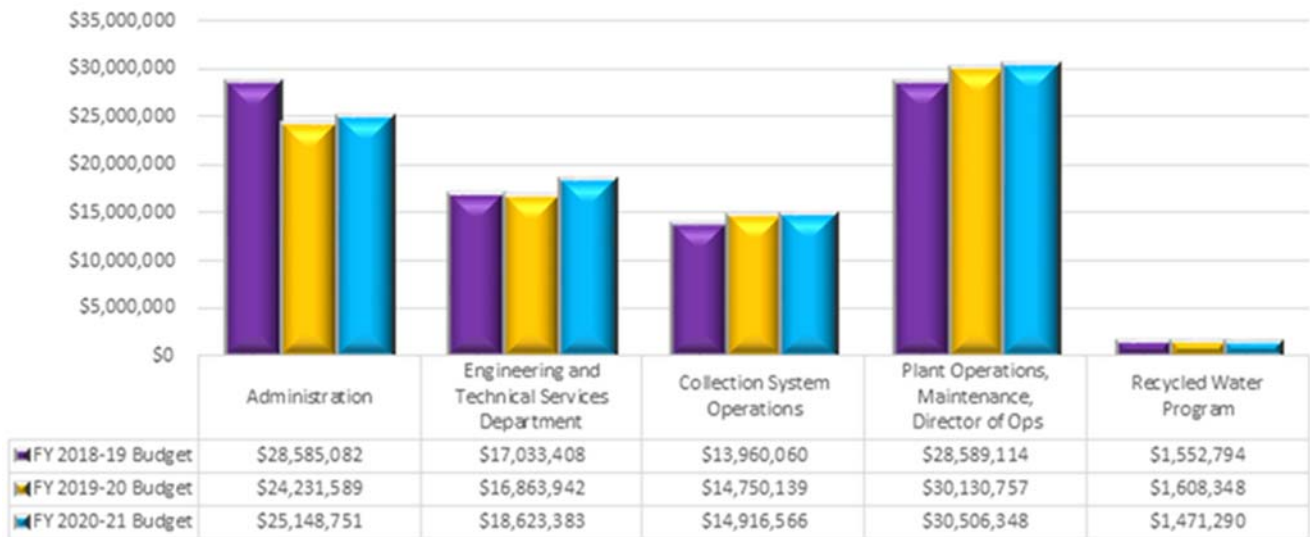
Table 9 – O&M Budget by Department

Account Description	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	% Variance
Administration							
Office of the General Manager	\$1,270,856	\$1,256,560	\$1,346,519	\$1,277,219	\$1,501,579	\$155,060	12%
Office of the Secretary of the District	857,684	848,097	904,112	1,063,449	998,779	94,667	10%
Board of Directors	535,494	489,493	255,650	280,100	564,029	308,379	121%
Office of the Director of Finance & Administration	697,227	664,884	691,713	512,508	579,032	(112,680)	-16%
Communications Services and Intergovernmental Relations	2,094,427	1,815,028	1,980,908	1,836,302	2,128,081	147,173	7%
Finance	2,442,604	1,834,946	2,409,374	1,818,584	2,256,811	(152,563)	-6%
Human Resources / Retirees/ Safety**	12,674,862	13,206,508	8,558,360	7,987,416	8,958,488	400,128	5%
Information Technology	4,137,334	3,888,148	4,093,590	3,718,148	4,527,320	433,730	11%
Purchasing and Material Services	2,051,286	1,747,571	2,123,488	1,758,518	2,006,169	(117,319)	-6%
Risk Management	1,823,308	1,648,664	1,867,875	1,822,529	1,628,463	(239,412)	-13%
Total	\$28,585,082	\$27,399,899	\$24,231,589	\$22,074,773	\$25,148,751	\$917,162	4%
Engineering and Technical Services							
Office of the Director of Engineering & Technical Services	\$634,658	\$640,153	\$616,058	\$481,748	\$1,132,683	\$516,625	84%
Capital Projects Division	835,854	543,322	455,841	462,718	883,170	427,329	94%
Environmental and Regulatory Compliance Division	8,397,399	8,302,380	8,628,203	8,668,923	9,159,765	531,562	6%
Planning and Development Services Division	7,165,497	6,848,387	7,163,840	7,129,505	7,447,765	283,925	4%
Total	\$17,033,408	\$16,334,241	\$16,863,942	\$16,742,894	\$18,623,383	\$1,759,441	10%
Operations							
Office of the Director of Operations	\$527,271	\$502,625	\$550,579	\$801,534	\$1,035,340	\$484,761	88%
Collection System Operations	13,960,060	13,977,517	14,750,139	14,364,491	14,916,566	166,427	1%
Plant Maintenance	13,156,196	13,777,733	14,439,069	14,434,709	13,811,530	(627,539)	-4%
Plant Operations	14,905,646	14,660,852	15,141,109	14,554,183	15,659,478	518,369	3%
Recycled Water Program	1,552,792	1,189,918	1,608,348	1,266,261	1,471,290	(137,058)	-9%
Total	\$44,101,966	\$44,108,645	\$46,489,244	\$45,421,178	\$46,894,204	\$404,960	1%
Total All Departments	\$89,720,456	\$87,842,786	\$87,584,775	\$84,238,845	\$90,666,338	\$3,081,563	4%

* Some significant variances are related to the reallocation of costs as new organizational units were created for FY 2020-21.

** FY 2018-19 actual column for Human Resources Division includes contributions made to section 115 secondary pension trust (\$2.5 million) for improved transparency in this table, despite these contributions being excluded for financial reporting purposes in the CAFR pursuant to GAAP in that fiscal year.

Figure 7 – FY 2020-21 O&M Budget by Function

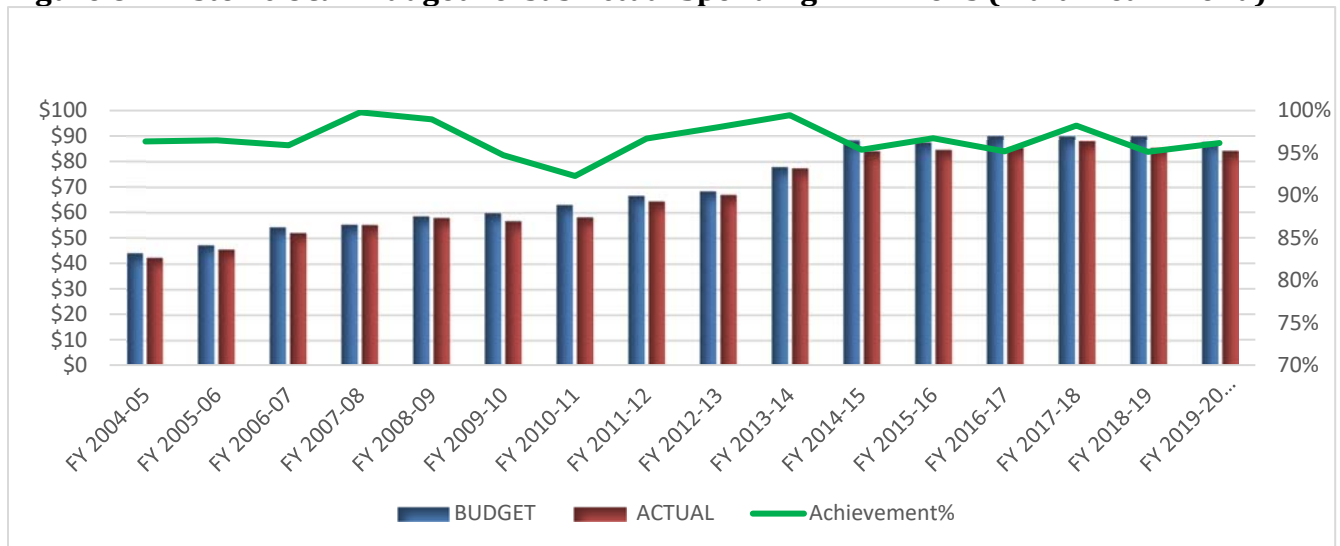


The substantial reduction in Administration costs from FY 2018-19 to FY 2019-20 is primarily related to the \$4.3 million reduction in retiree benefits, unfunded liabilities payments, and additional unfunded liabilities payment budgeted in the Human Resources division.

Historical Variances in Operations & Maintenance Spending

Figure 8 shows historic O&M budgeted and actual amounts, and actual spending as a percentage of budget. There have been variances averaging 3.9% (spending was 96.1% of budget) over the last five years (with variances averaging 3.4% since FY 2004-05).

Figure 8 – Historic O&M Budget versus Actual Spending in Millions (Multi-Year Trend)



Staffing, Salaries, and Benefits (Costs included in both O&M and Sewer Construction)

Total labor, benefit, and UAAL related costs increases by \$3.1 million, or 4.1%, from \$74.7 million in FY 2019-20 to \$77.8 million in FY 2020-21. See Table 1 in Supplemental Financial Information.

Total salaries and benefits for active employees are budgeted at \$62.0 million in FY 2020-21, including both the O&M Fund and the Sewer Construction Fund, compared to \$60.0 million in FY 2019-20, a \$2.0 million increase. UAAL costs for pension and OPEB (which relate to both active employees and retirees) are \$15.8 million, up from \$14.8 million in FY 2019-20.

Major factors affecting overall salaries and benefits include the following:

- Cost of living adjustment of 2.9%, which is the primary component of the overall salary line item increase of 3.9%. Other components include funding for step increases/promotions.
- Additional overtime of \$0.2 million, an increase of 14.5%
- Adjustment in overall benefit costs of 2.2% or \$0.4 million.

The following tables show various levels of detail regarding labor costs. Table 10 summarizes all labor-related costs across two sub-funds. Additional tables in the Supplemental Financial Information section at the end of this budget document provide additional detail about salary and benefit costs.

Table 10 – Total Labor Costs Summary

FY 2020-21 Budget	Operations & Maintenance	Sewer Construction	Total
Active Employees			
Budgeted Full-Time Employee Positions (Estimated Allocation)*	264.6	28.4	293.0
Budgeted Salaries & Wages	\$39,543,191	\$4,247,300	\$43,790,491
Budgeted Benefits	16,628,569	1,541,914	18,170,483
Capitalized Admin Overhead **	(5,083,396)	5,083,396	-
Benefits After Capitalized Administrative Overhead	11,545,173	6,625,310	18,170,483
Total Costs Active Employees ***	\$51,088,364	\$10,872,610	\$61,960,974
UAAL / Unfunded Liabilities & Additional Contributions			
OPEB UAAL	\$2,451,000	\$-	\$2,451,000
UAAL / Unfunded Liabilities for Pension & Additional Contributions	13,376,016	-	13,376,016
Total UAAL/ Unfunded Liabilities & Additional Contributions	\$15,827,016	\$-	\$15,827,016
Total Labor Related Costs	\$66,915,380	\$10,872,610	\$77,787,990

FY 2019-20 Budget	Operations & Maintenance	Sewer Construction	Total
Active Employee Costs			
Budgeted Full-Time Employee Positions (Estimated Allocation)*	264.9	25.1	291.0
Budgeted Salaries & Wages	\$38,565,093	\$3,601,298	\$42,166,391
Budgeted Benefits	16,430,934	1,353,379	17,784,313
Capitalized Administrative Overhead**	(4,448,369)	4,448,369	-
Benefits After Capitalized Administrative Overhead	11,982,565	5,801,748	17,784,313
Total Costs Active Employees ***	\$50,547,658	\$9,403,046	\$59,950,704
UAAL / Unfunded Liabilities & Additional Contributions			
OPEB UAAL	\$2,346,076	\$-	\$2,346,076
UAAL / Unfunded Liabilities for Pension & Additional Contributions	12,436,841	-	12,436,841
Total UAAL/ Unfunded Liabilities & Additional Contributions	\$14,782,917	\$-	\$14,782,917
Total Labor-Related Costs	\$65,330,575	\$9,403,046	\$74,733,621

* Estimated allocation of Full-Time Employees between Sewer Construction and O&M.

** Consists of indirect costs associated with non-productive hours and Administrative Overhead.

*** Restated to include new classification of costs; Board salaries & benefits included.

Budgeted Full-Time Equivalents

Table 11 shows full-time equivalent employee totals for the time periods indicated. The Year-End Actual figures represent actual staffing as of June 30, 2019. In addition to the 293 budgeted positions, the General Manager has the ability to add five additional “transitional” positions at any given time to backfill positions vacated due to an extended leave of absence or as necessary to properly address succession planning. The costs associated with these positions are funded through vacancy savings. Table 12 shows the positions by bargaining unit and division.

Table 11 – Budgeted Full-Time Equivalents

	FY 2018-19 Year-End Actual	FY 2019-20 Budget *	FY 2020-21 Budget
Regular Employees (Excluding Recycled Water Employees)	279.0	291.0	293.0
Limited Duration Employees			
Summer Students	30.0	17.0	24.0
Interns	9.5	11.0	13.5

* This summary budget table listed 31 and 9 for summer students and interns. Detailed departmental budgets summed to 17 and 11, respectively.

** 293 staff includes 291 regular FTEs, plus an additional two positions which will expire in two years.

*** The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Table 12 – Full-Time Equivalent Positions by Bargaining Unit and Division

	Administration	Engineering	Operations	Total
Local One	21.0	42.0	108.0	171.0
Management Support/Confidential Group	26.0	49.0	29.0	104.0
Management	5.0	4.0	3.0	12.0
Unrepresented	4.0	1.0	1.0	6.0
Total by Division	56.0	96.0	141.0	293.0

Staffing Changes

During 2015, a staffing and organizational study^[1] was completed for Central San. The study recommended that Central San hire a consultant to conduct a classification study, which was completed in 2017, to ensure that Central San’s classification structure was appropriate, and employees were working within their job classifications. Changes affecting the classification structure are pending implementation. The budget includes the cost of implementing the recommendations of the study, as well as other changes to the classification structure that Central San has deemed as operationally necessary. The FY 2020-21 Budget includes \$200,000 in gross wages and \$106,000 for the benefit-related costs of implementing these potential changes.

Overall, staffing is budgeted at 293 positions, reflective of the 2015 Organization and Staffing Plan recommendation, which recommended an additional four positions from the then 287 budgeted positions. Additionally, two limited duration positions for the permit counter were approved during FY 2019-20. The 293 staffing figure compares to 291 staff in the FY 2019-20 budget. As described previously, several budgetary organizational units reported in the prior year were impacted by the restructuring of Central San’s chart of accounts as part of its planned implementation of a new ERP in FY 2020-21. Some significant changes include: (1) splitting the previously-reported “Office of the General Manager and Secretary of the District” into sub-units, (2) the creation of Director budgetary organizational units overseeing each Department, and (3) the consolidation of Safety into Human Resources. These changes did not impact the reporting structure of Central San or operations generally but were intended to improve parent-child relationships in the new chart of accounts to facilitate automated reporting in the new ERP system.

[1] Report is available here: <https://www.centrsan.org/post/Organization-and-Staffing-Plan>.

Excluding the impact of these structural changes that were largely inconsequential to reporting structures and operations, reallocations of staffing between divisions and position changes within divisions are summarized below:

- Creation of Engineering Assistant position (Planning & Development Services)
- Management Analyst transferred from the Office of the General Manager to Human Resources
- Engineering Assistant transferred from Planning & Development Services to the Director of Engineering & Technical Services (Resource Recovery Program)
- Vacant Senior Buyer position repurposed to Buyer (Purchasing)
- Vacant Payroll Analyst position repurposed to Senior Administrative Technician (Human Resources)
- Vacant Utility Worker positions repurposed to Maintenance Crew Members (Collection System Operations)

Capital Improvement Budget

Sewer Construction Fund revenues are projected to increase by \$29.4 million, from \$65.6 million in FY 2019-20 to \$95.0 million in FY 2020-21.

This increase is to cover an extensive CIP, the funding for which is generated through a higher allocation of SSC by \$24.45 million as shown on Table 5.

The City of Concord reimbursement increases \$3.7 million due to increased cost-based reimbursement. This relates to Concord's flow proportionate share of treatment plant, recycled water and general improvement components of the capital budget. Additionally, \$3.0 million of borrowing from the State Revolving Fund is anticipated to fund the Solids Handling Facilities Improvements Project in FY 2020-21.

The \$88.0 million budget does not include the anticipated carryforward from FY 2019-20, which will be communicated to the Board after the close of the current fiscal year. The \$21.8 million increase, or 33%, in budgeted spending is a significant step toward the increased capital spending that will be taking place for the next several years as shown in the Ten-Year CIP presented later in this document.

Central San will contribute approximately \$9.9 million to capital reserves during FY 2020-21 with revenues and bond proceeds exceeding expenditures by that amount. Funding the Sewer Construction Fund (Capital Improvement) Working Capital Reserves exceeds the requirement of the aforementioned Board Policy No. BP 017 - Fiscal Reserves. These and prior year contributions to the Sewer Construction Reserve allow for smoothing of rate requirements to accommodate the significant ramp-up of expenditures that is continuing in the next several years, with peak capital spending anticipated to reach \$110 million in FY 2021-22.

Table 13 below is a summary of the projected FY 2020-21 Sewer Construction Fund revenues and expenditures. Further details are included in the Capital Improvement Program section.

Table 13 – Sewer Construction Fund Revenues and Expenditures

	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected *	FY 2020-21 Budget**	Budget-to-Budget Variance	% Variance
Revenue							
Capacity Fees-Gravity	\$5,900,000	\$7,619,056	\$5,750,000	\$8,290,000	\$6,000,000	\$250,000	4%
Capacity Fees=Pumped Zone	600,000	459,839	291,000	254,000	262,000	(29,000)	-10%
Interest Income	570,000	1,121,528	674,000	855,000	293,500	(380,500)	-56%
Ad Valorem Taxes	13,300,000	14,749,226	14,520,000	15,628,000	15,940,000	1,420,000	10%
Sewer Service Charge	27,926,268	28,588,625	32,219,130	32,909,000	56,673,402	24,454,272	76%
Reimbursements							
City of Concord	7,150,000	\$7,973,516	11,630,000	12,300,000	15,300,000	3,670,000	32%
Recycled Water Sales	-	-	-	-	-	-	0%
Developer Fees and Charges	443,000	387,933	514,000	473,000	484,000	(30,000)	-6%
Total Revenue	\$55,889,268	\$60,899,723	\$65,598,130	\$70,709,000	\$94,952,902	\$29,354,772	45%
Loan & Bond Proceeds							
State Revolving Fund Loan Proceeds	\$-	\$-	\$-	\$-	\$3,000,000	\$3,000,000	0%
Total Revenue and Loan Proceeds	\$55,889,268	\$60,899,723	\$65,598,130	\$70,709,000	\$97,952,902	\$32,354,772	49%
Expenditures							
Treatment Plant Program	\$16,865,000	\$19,964,433	\$28,330,000	\$25,497,000	\$32,334,000	\$4,004,000	14%
Collection System Program	19,347,000	19,857,390	27,130,000	24,417,000	40,165,000	13,035,000	48%
General Improvements Program	4,750,000	2,363,600	4,264,000	3,837,600	3,925,000	(339,000)	-8%
Recycled Water Program	2,857,000	1,608,883	4,452,000	4,006,800	9,100,000	4,648,000	104%
Contingency	1,500,000	-	2,000,000	1,800,000	2,500,000	500,000	25%
Total Expenditures	\$45,319,000	\$43,794,306	\$66,176,000	\$59,558,400	\$88,024,000	\$21,848,000	33%
Carryforward	\$6,968,827	-	-	\$8,493,521	-	-	
Total Expenditure Authority	\$52,287,827	\$-	\$-	\$68,051,921	\$-	\$-	
Sewer Construction Funds Available							
Projected Revenue and Loan Proceeds	\$-	\$-	\$65,598,130	\$70,709,000	\$97,952,902	\$-	
Projected Expenditures ***	-	-	66,176,000	59,558,400	88,024,000	-	
Reserves Contribution/(Draw)	\$-	\$-	(\$577,870)	\$11,150,600	\$9,928,902	\$-	

* Projection as of April 2020.

** The FY 2020-21 budget amount does not include any carryforward from past fiscal years; the Board will be notified of any carryforward amount after the close of the current fiscal year.

*** Reserve calculation assumes difference between FY 2019-20 budget and projected spending will be spent in FY 2020-21.

Impact of Capital Improvement Budget on Ongoing Operations & Maintenance Budget

Central San’s Capital Improvement Budget and the extent to which FY 2020-21 nonrecurring capital investments will affect the proposed or future years’ operating budget are described later in this document. In general, given the nature and composition of the FY 2020-21 Capital Improvement Budget, these effects are minimal. To the extent that future capital projects could have more substantial impacts (e.g., additional personnel costs, additional maintenance costs, or additional utility costs or, conversely, anticipated savings such as reduced utility costs or lower maintenance costs) such costs would be specified further in the year such projects are budgeted.

Reserve Projections

Board Policy No. BP 017 - Fiscal Reserves sets targets for each of Central San's reserve funds. Fiscal reserves provide working capital for O&M activities; funding for long-term capital improvement requirements; fulfillment of legal, regulatory, and contractual obligations; mitigation of risk and liability exposures; and cash flow emergencies. These reserves were fully funded as of year-end FY 2018-19 but are adjusted annually based on changes in the targeted reserve balance calculation.

- **For the O&M Fund** (Working capital reserves) – The Board has set a target of five months (41.7%) of gross operating expenses at the start of each fiscal year.
- **For the Sewer Construction Fund** (Working capital reserves) – The Board has set a target of 50% of the annual Capital Improvement Budget at the start of each fiscal year, excluding capital projects that are to be funded with bond proceeds.
- **For the Self Insurance Fund (SIF) Reserves** – The Board has set a target of three times the annual deductible, \$1.5 million. In addition, to help mitigate financial impacts and maintain uninterrupted service in the event of an emergency or catastrophic event, Central San maintains an Emergency Fund Reserve balance of \$5 million in the SIF.

Table 14 presents a summary of Central San's current reserve balance projections compared to the Board Policy targets. The reserve levels are projected to be above the policy-required levels on June 30, 2020 and 2021. The FY 2020-21 revenue requirement relies on a \$15.9 million net use of the reserve balances:

- The reduction in the O&M reserve is related to higher than policy specified funding in the reserve at June 30, 2019, anticipated favorable variances for FY 2019-20, and a redefinition of reserve balance to include non-cash & investment balance sheet accounts (see discussion below).
- The increase in the Sewer Construction reserve relates to the anticipated increase in Capital Improvement Budget spending in subsequent years, and planned use of cash in those years.
- The reduction in the Self-Insurance Fund reserve is related to higher than required funding in the reserve at June 30, 2020, due to lower claims expenses in the current fiscal year.

During FY 2019-20, staff completed an assessment of the calculation of the O&M and Sewer Construction Reserves and proposed certain adjustments which were reflected in an updated BP 017. Previously, the reserves were calculated simply as cash and investment balances. It was recognized that certain accrual related adjustments were necessary in certain instances to reflect a true reserve balance available for use. The revised definition is used in the calculation of projected reserves shown in Table 14.

The projected amounts are subject to change based on actual financial results for the current and next fiscal years.

The status of the reserves affects the allocation of the Sewer Service Charge, as documented in Table 5 of this Financial Summary section.

Also provided on Table 14 is a projection of the Rate Stabilization Account, Pension Trust fund, and OPEB trust fund. Assumptions include:

- Rate Stabilization Fund Reserve Account: No additional deposits or earnings on the account. The Board may instead direct a portion of the FY 2019-20 year-end closeout to this account, to the extent variance is generated that is more favorable than provided for in the reserve calculation based on the projected expenses and revenues in Tables 6, 7, 13.
- Pension Prefunding Trust Fund: The projected balance as of June 30, 2020 assumes a 15% decline in the equity portion (50%) of the fund due to adverse returns. The \$1.25 million budgeted in FY 2020-21 towards employee related liabilities is deposited here. The Board could instead direct that amount to the OPEB Trust. No earnings on the account are assumed in FY 2020-21.
- OPEB Trust Fund: The projected balance as of June 30, 2020 assumes a 15% decline in the equity portion (60%) of the fund due to adverse returns. No additional deposits or earnings on the account are assumed in FY 2020-21.

The Supplemental Financial Information section of this budget document contains a table showing changes in net position and fund equity.

Table 14 – Reserve Projections

	O&M Fund	Sewer Construction Fund (Capital)	Self-Insurance Fund	Totals
Actual Balance as of June 30, 2019	\$62,121,261	\$57,371,029	\$7,056,265	\$126,548,555
Projected Balance as of June 30, 2020	\$64,373,260	\$60,938,108	\$7,072,665	\$132,384,033
Projected Balance as of June 30, 2021	\$39,139,084	\$70,867,010	\$6,501,215	\$116,507,309
Change Year Over Year	(\$25,234,176)	\$9,928,902	(\$571,450)	(\$15,876,724)
<i>Reference:</i>	Table 7	Table 13	Self-Insurance Table 1	See Figure 3
Percentage Change Year Over Year	-39.2%	16.3%	-8.1%	-12.0%
Explanation	Ending balance at 6/30/19 is above policy level due to projected O&M savings in FY 2019-20	Funds were set aside in Recent years to be used toward the funding of future year's Capital Budgets		
Comparison to Policy Target-Start of Budget Year				
Policy Target	5/12 of following year's O&M Budget	50% of following year's non-debt funded Capital Budget	3 times annual deductible of \$500,000 plus \$5 million	
Reserve Policy Target end of June 30, 2020	\$37,777,641	\$44,012,000	\$6,500,000	\$88,289,641
Projected Balance Minus Reserve Policy Target at June 30, 2020	\$26,595,619	\$16,926,108	\$572,665	\$44,094,392
Comparison to Policy Target-End of Budget Year				
Reserve Policy Target end of June 30, 2021	\$39,139,085	\$40,107,545	\$6,500,000	\$85,746,630
Projected Balance Minus Reserve Policy Target at June 30, 2021	(\$0)	\$30,759,465	\$1,215	\$30,760,680

Reserve calculations subject to final close of financial results for the year and may differ from projection.

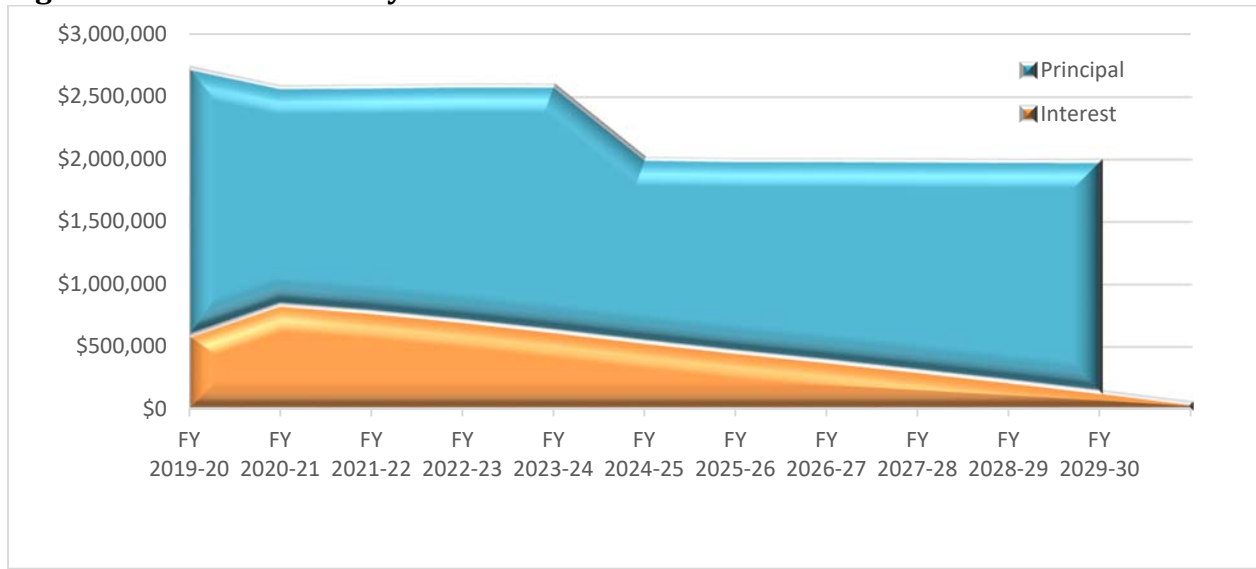
Table 14 – Reserve Projections (continued)

	Rate Stabilization Account	Pension Trust Fund	OPEB Trust Fund
Actual Balance as of June 30, 2019	\$-	\$8,420,816	\$65,926,014
Projected Balance as of June 30, 2020	\$2,610,000	\$8,945,505	\$61,130,173
Projected Balance as of June 30, 2021	\$2,610,000	\$10,195,505	\$61,130,173
Change Year Over Year	-	1,250,000	-
<i>Reference:</i>			
Percentage Change Year Over Year	0.0%	14.0%	0.0%
Explanation	FY 2020-21 Earnings Not Projected	FY 2020-21 Earnings Not Projected	FY 2020-21 Earnings Not Projected
Comparison to Policy Target-Start of Budget Year			
Policy Target	N/A	N/A	N/A
Reserve Policy Target end of June 30, 2020	N/A	N/A	N/A
Projected Balance Minus Reserve Policy Target at June 30, 2020	\$2,610,000	\$8,945,505	\$61,130,173
Comparison to Policy Target-End of Budget Year			
Reserve Policy Target end of June 30, 2021	N/A	N/A	N/A
Projected Balance Minus Reserve Policy Target at June 30, 2021	\$2,610,000	\$10,195,505	\$61,130,173

Debt Service

Current debt service expenditures include outstanding payments on 2018 Revenue Bonds. Details on the debt service are included in the Debt Program Section. Figure 9 depicts all existing debt payments for Central San. Future planned debt issuances would add to this debt profile. Additionally, the SRF loan, when the loan agreement and repayment schedule is finalized, would also add to these debt repayment amounts.

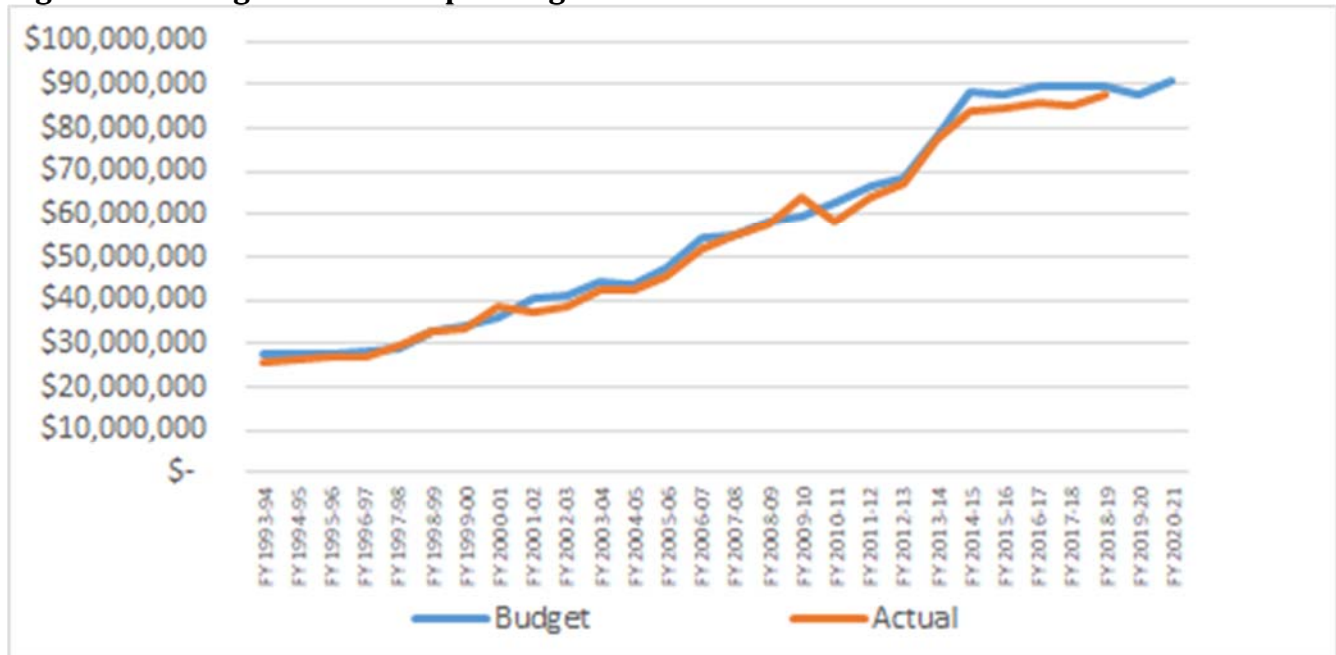
Figure 9 – Debt Service Payment Schedule



Long-Term Spending Trend

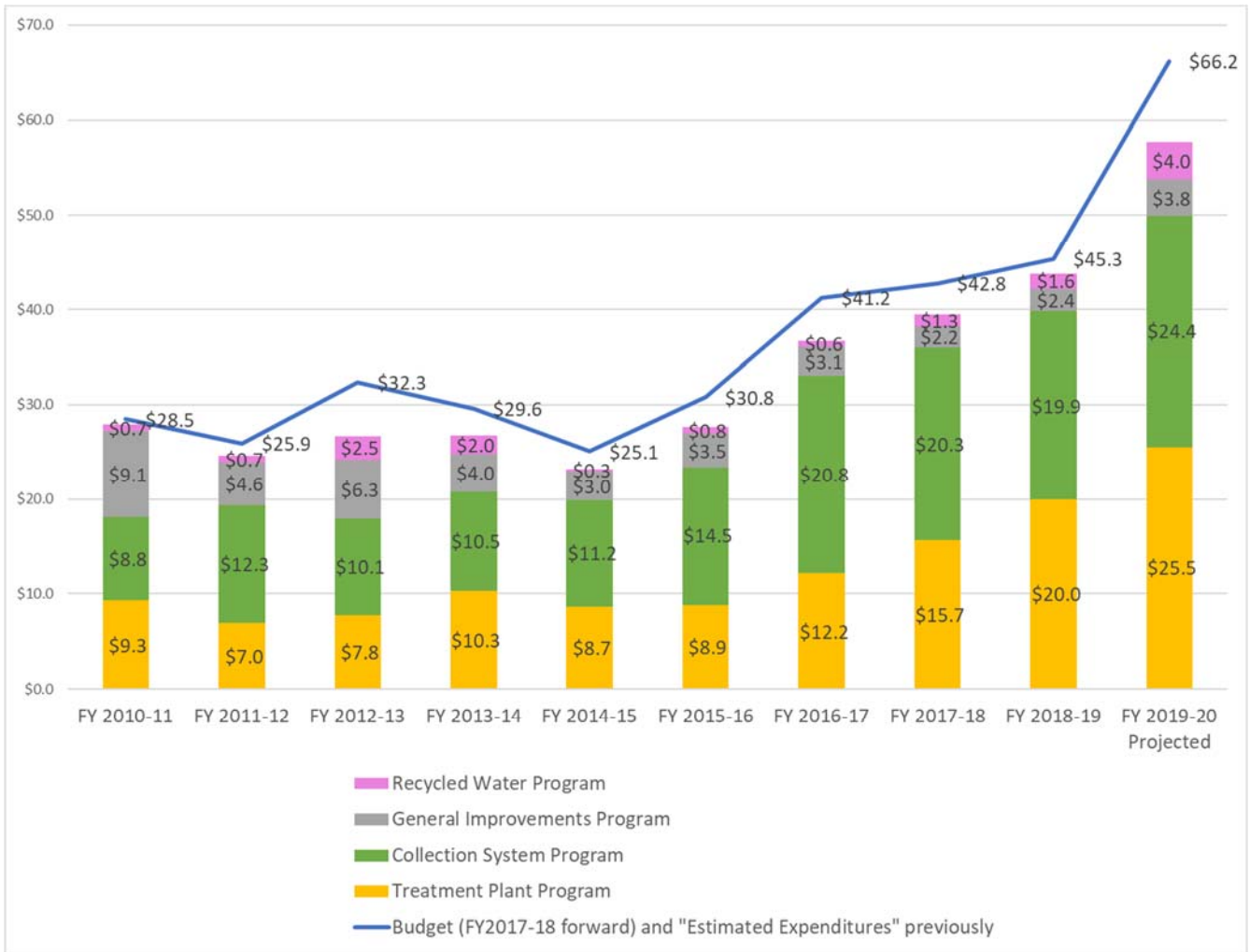
Figure 10 shows a long-term trend line of past O&M expenditures, while Figure 11 shows a long-term trend line of past capital expenditures. The O&M Budget was held essentially flat for a total of six years (from FY 2014-15 to FY 2019-20). FY 2020-21 provides for an increase of just 2.2% above the six-year average of the preceding O&M budgets. Spending in FY 2020-21 is consistent with the financial plan which recognizes certain inflationary pressures.

Figure 10 - Long-Term O&M Spending Trend



Capital spending has been ramping up significantly since FY 2016-17, with spending projected to average \$90.7 million per year over the next decade (in 2020 dollars). Over the past 10 years, actual spending (and “projected for FY 2020-21) has been \$334.7 million, while budgeted spending (called “estimated expenditures” prior to FY 2017-18) was \$367.6 million.

Figure 11 – Infrastructure Investments Over Past Ten Years: \$334.7 million (Actual)



Operating Departments

On a day-to-day basis, the following three Operating Departments that make up Central San carry out the mission of protecting public health and the environment:

- Administration
- Engineering and Technical Services
- Operations

The departments work together to provide both exceptional internal and external customer service in the operation of Central San's wastewater collection, treatment, recycled water, and household hazardous waste collection facilities. The departments are guided by Central San's Strategic Plan, which provides direction and initiatives to help achieve the strategic goals and objectives.

The two department directors, the Deputy General Manager, and the General Manager form Central San's Executive Team. Each department director worked closely with the division managers to create a prudent and cost-effective budget, utilizing efficiency and effectiveness to execute the Strategic Plan initiatives and targets while keeping costs at a minimum.

The following sections describe the responsibilities of each department and division; the strategic accomplishments in FY 2019-20 as of March 31, 2020 (Q3); performance against the FYs 2018-20 Strategic Plan key metrics in FYs 2018-19 and 2019-20 as of Q3; FYs 2020-22 Strategic Plan targets for FY 2020-21, and operating budget needs. For final FY 2019-20 strategic performance data, please refer to the FY 2019-20 Strategic Plan Annual Report after publication in fall 2020.

The total operating budget for FY 2020-21 is \$90.7 million, a \$3.1 million or 3.5% increase over the \$87.6 million budget for FY 2019-20.

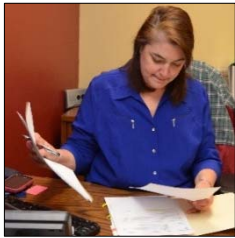


Administration Department

The key to moving water is not simply in the pipes and pumps, but also in the people who keep the business running. The Administration Department's primary function is to provide services that support the efficient operation of Central San, including the General Manager and his administrative support; financial management; human resources (HR) / safety; purchasing and materials services; information technology; and risk management. The department is also responsible for internal communications, advancing Central San's policy objectives with state and federal legislative bodies, and being responsible for interagency relations and public affairs.

The divisions that comprise this department include the following:

- Executive Governance Divisions
 - Office of the General Manager
 - Office of the Deputy General Manager
 - Office of the Secretary of the District
 - Board of Directors
- HR/Safety
- Director of Finance & Administration
- Communication Services and Intergovernmental Relations
- Finance
- Information Technology (IT)
- Purchasing and Materials Services
- Risk Management



Executive/Governance Offices

This section presents the budgets for the organizational units of Central San charged with executive governance. Divisional units include the offices of the General Manager, Deputy General Manager, Secretary of the District, and the Board of Directors (Board).

Office of the General Manager

OVERVIEW

The primary mission of the Office of the General Manager is to work with the Board to establish and implement policies and procedures, as well as the District's overall goals and Strategic Plan. The General Manager reports directly to the Board; acts as Central San's representative in collaborative associations with other agencies; and provides oversight to all operations. This includes interagency relations, legislative activities, communications, optimization efforts, and the completion of set goals for the year as part of the successful execution of the Strategic Plan.

This office also provides direction, support, and resources to departments so they may effectively and efficiently accomplish the Vision, Mission, and Goals of Central San. The strategic accomplishments below represent tasks completed by the General Manager and his budgeted staff, as well as major overarching accomplishments of the District directly overseen by the General Manager. The agency-wide FY 2020-21 accomplishments and strategic performance, as well as the FY 2021-22 targets and objectives, are embodied in each of the individual division and program sections.

This office's staffing budget includes the administrative staff supporting the General Manager and the Administration Department, as well as the budgeted Internal Auditor position.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Oversaw the effort to continue providing essential services during the COVID-19 pandemic while protecting employees, the public, and the environment.
- Received 62 applications for the next session of Central San Academy.
- Served on the boards of NACWA, CASA, WateReuse, and John Muir Health to strengthen ties to the water sector and the community Central San serves.
- Met with city and town officials to ensure open lines of communication and interagency relations, including attendance at Contra Costa County Mayors Conferences.
- Presented Strategic Plan Annual Report to the Board.
- Updated the Strategic Plan to reflect Central San's priorities for FYs 2020-22.
- Along with other Central San senior staff, co-hosted Executive Team of Monterey One Water for an information exchange.



Be a fiscally responsible and effective wastewater utility

- Successfully transitioned all employees and retirees to CalPERS health benefit plans on July 1 for savings in healthcare costs.
- Presented Internal Audit Plan for calendar year 2020 to the Board.
- Performed internal audits on residential non-SSC revenues and on contracts for goods and services and professional consulting agreements, which identified opportunities to strengthen internal controls.



Recruit, develop, and retain a highly trained and safe workforce

- Facilitated one-on-one meetings between each Board Member and the Executive Committee Members of the Local One and Management Support/Confidential Group bargaining units.
- Met with the Executive Committee Members of the bargaining units.



Embrace technology, innovation, and environmental sustainability





- Delivered Benchmarking Study comparing Central San’s performance against other water and wastewater agencies statewide and nationwide over three fiscal years.
- Maintained Optimizations Program to commit to efficiency, effectiveness, and continuous improvement by tracking and reporting progress.
- Produced and presented Optimizations Program Annual Report to the Board.
- Formed a “Central San Smart” committee to review and champion initiatives to leverage data to improve operations and reduce costs.
- Continued efforts to augment the region’s water supply through the proposed Refinery Recycled Water Exchange and the request from the Dublin San Ramon Services District (DSRSD) - East Bay Municipal Utility District Recycled Water Authority (DERWA) to divert flow from the San Ramon Pumping Station to create recycled water.
- Assisted in the effort to investigate the growing challenge of recycling certain materials in order to obtain a better understanding of the issue from the agencies in the service area and how it can be overcome.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Awards or Recognitions Received	≥10	13		11		≥10
	Completed Optimizations	N/A Not a Metric in the FYs 2018-20 Strategic Plan					≥20

FY 2020-21 Strategic Objectives

In the coming fiscal year, this office will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Maintain a Positive Reputation</p>	<p>Continue to provide staff with resources and high-level guidance needed to maintain excellence in the industry.</p> <p>Represent Central San's best interests in involvement with industry associations and advocacy groups regionwide, statewide, nationwide, and worldwide.</p>
 <p>Support Regional Development of Local Water Supply</p>	<p>Continue to work toward the fruition of the Refinery Recycled Water Exchange, an innovative partnership between Central San, CCWD, and Valley Water to supply recycled water to neighboring refineries.</p>
 <p>Foster Relationships across All Levels of Central San</p>	<p>Continue to meet regularly with labor bargaining unit representatives and division workgroups to maintain an open channel of communication and address workplace issues.</p>
 <p>Improve and Modernize Operations through Technology and Efficiency Measures</p>	<p>Continue to inspire performance, efficiency, and effectiveness through the Optimizations Program, the Central San Smart initiative, fulfillment of the Strategic Plan, and an employee recognition program.</p> <p>Hold Central San's first Innovations Fair to share innovations done to date, communicate what is to come, and inspire employees to further optimize their operations.</p>

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$704,159	\$719,973	\$751,241	\$610,400	\$815,472	\$64,231	8.6%
Employee Benefits	248,085	237,552	259,873	259,958	270,585	10,712	4.1%
Unfunded Liabilities	157,398	162,606	164,314	276,126	257,072	92,758	56.5%
Other Purchased Services	72,214	75,367	80,000	45,000	80,000	-	-
Professional Services	37,500	52,534	50,000	25,000	50,000	-	-
Technical Services	34,714	22,832	30,000	20,000	30,000	-	-
Supplies & Materials							
General Supplies	5,910	4,844	7,800	6,500	7,800	-	-
Other Expenses	83,090	56,219	83,291	79,235	70,650	(12,640)	-15.2%
Memberships	48,940	34,028	53,141	48,985	45,900	(7,240)	-13.6%
Training & Meetings	26,150	20,171	26,150	26,250	20,750	(5,400)	-20.7%
Miscellaneous Other	8,000	2,020	4,000	4,000	4,000	-	-
Total	\$1,270,856	\$1,256,560	\$1,346,519	\$1,277,219	\$1,501,579	\$155,060	11.5%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
General Manager	1.0	1.0	1.0
Administrative Technician	1.0	1.0	1.0
Executive Assistant	1.0	1.0	1.0
Internal Auditor	-	-	1.0
Management Analyst	1.0	1.0	-
Senior Administrative Technician	1.0	1.0	1.0
Total	5.0	5.0	5.0

Budget Modifications and Contributions to Key Priorities

As described in the Financial Summary section of the budget book previously, as part of the implementation of a new ERP system and revised chart of accounts, new org units were established for improved reporting purposes. In prior budgets, costs associated with the Office of the General Manager functions were reported within a consolidated cost center titled “Office of the General Manager and Office of the Secretary of the District.” This budgetary org unit reported costs for the Board of Directors, the Office of the General Manager, the Office of the Secretary of the District as well as the office of the Director of Finance & Administration. Beginning in FY 2020-21, each of these four previously consolidated cost centers has been separated.

The Office of the General Manager’s budget for FY 2020-21 is \$1.5 million, a \$155,000 or 11.5% increase over the \$1.3 million budget in FY 2019-20, as restated. This increase is primarily attributable to transferring the Internal Auditor position from the Finance Division in the prior year to the Office of the General Manager in FY 2020-21 to reflect the reporting relationship of that position. Salaries & Wages include the agency-wide cost-of-living adjustment and increases due to step advancements. Benefits increased due to a lower vacancy factor, offset by lower premiums for the new medical plans.

The Office of the General Manager leads the effort to address all key priorities facing Central San, as described in the General Manager’s Message.

Office of the Deputy General Manager

OVERVIEW

The Deputy General Manager oversees the Operations Department, Administration Department, and the HR (which now includes Safety) Division. The Office of the Deputy General Manager assists the General Manager in the general day-to-day administration of Central San and provides resources and support to ensure the successes outlined in the sections of the HR/Safety, IT, Finance, Purchasing and Materials Services, Communication Services and Intergovernmental Relations, Risk Management Divisions, and the Operations Department.

Major accomplishments include progress made on the Classification Study, the publication of the FY 2018-19 Strategic Plan Annual Report, and the update of the Strategic Plan to reflect the next two years of priorities and challenges. The Deputy General Manager continues to serve as a key advisor on several large-scale projects, such as the Enterprise Resource Planning Replacement and Solids Handling Facility Improvements Projects. On a regular basis, the Deputy General Manager also helps oversee succession planning, financial planning, and labor relations efforts.

Because the Deputy General Manager also serves as the Director of Operations, the Office of the Deputy General Manager does not have a separate budget. The strategic accomplishments for the Office of the Deputy General Manager are reflected in the Office of the General Manager and Administration Departments.

Office of the Secretary of the District

OVERVIEW

The Secretary of the District reports to the Board and General Manager and provides administrative support to the five elected Board Members. The Office of the Secretary of the District manages the Board and Committee meeting processes, including the preparation and distribution of agendas and minutes and the publication of notices of public hearings. It coordinates compliance with Fair Political Practices Commission regulations and the Brown Act, receives legal claims against Central San, coordinates elections with the Contra Costa County Elections Office, and arranges Ethics and Brown Act trainings for the Board and staff. It also manages Central San's Records Management Program and responds to Public Records Act requests.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Renewed California Special Districts Leadership Foundation Transparency Certificate of Excellence.
- Coordinated Board Self-Evaluation Workshop, Long-Term Vision Planning Board Workshop, Financial Planning Workshop, and annual review of Board Member compensation and benefits.
- Facilitated adoption of the new Internal Audit Function Board policy and a comprehensive update of the Board policy delegating authority to the General Manager.
- Coordinated biennial review of existing Board policies and facilitated amendments to 11 Board policies.
- Coordinated meetings for Board Liaisons with representative cities and agencies.
- Provided Records Program services to all departments, including indexing over 350 new records boxes transferred to storage, creating and printing over 1,500 new file folder labels, delivering over 100 boxes requested from storage, and processing shredding services for over 30 boxes of approved destructions, non-records, copies, and transitory documents.



Strive to meet regulatory requirements




- Completed comprehensive review and presentation of the updated Records Retention Schedules with incorporated destruction policy to the Board for adoption.
- Developed new policy for destroying records that meets the requirements of GC §60201(b)(2) and ensures evidence of compliance with retention policies.
- Developed and trained staff on a new Records Program Handbook incorporating the new destruction policy, revised retention schedules, and instructions for requesting other Records Program services.
- Facilitated the filing of Statements of Economic Interest (Form 700) for all designated filers under the Conflict of Interest Code.



Recruit, develop, and retain a highly trained and safe workforce




- Conducted employee workshops on the Ethics Compliance, Brown Act, and Public Records Act.
- Staff attended International Institute of Municipal Clerks (IIMC), California Special District Association (CSDA) Board Secretary, and Association of Records Managers and Administrators (ARMA) Conferences.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Biennial Review of All Existing Board Policies	100%	100%		100%		N/A Not a Metric in FYs 2020-22 Strategic Plan

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Provide High-Quality Customer Service</p>	Develop procedures for onboarding a new Board Member.
	Obtain electronic posting system for agendas and public hearing notices.
 <p>Achieve 100% Compliance in All Regulations</p>	Update and convert 2015 Board Compensation Resolution to a new Board Policy to facilitate regular review.
 <p>Improve and Modernize Operations through Technology and Efficiency Measures</p>	Consider potential improvements to modernize the Board Meeting Room, including the addition of multiple video cameras to improve transparency, upgrades to the electronic systems to accommodate mobile devices, and replacing projector screens with monitors.
	Begin a project with the Information Technology Division to optimize use of electronic records to improve processes District wide and develop an E-Records Master Plan.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$416,313	\$424,859	\$444,599	\$493,000	\$483,201	\$38,602	8.7%
Employee Benefits	130,268	125,543	136,656	154,519	160,700	24,044	17.6%
Unfunded Liabilities	101,315	104,667	105,767	177,738	165,473	59,707	56.5%
Purchased Property Services	29,300	21,356	25,000	22,000	24,850	(150)	-0.6%
Repairs & Maintenance	14,300	9,408	10,000	9,000	9,850	(150)	-1.5%
Rentals	15,000	11,948	15,000	13,000	15,000	-	-
Other Purchased Services	153,786	158,533	166,000	196,187	132,000	(34,000)	-20.5%
Professional Services	37,500	52,534	50,000	75,000	50,000	-	-
Technical Services	46,286	30,444	40,000	50,000	6,000	(34,000)	-85.0%
Other Services	70,000	75,555	76,000	71,187	76,000	-	-
Supplies & Materials							
General Supplies	8,862	7,142	11,650	11,000	11,000	(650)	-5.6%
Other Expenses	17,840	5,997	14,440	9,005	21,555	7,115	49.3%
Memberships	3,440	1,440	3,440	3,255	4,555	1,115	32.4%
Training & Meetings	6,400	2,537	7,000	3,250	14,500	7,500	107.1%
Miscellaneous Other	8,000	2,020	4,000	2,500	2,500	(1,500)	-37.5%
Total	\$857,684	\$848,097	\$904,112	\$1,063,449	\$998,779	\$94,667	10.5%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Services Supervisor	1.0	1.0	1.0
Assistant to the Secretary of the District	1.0	1.0	1.0
Secretary of the District	1.0	1.0	1.0
Senior Administrative Technician	1.0	1.0	1.0
Total	4.0	4.0	4.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Clerical Summer Student (Office of the Secretary of the District)	1.0	1.0	-
Total	1.0	1.0	-

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

As described previously, as part of the implementation of a new ERP system and revised chart of accounts, new org units were established for improved reporting purposes. In prior budgets, costs associated with the Office of the Secretary of the District were reported within a consolidated cost center titled "Office of the General Manager and Office of the Secretary of the District." This budgetary org unit reported costs for the Board of Directors, the Office of the General Manager, the Office of the Secretary of the District as well as the office of the Director of Finance & Administration. Beginning in FY 2020-21, each of these four previously consolidated cost centers have been separated.

The Office of the Secretary of the District Operating Budget for FY 2020-21 is \$999,000, a \$95,000 or 10% increase over the \$904,000 budget in FY 2019-20, as restated. Salaries & Wages include the agency-wide cost-of-living adjustment and increases due to step advancements. Technical Services decreased following the completion of a largescale record retention update project during FY 2019-20.

The Office of the Secretary of the District assures the ongoing flow of information to and from the Board, facilitating policy direction and oversight.

Board of Directors

OVERVIEW

The Board is a five-member governing body which represents the needs and interests of Central San’s customers. It provides oversight to Central San by setting policy direction; establishing governing ordinances and rules; ensuring accountability; providing resources; bargaining collectively with unions; managing Executive Management staff; and attending to lawsuits, real estate acquisitions, and high-level Human Resources (HR) issues. Each member is elected to a four-year term. In addition to twice-monthly meetings, Board Members serve on individual committees to review matters within their purview for recommendation to the full Board. They also act as liaisons to specific agencies and cities served by Central San, meeting with officials and presenting to town and city councils as needed to provide customer service and represent Central San and its ratepayers. The Board sets Central San's Vision, Mission, and Values; adopts District-wide Goals via the Strategic Plan; and provides the direction and resources for staff to execute this vision.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$54,650	\$49,335	\$54,650	\$46,600	\$54,650	\$-	-
Employee Benefits	68,844	77,531	50,000	91,500	106,229	56,229	112.5%
Other Purchased Services	350,000	330,303	100,000	100,000	350,000	250,000	250.0%
Professional Services	100,000	107,405	100,000	100,000	100,000	-	-
Other Services	250,000	222,898	-	-	250,000	250,000	
Supplies & Materials							
General Supplies	5,000	876	5,000	4,000	5,150	150	3.0%
Other Expenses	57,000	31,448	46,000	38,000	48,000	2,000	4.4%
Training & Meetings	45,000	28,418	40,000	30,000	40,000	-	-
Miscellaneous Other	12,000	3,030	6,000	8,000	8,000	2,000	33.3%
Total	\$535,494	\$489,493	\$255,650	\$280,100	\$564,029	\$308,379	120.6%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Budget Modifications and Contributions to Key Priorities

As described previously, as part of the implementation of a new ERP system and revised chart of accounts, new org units were established for improved reporting purposes. In prior budgets, costs associated with the Board of Directors were reported within a consolidated cost center titled “Office of the General Manager and Office of the Secretary of the District.” This budgetary org unit reported costs for the Board of Directors, the Office of the General Manager, the Office of the Secretary of the District as well as the office of the Director of Finance & Administration. Beginning in FY 2020-21, each of these four previously consolidated cost centers has been separated.

The Board of Directors Operating Budget for FY 2020-21 is approximately \$564,000, a \$308,000 or 121% increase over the \$256,000 budget in FY 2019-20, as restated. The bulk of this budgetary increase is attributable to costs associated with election costs in November 2020. The budget also reflects more Board members anticipated to take health insurance next year.

Human Resources / Safety

OVERVIEW

This division manages employee and labor relations; recruitment, testing, and selection to enhance Central San's workforce; classification and compensation; benefits administration; agency-wide training; organizational development; engagement efforts; and all payroll functions.

The Safety workgroup is overseen by the HR Manager and administers Central San's Safety Program. The primary objective of the program is to reduce injuries, accidents, and environmental impact while ensuring compliance. This is achieved through high-quality training for staff; comprehensive workplace evaluation; incident response; hazardous materials management from acquisition to disposal; and management of regulatory information.

FY 2019-20 Strategic Accomplishments (Human Resources)



Provide exceptional customer service and maintain an excellent reputation in the community

- Co-coordinated Central San's response to the COVID-19 pandemic, ensuring essential services remained intact while protecting staff, the public, and the environment.



Strive to meet regulatory requirements

- Conducted harassment and ethics training for all employees.



Be a fiscally responsible and effective wastewater utility

- Successfully transitioned all employees and retirees to CalPERS health benefit plans on July 1 for savings in healthcare costs.



Recruit, develop, and retain a highly trained and safe workforce

- Deployed a survey to assess employee engagement levels.
- Completed the Classification Study Phase 1, developing naming conventions.
- Hosted HR @ Your Service training sessions for employees.
- Began offering financial wellness seminars on alternate months with HR @ Your Service sessions.
- Started presenting monthly wellness seminars on topics related to physical and mental health.
- Held the third session of the Management Academy, which for the first time allowed participants from sister public agencies.
- Paired seven mentees with mentors in the third cycle of the BOOST Mentorship Program.
- Began tracking status of resolution of issues arising from the Local One and Management Support / Confidential Group Labor Management Committees.
- Transitioned to Kaiser Occupational Health for all pre-employment medical activity.
- Identified NeoGov as the vendor for the implementation of an agency-wide learning management system to centralize tracking of all employee training.

- Hosted two students from the University of Michigan in first student externship program.
- Suggested enhancements to the performance evaluation forms, which are currently being discussed with the bargaining units.
- Continued coordinating with other agencies to support development of the regional workforce.



Embrace technology, innovation, and environmental sustainability

- Implemented new HR modules within the new ERP system which includes HR information system and employee self-service, which will result in increased automation, ease of report production, and improved record keeping.
- Completed preliminary design of a biweekly payroll system within the new ERP.

FY 2019-20 Strategic Accomplishments (Safety)



Strive to meet regulatory requirements

- Updated the Exposure Control Plan for Bloodborne and Infectious Pathogens.
- Oversaw the Employee Medical Surveillance Program.
- Oversaw Hazardous Materials Business Plan (HMBP) with no violations.
- Had zero Cal/OSHA violations.



Recruit, develop, and retain a highly trained and safe workforce

- Conducted 243 Safety Tailgates to train various divisions on safety topics.
- Conducted 28 classroom safety courses and 37 online safety courses on 49 different subjects.
- Collection Systems Operations (CSO) Division and Administration and Engineering and Technical Services Departments completed calendar year 2019 with zero lost work days.



Maintain a reliable infrastructure































- Spearheaded facility safety upgrades to the fire protection system in the Plant Operations facilities; diesel storage tanks; and the gas detection system in the Solids Conditioning Building, Headworks, and Pumping Stations.
- Addressed action items within the District Safety Committee (DSC) quickly (the current timeframe for an open action item is less than 60 days).
- DSC reviewed 17 Safety Suggestions in calendar year 2019.
- Conducted 10 Contractor Safety Orientations, reviewed 151 Design and Safety Submittals, and attended 72 Construction Progress Meetings.



Embrace technology, innovation, and environmental sustainability







- Maintained chemical inventory and reconciled safety data sheets with online repository, MSDSonline®.
- Launched Safety page on San Central intranet to provide more efficient access to safety information.
- Integrated online safety training through Target Solutions®.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance	FY 2019-20 Performance as of Q3	FY 2020-21 Target		
Human Resources							
	Employees Attending Customer Service Training	≥50% of All District Staff	100% of Staff Due for Training (New Employees within 6 Months of Employment)		100% of Staff Due for Training (New Employees within 6 Months of Employment)		N/A Not a Metric in FYs 2020-22 Strategic Plan
	Average Time to Fill Vacancy (From Request to Hire)	≤60 Days	58.8 Days		54.0 Days		≤60 Days
	Turnover Rate at or Below Industry Average	≤4.8% (2017 Industry Median)	5.7%		4.7%		≤6.5% (2018 Industry Median)
	Average Annual Training Hours (External and Internal Training)	≥7.5 Hours Per Full-Time Equivalent Employee (FTE)	22.7 Hours/FTE		4.1 Hours/FTE		≥15 Hours Per Full-Time Equivalent Employee (FTE)
	Actual Versus Budgeted Usage of Training Dollars	≥80.0%	73.8%		77.9%		N/A Not a Metric in FYs 2020-22 Strategic Plan
	Participation in Annual Wellness Expo	Increase by 10% Each Year	-15.6%		+13.8%		Increase by 10% Each Year
	Internal Promotions (Excludes Entry-Level Positions)	≥25%	45.8%		75%		≥25%
	Formal Grievances Filed	Zero (0)	2		Zero (0)		Zero Grievances Processed
	Performance Evaluations Completed on Time	100.0%	49.0%		62.4%		100% Completion of Annual Performance Evaluations
	Employee Injury and Illness Lost Time Incident Rate	≤6.8 (Bureau of Labor Statistics (BLS) California Sewage Treatment Facilities Rate)	2.6		3.6		≤4.0 (via BLS) ≤5.6 (via AWWA)

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
Human Resources	
 <p>Ensure Adequate Staffing and Training to Meet Current and Future Operational Levels</p>	<p>Launch third Supervisory Academy in fall 2020.</p> <p>Purchase and implement the NeoGov® learning management system for centralized training tracking.</p>
 <p>Enhance Relationship with Employees and Bargaining Units</p>	<p>Investigate additional cost-effective benefits to offer to employees.</p> <p>Implement recommendations from employee engagement survey.</p> <p>Continue to work collaboratively with bargaining units to resolve workplace issues in their early stages and prevent grievances.</p>
 <p>Improve and Modernize Operations through Technology and Efficiency Measures</p>	<p>Configure, test, and implement a bi-weekly payroll system within the new ERP to transition from once-monthly paydays through the previous software.</p>
Safety	
 <p>Foster Relationships across All Levels of Central San</p>	<p>Continue improving customer service through the following:</p> <ul style="list-style-type: none"> • Increased visibility in contractor project oversight/design reviews. • Participation in a greater number of tailgate meetings. • Attendance at additional manager and departmental meetings. • Inspections at more job worksites and facilities.
 <p>Meet or Exceed Safety Standards</p>	<p>Continue monitoring safety metrics, including both leading and lagging indicators, to identify trends in incident reports, first-aids-only, near misses, and inspection findings.</p> <p>Transition to the NeoGov® online training platform to improve efficiency and compliance with online trainings, records retention, and certification tracking.</p>
Human Resources/Safety	
 <p>Maintain a Safe Working Environment for Employees and the Public During the COVID-19 Pandemic</p>	<p>As may be necessary, modify working schedules and conditions to reflect social distancing best practices and ensure proper personal protective equipment is provided.</p>

Budget Overview by Expense Category (Includes Human Resources, Retirees, Safety)

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$1,856,367	\$1,906,108	\$1,974,648	\$1,677,500	\$2,131,990	\$157,342	8.0%
Employee Benefits	2,184,600	2,863,806	1,836,548	1,921,492	1,903,305	66,757	3.6%
Unfunded Liabilities	7,836,715	5,232,931	3,903,234	3,765,894	4,116,343	213,109	5.5%
Purchased Property Services	114,450	57,121	111,450	122,950	114,950	3,500	3.1%
Repairs & Maintenance	77,200	32,290	76,200	75,700	75,700	(500)	-0.7%
Hauling & Disposal	10,000	6,964	8,000	20,000	12,000	4,000	50.0%
Security	27,000	17,866	27,000	27,000	27,000	-	-
Cleaning	250	-	250	250	250	-	-
Other Purchased Services	587,950	535,262	609,950	374,500	536,150	(73,800)	-12.1%
Professional Services	122,500	184,842	122,500	62,500	122,500	-	-
Technical Services	34,000	3,040	34,000	34,000	34,000	-	-
Other Services	431,450	347,381	453,450	278,000	379,650	(73,800)	-16.3%
Supplies & Materials							
General Supplies	60,100	70,906	80,100	88,350	101,000	20,900	26.1%
Other Expenses	34,680	40,374	42,430	36,730	54,750	12,320	29.0%
Memberships	13,430	4,137	9,880	9,880	10,300	420	4.35%
Training & Meetings	17,250	34,170	28,550	22,950	37,450	8,900	31.2%
Miscellaneous Other	4,000	2,067	4,000	3,900	7,000	3,000	75.0%
Total	\$12,674,862	\$10,706,508	\$8,558,360	\$7,987,416	\$8,958,488	\$400,128	4.7%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Human Resources Analyst	1.0	2.0	2.0
Human Resources Manager	1.0	1.0	1.0
Management Analyst	-	-	1.0
Operations Safety Specialist	1.0	2.0	2.0
Payroll Analyst	1.0	1.0	-
Safety Officer	1.0	1.0	1.0
Senior Administrative Technician	2.0	2.0	3.0
Total	7.0	9.0	10.0

Budget Modifications and Contributions to Key Priorities

As described previously, as part of the implementation of a new ERP system and revised chart of accounts, certain modifications were made to budgetary org units for improved reporting purposes. Beginning in FY 2020-21, costs of the Safety division are being consolidated within the Human Resources Division as this function is an entity-wide support service. In prior budgets, costs associated with the Safety division were reported as a Division within Central San's Operation's Department.

The Human Resources Operating Budget for FY 2020-21 is \$8.96 million, a \$400,000 or 4.7% increase over the \$8.56 million budget in FY 2019-20, as restated. Salaries & Wages include the agency-wide cost-of-living adjustment and anticipated employee step increases. The increase in this division is

largely attributable to labor-related costs for the transfer of a Management Analyst position from the Office of the General Manager effective FY 2020-21.

Certain costs relating to all Central San employees or retirees are centrally budgeted in the Human Resources Division. The following are items budgeted in Human Resources but not specific to that division:

- Salaries & Wages includes \$375,000 for Compensated Absences Accrual Payments and \$475,000 for Accrued Compensated Absences
- Employee Benefits includes \$25,000 for Unemployment Expenses.
- The Normal Cost as well as unfunded actuarial accrued liability (UAAL) attributable to Central San's Other Post Employment Benefit (OPEB) plans are reported solely within this Division. OPEB benefits offered include health, dental, life, and vision benefits. Every two years management engages an actuary to calculate Central San's Actuarially Determined Contribution (ADC) to ensure adequate funding levels of the plan over the long run. The ADC is further broken down between a "Normal Cost" component, attributable to current active employees, and a "UAAL" component attributable largely to unfunded retiree costs. Accordingly, in an effort to improve transparency, financial planning and financial reporting, the budgeted cost of retiree health premiums is now split between its normal and UAAL cost components in accordance with the independently calculated ADC. In FY 2020-21, the total budgeted cost of retiree health premiums is \$4.092 million, reflecting a modest increase (2.2%) from the \$4.001 million budgeted in the prior year.
- Unfunded Liabilities also includes the costs for supplemental pension and OPEB trust payments. This account description includes payments to the OPEB trust to meet the annual ADC amount in full in years where retiree benefit premiums falls short of the ADC. Beginning in FY 2019-20, the new medical plans have reduced the ADC so low that Central San's pay-as-you-go retiree premiums are now higher than its ADC. Accordingly, there is no required OPEB trust payment to fully satisfy the ADC in FY 2020-21.

Human Resources plays an important role in meeting the overall challenges that Central San is addressing by working to retain an engaged, motivated and safe workforce. This includes administering the employee performance review and performance planning process; administering the labor memoranda of understanding; attracting and retaining talented employees through a competitive pay and benefit structure; providing training programs to ensure that Central San managers, supervisors and employees have the tools and knowledge to contribute to a high-performance organization; and providing oversight of the safety function.

Office of the Director of Finance & Administration

OVERVIEW

The Director of Finance & Administration oversees Communication Services and Intergovernmental Relations, Finance, Purchasing and Materials Services, Information Technology, and Risk Management.

In FY 2019-20, much of the work under this office revolved around the replacement of the ERP software, which has run Central San’s core business processes since 1993. A significant District-wide staff effort resulted in the implementation of the first stages of the new software system, including the Core Human Resources in the fourth quarter of FY 2019-20, and preparing for a go-live of the Core Financial modules in the first quarter of FY 2020-21. Information Technology and Engineering staff coordinated on the implementation of a new permitting system and successfully integrated engineering project management software. Other important work included advancements in advocacy efforts and student education programs, a new intranet for improved internal communication abilities, continued prudent funding of unfunded liabilities and Other Post-Employment Benefits, improvement of internal controls, and enhancements to purchasing practices. The coordination of the response to the COVID-19 pandemic was also performed within the Office of the Director of Finance & Administration.

For the avoidance of duplicative material, the FY 2019-20 Strategic Accomplishments and performance against the key metrics, as well as the FY 2020-21 Strategic Objectives, for the Director of Finance & Administration are embedded within the sections of the individual divisions and programs overseen by the Director.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$328,949	\$337,166	\$349,674	\$344,700	\$382,081	\$32,407	9.3%
Employee Benefits	131,902	123,895	133,958	70,700	100,557	(33,401)	-24.9%
Unfunded Liabilities	226,497	200,158	198,181	93,308	86,869	(111,312)	-56.2%
Supplies & Materials	379	311	500	500	1,000	500	100%
General Supplies	379	311	500	500	1,000	500	100%
Other Expenses	9,500	3,354	9,400	3,300	8,525	(875)	-9.3%
Memberships	800	468	800	800	925	125	15.6%
Training & Meetings	6,700	2,381	7,600	2,500	7,100	(500)	-6.6%
Miscellaneous Other	2,000	505	1,000	-	500	(500)	-50.0%
Total	\$697,227	\$664,884	\$691,713	\$512,508	\$579,032	(112,680)	-16.3%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Director of Finance & Administration	1.0	1.0	1.0
Senior Administrative Assistant	1.0	1.0	1.0
Total	2.0	2.0	2.0

Budget Modifications and Contributions to Key Priorities

As described previously in the Financial Summary section, as part of the implementation of a new ERP system and revised chart of accounts, new org units were established for Director functions overseeing each department of Central San. In prior budgets, costs associated with Department Director functions were reported within one of the child divisions of the overarching parent department. In the case of the Office of the Director of Finance & Administration, prior year budget costs associated with this function were previously reported within the Offices of the General Manager and Secretary of the District.

The Office of the Director of Finance & Administration Operating Budget for FY 2020-21 is \$0.6 million, a \$0.1 million or 16% decrease from the \$0.7 million budget in FY 2019-20, as restated. This reduction is largely attributable to a significant decrease in the unfunded liabilities expenses caused by this cost center's dis-aggregation from the former "Offices of the General Manager and Secretary of the District" org unit as well as a decrease in the required employer contribution rate to CCCERA. Salaries & Wages include the agency-wide cost-of-living adjustment and increases due to step advancements.

Communication Services and Intergovernmental Relations

OVERVIEW

This division facilitates communication with employees, customers, stakeholders, agencies, legislators, and elected officials, which encompasses government relations, advocacy, community outreach, media relations, emergency communications, publications, events, and student educational programs. In addition, it oversees a contracted, full-service reprographics services center which is utilized by all of Central San.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Co-coordinated Central San’s response to the COVID-19 pandemic, ensuring essential services remained intact while protecting staff, the public, and the environment.
- Developed a state and national award-winning student education program, Pipe Protectors, and increased the number of students served with this addition.
- Developed “Maintaining a Reliable Infrastructure – The Collection System,” “Pipe Protectors,” and “Wipes Fail 'Flushable' Test” videos to communicate District information.
- Continued to promote the Central San Academy.
- Continued to increase followers and impressions on YouTube, Facebook, Twitter, and Instagram.
- Produced and distributed *Pipeline* newsletter to inform customers about major infrastructure projects and share pollution prevention information.
- Met with city managers and other stakeholders to discuss potential impacts of Capital Improvement Projects.
- Created new online content, allowing customers to learn about the sewer renovation process.
- Presented results of customer research to assess awareness, satisfaction, desire to learn more about Central San, and methods of best receiving information.
- Led the District’s advocacy efforts at the state and national levels.



Strive to meet regulatory requirements


- Distributed the “Wipes are Costly to Sewer Agencies in California” map to local news outlets, generating media coverage of the damage caused by wipes and the importance of proper disposal.
- In collaboration with the California Association of Sanitation Agencies (CASA), the “Wipes are Costly to Sewer Agencies in California” map was also included in a presentation to state legislators to highlight the need for improved labeling and performance standards for wipes.
- Communication Services and Intergovernmental Relations Manager was reappointed to California Special Districts Association (CSDA) legislative committee, which helps develop CSDA’s legislative agenda and reviews, directs, and assists with legislative and public policy issues affecting special districts throughout the state.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Students Served by Educational Programs	≥4,000 per Year	6,056		5,923		≥6,000
	Participants in Plant / HHWCF Tours and District Presentations	≥500 per Year	2,756		758		≥500
	Participants in Citizens Academy, Central San Academy	≥30 per Session	39		N/A (session was postponed to Fall 2020)		≥35

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Maintain a Positive Reputation</p>	Continue to expand outreach with residential and commercial customers, legislators, elected officials, and sister agencies to grow and maintain relationships and advocate for the interests of Central San’s customers.
	Invest in programs to inform the public and students of the need to fund necessary infrastructure improvements to maintain Central San’s level of service and protect public health and the environment through the Central San Academy, 75 th Anniversary event, student education programs, tours, and more.
	Perform outreach to customers on projects that impact their communities such as construction, pumping station improvements, and sister agency interconnections promoting the use of recycled water.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$732,452	\$681,848	\$747,972	\$745,000	\$784,189	\$36,217	4.8%
Employee Benefits	216,536	232,989	192,229	209,818	194,341	2,112	1.1%
Unfunded Liabilities	226,934	228,449	220,602	216,851	248,971	28,369	12.9%
Purchased Property Services							
Repairs & Maintenance	1,000	510	1,000	-	1,000	-	-
Other Purchased Services	810,000	580,526	705,000	567,500	786,000	81,000	11.5%
Professional Services	3,500	1,028	3,500	1,500	6,500	3,000	85.7%
Technical Services	391,000	201,466	306,000	261,000	263,500	(42,500)	-13.9%
Other Services	415,500	378,032	395,500	305,000	516,000	120,500	30.5%
Supplies & Materials							
General Supplies	61,675	58,012	61,675	60,333	62,050	375	0.6%
Other Expenses	45,830	32,694	52,430	36,800	51,530	(900)	1.7%
Memberships	19,130	6,966	20,230	15,800	21,280	1,050	5.2%
Training & Meetings	24,700	21,094	27,200	20,500	26,250	(950)	-3.5%
Miscellaneous Other	2,000	4,634	5,000	500	4,000	(1000)	-20.0%
Total	\$2,094,427	\$1,815,028	\$1,980,908	\$1,836,302	\$2,128,081	\$147,173	7.4%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Communication Services and Intergovernmental Relations Manager	1.0	1.0	1.0
Community Affairs Representative	2.0	3.0	3.0
Graphics Technician	1.0	1.0	1.0
Media Production Technician	1.0	1.0	1.0
Total	5.0	6.0	6.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Graphic Design Summer Student	1.0	1.0	1.0
Intern	-	1.0	1.0
Total	1.0	2.0	2.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Communication Services and Intergovernmental Relations Division Operating Budget for FY 2020-21 is \$2.13 million, a \$147,000 or 7.4% increase over the \$1.98 million budget in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment and increases due to step advancements. The increase in contracted Other Services is due to higher anticipated Reprographic Service Center provider costs with Central San's upcoming 75th Anniversary Signature Event in FY 2020-21.

Communication Services and Intergovernmental Relations takes the lead role in conveying to customers and other government agencies how Central San responds to challenges facing the organization. This includes federal, state, and local advocacy, maintaining customer awareness of Central San's services, and promoting customer behavioral changes to reduce water pollution and impacts on Central San's infrastructure.

Finance

OVERVIEW

This division is responsible for maintaining internal controls over the financial reporting of all Central San funds and accounts. It administers the transactions related to cash and investments, debt service, cash receipts, accounts payable, sewer service charges, and all other revenues, pension, and capital assets. It is also responsible for the preparation of the budget and coordinates this process with all other departments at Central San. Various interim and annual financial reports are prepared, reviewed, and analyzed by this division and provided to the Board, Finance Committee, General Manager, and other Divisions essential for decision making and budget monitoring purposes. Central San is subject to an annual independent audit, which is administered and coordinated by this division. The Finance Division assembles the Comprehensive Annual Financial Report (CAFR), which is submitted annually to the Board and the Government Finance Officers Association (GFOA) to be considered for the prestigious Certificate of Achievement for Excellence in Financial Reporting award. The Finance Division also ensures Central San's annual budget meets the requirements of the GFOA's Distinguished Budget Presentation award, for which it is submitted annually.

FY 2019-20 Strategic Accomplishments



Be a fiscally responsible and effective wastewater utility

- Spearheaded the establishment of a new Rate Stabilization Fund reserve account in the Running Expense and Sewer Construction funds to help hedge against the adverse impacts of cost pressure volatility on sewer service charge (SSC) stability.
- Fully funded the Other Post-Employment Benefits (OPEB) actuarially determined contribution and paid an additional \$1.25 million toward the unfunded actuarial accrued liability (UAAL).
- Fully funded the actuarially determined contribution requirements determined by the Contra Costa County Employees' Retirement Association (CCCERA) pension administrator and paid an additional \$1.25 million toward the Section 115 secondary pension trust.
- Restructured the chart of accounts based on best practice guidance issued by the GFOA, implementing a more logical parent-child segment structure allowing for greatly improved reporting functionalities.
- Issued accurate and timely interim monthly financial reports allowing for diligent monitoring budget and accountability with FY 2019-20 projected to close under budget.
- Received the GFOA Certificate of Achievement for Excellence in Financial Reporting award for the 19th consecutive year.
- Received the GFOA's Distinguished Budget Presentation award for the 2nd consecutive year following Central San's first ever submission two years ago.
- Received an unqualified audit opinion and zero reported material weaknesses or significant deficiencies in internal controls as part of the annual financial audit.



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- In response to the COVID-19 pandemic, swiftly designed and implemented new paperless entry and approval workflows for key financial business processes (i.e., payables, procurement cards, online customer payments, remote deposits, etc.) to improve workplace safety during the pandemic, the internal control structure, and operational efficiency.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance	FY 2019-20 Performance as of Q3	FY 2020-21 Target
	Service Affordability Maintained	SSC Less Than Average of Bay Area Agencies SSC Plus Ad Valorem Tax Less Than Average of Bay Area Agencies	Target Met	Target Met	SSC less than average of Bay Area agencies SSC plus Ad Valorem tax less than average of Bay Area Agencies ≤0.78% of median household income
	Standard and Poor's (S&P) and Moddy's Credit Ratings	AAA (S&P) / Aa1 (Moody's)	AAA (S&P) / No Rating from Moody's	AAA (S&P) / Aa1 (Moody's)	AAA from S&P and Aa1 from Moody's
	Debt Service Coverage Ratio	≥2.0	101.6	>10	≥2.0
	Actual Reserves as a Percentage of Target	100.0%	170% (O&M) / 173% (Sewer Construction)	Fully Funded Reserves Expected	100.0%
	Operating Expenditures as a Percentage of Operating Budget	≥90.0%	96.5%	~96%	≥95%
	Reported Material Weaknesses or Significant Deficiencies in Internal Controls as Part of Annual Financial Audit	Zero (0)	Zero (0)	Zero (0)	Zero (0)

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Maintain a Strong Reputation in the Community</p>	Achieve awards for budget and financial reporting from GFOA.
 <p>Conduct Long-Range Financial Planning</p>	Continue to support effort to manage unfunded liabilities by reporting on and offering alternatives for favorable variances towards these obligations or other priorities.
 <p>Manage Costs</p>	Implement improvements to interim financial reports to address areas of interest to the Board.
 <p>Maintain a Safe Working Environment for Employees and the Public During the COVID-19 Pandemic</p>	As may be necessary, modify working schedules and conditions to reflect social distancing best practices and ensure proper personal protective equipment is provided.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$1,211,950	\$920,144	1,232,280	\$991,700	\$1,144,873	\$(87,407)	-7.1%
Employee Benefits	461,426	362,041	373,414	248,173	379,502	6,088	1.6%
Unfunded Liabilities	343,153	284,529	311,815	306,515	340,336	28,521	9.1%
Purchased Property Services							
Repairs & Maintenance	1,000	150	1,000	300	1,000	-	-
Other Purchased Services	391,800	250,700	447,700	257,406	361,600	(86,100)	-19.2%
Professional Services	243,000	107,541	250,500	75,018	170,500	(80,000)	-31.9%
Technical Services	2,800	550	42,600	42,460	-	(42,600)	-100.0%
Other Services	146,000	142,609	154,600	139,928	191,100	36,500	23.6%
Supplies & Materials							
General Supplies	10,000	12,940	10,000	4,850	10,000	-	-
Other Expenses	23,275	4,442	33,165	9,640	19,500	(13,665)	-41.2%
Memberships	3,775	1,114	22,365	2,090	2,400	(19,965)	-89.3%
Training & Meetings	18,500	2,743	10,250	7,000	16,500	6,250	61.0%
Miscellaneous Other	1,000	585	550	550	600	50	9.1%
Total	\$2,442,604	\$1,834,946	\$2,409,374	\$1,818,584	\$2,256,811	\$(152,563)	-6.3%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Accountant	2.0	2.0	2.0
Accounting Technician III	2.0	3.0	3.0
Finance Administrator	2.0	2.0	2.0
Finance Manager	-	1.0	1.0
Total	6.0	8.0	8.0

Budget Modifications and Contributions to Key Priorities

The Finance Division Operating Budget for FY 2020-21 is \$2.26 million, which represents a reduction of \$153,000 (6.3%) from the \$2.41 million budget in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment, increases due to step advancements, offset by reductions due to attrition and lower costs for new employees. The decrease in the budget for Salaries & Wages is driven largely by the transfer of a Temporary Senior Internal Auditor position (previously included in the Finance Division’s FY 2019-20 budget) to the Office of the General Manager. The overall net reduction in Other Purchased Services category is a result of reduced temporary staffing needs anticipated with the new ERP expected to “go-live” July 1, 2020, immediately preceding the start of FY 2020-21.

Finance supports Central San by providing transparent financial information and works, in conjunction with the Planning & Development Services Division, to provide the rate and debt funding to address the principal issues facing Central San. The division plays a significant role in specifying the costs of Central San’s functions, how those costs drive the need for rate adjustments, and in developing financial alternatives to keep rates moderated over the long term through financing approaches. This data is used to document why spending is necessary and that rate levels are no more than necessary to meet essential needs, provide for long-term reliability, and ensure appropriate levels of customer service. Finance will continue working with other divisions to implement various modules of the new Oracle Cloud Fusion ERP, as part of the ERP System Replacement Project.

Information Technology

OVERVIEW

The Information Technology (IT) Division supports all computer hardware, software, and telecommunications needs at Central San. It is tasked with Central San’s cybersecurity and is often called to assist with the improvement and automation of business processes agency-wide using technology.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Awarded Municipal Information Systems Association of California Award for Excellence in IT Practices for the third year in a row.
- Replaced both internal intranet sites with a more customer-friendly platform, with assistance from the Communication Services and Intergovernmental Relations Division.



Recruit, develop, and retain a highly trained and safe workforce

- Deployed laptops to support teleworking during the COVID-19 pandemic.
- Supported staff in transition to Microsoft Teams to facilitate increased communication and productivity and to conduct meetings, including Board meetings, remotely.



Maintain a reliable infrastructure







- Worked with Engineering during the construction of a new, more secure Data Center and began migrating systems from the old Data Center to the new one.



Embrace technology, innovation, and environmental sustainability





- Integrated e-Builder with the new Oracle ERP system for improved Engineering project management abilities.
- Coordinated and implemented the first stages of the new Oracle ERP system, including the Core Human Resources and much of the Core Financials systems.
- Coordinated and assisted with implementation and project management for new Oracle permitting system.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Information System Outages Affecting Normal Business Operations	100% Uptime	100% Uptime		100% Uptime		100% Uptime
	Data Backup and Recovery	Zero (0) Lost Data	Zero (0) Lost Data		Zero (0) Lost Data		Zero (0) Lost Data

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Deliver High-Quality Customer Service</p>	<p>Be well underway in the implementation of the new ERP system, with a goal of completing both the financial and human resources components by early 2021.</p>
 <p>Maintain Financial Stability and Sustainability</p>	
 <p>Protect Personnel and Assets from Threats and Emergencies</p>	<p>Complete construction of new Data Center and migration of equipment into the new location.</p>
 <p>Improve and Modernize Operations through Technology and Efficiency Measures</p>	<p>Replace desk phones with new digital phones equipped with advanced mobile and collaboration features.</p>
	<p>Explore options to replace legacy permitting and billing systems.</p>

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$1,569,307	\$1,574,967	\$1,661,338	\$1,593,100	\$1,758,890	\$97,552	5.9%
Employee Benefits	729,744	688,993	688,200	555,845	695,355	7,155	1.0%
Unfunded Liabilities	509,668	523,944	524,113	515,203	574,924	50,811	9.7%
Purchased Property Services							
Repairs & Maintenance	1,045,090	891,281	955,414	895,000	1,294,101	338,687	35.5%
Other Purchased Services	110,000	50,046	110,000	25,000	56,500	(53,500)	-48.6%
Professional Services	-	-	-	-	6,500	6,500	0.0%
Technical Services	110,000	50,046	110,000	25,000	50,000	(60,000)	-54.6%
Supplies & Materials	138,000	143,391	119,000	117,700	121,500	2,500	2.1%
Utilities & Fuel	129,800	135,108	109,500	108,700	112,000	2,500	2.3%
General Supplies	8,200	8,283	9,500	9,000	9,500	-	-
Other Expenses	35,525	15,526	35,525	16,300	26,050	(9,475)	-26.7%
Memberships	375	360	375	500	500	125	33.3%
Training & Meetings	34,950	15,166	39,950	15,200	24,950	(10,000)	28.6%
Miscellaneous Other	200	-	200	600	600	400	200.0%
Total	\$4,137,334	\$3,888,148	\$4,093,590	\$3,718,148	\$4,527,320	\$433,730	10.6%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Information Technology Manager	1.0	1.0	1.0
Information Technology Supervisor	2.0	2.0	2.0
Project Manager/Business Analyst	1.0	1.0	1.0
System Administrator	2.0	2.0	2.0
Technical Support Analyst	3.0	3.0	3.0
Information Technology Analyst I/II	2.0	2.0	2.0
Total	11.0	11.0	11.0

Budget Modifications and Contributions to Key Priorities

The Information Technology Division Operating Budget for FY 2020-21 is \$4.53 million, an increase of \$434,000 (10.6%) over the \$4.09 million budget in FY 2019-20. The increase in Salaries & Wages includes the agency-wide cost-of-living adjustment and increases due to step and personnel advancements. Increases in Repairs & Maintenance are largely attributable to new support and licensing costs related to the new Oracle Cloud ERP and permitting system expected to “go-live” in FY 2020-21. The reduction in Technical Services budgeted was a result of the drone security program budgeted in the prior year being dropped as not being feasible prospectively, upon further research.

Purchasing and Materials Services

OVERVIEW

This division provides the necessary materials, supplies, equipment, services, and information to support Central San's operations. It is responsible for contracting and procurement for all departments (except construction contracts) and ensuring compliance with applicable federal, state, and local regulations. The warehouse maintains Central San's inventory of needed supplies, materials, equipment, and spare parts for operations, providing inventory control measures and analysis. In addition, the warehouse provides delivery services for these items, as well as interoffice mail, and is responsible for surplus disposition.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Received the Achievement of Excellence in Procurement Award for the 9th consecutive year, recognizing organizational excellence in public purchasing.
- Maintained requisition tracking system to allow end-users to view status of procurement requests, including a customer satisfaction survey to better monitor performance and customer service goals.
- Processed over 500 procurement requests while maintaining an average five-star rating on internal customer satisfaction surveys.



Strive to meet regulatory requirements

- Updated Board Policy No. BP 035 – Purchasing Policy.



Be a fiscally responsible and effective wastewater utility

- Leveraged spend through annual requirements contracts for 39% of the total procurement spend for goods and services, not including construction, construction-related professional services, and utility payments. This improved efficiency, shortened procurement processing time, and saved money through negotiated pricing contracts.
- Promoted open competition and equal opportunity for qualified suppliers and service providers by successfully soliciting and awarding high-level service and commodity-based contracts.
- Leveraged the buying power of public entities by utilizing sourced cooperative purchasing agreements.
- Completed Contract Management Controls Audit.
- Participated in the Bay Area Chemical Consortium bidding process, resulting in awards for aluminum sulfate, sodium hypochlorite, and sodium hydroxide.
- Completed cycle counts of warehouse inventory, including counting 5,078 total line items for a total piece count of 71,592 and total value count of \$1,928,372.



Recruit, develop, and retain a highly trained and safe workforce

- Successfully trained new Purchasing staff as a result of significant staffing changes.
- Implemented business process changes to strategically ensure that procurement resources are being utilized efficiently.



Maintain a reliable infrastructure

- Prioritized and resolved various urgent requests for procurements related to the PG&E Public Safety Power Shutoffs (PSPS) and the COVID-19 pandemic, such as critical equipment and supplies, maintenance and repair services, fuel, and equipment rentals.
- Successfully managed the inventory investment by reducing the difference between the inventory net value and the general ledger amount to less than 1%.
- Maintained efficient levels of inventory, enabling Operations to conduct their work without interruption to maintenance, repairs and operations.



Embrace technology, innovation, and environmental sustainability



- Implemented electronic signature technology for contracts and agreements, increasing functionality, visibility and tracking, improving processing time, and reducing the use of paper.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
GOAL ONE	Purchasing Internal Customer Survey Rating of Satisfactory or Better	≥70%	100%		100%		N/A Not a Metric in the FYs 2020-22 Strategic Plan
GOAL THREE	Difference in Inventory Value in Purchasing Database vs. Value Submitted to Accounting	≤1%	0.93%		1.22%		≤1%
GOAL THREE	Accuracy of Physical Inventory Count vs. Book Value	≥95%	99%		99%		≥95%

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Deliver High-Quality Customer Service</p>	Continue to promote open competition and equal opportunity for qualified suppliers and service providers by successfully soliciting and awarding high-level service and commodity-based contracts.
 <p>Maintain Financial Stability and Sustainability</p>	Further improve workflow using electronic signature technology and digital transaction management services.
	Implement ERP software to improve procedures and align with industry best practices and develop new administrative procedures to document the updated processes.
	Continue to find opportunities to leverage spend through annual requirements contracts .

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$1,058,883	\$904,541	\$1,165,618	\$886,900	\$1,108,279	\$(57,339)	-4.9%
Employee Benefits	508,940	461,731	475,397	412,420	437,676	(37,721)	-7.9%
Unfunded Liabilities	346,563	298,307	345,573	339,698	333,314	(12,259)	-3.6%
Purchased Property Services	24,000	10,000	24,000	24,000	21,000	(3,000)	-12.5%
Repairs & Maintenance	23,000	10,000	23,000	23,000	20,000	(3,000)	-13.4%
Rentals	1,000	-	1,000	1,000	1,000	-	
Other Purchased Services	84,000	63,490	84,000	71,000	77,000	(7,000)	-8.3%
Professional Services	35,000	21,196	35,000	30,000	36,000	1,000	2.9%
Technical Services	48,000	41,745	48,000	40,000	40,000	(8,000)	-16.7%
Other Services	1,000	549	1,000	1,000	1,000	-	
Supplies & Materials							
General Supplies	14,000	6,659	14,000	14,000	14,000	-	
Other Expenses	14,900	2,843	14,900	10,500	14,900	-	
Memberships	3,800	522	3,800	3,800	3,700	(100)	-2.6%
Training & Meetings	10,500	1,551	10,500	6,000	10,500	-	
Miscellaneous Other	600	770	600	700	700	100	16.7%
Total	\$2,051,286	\$1,747,571	\$2,123,488	\$1,758,518	\$2,006,169	\$(117,319)	-5.5%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Buyer	-	-	1.0
Materials Coordinator	2.0	1.0	1.0
Materials Services Supervisor	1.0	1.0	1.0
Purchasing and Materials Manager	1.0	1.0	1.0
Senior Buyer	2.0	3.0	2.0
Senior Materials Coordinator	1.0	2.0	2.0
Total	7.0	8.0	8.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Warehouse Summer Student	1.0	-	1.0
Total	1.0	-	1.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Purchasing and Materials Services Division Operating Budget for FY 2020-21 is \$2.0 million, which represents a 5% reduction compared to the \$2.1 million budget in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment. The overall budgetary reduction is primarily a result of a Senior Buyer position budgeted in the prior year being reduced to a lower-level Buyer position for a new hire expected in FY 2020-21, and other miscellaneous reductions. The reduction in Technical Services resulted from the elimination of a temporary warehouse position next year.

The division is helping to address the overall challenges facing Central San by working to ensure there are sufficient procurement processing capacity in light of increased contracting for infrastructure needs. FY 2020-21 will see Purchasing working to implement the new ERP software, which is anticipated to significantly improve contract management and automated procurement functionality, in addition to providing staff with better tools for productivity and internal customer service.

Risk Management

OVERVIEW

This division supports Central San by enhancing its capacity to identify, evaluate and respond to current and emerging risks. It manages workers' compensation, liability claims, security programs, insurance procurement, self-insurance funding, contract and insurance review, litigation support, emergency preparedness and response programs, and coordinates Central San's Enterprise Risk Management program.

FY 2019-20 Strategic Accomplishments



Be a fiscally responsible and effective wastewater utility

- Managed claims aggressively to reduce costs and facilitate resolution, resulting in an average cost per overflow claim of \$15,450.
- Continued to debrief after losses to identify and implement preventive measures.
- Established pre-loss measures to address or resolve situations affecting District infrastructure.
- Conducted and presented results of Risk Control Audit to Management Team.
- Developed Enterprise Risk Management planning process and integrated strategic and operational risk registers.



Maintain a reliable infrastructure



- Presented an Emergency Management Program report to the Board.
- Updated Pandemic Response Plan and presented to the Board.
- Participated in the Operational Area Council to contribute to creating an effective and multijurisdictional approach to disaster preparedness and planning.
- Activated Emergency Operations Center to monitor natural hazard conditions.
- Installed additional card readers.
- Increased security guard presence on main campus.
- Developed scope and design of pumping stations security improvements.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
GOAL FOUR	Workers' Compensation Experience Modifier	≤1.0	0.7		1.06		≤1.0
GOAL FOUR	Temporary Modified Duty Provided (Return to Work Program)	≥95% of Recordable Injuries	83.3%		100.0%		≥95% of Recordable Injuries

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 Maintain Financial Stability and Sustainability	Maintain an average cost per overflow claim of ≤\$25,000.
	Actively seek opportunities to reduce risk in extant and developing business processes.
	Initiate next steps in implementing Enterprise Risk Management model.
 Protect Personnel and Assets from Threats and Emergencies	Incorporate emergency response activities into Emergency Operations Plan and Continuity of Operations where applicable.
	Continue implementation of recommendations from security assessment .
	Finalize security system design criteria for use in upcoming capital projects.
	Complete review and update of the Continuity of Operations Plan .

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$262,093	\$261,962	\$286,980	\$275,000	\$305,518	\$18,538	6.5%
Employee Benefits	101,561	123,277	122,766	117,800	126,307	3,541	2.9%
Unfunded Liabilities	87,307	91,744	91,484	89,929	101,438	9,954	10.9%
Purchased Property Services	42,500	16,934	44,000	36,500	430,000	386,000	877.3%
Repairs & Maintenance	42,500	16,934	44,000	36,500	45,000	1,000	2.3%
Security	-	-	-	-	385,000	385,000	>100%
Other Purchased Services	479,847	286,466	469,350	452,500	179,000	(290,350)	-61.9%
Professional Services	26,347	10,446	21,350	50,000	51,000	29,650	138.9%
Technical Services	413,500	266,720	408,000	372,500	88,000	(320,000)	-78.4%
Other Services	40,000	9,300	40,000	30,000	40,000	-	
Supplies & Materials	58,000	72,809	11,000	12,000	19,000	8,000	72.7%
Utilities & Fuel	5,000	4,263	5,000	5,000	10,500	5,500	110.0%
General Supplies	53,000	68,547	6,000	7,000	8,500	2,500	41.7%
Other Expenses	792,000	795,471	842,295	838,800	467,200	(375,095)	-44.5%
Insurance & Risk Management	779,500	779,505	825,000	825,000	450,000	(375,000)	-45.5%
Memberships	2,500	2,879	3,295	2,200	3,200	(95)	-2.9%
Training & Meetings	6,500	12,853	11,000	11,000	11,000	-	-
Miscellaneous Other	3,500	234	3,000	600	3,000	-	-
Total	\$1,823,308	\$1,648,664	\$1,867,875	\$1,822,529	\$1,628,463	(\$239,412)	-12.8%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Risk Management Administrator	1.0	1.0	1.0
Risk Management Specialist	1.0	1.0	1.0
Total	2.0	2.0	2.0

Budget Modifications and Contributions to Key Priorities

The Risk Management Operating Budget for FY 2020-21 is \$1.63 million, reflecting a \$239,000 or 13% decrease from the \$1.87 million budget in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment and increases due to step advancements. Insurance & Risk Management contributions to properly replenish the Self-Insurance Fund were notably lower than the prior year budget following favorable loss results expected for FY 2019-20. The new chart of accounts implemented as part of the ERP Replacement Project resulted in the reclassification of security services, previously budgeted under Technical Services, to a new Security line item under the “Purchased Property Services” category.

Risk Management assists Central San in effectively managing risks, broadly defined as anything that can impede Central San from meeting its strategic goals. Building this program’s capacity will be an important tool in helping Central San mitigate risks as the agency ramps up the level of capital spending in the coming years, and in meeting evolving regulatory requirements. Risk Management helps Central San meet these and other challenges of the environment in which the agency operates.

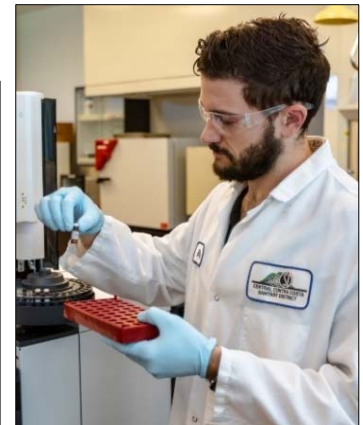
Engineering and Technical Services Department

The Engineering and Technical Services Department consists of three divisions and the Resource Recovery Program that report to the Director of Engineering and Technical Services. These divisions include Capital Projects, Environmental and Regulatory Compliance, and Planning and Development Services. The primary function of this department is to ensure Central San's infrastructure is well maintained and equipped for the future; working with development and permitting; and managing existing regulatory permits, including foreseeing potential regulatory changes, climate impacts, and the end of assets' useful lives.

The Capital Projects Division is responsible for the planning, design, construction, and/or rehabilitation of the treatment plant, collection system, and recycled water infrastructure. The Environmental and Regulatory Compliance Division is responsible for monitoring industrial businesses for environmental compliance; conducting regulatory activities and permit monitoring; performing laboratory analysis; and managing the Household Hazardous Waste Collection Facility. The Planning and Development Services Division handles development services, including right-of-way, property management, inspection, and mainline plan review; financial planning for rate-setting; planning, piloting, and applied research; and asset management and geographic information systems data (GIS). The Resource Recovery Program oversees projects that enable Central San to help augment the region's water supply, reduce reliance on non-renewable energy in a cost-effective manner, and expand efforts to utilize data to become more efficient.

The divisions that comprise this department include the following:

- Office of the Director of Engineering and Technical Services
 - Resource Recovery Program
- Capital Projects
- Environmental and Regulatory Compliance
- Planning and Development Services



Office of the Director of Engineering and Technical Services (including Resource Recovery Program)

OVERVIEW

The Director of Engineering and Technical Services oversees the Resource Recovery Program and the Capital Projects, Environmental and Regulatory Compliance, and Planning and Development Services Divisions. Staff from these divisions make significant contributions to the Recycled Water Program discussed in the Operations Department section of this document.

Major accomplishments of the Office of the Director of Engineering and Technical Services span from making important infrastructure upgrades to providing exceptional customer service through innovative recycled water, household hazardous waste (HHW), and pharmaceutical collection programs. This office was responsible for replacing five miles of pipes in Walnut Creek, Lafayette, and Orinda with a 96% customer satisfaction rating; retrofitting the Plant Operations Building to meet seismic standards; constructing a new Data Center to protect information technology equipment; remodeling the Headquarters Office Building Lobby to be more customer friendly; beginning to pilot a new permitting system; integrating project management software into the new ERP software with the help of the IT Division; and preventing 1,577,000 pounds of HHW from entering local waterways through collection at the HHW Collection Facility. This year also saw the formation of a new Central San Smart initiative, which will drive the use of data to perform system-wide optimizations to make Central San a more efficient operation. The Asset Management Program overseen by this office continues to develop innovative tools such as the GIS Emergency Response Dashboard and Reliability Engineering Tool.

The FY 2019-20 Strategic Accomplishments and performance against the key metrics, as well as the FY 2020-21 Strategic Objectives, for the Director of Engineering and Technical Services are embedded within the sections of the individual divisions and programs overseen by the Director, with the exception of the Resource Recovery Program, whose accomplishments, performance, and objectives are listed within this section, since the program operates directly within the budget of the Office of the Director.

The Office of the Director of Engineering and Technical Services' staffing budget includes the administrative staff supporting the Director of Engineering and Technical Services and the Resource Recovery Program staff.

The Resource Recovery Program operates directly within the budget of the Office of the Director of Engineering and Technical Services and manages projects which enable Central San to help augment the region's water supply through partnering opportunities and expansion of recycled water use, reduce reliance on non-renewable energy through cost-effective alternative methods, and leverage data to improve operations by becoming a smart utility of the future. This program includes support for the existing recycled water system, planned expansions, and other related projects that can also be found in the Recycled Water Program section of this document.

FY 2019-20 Strategic Accomplishments – Resource Recovery Program



Embrace technology, innovation, and environmental sustainability

- Formed a Central San Smart Steering Committee to identify projects to optimize operations, improve asset management, increase energy efficiency and safety, and reduce facility management costs.
- Identified projects under the Central San Smart initiative, nominated project champions, and formed project task forces.
- Developed Request for Proposals (RFP) for a Power Purchase Agreement (PPA) for a 1.75-megawatt solar energy project that meets the cost-effectiveness criteria in Central San’s Energy Policy.
- Began investigating the growing challenge of recycling certain materials in order to obtain a better understanding of the issue from the agencies in the service area and how it can be overcome.
- Lead the water exchange project to augment the regional water supply.



FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets - Resource Recovery Program

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	kWh (kilowatt hour) of Electricity Produced by Cogeneration Using Natural Gas	≥18 Million kWh per Year (Reported as a Rolling Average)	22.7 Million kWh		22.4 Million kWh		≥18 Million kWh per Year (Reported as a Rolling Average)
	kWh of Solar Power Produced at CSO and the HHWCF	≥220,000 kWh Per Year (Reported as a Rolling Average)	299,000 kWh		286,000 kWh		≥220,000 kWh Per Year (Reported as a Rolling Average)
	kWh of Solar Power Produced by a New Solar Array Near the Treatment Plant Campus		N/A				≥2.5 million kWh (reported as a rolling average)*
	Projects initiated under Central San Smart		N/A				≥3

*pending Board execution of the PPA contract

FY 2020-21 Strategic Objectives - Resource Recovery Program

In the coming fiscal year, this program will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Reduce Reliance on Non-Renewable Energy</p>	<p>Initiate a cost-effective 1.75 MW solar energy project available for Central San’s operation using a PPA.</p>
 <p>Implement the Central San Smart Initiative</p>	<p>Commence at least three projects as part of the Central San Smart initiative, including the optimization of the treatment plant asset handover process and development of an asset health indicator tool.</p>

Budget Overview by Expense Category - Office of the Director of Engineering and Technical Services (including Resource Recovery Program)

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$344,923	\$380,413	\$355,891	\$471,100	\$658,616	\$302,725	85.1%
Employee Benefits	111,801	111,887	103,030	-	161,191	58,161	56.5%
Unfunded Liabilities	157,388	137,458	136,747	-	204,462	67,715	49.5%
Other Purchased Services	-	-	-	-	86,000	86,000	
Technical Services	-	-	-	-	6,000	6,000	
Other Services	-	-	-	-	80,000	80,000	
Other Expenses	20,546	10,395	20,390	10,648	22,644	2,254	11.1%
Memberships	796	505	640	648	914	274	42.8%
Training & Meetings	19,000	9,890	19,000	10,000	21,500	2,500	13.2%
Miscellaneous Other	750	-	750	-	-	(750)	-100.0%
Total	\$634,658	\$640,153	\$616,058	\$481,748	\$1,132,683	\$516,625	83.9%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements - Office of the Director of Engineering and Technical Services

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Services Supervisor	1.0	1.0	1.0
Director of Engineering & Technical Services	1.0	1.0	1.0
Total	2.0	2.0	2.0

Personnel Requirements - Resource Recovery Program

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Engineering Assistant III	1.0	1.0	1.0
Program Manager	.5	.5	.5
Total	1.5	1.5	1.5

* The above four positions were presented as part of Planning and Development Services Division budget in prior years.

Budget Modifications and Contributions to Key Priorities – Office of the Director of Engineering and Technical Services (including Resource Recovery Program)

As described previously in the Financial Summary section of the budget book, as part of its implementation of a new ERP system and revised chart of accounts, new org units were established for director functions overseeing each department of Central San. In prior budgets, costs associated with Department Director functions were reported within one of the child divisions of the overarching parent department. For the Office of the Director of Engineering and Technical Services (including Resource Recovery), prior year budget costs were previously reported within the Planning and Development Services Division. While prior year columns in the budget table above were largely restated for this change, certain adjustments occurred prospectively.

The Office of the Director of Engineering and Technical Services Budget for FY 2020-21 is \$1.13 million, a \$517,000 or 84% increase over the \$616,000 budget in FY 2019-20, as restated. This increase is primarily attributable to transferring costs associated with the Resource Recovery Program as well as certain administrative support staff from the Planning and Development Services Division in the prior year. Salaries & Wages includes the agency-wide cost-of-living adjustment as well as increases due to step advancements.

Capital Projects

OVERVIEW

This division conducts and manages the preliminary design, final design, public bidding, and construction management of projects to rehabilitate or improve the treatment plant, pumping stations, collection system sewer pipelines, general facilities, safety, and recycled water infrastructure. In addition, this division works as one of the primary engineering resources at Central San, including staff that provides data and support to facilitate the work, not just of the Capital Projects Division, but also of the entire organization. All informal and formal public works design and construction projects are conducted under this division.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Received 100% customer satisfaction rating for the Walnut Creek Sewer Renovations, Phase 13 construction project.
- Received 94% customer satisfaction rating for the South Orinda Sewer Renovations, Phase 7 construction project.
- Received 93% customer satisfaction rating for the Lafayette Sewer Renovations, Phase 13 construction project.
- Remodeled lobby to a more accessible and customer-friendly environment.
- Continued to coordinate construction projects with local jurisdictions and other agencies to lessen construction impacts to the community.
- Restricted sewer construction projects not to perform activities in backyard easements during COVID-19.



Be a fiscally responsible and effective wastewater utility

- Implemented the use of the Uniform Public Construction Cost Accounting Act (UPCCAA) for savings on administrative costs of bidding and streamlining the bidding process for informal projects.
- Executed blanket contracts to cover similar work shared by multiple projects to save on engineering, administration, and other costs.
- Continued to evaluate, design, and manage construction sewer renovation projects in-house at costs below the industry standards or compared to outside services.



Maintain a reliable infrastructure










- Completed several critical projects at the treatment plant, including the Treatment Plant Piping Renovations, Phase 9; Plant Operations Building Seismic Upgrades; and made significant progress on the Mechanical and Concrete Renovations Project.
- Completed sewer renovation projects in Walnut Creek, Lafayette, Orinda, and other nearby communities.
- Started several new projects including the Annual Infrastructure Replacement Project; Treatment Plant Piping Renovations, Phase 10; and construction of the Pump Station Upgrades, Phase 1.



Embrace technology, innovation, and environmental sustainability




- Completed a filter plant pilot under the Filter Plant and Clearwell Improvements Project to cost effectively produce better Title 22 recycled water.
- Continued to design and perform constructability reviews using three-dimensional modeling under the Solids Handling Facility Improvements Project.
- Implemented online meetings and interactions to reduce travel and save time.
- Continued to expand recycled water use by increasing the number of restrooms and Central San facilities that can benefit from the water source.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Average Customer Satisfaction Rating on Construction Projects	≥95%	89%		96%		≥95%
	Miles of Pipeline Replaced	≥0.5% of Assets (7.6 Miles Per Year)	0.4% (6.1 miles)		0.3% (5.1 Miles) due to COVID-19		≥6.0 Miles of Sewers Replaced or Rehabilitated
	Capital Expenditures as a Percentage of Capital Budgeted Cash Flow Including Carry Forward	≥90%	84%		89%		≥90%

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Achieve 100% Compliance in All Regulations</p>	<p>Successfully bid and award the Solids Handling Facility Improvements Project, which will include air pollution control equipment needed to reliably comply with current air regulations.</p>
	<p>Successfully bid and award the Filter Plant and Clearwell Improvements - Phase 1A Project, which will include replacing critical electrical gear and increase reliability at recycled water storage facilities.</p>
	<p>Successfully bid and award the Influent Pump Electrical Improvements Project, which will replace the variable frequency drives (VFDs) at the Headworks Facility at the treatment plant.</p>
	<p>Successfully construct the Outfall Improvements Phase 7 Project, which will inspect and repair the 72-inch final effluent pipeline that travels from the treatment plant to Suisun Bay as noted in Central San’s National Pollutant Discharge Elimination System (NPDES) permit.</p>
 <p>Maintain Financial Stability and Sustainability</p>	<p>Continue to use the Uniform Public Construction Cost Accounting Act to help streamline infrastructure replacement projects using informal bidding and maintain a contractors list for projects under \$200,000.</p>
	<p>Enter into a Financing Agreement for the California State Revolving Fund (SRF) loan to help supplement the construction costs of the Solids Handling Improvements Project.</p>
 <p>Execute Long-Term Capital Renewal and Replacement Program</p>	<p>Continue to replace sewers in poor condition and respond to urgent or emergency sewer repairs throughout the service area in a timely manner.</p>
	<p>Replace sewers needing difficult or frequent maintenance to allow the Collection System Operations Division to focus on other sewers and reduce sanitary sewer overflows.</p>
	<p>Deliver projects on time and on budget using new construction management software, e-Builder and Oracle.</p>

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$1,959,112	\$1,812,042	\$1,960,752	\$1,996,000	\$2,135,534	\$174,782	8.9%
Employee Benefits	(1,851,611)	(1,956,639)	(2,238,431)	(2,246,063)	(2,310,273)	(71,842)	3.2%
Unfunded Liabilities	585,833	587,921	595,475	603,046	692,954	97,479	16.4%
Purchased Property Services	4,000	2,496	4,000	3,900	223,000	219,000	5475.0%
Repairs & Maintenance	3,000	2,496	3,000	2,900	3,000	-	-
Security	-	-	-	-	219,000	219,000	-
Rentals	1,000	-	1,000	1,000	1,000	-	-
Other Purchased Services	41,100	26,387	35,325	19,725	35,000	(325)	-0.9%
Technical Services	40,100	26,326	34,325	19,225	34,000	(325)	-1.0%
Other Services	1,000	61	1,000	500	1,000	-	-
Supplies & Materials	51,500	42,570	52,800	49,800	54,800	2,000	3.8%
Utilities & Fuel	22,800	19,929	19,200	20,600	21,600	2,400	12.5%
General Supplies	28,700	22,641	33,600	29,200	33,200	(400)	-1.2%
Other Expenses	45,920	28,546	45,920	36,310	52,155	6,235	13.6%
Memberships	8,520	5,014	8,520	9,010	10,155	1,635	19.2%
Training & Meetings	36,600	23,442	36,600	27,000	41,000	4,400	12.0%
Miscellaneous Other	800	90	800	300	1,000	200	25.0%
Total	\$835,854	\$543,323	\$455,841	\$462,718	\$883,170	\$427,329	93.8%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Note: The staff in this division are budgeted with the Capital Improvements Program. As a result, 98% of their combined salary and benefit expenses are paid for by the projects identified in the Capital Improvement Budget. The amounts above are net of the capitalized administrative overhead transfer to the Sewer Construction Fund.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Assistant	2.0	2.0	2.0
Assistant Engineer	6.0	5.0	5.0
Assistant Land Surveyor	2.0	2.0	2.0
Associate Engineer	6.0	7.0	7.0
Capital Projects Division Manager	1.0	1.0	1.0
Contracts Specialist	0.0	1.0	1.0
Engineering Assistant I/II	0.0	1.0	1.0
Engineering Assistant III	1.0	1.0	1.0
Engineering Technician III	3.0	3.0	3.0
Land Surveyor	1.0	1.0	1.0
Senior Engineer	3.0	3.0	3.0
Senior Engineering Assistant	1.0	1.0	1.0
Utility Systems Engineer	1.0	1.0	1.0
Total	27.0	29.0	29.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Summer Student	3.0	3.0	3.0
Intern	3.0	3.0	4.0
Total	6.0	6.0	7.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Capital Projects Operating Budget for FY 2020-21 is \$883,000, a \$427,000 or 94% increase over the \$456,000 budget in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment as well as increases due to step advancements, largely offset by additional time being charged to work for capital projects. This division’s overall budgetary increase is mainly attributable to a newly budgeted item for on-site security measures that will be necessary to counteract the significant increase in non-employee foot traffic on the treatment plant premises in conjunction with large-scale treatment plant improvement projects planned next year such as the Solids Handling Facility Improvements Project.

The Capital Projects Division leads Central San’s efforts in maintaining and upgrading aging infrastructure, as well as implementing projects driven by the need to meet evolving regulatory requirements. This division also oversees projects related to other strategic priorities of Central San, including playing a role in maintaining a sustainable water supply and executing projects related to resource recovery. The division is building its capacities to effectively administer a significantly larger Capital Improvement Program in future years. This includes implementing a program management information system and using outside resources to supplement Central San staff.

As noted in the footnote to the Budget Overview table, most of the cost for staff in this division are charged to the projects that the group oversees and manages.

Environmental and Regulatory Compliance

OVERVIEW

This division ensures that Central San is in compliance with applicable federal, state, and local environmental laws, regulations, and policies. It monitors Central San's permitted businesses and industrial customers for compliance with all applicable requirements to protect the environment as well as Central San's assets; manages the Household Hazardous Waste (HHW) Collection Program and Residential Recycled Water Fill Station; receives and interprets laboratory data and applies their results to regulatory requirements to ensure the treatment plant's effluent meets all water quality standards; evaluates treatment plant operations to ensure compliance with all air pollution control standards; evaluates the effectiveness of regulatory compliance programs; develops and implements new programs as mandated by legislation and/or policy; monitors and analyzes legislation and new regulations that impact regulatory compliance; and represents Central San before regulatory agency staff and boards, political bodies, committees, and the general public. Through active participation in the Bay Area Clean Water Agencies (BACWA), this division works collaboratively with sister agencies to provide technical expertise, financial support, and a public utility perspective to ensure that regulations affecting the Bay Area wastewater community are well informed, thoughtful, and effective.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Oversaw over 57,000 visits to the HHW Collection Facility and Residential Recycled Water Fill Station by residents, small businesses, reuse customers, retail partners, and fill station users.



Strive to meet regulatory requirements

- Achieved 22nd year of continuous compliance with all National Pollutant Discharge Elimination System (NPDES) permit requirements governing wastewater discharge.
- Submitted Title V permit renewal application to Bay Area Air Quality Management District (BAAQMD).
- Completed pretreatment and stormwater inspections.
- Collected 1,577,000 pounds of HHW prior to the facility closing on March 16 due to the COVID-19 pandemic, which is 1% less than the total collected last fiscal year.
- Collected 6,386 pounds of pharmaceuticals.
- Maintained 2019 anthropogenic greenhouse gas (GHG) emissions below the Cap and Trade inclusion threshold.
- Developed health risk reduction strategies in preparation for compliance with BAAQMD Rule 11-18.
- Completed root cause analyses on incidences of non-compliance with air permit requirements.
- Reviewed and commented on proposed regulations to ensure they are both practical and protective.

- Division Manager served as Chair of the BACWA Executive Board and staff served in leadership roles on associated committees.
- Worked with BACWA to procure second regional Nutrient Watershed Permit.
- Worked with Division of Safety of Dams to obtain “low hazard” determination for clearwell dam.
- Initiated District-wide Spill Prevention, Control, and Countermeasure Program revamp efforts.
- Submitted 2019 Five-Year Review Report for Soil Cap to Department of Toxic Substances.



Maintain a reliable infrastructure

- Completed annual Basin A South soil cap seep repairs.
- Obtained regulatory permits for Outfall Improvements Project, Phase 7.



Embrace technology, innovation, and environmental sustainability


- Continued use of tablets in the field for Environmental Compliance inspections.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
GOAL TWO	NPDES Compliance	Zero (0) Violations	Zero (0) Violations		Zero (0) Violations		Zero (0) Violations
GOAL TWO	Title V Compliance	Zero (0) Violations	3 Violations (Will be Addressed with New Wet Scrubber)		5 Violations (Will be Addressed with New Wet Scrubber)		Zero (0) Violations
GOAL TWO	Recycled Water Title 22 Compliance	Zero (0) Violations	Zero (0) Violations		Zero (0) Violations		Zero (0) Violations
GOAL TWO	Anthropogenic GHG Emissions (Per Calendar Year)	<25,000 Metric Tons (MT) CO ₂ e	23,038 MT CO ₂ e (Pre-verified for Calendar Year 2019)		On Track to Meet Goal		<25,000 MT CO ₂ e
GOAL TWO	Annual Environmental Compliance Inspections and Permitting Completed on Time	100.0%	100.0%		100.0%		100.0%
GOAL TWO	HHW Management Compliance	Zero (0) Violations	Zero (0) Violations		Zero (0) Violations		Zero (0) Violations

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Achieve 100% Compliance in All Regulations</p>	Strive to meet all air permit requirements (Title V and Permit to Operate).
	Strive to meet all wastewater-related permit requirements (NPDES Treatment Plant Permit, Nutrients Watershed Permit, Polychlorinated Biphenyls, and Mercury Watershed Permit).

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$3,594,027	\$3,730,140	\$3,831,724	\$3,822,100	\$3,960,913	\$129,189	3.4%
Employee Benefits	1,480,320	1,519,525	1,416,357	1,464,428	1,482,826	66,469	4.7%
Unfunded Liabilities	1,140,247	1,270,385	1,205,956	1,221,826	1,307,155	101,199	8.4%
Purchased Property Services	650,425	573,497	690,625	773,800	841,625	151,000	21.9%
Repairs & Maintenance	104,000	58,683	94,000	82,000	94,000	-	-
Hauling & Disposal	501,925	475,798	551,625	650,900	701,425	149,800	27.2%
Rentals	8,000	5,438	6,500	4,900	5,200	(1,300)	-20.0%
Cleaning	36,500	33,578	38,500	36,000	41,000	2,500	6.5%
Other Purchased Services	627,300	467,825	630,300	611,300	724,300	94,000	14.9%
Professional Services	6,000	(6,806)	6,000	4,000	6,000	-	-
Technical Services	594,500	457,475	598,500	588,000	696,000	97,500	16.3%
Other Services	26,800	17,156	25,800	19,300	22,300	(3,500)	-13.6%
Supplies & Materials	327,000	338,795	346,800	345,650	356,700	9,900	2.9%
Utilities & Fuel	13,500	10,693	14,300	11,300	12,700	(1,600)	-11.2%
General Supplies	313,500	328,102	332,500	334,350	344,000	11,500	3.5%
Other Expenses	578,080	402,214	506,441	429,819	486,246	(20,195)	-4.0%
Memberships	526,655	362,435	455,016	386,544	434,671	(20,345)	-4.5%
Training & Meetings	46,825	38,778	47,825	40,275	47,975	150	0.3%
Miscellaneous Other	4,600	1,001	3,600	3,000	3,600	-	-
Total	\$8,397,399	\$8,302,381	\$8,628,203	\$8,668,923	\$9,159,765	\$531,562	6.2%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

** Memberships for FY 2020-21 includes \$368,000 for BACWA membership and studies, including \$105,000 for dues, \$90,000 for CBC fee, and \$173,000 for nutrient studies.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Assistant	1.0	1.0	1.0
Assistant Engineer	2.0	2.0	2.0
Associate Engineer	1.0	1.0	1.0
Chemist I/II	5.0	5.0	5.0
Chemist III	1.0	1.0	1.0
Environmental and Regulatory Compliance Division Manager	1.0	1.0	1.0
Environmental Compliance Inspector I/II	6.0	6.0	6.0
Environmental Compliance Superintendent	1.0	1.0	1.0
Household Hazardous Waste Supervisor	1.0	1.0	1.0
Household Hazardous Waste Technician I/II	3.0	3.0	3.0
Laboratory Superintendent	1.0	1.0	1.0
Senior Chemist	1.0	1.0	1.0
Senior Engineer	1.0	1.0	1.0
Senior Environmental Compliance Inspector	2.0	2.0	2.0
Senior Household Hazardous Waste Technician	2.0	2.0	2.0
Total	29.0	29.0	29.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Laboratory Assistant Summer Student	2.0	2.0	1.0
Intern	1.5	2.0	2.0
Total	3.5	4.0	3.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Environmental and Regulatory Compliance Operating Budget for FY 2020-21 is \$9.2 million, a \$532,000 or 6% increase over the \$8.6 million budget in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment and increases due to step advancements. Hauling & Disposal increased due to a new contract for hazardous waste disposal. Technical Services increased due to expanded air source testing requirements.

The Environmental and Regulatory Compliance Division plays the leading role in monitoring evolving regulation and environmental compliance requirements promulgated by state and federal agencies and assuring that Central San is positioned to meet these requirements.

Planning and Development Services

OVERVIEW

This division provides development services, including right-of-way, property management, development inspection, permit counter operations, and mainline plan review. This division also leads pilot studies to provide in-depth results specific to Central San's operations and needs; oversees asset management, geographic information systems (GIS), and computerized maintenance management systems used by staff and the public; and conducts financial planning for rates, capacity fees, permits, and sewer service charges, including preparation of the rate increases that may be necessary to adequately fund operations, maintenance, and the sewer construction budget for ever-increasing Capital Improvement Program needs.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Updated 2014 Standard Specifications for Design and Construction.
- Implemented convenient online payment options for customers in response to the COVID-19 pandemic.
- Created a GIS Emergency Response Dashboard to track staffing resources during the COVID-19 pandemic.
- Hosted collaborative Asset Management Program meeting with staff from San Francisco Public Utilities Commission Wastewater Enterprise (SFPUCC-WWE).
- Along with Collection System Operations (CSO) staff, co-hosted City of Oakland staff at the CSO Facility to share information on asset management.
- Created "Wipes Are Costly to Sewer Agencies in California" map as a compelling visual case study for advocacy and outreach of the wipes issue at the local and state levels. The map has been selected for publication in the *Esri Map Book, Volume 35*.



Be a fiscally responsible and effective wastewater utility

- Developed rate alternative scenarios that reduced 10-Year Capital Improvement Plan (CIP) cash flow and Central San's reliance on debt by \$34 million.
- Presented new rate structure for mixed-use businesses and non-residential customers as part of the proposed rate for Board consideration on April 18, 2019.
- Presented alternatives for Board input consistent with debt management policy, fiscal reserve policy, CIP, and general ratemaking principles at two Financial Workshops and a Public Hearing.
- Prepared a State Revolving Fund (SRF) application in the amount of \$89.6 million for the Solids Handling Facility Improvements Project.
- Completed Lime Reduction Bench Scale Study and paper recommending full-scale testing for potential savings in lime procurement costs.

- Conducted annual reviews of the following:
 - Current rates and fees, for reasonableness and consistency.
 - Capacity fees, to ensure appropriate fees are assessed and collected.
 - Businesses, to ensure consistent use with existing permits and payment of capacity fees.



Maintain a reliable infrastructure

- Continued comprehensive two-year program to perform condition assessments for the Steam and Aeration Blower Systems Renovations Project.
- Developed software for a Reliability Engineering Tool to see which assets do not have preventive maintenance (PM) work order cycles, which assets have predictive maintenance (PdM) (e.g., vibration analysis and temperature analysis) work order cycles, and which assets have a maintenance program assessment (e.g., root cause analysis and Reliability Centered Maintenance (RCM)) performed on them.
- Initiated a valve exercising program in Cityworks for recycled water distribution system control valves.
- Added new layers in GeoPortal for annual sewer renovation planning forecast and large diameter pipeline corrosion planning information.
















Embrace technology, innovation, and environmental sustainability

- Completed evaluation of a pilot project for new recycled water meter technology (Water Pigeon), initiated a second trial phase using a new design from the vendor, and purchased additional units to reduce staff time devoted to meter reading.
- Completed white paper to provide for proof-of-concept and feasibility evaluation of new tertiary membrane filtration to improve recycled water production in lieu of renovating existing filters.
- Provided support to further the Refinery Recycled Water Exchange Project with Contra Costa Water District (CCWD) and Valley Water.
- Optimized plan review workflow for Development Mainline Construction.
- Developed Septic Parcel Identification web application to assist in identifying parcels that are potential septic conversion candidates.
- Optimized Asset Registry by enhancing GIS data structure through the Pressure Relief Demotion Project, which streamlined the cleaning and inspection process by eliminating duplication of cleaning efforts and decreasing the numbers of work orders needed.
- Developed Pipeline Cleaning Schedules web application and analysis tool to optimize how staff cleans the pipes using geospatial location information.
- Invited to speak on “The Next Generation Water Future” at 2019 American Water Summit, focused on Leadership for a Sustainable America.
- Presented at the Cityworks 2019 Conference “Going Mobile.”
- Invited to speak and present on “Taking a Micro-Services Approach to Feature Manipulation Engine (FME) Server Workspace Design” at the 2020 FME World Tour. The conference was postponed due to COVID-19.







- Presented paper on “Customer Showcase: Learn How Central San Uses ColdFusion to Interconnect and Manage Enterprise Infrastructure Assets” at the 2019 ColdFusion Summit.
- Invited to speak and present paper on “The Pressure's On! Modeling the Way for Recycled Water Purple Pipe Optimization” at the 2020 California Water Environment Association Conference. The conference was postponed to October due to COVID-19.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FY 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Median Customer Satisfaction Rating on Permit Counter Interactions	≥95.0%	100%		100%		100% (average rating)
	Median Service Affordability	Sewer Service Charge (SSC) Less Than Median of Bay Area Agencies SSC Plus Ad Valorem Tax Less Than Average of Bay Area Agencies	Target Met		Target Met		SSC Less Than Average of Bay Area Agencies SSC Plus Ad Valorem Tax Less Than Average of Bay Area Agencies ≤0.78% of Median Household Income
	Large Diameter and Force Main Condition Assessment	N/A – not included in the FY 2018-20 Strategic Plan					≥3 Miles Per Year for the Next 5 Years Starting in FY 2020-21
	Pilot Test New and Promising Technology	≥3 Pilot Tests or Reviews Per Year	7		6 Pilot Tests or Reviews		≥3 Pilot Tests or Reviews
	Present Research Papers and Findings	≥3 Papers Per Year	6 (2 papers and 4 presentations)		3 Papers or Presentations		≥3 Papers or Presentations

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Deliver High-Quality Customer Service</p>	<p>Host a Sewer Summit Workshop for partner Cities and County.</p> <p>Update and publish “Construction Guides” to assist Development Applicants.</p> <p>Develop an interactive webmap for education outreach programs.</p>
 <p>Support Regional Development of Local Water Supply</p>	<p>Work with CCWD and the City of Concord to supply recycled water to the Concord Community Reuse Project.</p>
 <p>Maintain Financial Stability and Sustainability</p>	<p>Successfully bid the Solids Handling Facility Improvements Project and submit all necessary SRF paperwork, including an amended budget request, to enter into the Final Financing Agreement to receive loan proceeds.</p>
 <p>Manage Assets Optimally Throughout Their Lifecycle</p>	<p>Develop prioritization model for vertical assets.</p> <p>Implement the Large Diameter Pipe and Force Main Inspection and condition assessment programs.</p>
 <p>Execute Long-Term Capital Renewal and Replacement Program</p>	<p>Continue work on comprehensive two-year program to perform condition assessments for the Steam Aeration and Blower System Project.</p> <p>Develop a planning tool for multi-year future capital spending which integrates with the new Oracle ERP.</p> <p>Update the Comprehensive Wastewater Master Plan (CWMP) Technical Memos on Resiliency and Vulnerability.</p>
 <p>Improve and Modernize Operations through Technology and Efficiency Measures</p>	<p>Implement and train staff on the new Oracle permitting software.</p> <p>Evaluate and review new Sewer Service Billing software to replace SunGard.</p> <p>Evaluate and review remote manhole level monitoring solutions.</p> <p>Initiate Phase 2 of the Hydrothermal Processing of Wastewater Solids (HYPOWERS) Pilot Project.</p>

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$4,099,980	\$4,085,208	\$4,224,701	\$4,045,553	\$4,329,561	\$104,860	2.5%
Employee Benefits	649,382	612,278	385,354	550,363	573,751	188,397	48.9%
Unfunded Liabilities	1,277,975	1,342,504	1,297,871	1,453,482	1,459,773	161,902	12.5%
Purchased Property Services	62,250	26,033	40,400	24,400	33,400	(7,000)	-17.3%
Repairs & Maintenance	59,400	23,407	35,400	19,400	28,400	(7,000)	-19.8%
Rentals	2,850	2,626	5,000	5,000	5,000	-	-
Other Purchased Services	802,541	489,401	929,542	767,042	760,942	(168,600)	-18.1%
Professional Services	165,000	140,902	165,000	102,000	102,500	(62,500)	-37.9%
Technical Services	524,000	243,085	650,000	551,500	544,500	(105,500)	-16.2%
Other Services	113,541	105,414	114,542	113,542	113,942	(600)	-0.5%
Supplies & Materials	194,750	258,198	207,650	210,200	211,800	4,150	2.0%
Utilities & Fuel	136,900	223,839	149,800	151,200	155,800	6,000	4.0%
General Supplies	57,850	34,359	57,850	59,000	56,000	(1,850)	-3.2%
Other Expenses	78,619	34,764	78,322	78,465	78,538	216	0.3%
Memberships	33,319	6,973	22,922	22,865	22,813	(109)	-0.5%
Training & Meetings	39,200	25,761	49,300	51,500	48,875	(425)	-0.9%
Miscellaneous Other	6,100	2,030	6,100	4,100	6,850	750	12.3%
Total	\$7,165,497	\$6,848,386	\$7,163,840	\$7,129,505	\$7,447,765	\$283,925	4.0%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Note: Some staff in this division are budgeted with the Capital Improvements Program. As a result, 26% of their combined salary and benefit expenses are paid for by the projects identified in the Capital Improvement Budget. The amounts above are net of the capitalized administrative overhead transfer to the Sewer Construction Fund.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Assistant	1.0	1.0	1.0
Asset Management Program Administrator	-	1.0	1.0
Assistant Engineer	2.0	2.0	2.0
Associate Engineer	4.0	4.0	4.0
Construction Inspector	4.0	4.0	4.0
Development Services Supervisor	2.0	2.0	2.0
Engineering Assistant III	5.0	5.0	4.0
Engineering Assistant I/II	2.0	2.0	4.0
Engineering Technician I/II	1.0	1.0	1.0
GIS Analyst	2.0	2.0	2.0
Maintenance Planner	1.0	1.0	-
Management Analyst	2.0	1.0	2.0
Planning and Development Services Division Manager	1.0	1.0	1.0
Senior Engineer	4.0	4.0	4.0
Senior Right-of-Way Agent	2.0	2.0	2.0
Total	33.0	33.0	34.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Engineering Assistant Summer Student	8.0	4.0	4.0
Intern	4.0	4.0	4.0
Total	12.0	8.0	8.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Planning and Development Services Division's Operating Budget for FY 2020-21 is \$7.4 million, reflecting an increase of approximately \$284,000 (4%) over the prior year budget of \$7.2 million in FY 2019-20. Salaries & Wages include the agency-wide cost-of-living adjustment, increases due to step advancements, as well as the addition of two new General Manager transitional positions necessary for succession planning purposes and to assist at the permit counter during the new ERP Implementation Project. The increase of these two transitional positions is accompanied by a reduction in Technical Services.

The Planning and Development Services Division's budget allows Central San to meet several key challenges including maintaining customer awareness of Central San's services, the costs involved in meeting those responsibilities, and meeting service level expectations at responsible rates. This is accomplished through the division's work in maintaining the financial plan and rate-setting, by balancing the objectives of setting rates to fund important priorities for Central San, while keeping rate adjustments moderated and no higher than necessary.

Operations Department

The Operations Department consists of three divisions and the Recycled Water Program. The Recycled Water Program consists of staff from multiple departments. The primary function of the Operations Department is to collect, clean, and dispose of wastewater in compliance with regulatory requirements, and to divert a portion of the wastewater to produce Title 22 recycled water. This includes operations and maintenance of pipelines, pumping stations, and treatment facilities; oversight of power generation operations; fleet maintenance; and managing computerized control equipment and systems.

The Divisions that comprise this Department include the following:

- Director of Operations
- Collection System Operations
- Plant Maintenance
- Plant Operations
- Recycled Water Program



Office of the Director of Operations

OVERVIEW

The Director of Operations serves as the Deputy General Manager and oversees the Collection System Operations, Plant Maintenance, and Plant Operations Divisions. The Director is responsible for providing these divisions with the resources and guidance needed to fulfill their missions.

Major accomplishments include achievement of a steadily decreasing sewer overflow rate; the 22nd consecutive NACWA Platinum Peak Award, recognizing 100% compliance with Central San’s wastewater discharge permit; and a continually growing reliability-centered maintenance program. With only 18 sanitary sewer overflows recorded as of March 31, Central San could potentially set a new record low for overflows, thanks in large part to Collection System Operations’ diligent and optimized cleaning schedules and methods. Plant Operations maintained its compliance record while working with Engineering to plan for large-scale capital improvements. Maintenance continues to add trainings and certifications for staff, implement testing programs to monitor equipment, and integrate data through technology tools, all to ensure that assets are optimally maintained to extend their useful life as long as possible. In response to the COVID-19 pandemic, under the direction of the Director of Operations, Operations staff as a whole acted quickly to implement safety measures to protect its essential employees and continued service with no interruption.

The FY 2019-20 Strategic Accomplishments and performance against the key metrics, as well as the FY 2020-21 Strategic Objectives, for the Director of Operations are embedded within the sections of the individual divisions and programs overseen by the Director.

This office’s staffing budget includes the administrative staff supporting the Deputy General Manager/Director of Operations.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$267,248	\$268,522	\$286,479	\$554,000	\$584,505	\$298,026	104.0%
Employee Benefits	127,509	114,739	126,124	121,114	198,824	72,700	57.6%
Unfunded Liabilities	90,848	91,393	94,476	92,870	201,761	107,285	113.6%
Other Purchased Services	8,000	2,892	8,000	3,000	12,000	4,000	50.0%
Professional Services	1,000	2,892	1,000	2,500	5,000	4,000	400.0%
Technical Services	7,000	-	7,000	500	7,000	-	
Supplies & Materials							
General Supplies	20,400	17,462	20,400	20,400	20,400	-	-
Other Expenses	13,266	7,617	15,100	10,150	17,850	2,750	18.2%
Memberships	1,200	568	1,200	500	1,200	-	-
Training & Meetings	11,116	6,643	12,950	8,700	15,700	2,750	21.2%
Miscellaneous Other	950	406	950	950	950	-	-
Total	\$527,271	\$502,625	\$550,579	\$801,534	\$1,035,340	\$484,761	88.1%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Assistant	2.0	2.0	2.0
Administrative Services Supervisor	1.0	1.0	1.0
Deputy General Manager/Director of Operations	1.0	1.0	1.0
Total	4.0	4.0	4.0

Budget Modifications and Contributions to Key Priorities

As described previously in the Financial Summary section of the budget book, as part of its implementation of a new ERP system and revised functions chart of accounts, new org units were established for Director functions overseeing each department of Central San. In prior budgets, costs associated with Department Director functions were reported within one of the child divisions of the overarching parent department. In the case of the Office of the Director of Operations, prior year budget costs associated with this function were previously reported within the Plant Operations Division of the Operations Department. While prior year columns in the budget table above were largely restated for this change, certain adjustments occurred prospectively.

The Office of the Director of Operations Budget for FY 2020-21 is approximately \$1.04 million, a \$485,000 or 88% increase over the \$551,000 budget in FY 2019-20, as restated. This increase is primarily attributable to transferring costs associated with administrative support for the Plant Operations Division to the Office of the Director of Operations in FY 2020-21 to better reflect the actual reporting hierarchy of Central San's current organizational chart. As reflected in the Personnel Requirements table, several support positions were transferred to this divisional cost center in FY 2020-21. Salaries & Wages includes the agency-wide cost-of-living adjustment as well as increases due to step advancements.

Collection System Operations

OVERVIEW

This division is responsible for cleaning, maintaining, and repairing over 1,500 miles of collection sewers, trunk sewers and force mains in Central San’s vast collection system, as well as maintaining the recycled water distribution system. This division also includes an in-house vehicle shop, which is responsible for the maintenance of all Central San vehicles.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Responded to 213 customer service phone calls.
- Received and cleared over 22,508 USA locating requests on time.
- Along with Asset Management staff, co-hosted City of Oakland staff at the CSO Facility to share information on asset management efforts.
- Continued to provide essential services with no interruption during the COVID-19 pandemic.



Strive to meet regulatory requirements

- Responded to 18 sanitary sewer overflows.
- Cleaned 569 miles of sewers.
- Completed 12,714 work orders on schedule 99.22% of the time.
- Performed 21% of all cleaning work on “hotspots.”
- Closed circuit televised 108 miles of sewers.
- Hosted 13 members of the State and Regional Water Quality Control Board for a tour of CSO’s facilities.



Be a fiscally responsible and effective wastewater utility
































- Optimized 1-, 2-, 3-, and 6-month cleaning schedules to dispatch staff more efficiently and clean sewers as needed to best prevent overflows.



Maintain a reliable infrastructure




- Completed 701 services on vehicles and equipment to maintain 100% uptime.
- Converted cleaning schedules from routine to scheduled maintenance to ensure each line has a scheduled cleaning date.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Average Onsite Response Time for Collection System Emergency Calls, During Working Hours	≤20.0 Minutes	30.3 Minutes		30.5 Minutes		≤30.0 Minutes
	Average Onsite Response Time for Collection System Emergency Calls, After Hours	≤30.0 Minutes	34.2 Minutes		34.3 Minutes		≤40.0 Minutes
	Average Customer Service Rating for Emergency Calls	≥3.8 out of 4.0	3.9 out of 4.0		3.9 out of 4.0		≥3.8 out of 4.0
	Sanitary Sewer Overflows	≤2.5 Spills per 100 Miles of Pipeline	1.95 Spills per 100 Miles of Pipeline		1.17 Spills per 100 Miles of Pipeline		≤2.0 Spills per 100 Miles of Pipeline
	Spills to Public Water	≤3	7		3		≤3
	Percentage of Spills <500 Gallons	≥95%	87%		72%		≥95%
	Pipeline Cleaning Schedules Completed on Time	≥95%	99%		99.22%		≥98%
	Pipeline Cleaning QA/QC	On ≥3.0% of Pipelines Cleaned on an Annual Basis	3.8%		3.07%		On ≥4% of Pipelines Cleaned on an Annual Basis
	Pipeline Cleaning QA/QC Passing Rate	≥98.0%	95.6%		95.43%		≥98%
	Recycled Water Distribution System Maintenance Schedules Completed on Time	N/A (Not a Metric in the FYs 2018-20 Strategic Plan)					≥98%
	Uptime for Vehicles and Equipment	100.0%	99.5%		100.0%		100% (Uptime for Vehicles)

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Deliver High-Quality Customer Service</p>	Continue to respond quickly to emergency calls both during and after work hours.
 <p>Achieve 100% Compliance in All Regulations</p>	<p>Continue to proactively and optimally clean sewers to prevent overflows.</p> <p>Optimize cleaning schedule frequencies and location of work orders.</p>
 <p>Maintain Financial Stability and Sustainability</p>	Begin using alternative diesel fuels for CSO vehicles, resulting in cleaner emissions, reduced maintenance, and improved reliability.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$6,272,384	\$6,435,490	\$6,913,694	\$6,594,900	\$6,948,805	\$35,111	0.5%
Employee Benefits	3,031,274	2,927,786	3,046,602	2,997,860	3,035,416	(11,186)	-0.4%
Unfunded Liabilities	1,942,922	2,040,237	2,052,083	2,079,128	2,190,179	138,096	6.7%
Purchased Property Services	1,505,106	1,252,874	630,605	589,503	657,501	26,896	4.3%
Repairs & Maintenance	1,283,504	1,062,195	407,503	362,502	407,500	(3)	-
Hauling & Disposal	40,000	36,381	40,000	40,000	40,000	-	-
Security	21,000	14,495	19,500	19,500	16,500	(3000)	-15.4%
Rentals	69,602	72,433	72,602	76,501	78,501	5,899	8.1%
Cleaning	91,000	67,370	91,000	91,000	115,000	24,000	26.4%
Other Purchased Services	80,680	77,725	951,780	955,253	951,880	100	
Professional Services	7,500	2,752	7,000	7,000	7,700	700	10.0%
Technical Services	36,680	46,978	909,780	912,180	907,180	(2,600)	-0.3%
Other Services	36,500	27,995	35,000	36,073	37,000	2,000	5.7%
Supplies & Materials	1,093,351	1,217,258	1,118,852	1,111,350	1,092,850	(26,002)	-2.3%
Utilities & Fuel	375,400	430,521	393,100	393,100	393,100	-	-
General Supplies	717,951	786,737	725,752	718,250	699,750	(26,002)	-3.6%
Other Expenses	34,343	26,147	36,523	36,497	39,935	3,412	9.3%
Memberships	14,642	13,515	16,822	16,797	17,235	413	2.5%
Training & Meetings	15,801	9,011	15,801	15,800	18,800	2,999	19%
Miscellaneous Other	3,900	3,621	3,900	3,900	3,900	-	-
Total	\$13,960,060	\$13,977,517	\$14,750,139	\$14,364,491	\$14,916,566	\$166,427	1.1%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Administrative Assistant	1.0	1.0	1.0
Senior Administrative Assistant	1.0	1.0	1.0
Administrative Technician	2.0	2.0	2.0
Collection System Maintenance Scheduler	1.0	1.0	1.0
Collection System Operations Division Manager	1.0	1.0	1.0
Construction Equipment Operator	2.0	2.0	2.0
Field Operations Superintendent	1.0	1.0	1.0
Maintenance Crew Leader	18.0	18.0	18.0
Maintenance Crew Member I/II	18.0	18.0	20.0
Maintenance Supervisor	4.0	4.0	4.0
Senior Engineer	1.0	1.0	1.0
Utility Worker	1.0	2.0	-
Vehicle and Equipment Mechanic	3.0	3.0	3.0
Vehicle Maintenance and Equipment Maintenance Supervisor	1.0	1.0	1.0
Total	55.0	56.0	56.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Laborer Summer Student	3.0	-	-
Clerical Summer Student	1.0	-	1.0
Total	4.0	-	1.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Collection System Operations Operating Budget for FY 2020-21 is \$14.9 million, a marginal \$116,000 or 1.1% increase over the \$14.8 million budget in FY 2019-20. While this operational division's budget largely remained steady, the overall net increase was primarily driven by increases in known labor-related costs. Growth in Salaries & Wages includes the agency-wide cost-of-living adjustment as well as increases due to step advancements. The increase in Cleaning Services is almost entirely the result of an account reclassification of uniform cleaning services following the implementation of a new ERP and chart of accounts. Uniform cleaning services were previously reported under General Supplies, which is reporting an offsetting budgetary reduction in FY 2020-21.

Plant Maintenance

OVERVIEW

This division is responsible for maintaining all mechanical, electrical, and instrumentation equipment and systems for the treatment plant, laboratory, as well as all facilities at the Martinez campus. It consists of five shops: Mechanical, Machine, Electrical, Instrumentation, and Building and Grounds, as well as a Reliability Engineering section. The Pumping Station workgroup in this division operates and maintains the 18 pumping stations throughout the service area. This division's aim is to be a high-performance team that maintains the treatment plant and pumping stations in an optimal state and to continuously improve overall maintenance effectiveness and asset reliability over the lifecycle of the asset.

FY 2019-20 Strategic Accomplishments



Strive to meet regulatory requirements

- Monitored and managed Preventive Maintenance (PM) and Regulatory related work order schedule compliance.
- Maintained all equipment and systems to help achieve the NACWA Peak Performance Platinum Award for the 22nd consecutive year.



Recruit, develop, and retain a highly trained and safe workforce

- Improved Mechanical Maintenance Technician Trainee Program by updating the training material and modifying the curriculum to better suit learning and development in the subject matter. Added online TPC learning modules for trainee program.
- Added new technical learning libraries content.
- Enhanced hiring process to include a hands-on practical exam for Mechanical Shop recruitments.
- Engaged with community and technical colleges' recruitment and program development.
- Created a technical trades internship program and started with two interns in the Mechanical Shop from Los Medanos College.
- Several staff have gained Level I certification in areas of asset condition monitoring (ACM) techniques, such as Machinery Lubrication Technician and Infrared Thermography.
- Three staff members obtained Certified Reliability Leader certification.



Maintain a reliable infrastructure

- Completed 17 Don't Just Fix It; Improve It (DJFI) initiatives to increase maintenance effectiveness, lower costs, and increase equipment reliability.
- Completed 288 QA/QC Maintenance Planner updates to improve work orders by incorporating Maintenance staff's suggestions.
- Completed 58 safety work orders.
- Successfully maintained operation of all 18 pumping stations during the PG&E Public Safety Power Shutoffs (PSPS).












- Continuously reviewed maintenance procedures and identified opportunities for improvement as part of overall Maintenance strategy. This includes failure reporting and corrective action process for continuous improvement.
- Worked with Engineering in the pre-design, design, and construction stages to ensure procurement and correct installment of the latest, safest, most reliable equipment and maintainable technology.
- Increased accessibility of Asset Management and Reliability Engineering information, including tracking DJFI initiatives, improving spares management, creating new workflows to the Cityworks maintenance system, adding job plans to GeoPortal, and creating links in GeoPortal to reliability analysis information and preventive and predictive maintenance program tasks based on asset identification.



Embrace technology, innovation, and environmental sustainability

- Obtained new ACM/maintenance tools and equipment to increase work efficiency, such as RDI Technologies’ motion amplification and ultrasound technologies for the Mechanical Shop.
- Made additions to the ACM program such as implementing a breaker overload testing program and a winding analyzer program, which play a significant role in lowering equipment downtime costs, increasing reliability of equipment, increasing effectiveness of the motor management program, and enhancing acceptance testing of new or overhauled equipment.
- Worked with the Asset Management team to create
 - Dashboards for various key metrics and ACM templates for each technology to better monitor, analyze, and act on exceptions
 - An Asset Health Monitoring system based on asset condition inspections and ACM program analysis
 - An update to the asset handoff workflow to include new engineering standards and enhance tracking of steps along the handoff workflow.


FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FY 2018-19 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Safety-Prioritized Work Orders Completed on Time	100%	87.0%		93.3%		100%
	Regulatory Title V Work Orders Completed on Time	100%	99.0%		91.4%		100%
	Planned Treatment Plant PM Completed on Time	≥95%	83.8%		90.3%		≥90%
	Planned Pumping Station PM Completed on Time	≥95%	Data Unavailable*	N/A	N/A – not a Metric in the FYs 2020-22 Strategic Plan		
	DJFI work orders completed		N/A – not a Metric in the FYs 2018-20 Strategic Plan				≥35

* Pumping Stations PM data is planned to be added to Cityworks by the end of 2020.

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Meet or Exceed Industry Safety Standards</p>	Continue to apply the latest arc-resistant switchgear with arc-quenching devices to make it safer for staff to operate and service electrical equipment.
 <p>Manage Assets Optimally to Prolong Their Useful Life</p>	Actively participate in all phases of asset lifecycles , including design, installation, operation, maintenance, and replacement planning.
	Commit to consistently perform the most effective maintenance tasks on equipment at the optimal frequency.
	Utilize a repeatable and comprehensive approach to maintenance that optimizes asset lifecycle based on reliability, cost, and criticality, including continuing to perform additional Reliability Centered Maintenance, Root Cause Analysis, PM Optimization analysis, and Defect Elimination initiatives on critical equipment and systems.
	Drive the development of the Asset Centered Maintenance Program and integrate with analytics for earliest warning of equipment degradation.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$6,065,515	\$5,863,860	\$6,335,660	\$6,180,800	\$6,481,112	\$145,452	2.3%
Employee Benefits	2,559,801	2,469,138	2,541,107	2,259,009	2,123,173	(417,934)	-16.5%
Unfunded Liabilities	1,842,202	1,852,011	1,884,631	1,779,303	1,932,312	47,681	2.5%
Purchased Property Services	1,621,550	1,667,911	1,631,550	1,802,450	2,344,650	713,100	43.7%
Repairs & Maintenance	1,358,950	1,370,095	1,379,950	1,507,950	2,079,850	699,900	50.7%
Security	12,300	8,066	3,300	3,000	3,300	-	-
Rentals	76,500	125,130	76,500	114,500	84,500	8,000	10.5%
Cleaning	173,800	164,620	171,800	177,000	177,000	5,200	3.0%
Other Purchased Services	226,285	359,301	226,285	208,000	234,205	7,920	3.5%
Technical Services	196,900	323,542	196,900	190,000	204,900	8,000	4.1%
Other Services	29,385	35,759	29,385	18,000	29,305	(80)	-0.3%
Supplies & Materials	2,521,250	2,393,215	2,447,450	2,248,050	2,453,050	5,600	0.2%
Utilities & Fuel	534,550	\$562,440	534,550	548,350	555,150	20,600	3.9%
Chemicals	250,000	113,704	200,000	120,000	200,000	-	-
General Supplies	1,736,700	1,717,071	1,712,900	1,579,700	1,697,900	(15,000)	-0.9%
Other Expenses	69,043	55,417	74,426	76,571	90,976	16,550	22.2%
Memberships	11,851	9,445	11,851	10,996	15,101	3,250	27.4%
Training & Meetings	55,392	45,305	60,775	63,775	74,075	13,300	21.9%
Miscellaneous Other	1,800	667	1,800	1,800	1,800	-	-
Total	\$14,905,646	\$14,660,853	\$15,141,109	\$14,554,183	\$15,659,478	\$518,369	3.4%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Buildings and Grounds Supervisor	1.0	1.0	1.0
Electrical Shop Supervisor	1.0	1.0	1.0
Electrical Technician	4.0	4.0	4.0
Instrument Shop Supervisor	1.0	1.0	1.0
Instrument Technician	3.0	3.0	3.0
Machinist	2.0	2.0	2.0
Maintenance Crew Leader	1.0	1.0	1.0
Maintenance Planner	3.0	3.0	3.0
Maintenance Technician I/II, Mechanical	1.0	2.0	2.0
Maintenance Technician III, Mechanical	7.0	7.0	7.0
Mechanical Supervisor	2.0	2.0	2.0
Painter	1.0	1.0	1.0
Plant Maintenance Division Manager	1.0	1.0	1.0
Plant Maintenance Superintendent	1.0	1.0	1.0
Pumping Stations Operator I/II	4.0	4.0	4.0
Pumping Stations Operator III	2.0	2.0	2.0
Pumping Stations Supervisor	1.0	1.0	1.0
Senior Engineer	1.0	1.0	1.0
Utility Systems Engineer	1.0	1.0	1.0
Utility Worker	6.0	7.0	7.0
Total	44.0	46.0	46.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Laborer Summer Student	10.0	5.0	10.0
Engineering Assistant Summer Student	-	-	1.0
Intern	1.0	1.0	3.5
Total	11.0	6.0	14.5

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Plant Maintenance Operating Budget for FY 2019-20 is \$15.6 million, a \$518,000 or 3.4% increase over the \$15.1 million budget in FY 2018-19. Salaries & Wages include the agency-wide cost-of-living adjustment as well as increases due to step advancements. A sizeable increase in Repairs & Maintenance is planned for the replacement of hearths in the treatment plant furnace. Additionally, increases in Rentals as well as Utilities & Fuel incorporate additional costs associated with preparing and responding to additional PG&E Public Safety Power Shutoffs during FY 2020-21.

The Plant Maintenance Division Budget directly addresses several of the principal issues facing Central San by optimizing the Maintenance Program to ensure that equipment and system reliability meets all safety, service level, and regulatory requirements. The division strives to continuously improve overall maintenance effectiveness and reliability over the lifecycle of an asset, including active participation in all phases of design, installation, operation, maintenance, and replacement planning.

Plant Operations

OVERVIEW

This division operates and maintains Central San's treatment plant in Martinez. The treatment plant has a permitted capacity of 53.8 million gallons per day (MGD) and cleans an average of 38.6 MGD, 2.5 MGD of which can be further treated into recycled water and reused within the treatment plant and distributed to customers for non-potable uses.

FY 2019-20 Strategic Accomplishments



Provide exceptional customer service and maintain an excellent reputation in the community

- Provided wastewater treatment service with no interruptions during the PG&E Public Safety Power Shutoffs and the COVID-19 pandemic.



Strive to meet regulatory requirements

- Maintained eligibility for the National Association of Clean Water Agencies Peak Performance Award Platinum status for the 22nd consecutive year, recognizing 100% compliance with the wastewater discharge permit.
- Improved reliability of Central San's waste heat boiler (WHB) level control by upgrading level signal and adding alarms in the Solids Conditioning Building Control Room, to help address issues with the WHB level control which have been the root cause of several Title V violations.



Maintain a reliable infrastructure













- Assisted Engineering in the design, coordination, and construction of the Mechanical and Concrete Renovations; Plant Operations Building Seismic Upgrades; Influent Pump Electrical Improvements; Piping Renovations, Phase 10; Filter Plant and Clearwell Improvements, Phase 1A; Steam and Aeration Blower Systems Renovations; and Solids Handling Facility Improvements Projects.



Embrace technology, innovation, and environmental sustainability




- Piloted and installed infrastructure for mobile supervisory control and data acquisition (Dynac) software.
- Upgraded Filter Plant, Headworks, and Dewatering programmable logic control programs from 1980s-era software to modern software.
- Led effort to move toward smart motor control centers and variable frequency drives controlled over Ethernet.
- Improved reliability of the Ultraviolet Disinfection Basins by continuing to replace obsolete control hardware and pilot test low ultraviolet transmittance.

FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3	FY 2020-21 Target	
	National Pollutant Discharge Elimination System Compliance	Zero (0) Violations	Zero (0) Violations		Zero (0) Violations	Zero (0) Violations	
	Title V Compliance	Zero (0) Violations	3 Violations (Will Be Addressed with New Wet Scrubber)		Zero (0) Violations	5 Violations (Will Be Addressed with New Wet Scrubber)	
	Recycled Water Title 22 Compliance	Zero (0) Violations	Zero (0) Violations		Zero (0) Violations	Zero (0) Violations	
	Anthropogenic Greenhouse Gas Emissions (Per Calendar Year)	<25,000 MT CO ₂ e	23,038 MT CO ₂ e for Calendar 2019 (pre-verified)		<25,000 MT CO ₂ e	On Track to Meet Goal	

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 Achieve 100% Compliance in All Regulations	Maintain eligibility for the National Association of Clean Water Agencies Peak Performance Award Platinum status.
 Proactively Plan for Future Operational Staffing Needs	Perform succession planning successfully and appropriately staff the division to meet the challenges of any upcoming departures.
 Manage Assets Optimally to Prolong Their Useful Life	Continue to work with Engineering in the design, coordination, and construction of projects affecting the treatment plant.

Budget Overview by Expense Category

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$4,711,774	\$5,035,005	\$5,414,691	\$5,110,200	\$4,984,842	(\$429,849)	-7.9%
Employee Benefits	1,799,706	1,823,907	1,914,184	2,101,515	1,572,429	(341,755)	-17.9%
Unfunded Liabilities	1,447,800	1,691,323	1,650,594	1,807,885	1,613,679	(36,915)	-2.2%
Purchased Property Services	287,700	256,768	297,700	261,500	320,500	22,800	7.7%
Repairs & Maintenance	4,200	-	4,200	3,000	4,000	(200)	-4.8%
Hauling & Disposal	233,000	195,919	243,000	200,000	261,000	18,000	7.4%
Rentals	500	-	500	500	500	-	-
Cleaning	50,000	60,849	50,000	58,000	55,000	5,000	10.0%
Other Purchased Services	613,000	478,515	604,000	567,789	681,700	77,700	12.9%
Technical Services	15,000	-	15,000	1,200	6,000	(9,000)	-60.0%
Other Services	598,000	478,515	589,000	566,589	675,700	86,700	14.7%
Supplies & Materials	4,252,100	4,466,846	4,513,100	4,552,800	4,597,300	85,200	1.9%
Utilities & Fuel	3,012,600	3,171,451	3,077,600	3,233,300	3,253,800	176,200	5.7%
Chemicals	1,125,000	1,154,948	1,320,000	1,185,000	1,202,000	(118,000)	-8.9%
General Supplies	114,500	140,447	114,500	134,500	141,500	27,000	23.6%
Other Expenses	44,117	25,369	45,800	33,020	41,080	(4,720)	-10.3%
Memberships	15,800	8,658	15,800	11,520	11,830	(3,970)	-25.1%
Training & Meetings	24,817	16,698	26,500	20,500	27,500	1,000	3.8%
Miscellaneous Other	3,500	13	3,500	1,000	1,750	(1,750)	-50.0%
Total	\$13,156,197	\$13,777,733	\$14,439,069	\$14,434,709	\$13,811,530	(\$627,537)	-4.4%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Personnel Requirements

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Control Systems Engineer	-	-	-
Control Systems Technician	1.0	1.0	1.0
Plant Operations Division Manager	1.0	1.0	1.0
Plant Operations Superintendent	-	1.0	1.0
Plant Operations Training Coordinator	1.0	1.0	1.0
Plant Operator I/II	4.0	4.0	4.0
Plant Operator III	-	1.0	1.0
Senior Engineer	1.0	1.0	1.0
Senior Plant Operator	17.0	16.0	16.0
Shift Supervisor	7.0	7.0	7.0
Utility Systems Engineer	2.0	2.0	2.0
Total	34.0	35.0	35.0

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Summer Engineering Assistant	-	1.0	-
Total	-	1.0	-

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Plant Operations Budget provides Central San staff the resources necessary to continue to meet or exceed regulatory requirements and optimize operations to work cost effectively. The Plant Operations Operating Budget for FY 2020-21 is \$13.8 million, a \$0.6 million or 4% reduction over the \$14.1 million budgeted in FY 2019-20. This decrease, reflected primarily in labor-related line items, is attributable to transferring costs associated with administrative support for the Plant Operations Division to the Office of the Director of Operations in FY 2020-21 to better reflect the actual reporting hierarchy of Central San's current organizational chart. As reflected in the Personnel Requirements table, several support positions were transferred out of this divisional cost center in FY 2020-21. Salaries & Wages include the agency-wide cost-of-living adjustment as well as increases due to step advancements. Chemicals decreased due to the elimination of sodium hydroxide in the treatment process in FY 2020-21. Utilities & Fuel increased due to an increase in capacity held on site due to PG&E Public Safety Power Shutoff (PSPS) concerns.

Recycled Water Program

OVERVIEW

The Recycled Water Program is a reflection of Central San's continued efforts to utilize the valuable resources available in treated wastewater to supplement the region's water supply. Central San began to separately track the Recycled Water Program financials in FY 2016-17, and staff continues to work to accurately budget the anticipated expenses and revenues. This program draws resources from several divisions to provide support for the production and distribution of recycled water to Zone 1 commercial and municipal customers through pipelines, construction contractors through hydrants and a truck fill station, and residential customers through the Residential Fill Station operated out of the Household Hazardous Waste Collection Facility. This program also includes planning and regulatory support for the existing system and planned expansions, including the Refinery Recycled Water Exchange Project and the Concord Community Reuse Project (the redevelopment of the Concord Naval Weapons Station).

FY 2019-20 Strategic Accomplishments



Maintain a reliable infrastructure







- Began utilizing Cityworks to track the valve exercising program for the recycled water distribution system control valves.



Embrace technology, innovation, and environmental sustainability

- Collaborated with Contra Costa Water District (CCWD) and Valley Water to complete a Preliminary Feasibility Evaluation of the Refinery Recycled Water Exchange Project as agreed upon in the Memorandum of Understanding.
- Collaborated with Dublin San Ramon Services District (DSRSD) – East Bay Municipal Utility District Recycled Water Authority (DERWA) to approve a project design and support DSRSD in bidding the project for the construction of a Temporary Wastewater Diversion to allow DERWA to divert approximately 1.3 MGD of raw wastewater from Central San's San Ramon Pumping Station to DSRSD for the production of recycled water to meet DERWA's peak summer irrigation demand.
- Continued working with CCWD and the City of Concord to plan for recycled water usage at the Concord Community Reuse Project.
- Distributed approximately 125 million gallons of recycled water to Zone 1.
- Distributed approximately 3.5 million gallons through the Commercial Truck Fill Program.
- Distributed approximately 1 million gallons through the Residential Fill Station.


FYs 2018-19 and 2019-20 Strategic Performance and FY 2020-21 Targets

Goal	Metric	FYs 2018-20 Target	FY 2018-19 Performance		FY 2019-20 Performance as of Q3		FY 2020-21 Target
	Recycled Water Title 22 Compliance	Zero (0) Violations	Zero (0) Violations		Zero (0) Violations		Zero (0) Violations
	Gallons per Year of Recycled Water Distributed to External Customers	≥240 Million Gallons	195,857,981 Gallons		138,971,510* Gallons		≥240 Million Gallons

* The irrigation season typically grows in April and peaks in July, so this reported figure omits a significant amount of future usage from Q4 (April to June).

FY 2020-21 Strategic Objectives

In the coming fiscal year, this division will play a major part in supporting Strategic Plan Goals and Strategies through the following objectives:

Goal/Strategy	Objective for FY 2020-21
 <p>Support Regional Development of Local Water Supply</p>	Continue working with CCWD and Valley Water to advance the Refinery Recycled Water Exchange Project.
	Continue working with DERWA and its representatives to complete community outreach and inspect and accept the construction of new diversion facilities to allow the temporary diversion of approximately 1.3 MGD of raw wastewater from Central San to DSRSD for the production of recycled water to meet DERWA’s peak summer irrigation demand.
	Continue working with CCWD and the City of Concord to plan for recycled water usage at the Concord Community Reuse Project.
	Continue to support the development of a demonstration Satellite Water Recycling Facility at Diablo Country Club , as needed.

Budget Overview by Expense Category Treatment

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$241,800	\$206,445	\$207,600	\$242,400	\$243,700	\$36,100	17.4%
Employee Benefits	229,800	181,426	172,300	190,100	185,200	12,900	7.5%
Purchased Property Services							
Repairs & Maintenance	4,000	-	4,000	-	4,000	-	-
Other Purchased Services	500	10,490	100,500	-	100,500	-	-
Professional Services	-	136	-	-	-	-	-
Technical Services	500	10,354	100,500	-	100,500	-	-
Supplies & Materials	262,000	206,703	278,000	290,000	310,000	32,000	11.5%
Chemicals	84,000	84,206	100,000	130,000	132,000	32,000	32.0%
General Supplies	3,000	-	3,000	-	3,000	-	-
Utilities & Fuel	175,000	122,497	175,000	160,000	175,000	-	-
Other Expenses	6,600	7,679	28,200	25,500	28,200	-	-
Memberships	-	-	21,600	18,900	21,600	-	-
Trainings & Meetings	6,600	7,679	6,600	6,600	6,600	-	-
Total	\$744,700	\$612,743	\$790,600	\$748,000	\$871,600	\$81,000	10.2%

Distribution (including Residential Fill Station, Satellite Water Recycling Facility)

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Salaries & Wages	\$323,800	\$232,483	\$364,900	\$251,700	\$246,460	(\$118,440)	-32.5%
Employee Benefits	195,444	125,817	246,898	154,361	148,080	(98,818)	40.0%
Purchased Property Services							
Repairs & Maintenance	23,000	10,944	23,000	10,000	23,000	-	-
Other Purchased Services	231,500	172,255	160,500	89,000	160,700	200	0.1%
Professional Services	14,000	18,910	14,000	12,000	14,000	-	-
Technical Services	214,000	153,345	145,000	77,000	145,000	-	-
Other Services	3,500	-	1,500	-	1,700	200	13.3%
Supplies & Materials							
General Supplies	10,898	16,654	17,900	9,100	16,900	(1,000)	-5.6%
Other Expenses	23,450	19,022	4,550	4,100	4,550	-	-
Memberships	18,900	17,675	-	-	-	-	-
Trainings & Meetings	4,050	1,347	4,050	4,100	4,050	-	-
Miscellaneous Other	500	-	500	-	500	-	-
Total	\$808,092	\$577,175	\$817,748	\$518,261	\$599,690	(\$218,058)	-26.7%

* As part of its implementation of a new enterprise resource planning system, Central San adopted a new chart of accounts to take effect FY 2020-21 based on GFOA best practices. Prior year information presented in this table has been reclassified to reflect the new org unit and expense account structure of the new chart of accounts for improved comparability purposes.

Total Recycled Water

Account Description	FY 2018-19 Budget*	FY 2018-19 Actual*	FY 2019-20 Budget*	FY 2019-20 Projected*	FY 2020-21 Budget	Budget to Budget Variance (\$)	Budget to Budget Variance (%)
Total	\$1,552,792	\$1,189,918	\$1,608,348	\$1,266,261	\$1,471,290	(\$137,058)	-8.5%

Personnel Requirements

Several divisions support the Recycled Water Program. Personnel for the Recycled Water Program are shown in their respective divisions and total 2.4 full time equivalents. A portion of their labor costs, as appropriate to their time spent on the program, are included in the Recycled Water Budget. In addition, the budget includes funding for two temporary staff to operate the Residential Fill Station and one intern to support recycled water planning.

Regular Status Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Program Manager	0.5	0.5	0.5
Engineering and Technical Services	0.7	0.9	0.9
Operations Department Staff	1.2	1.3	1.0
Total	2.4	2.7	2.4

Limited Duration Employees	FY 2018-19 Year-End Actual	FY 2019-20	FY 2020-21
Fill Station Temporary	8.0	3.0	2.0
Intern	1.0	1.0	1.0
Total	9.0	4.0	3.0

* The Summer Student project for the summer of 2020 is under evaluation at this time due to COVID-19 situation.

Budget Modifications and Contributions to Key Priorities

The Recycled Water Program Operating Budget for FY 2020-21 is \$1.47 million, which is reduced 8.5% compared to the \$1.61 million budget in FY 2019-20. Utilities increased due to rising electrical expenses in the treatment plant. Outside Services increased due to the need for technical services for process support services. Materials & Supplies increased due to meter replacements and in-house repair supplies.

The Recycled Water Program helps Central San address several of the challenges presented by the environment in which it operates. These challenges include the need for all water sector agencies in the arid west to play a role in maintaining a sustainable water supply, with recent drought experiences, and the continuing effects of climate change. The program also addresses the increased focus on resource recovery in the wastewater industry.

Financial Summary for Recycled Water Program

Recycled Water Expense Summary	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	% Variance
Treatment Plant O&M	\$612,743	\$790,600	\$748,000	\$871,600	\$81,000	10.2%
Treatment Plant Capital	1,576,114	3,452,000	1,790,500	9,000,000	5,548,000	160.7%
Distribution O&M	577,177	817,748	518,261	599,690	(218,058)	-26.7%
Distribution Capital	32,769	700,000	114,600	100,000	(600,000)	-85.7%
Total Combined Expense	\$2,798,803	\$5,760,348	\$3,171,761	\$10,571,290	\$4,810,942	58.6%

Recycled Water Revenue Summary	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	% Variance
Treatment Plant <i>(Wastewater Cost)</i>	\$1,011,902	\$1,672,841	\$954,685	\$4,097,705	\$2,424,864	145.0%
Zone 1 Revenue	430,045	420,000	488,000	420,000	-	0%
Distribution <i>(Wastewater Cost)</i>	367,524	1,368,982	587,891	2,357,273	988,291	72.2%
Residential Fill <i>(Wastewater Cost)</i>	96,943	263,119	147,488	195,168	(67,951)	-25.8%
Satellite Reimbursement	48,428	144,700	18,500	62,000	(82,700)	-57.2%
Recycled Water Exchange <i>(Wastewater Cost)</i>	52,729	176,143	82,069	109,679	(66,464)	-37.7%
City of Concord Reimbursement	791,232	1,714,563	892,728	3,329,465	1,614,902	94.2%
Total Combined Revenue	\$2,798,803	\$5,760,348	\$3,171,761	\$10,571,290	\$4,810,942	83.5%
Wastewater Cost per RUE	\$8.92	\$19.90	\$10.13	\$37.88	\$17.98	90.4%

The above Recycled Water Revenue Summary table contains additional rows as compared to the table presented in the FY 2019-20 budget book, representing an attempt to match all expenses to revenues (whether true revenues, or ascribed). Recycled water rates charged to customers have not increased with budgeted costs, but instead have been inflated by 3% annually in recent years. Accordingly, the large increase in budgeted costs for FY 2020-21, primarily due to capital improvements, does not mean that recycled water rates will be increased in that proportion.

Regarding the FY 2020-21 Budget Revenue figures noted above, the \$420,000 Zone 1 Revenue is entirely allocated to O&M (see Table 5 in Financial Summary). The \$3,329,465 City of Concord Reimbursement is contained within the \$15,760,000 for O&M (see Table 5 in Financial Summary) and \$15,300,000 for Capital (see Table 11 in Financial Summary). The \$62,000 Satellite Reimbursement is contained within the \$409,000 Other Revenues (see Table 6 in Financial Summary). The remaining costs are Wastewater Costs and included in the Sewer Service Charge.

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Self-Insurance Program

Central San has self-insured a portion of its liability and property risks since July 1, 1986, when the Board approved the establishment of the Self-Insurance Fund (SIF). Central San currently self-insures general and auto liability risks up to \$500,000 per occurrence and purchases a \$15 million excess liability insurance policy above that retention.

At this time, Central San does not purchase insurance coverage for earthquake or flood losses because insurance programs currently available in California are very expensive for the scope and limits of coverage provided. As a result, Central San self-insures these risks.

Fund Allocation

In 1994, the Government Accounting Standards Board issued statement No. 10 (GASB-10) which established requirements on how public agencies must fund their self-insured risks. To ensure compliance with GASB-10, Central San restructured the SIF into three sub-funds. Each of the three sub-funds was established to pay for specific losses and expenses. In FY 2015-16, Sub-Fund B was retired and funds for its risks were transferred to Sub-Fund C.

Table 1 presents a recent financial history and projection of the SIF and shows the FY 2020-21 SIF Budget. The SIF revenue for FY 2020-21 is projected to be \$582,050, and expenses are projected to be \$1,153,500, resulting in closing net SIF reserves of \$6,501,215. The budgeted revenues include the allocation of \$450,000 from the FY 2020-21 Operations and Maintenance (O&M) Fund to the SIF, which is reduced from prior years given the projected overfunded position of the self-insurance fund above the required level of \$6.5 million for FY 2019-20.

Sub-Fund A: Actuarially-Based Risks

Sub-Fund A is used to pay general liability and auto liability claims and expenses within Central San's self-insured retention. Claims in excess of this retention are covered by a liability excess insurance policy that renews annually on July 1.

Under the requirements of GASB-10, risks that can be actuarially studied must be funded based on an actuarial study performed at least every two years. General liability and automobile liability risks are readily studied throughout the insurance and self-insurance industry to project funding levels for future losses. Central San obtained an actuarial review of its self-insured general liability and automobile liability losses in September 2018. The next actuarial report will be performed in August 2020 using loss data through June 30, 2020.

The Board established a policy to maintain the Sub-Fund A reserve at three times the amount of Central San's self-insured retention. Thus, the current \$500,000 retention requires a \$1.5 million reserve. This reserve is used to pay claims and expenses throughout the year and is replenished the following fiscal year.

Table 2 shows budgeted revenue for FY 2020-21 of \$24,900 with expenses of \$415,000, for a decrease of \$390,100. This amount will be transferred from Sub-Fund C in order to maintain the minimum reserve at \$1.5 million.

Sub-Fund B: Non-Actuarially-Based Risks

Sub-Fund B has been retired and all reserves for these risks were transferred to Sub-Fund C in FY 2015-16.

Sub-Fund C: Non-GASB-10 Risks

Sub-Fund C has historically covered the Risk Management Program expenses including insurance premiums, self-insured property losses, potential losses from uninsurable risks, and the costs of initiating claims and lawsuits against others. As noted above, this fund now includes reserves for non-GASB-10 risks and catastrophic losses.

The Board established a policy to maintain this reserve at \$5 million. This reserve is used to pay claims and expenses throughout the year and is replenished the following fiscal year. This fund also receives the annual O&M contribution and then re-allocates funds needed to maintain the required reserve in Sub-Fund A.

Table 3 shows budgeted revenue for FY 2020-21 of \$557,150, which includes a transfer from the O&M Fund of \$450,000. The budgeted ending balance for FY 2019-20 is slightly above the policy required level of \$5 million.

Table 1 – SIF Summary Overview

Account Description	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget
Revenues				
SIF Allocation from O&M Fund	\$779,500	\$825,000	\$825,000	\$450,000
Insurance Allocation from Household Hazardous Waste	19,511	21,000	20,000	20,000
Subrogation Recovery	66,452	-	20,000	-
Interest Income	170,867	179,900	148,400	112,750
Total Revenue	\$1,036,329	\$1,025,900	\$1,013,400	\$582,050
Expenses				
Claims Adjusting	\$-	\$2,000	\$-	\$2,000
Insurance Consulting	5,000	-	-	6,500
Loss Payments	368,891	275,000	165,000	275,000
Losses: Audit Adjustment for GASB-10	-	-	-	-
Legal Services	141,706	80,000	150,000	80,000
Technical Services	28,399	85,000	45,000	90,000
Insurance Premiums	581,408	631,700	637,000	700,000
Total Expenses	\$1,125,404	\$1,073,700	\$997,000	\$1,153,500
Revenue Over Expense	(\$89,075)	(\$47,800)	\$16,400	(\$571,450)
Projected Reserves *				
Beginning of Year	\$7,145,340	\$7,245,540	\$6,056,265	\$7,072,665
Reserve Policy Transfer	-	-	-	-
Revenue over Expense	(89,075)	(47,800)	16,400	(571,450)
End of Year Projected Reserves	\$7,056,265	\$7,197,740	\$7,072,665	\$6,501,215
Allocated Reserves				
Actuarial Reserves-GASB-10 (Fund A)	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Non-Actuarial Reserves-GASB-10 (Fund C)	5,556,265	5,697,741	5,572,665	5,001,215
Total Allocated Reserves	\$7,056,265	\$7,197,741	\$7,072,665	\$6,501,215

*Projected reserves may differ from actual reserves due to entries related to the accrual method of accounting

Table 2 – SIF – Sub-Fund A

Account Description	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget
Projected Reserves- Beginning of Year	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Revenues				
O&M	\$-	\$-	\$-	\$-
Subrogation Recovery	5,015	-	-	-
Interest	38,137	41,500	31,000	24,900
Total Revenue	\$43,151	\$41,500	\$31,000	\$24,900
Expenses				
Losses	\$348,394	\$250,000	\$150,000	\$250,000
Losses: Audit Adjustment for GASB-10	-	-	-	-
Legal Services	141,706	75,000	150,000	80,000
Technical	28,399	75,000	45,000	85,000
Total Expenses	\$518,499	\$400,000	\$345,000	\$415,000
Revenue Over Expense	(\$475,348)	(\$358,500)	(\$314,000)	(\$390,100)
Projected Reserves *				
Transfer (to)/from Sub-Fund C	\$475,348	\$358,500	\$314,000	\$390,100
Reserve Increase Transfer from Fund C	-	-	-	-
Total Reserves Projected End of Year	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000

* Projected reserves may differ from actual reserves due to entries related to the accrual method of accounting

Table 3 – SIF – Sub-Fund C

Account Description	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget
Beginning Reserves	\$5,645,340	\$5,745,541	\$5,556,265	\$5,572,665
Revenues				
O&M	\$779,500	\$825,000	\$825,000	\$450,000
Subrogation Recovery	61,437	-	20,000	-
Insurance Recovery from Household Hazardous Waste Partners	19,511	21,000	20,000	20,000
Interest	132,730	138,400	88,050	87,250
Total Revenue	\$993,178	\$984,400	\$982,400	\$557,150
Expenses				
Losses	\$20,497	\$25,000	\$15,000	\$25,000
Legal	-	5,000	-	-
Technical	-	10,000	-	5,000
Insurance Premiums	581,408	631,700	637,000	700,000
Insurance Consulting Services	5,000	-	-	6,500
Claims Adjustment	-	2,000	-	2,000
Total Expenses	\$606,905	\$673,700	\$652,000	\$738,500
Revenue Over (Under) Expense	\$386,273	\$310,700	\$330,400	(\$181,350)
Projected Reserves				
Transfer (to)/from Sub-Fund A	(\$475,348)	(\$358,500)	(\$314,000)	(\$390,100)
Transfer (to)/from Sub-Fund B	-	-	-	-
Reserve Increase to Sub-Fund A (Audit Adjustment for GASB-10)	-	-	-	-
Reserve Policy Transfers	-	-	-	-
Total Reserves Projected End of Year	\$5,556,265	\$5,697,741	\$5,572,665	\$5,001,215

* Projected reserves may differ from actual reserves due to entries related to the accrual method of accounting

Figure 1 – History of Revenue, Expense, and Reserve Balance

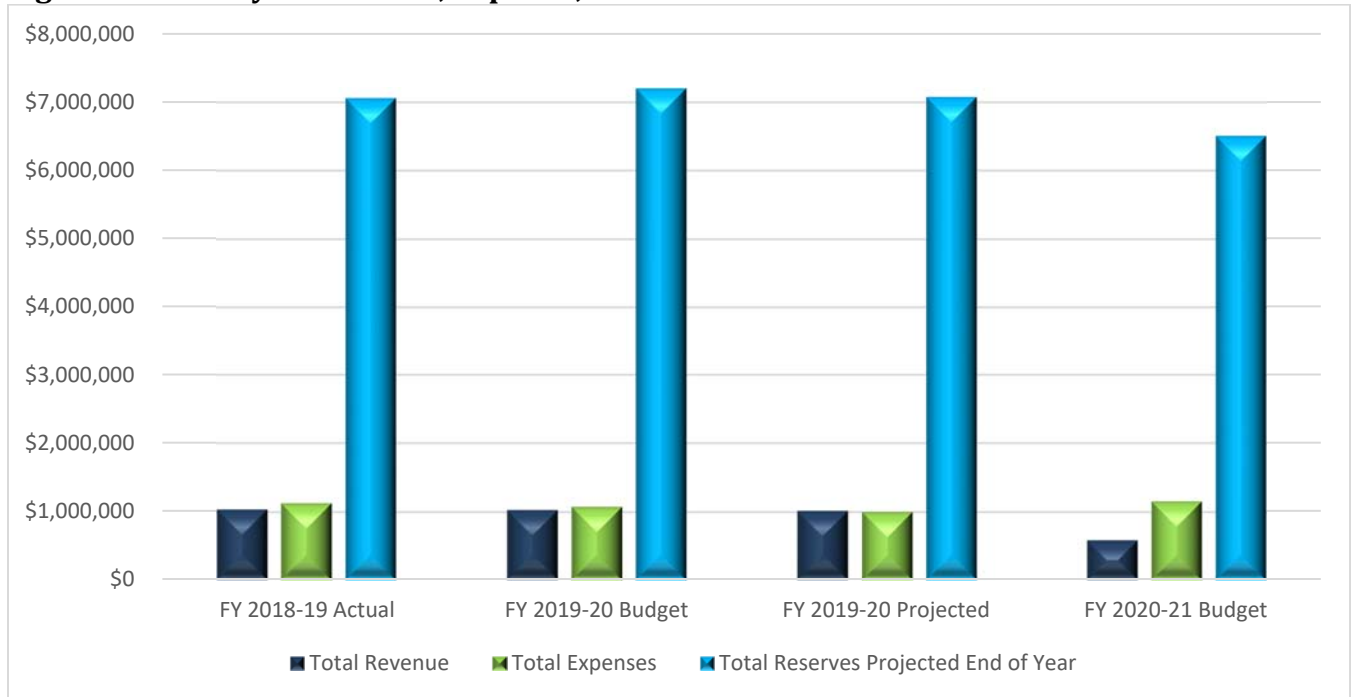


Figure 2 – History of Loss Payment and Insurance Premiums

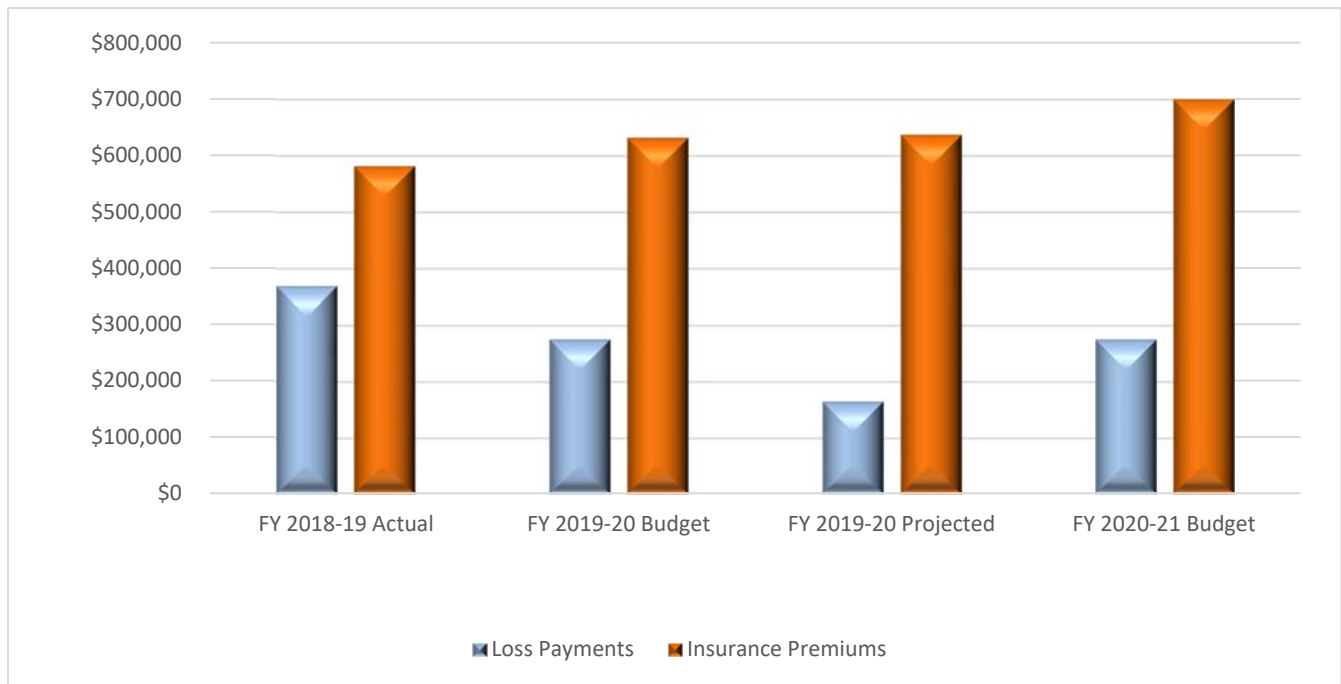


Figure 3 – Reserves by Sub-Fund

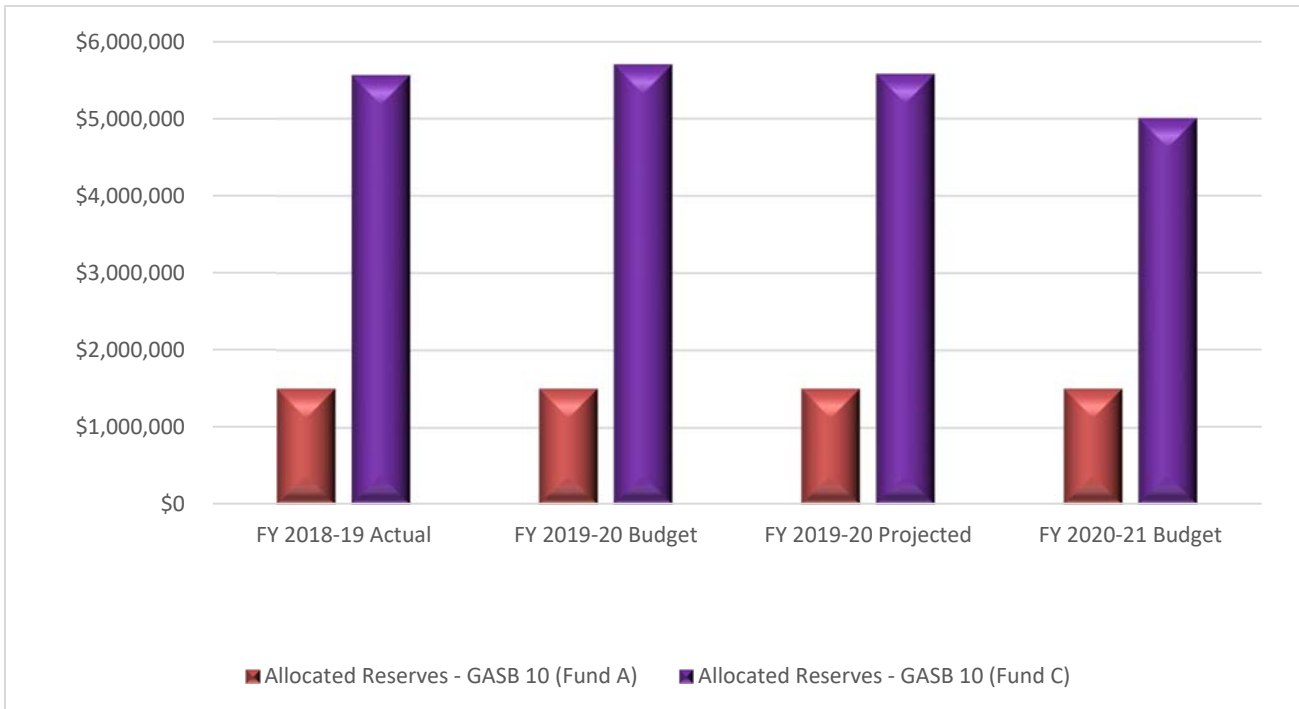
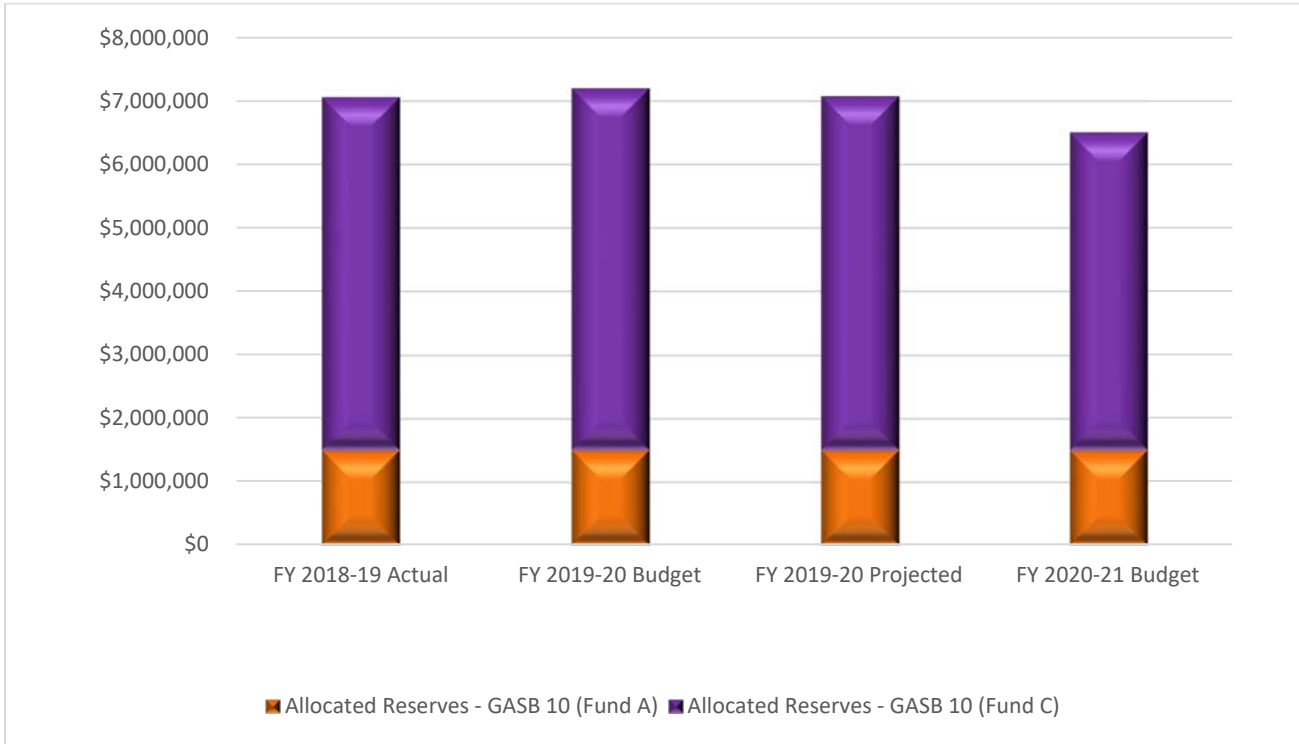


Figure 4 – History of Reserves



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Capital Improvement Program

OVERVIEW

Central San funds an extensive Capital Improvement Program (CIP) designed to preserve, maintain, and enhance Central San's assets, meet regulatory requirements, accommodate the community's needs, and protect public health and the environment. Capital improvements are construction or renovation activities that add value to Central San's fixed assets (pipelines, buildings, facilities, and equipment) or significantly extend their useful life.

Capital Expenditures Definition

Capital expenditures are cash outlays by Central San that result in the acquisition or construction of a capital asset. A capital asset is any asset of significant value, over \$5,000, that has a useful life expectancy of one year or more. Examples of capital assets include treatment plant renovations, collection system sewer replacements, equipment replacements, vehicle acquisitions, buildings, and land. Land is always considered a capital asset, regardless of value. All capital assets and improvements acquired or constructed are included in the CIP.

Capital Improvement Program Process

Annually, Central San updates its Ten-Year Capital Improvement Plan (Ten-Year CIP). The CIP identifies and prioritizes capital projects needed to accomplish Central San's Strategic Plan and provides the basis for project scheduling, staffing, and long-range financial planning. The CIP also serves as the framework for rate setting and decisions based on planned expenditures. The CIP undergoes several levels of review by Central San as detailed in the Ten-Year CIP Section. Once a project is determined to be necessary, usually based on operational or maintenance needs or condition assessments, the project is listed in the Capital Improvement Budget (CIB). In addition, new or rescheduled projects may occur during any given year due to urgent requirements or unforeseen circumstances. These projects are referred to as new or contingency projects and are included in the CIB as needed.

The CIB provides a detailed presentation of the estimated budget needed for the first year of the Ten-Year CIP beginning on July 1 and ending on June 30, referred to as a fiscal year. Since most capital projects take longer than a year to complete, future years are presented and estimated to predict the potential budget appropriation for the current projects. The CIB includes expenditures for the planning, design, and construction of capital projects and is categorized in four programs: Collection System, Treatment Plant, General Improvements, and Recycled Water. All CIB projects are reviewed and prioritized yearly, especially as projects are refined during the predesign phase, which includes comprehensive condition assessments. The CIB also includes two types of contingency funding of capital projects. The first, project contingency, is determined at the time of award of any project. The second, CIB contingency, can be used in any program and is intended to cover contingency projects and potential budget overruns. By adopting the CIB, the Board of Directors (Board) authorizes staff to pursue work on the identified projects in all four programs with firm individual project budgets. In addition, any previously approved budget may carry forward to the current fiscal year. Staff reports to the Board the final CIB expenditures after the end of each fiscal year and updates the Board Engineering and Operations Committee on the status of the CIP.

Capital Revenue

The CIP is funded by the Sewer Construction Fund's fees and charges listed below which are discussed in detail in the Financial Summary.

- Capacity Fees
- Gravity Zone Capacity Fees
- Pumped Zone Capacity Fees
- Property Taxes
- Interest
- Sewer Service Charges
- Reimbursement from Others

While Central San generally follows a pay-as-you-go philosophy, Sewer Service Charge rate increases can be mitigated by utilizing the Clean Water State Revolving Fund Program which offers low cost financing for a wide variety of water quality projects to spread the payment over time. This is anticipated for FY 2020-21.

Capital Improvement Budget Project Prioritization

The projects included in the FY 2020-21 CIB have been prioritized to ensure the best use of District's funds. Each project was evaluated using a prioritization scoring system that includes input from stakeholders within the Operations and Engineering Departments. The prioritization scoring system uses existing Central San prioritization strategies, including guidelines developed by the Water Environment & Reuse Foundation and prioritization procedures from the National Association of Clean Water Agencies' member agencies. Scoring for each project used twenty weighted criteria, with emphasis on projects currently under construction, those associated with asset management, regulatory requirements, prior commitments and those supporting business functions.

The criteria used to develop the scores take into consideration the "triple bottom line plus," or social, environmental, financial, and technical benefits of the project and their applicability to Central San's Vision, Mission, and Values. Criteria fell into three categories: 1) Essential Commitments; 2) Project Benefits; and 3) Operational Reliability, as summarized below:

Criteria Category: Essential Commitments
Complies with Regulatory Requirements and Mandates
Meets Commitment with Outside Agency or Existing Contract
Reduces Potential Health or Safety Hazards
Implements Board of Directors' Policy/Priority
Increases Capacity to Meet Projected Build-out
Criteria Category: Project Benefits
Impacts Phasing or Implementation Schedule for Other Projects
Optimizes Capital and/ or Operations and Maintenance Costs
Increases Sustainable Use of Natural or Existing Resources
Reduces Social and or Environmental Impacts
Supports Timely Adoption of Technology Improvements
Criteria Category: Operational Reliability
Consistent with Asset Management Program
Improves Reliability and System Performance
Improves Facility-Wide Resiliency
Required for Safe & Reliable Operations
Key Asset Replacement
Project Criticality Ranking



In addition, all projects for FY 2020-21 have been listed in order of priority based on the criteria described above with other factors that include consequence of failure, project development, potential contract impacts, and more so that the entire capital program can be assessed. This ranking is applicable at the time the Budget is adopted. However, the score and the ranking will be continuously re-evaluated during the year as projects evolve. For example; once a construction contract is awarded and executed for a project, its score would increase and result in a ranking change at that time. It should also be noted that the priority ranking is not reflective of the order in which the project is started. The score and ranking are more a reflection of an importance factor, than timing or a priority

in which the project is delivered. The project ranking, District number, name, program, and score (maximum score is 400) as of May 26, 2020 are shown below:

Project Ranking	Project Number	Project	Program	Score
1	7348	Solids Handling Facility Improvements	TP	315
2	7353	Outfall Improvements – Phase 7	TP	305
3	8436	Pumping Station Upgrades – Phase 1	CS	295
4	7351	Mechanical and Concrete Renovations	TP	290
5	7328	Influent Pump Electrical Improvements	TP	280
5	8250	Enterprise Resource Planning Replacement	GI	280
7	7352	Ultraviolet (UV) Disinfection Upgrades	TP	275
8	8458	Martinez Sewer Renovation – Phase 6	CS	270
8	8459	Lafayette Sewer Renovation – Phase 14	CS	270
8	8456	Danville Sewer Renovation – Phase 3	CS	270
8	8460	Walnut Creek Sewer Renovation – Phase 14	CS	270
12	7339	Plant Control System I/O Replacement	TP	265
13	8243	Server Room Relocation	GI	260
14	7362	POB Seismic Upgrades	TP	255
14	8451	Collection System Sewer Renovation – Phase 1	CS	255
14	7361	Filter Plant and Clearwell Improvements – Phase 1A	ReW	255
17	7322	Fire Protection System – Phase 2	TP	250
18	7304	Programmable Logic Control Systems Upgrades	TP	230
19	7349	Steam and Aeration Blower Systems Renovations	TP	225
19	TBD *	UPCCAA Urgent Projects FY 2020-25	TP	225
21	8230	Capital Legal Services	GI	220
22	7317	Plant Control System Network Upgrades	TP	215
22	TBD *	Cured-In-Place Pipe Blanket Contract FY 2020-25	CS	215
22	8448	Manhole Modifications	CS	215
22	7365	Recycled Water Clearwell Repairs	ReW	215
26	7370	Annual Infrastructure Replacement	TP	210
26	8461	South Orinda Sewer Renovation – Phase 8	CS	210
26	8462	San Ramon Pumping Station DERWA	CS	210
29	8442	Pumping Station Equipment and Piping Replacement – Phase 2	CS	200
29	8517	Vehicle Replacement Program	GI	200
31	TBD *	Contractual Assessment District Project Financing	CS	190
31	TBD *	Large Diameter Piping Renovation Program	CS	190
33	8240	IT Development	GI	185
34	7369	Piping Renovation – Phase 10	TP	180
34	TBD *	Filter Plant and Clearwell Improvements – Phase 1B	ReW	180
36	7367	Concord Main Metering Station Upgrade	CS	170
36	8516	Equipment Acquisition	GI	170
38	TBD *	Hearth Replacement	TP	165

Project Ranking	Project Number	Project	Program	Score
38	TBD *	Plant Electrical Replacement and Rehabilitation	TP	165
38	8450	Development Sewerage Support	CS	165
41	8457	Pumping Stations Upgrades – Phase 2	CS	160
41	5991	Pleasant Hill Sewer Renovation – Phase 2	CS	160
43	8443	Large Diameter Pipeline Inspection Program – Phase 1	CS	155
44	7364	TP Safety Enhancement – Phase 5	TP	150
45	8444	Force Main Inspection Program – Phase 1	CS	140
45	8207	General Security and Access	GI	140
45	7368	Water Exchange Project	ReW	140
48	TBD *	UV Disinfection Replacement	TP	135
49	7315	Applied Research and Innovations	TP	125
49	TBD *	UV Hydraulic Improvements	TP	125
49	7366	Recycled Water Distribution System Renovations Program	ReW	125
52	7357	Plant-Wide Instrumentation Upgrades	TP	120
52	TBD *	Contractor Staging Improvements	TP	120
54	7363	Treatment Plant Planning	TP	115
54	TBD *	Laboratory Roof and Seismic Upgrades	TP	115
54	8236	District Easement Acquisition	GI	115
54	TBD *	HOB Exterior Repairs	GI	115
54	TBD *	Property Repairs and Improvements	GI	115
59	TBD *	Air Conditioning and Lighting Renovation	TP	110
60	7373	Fire Protection System – Phase 3	TP	100
60	7355	Odor Control Upgrades – Phase 1	TP	100
60	8449	Collection System Modeling Support	CS	100
60	7346	Recycled Water Distribution System Surge Analysis	ReW	100
64	7371	Condition Assessment of Buried Pipelines	TP	95
64	8419	Collection System Planning	CS	95
66	7306	Zone 1 Recycled Water	ReW	90
67	8447	Pumping Station Security Improvements	CS	85
67	8251	Capital Improvement Program and Budget Improvements	GI	85
69	TBD *	MRC Building Modifications	TP	80
70	7341	Walnut Creek/Grayson Creek Levee Rehab	TP	60
70	7354	Treatment Plant Security Improvements	TP	60

Individual Project Drivers

Projects included in the CIP address one or more of the four major drivers for implementing capital improvement projects: 1) Aging Infrastructure; 2) Regulatory; 3) Capacity; and 4) Sustainability. Most project scopes include several project elements that address a range of drivers. Below is a description for each of the four major drivers:

- ***Aging Infrastructure:*** This project driver describes projects required to maintain the performance and reliability of existing assets to ensure reliable conveyance and treatment of wastewater. Central San operates and maintains several billion dollars of assets, and several projects in each program have been initiated or are in progress to meet replacement or rehabilitation infrastructure needs. Most of the existing treatment plant facilities were constructed in the late 1970s and early 1980s following the passage of the Clean Water Act, and some of the collection system facilities and piping were constructed as early as the 1940s and 1950s. Central San recognizes the need to address aging infrastructure and has developed an Asset Management system.
- ***Regulatory:*** This project driver describes projects required to reliably comply with regulatory requirements that are designed to protect human health and the environment, and includes planning needed to anticipate potential future regulatory requirements. Regulatory drivers that may trigger capital improvement projects include potential changes in future state and/or federal water, air, and solids regulations. Potential regulatory drivers include: changes to existing final effluent limits to address nutrients, selenium, contaminants of emerging concern, and others; changes to California/National Toxics Rules, 303 (d) listed pollutants and micropollutants, and new virus-based disinfection criterion; reductions in greenhouse gas emission Cap and Trade Program thresholds; compliance with Federal 129 sewage sludge incineration rules, changes to air emission limits, and solids handling/management and disposal regulations; recycled water, including potential coordinated projects with water agencies on Title 22, indirect or direct potable reuse opportunities; and collection system regulatory requirements such as the reduction of sewer system overflows. Occasionally, improvements are also required to improve the reliability of existing facilities to ensure 100% compliance with regulatory permits and to ensure protection of human health and the environment.
- ***Capacity:*** This project driver describes projects required to increase capacity of existing facilities. Capacity drivers that may trigger capital improvement projects include potential upgrades required to mitigate hydraulic bottlenecks and increase capacity of existing facilities to accommodate wastewater flows and loads. Projects that would be required to accommodate planned growth are not included in the CIP.
- ***Sustainability/Energy/Optimization:*** This project driver describes projects to minimize lifecycle costs, maximize benefits, and achieve economic stability through optimization, resiliency, resource recovery, and energy projects. Sustainability drivers that may trigger capital improvement projects include upgrades to strive towards net zero energy, recycled water projects to ensure the reliable supply of recycled water for use at Central San and for use by Central San’s customers, and upgrades to improve the resiliency of Central San facilities. Improvements to strive towards net zero energy or energy self-sufficiency include energy efficiency measures such as installing more energy efficient equipment or treatment processes, and renewable energy projects such as solar or wind.

Example of Project Driver(s)

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Each project is described on the following pages. Each project summary includes project name, description, prioritization, purpose, operating department impact and funding source, location, budgetary information, and drivers (i.e., what is the main impetus for a project). The main driver(s) for each project is (are) identified by highlighting in yellow background color and **bold** text. Driver(s) that is (are) not as significant or not relevant is (are) displayed in gray.

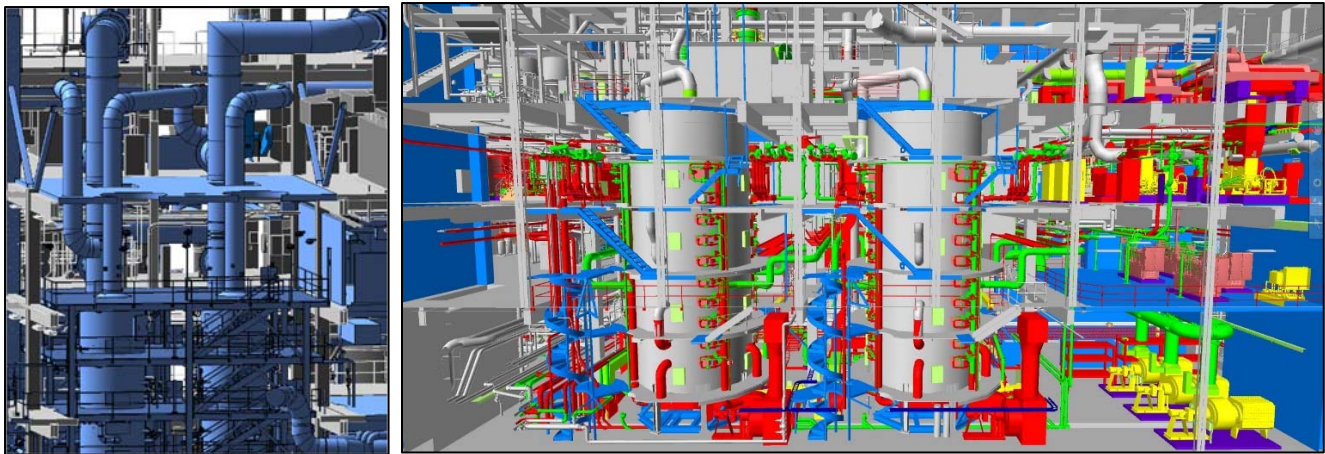
Capital Improvement Budget FY 2019-20 Accomplishments

Collection System Sewer Replacement: Several projects have replaced or rehabilitated up to 6.0 miles of sewers, most of which were 6-inch vitrified clay pipes in poor condition. Construction included sewer replacement, new manholes, and other infrastructure improvements in public rights-of-way and backyard easements. Trenchless technology was utilized where possible for cost effectiveness and to minimize construction impacts. Central San staff also designed and bid up to 7.0 miles of upcoming sewer replacement this fiscal year and coordinated the projects with city paving programs and other utilities throughout the service area.



Sewer Replacement in a Residential Neighborhood and Creek Crossing

Regulatory and Safety Projects: One of the major regulatory challenges facing Central San concerns the air pollution control equipment on the existing furnaces at the wastewater treatment plant. The Solids Handling Facility Improvements Project will replace this equipment to meet current and future regulatory needs. In addition, this project will include structural modifications to the building, furnaces, and electrical bracing to meet current seismic standards. The final design is underway with design completion expected in 2020.



3 – D Construction Modeling of the Solids Handling Facility Improvements Project

Safety projects included the completion of the Plant Operations Building Seismic Upgrades construction, and the design and bidding of the Emergency External Stairway for the Solids Conditioning Building. Both projects provide for employee safety while including improvements to ensure reliability of critical facilities that process wastewater.

Infrastructure Replacement: The main emphasis of the CIP is replacing deteriorated infrastructure. Last fiscal year, several projects were initiated in design or construction and included the following major efforts:

- **Mechanical and Concrete Renovations:** This construction project is focused on replacing critical gates, mechanical systems, and rehabilitating concrete structures at the wastewater treatment plant. In addition, this project rehabilitated the odor control towers and associated electrical for two critical process areas (Headworks and Primary Sedimentation).
- **Pumping Station Upgrades – Phase 1:** Awarded the construction contract and started construction for needed replacement of electrical, mechanical, and back-up power equipment at the Moraga, Orinda Crossroads, and Flush Kleen Pumping Stations.
- **Pumping Station Upgrades – Phase 2:** Land acquisitions and detailed design is ongoing for needed electrical and mechanical equipment replacement at the Martinez, Maltby, and Fairview Pumping Stations and progress into the next fiscal year.
- **Filter Plant and Clearwell Improvements – Phase 1A:** Completed final design, which includes replacement of deteriorated electrical infrastructure at the Clearwell, new pumps, recycled water storage improvements, and filter system modifications. Construction is expected to begin in FY 2020-21.
- **Steam and Aeration Blower Systems Renovation:** Condition assessments are underway for the steam and heat recovery systems at the treatment plant, and several other areas in the aeration system, including the blowers, will be evaluated this fiscal year. This project also includes evaluation of the treatment plant electrical systems. The planning of this project will continue into next year.
- **Projects completed:** Several projects are either at the Substantial Completion or Closed phase of construction, including the Headworks Screenings Upgrade (Closed), Piping Renovation – Phase 9 (Closed), and Recycled Water Clearwell Repairs (Closing in Progress). All of these projects replaced or protected critical infrastructure to allow Central San to continue to effectively collect, treat, and process wastewater, and deliver recycled water in compliance with all recycling requirements.



Rehabilitating the odor control tower and temporary bypassing under the Mechanical and Concrete Renovations Project

FY 2020-21 Capital Improvement Budget

The CIB Budget to date is approximately \$104.77 million. The budget needed for all ongoing and new projects in FY 2020-21 is \$88.02 million. The future year estimated budget for these projects is at \$380.16 million. Combined the total estimated budget for the identified projects in the FY 2020-21 CIB is \$572.96 million. The 2020 Ten-Year CIP is projected to be \$907.55 million as shown below in Table 1:

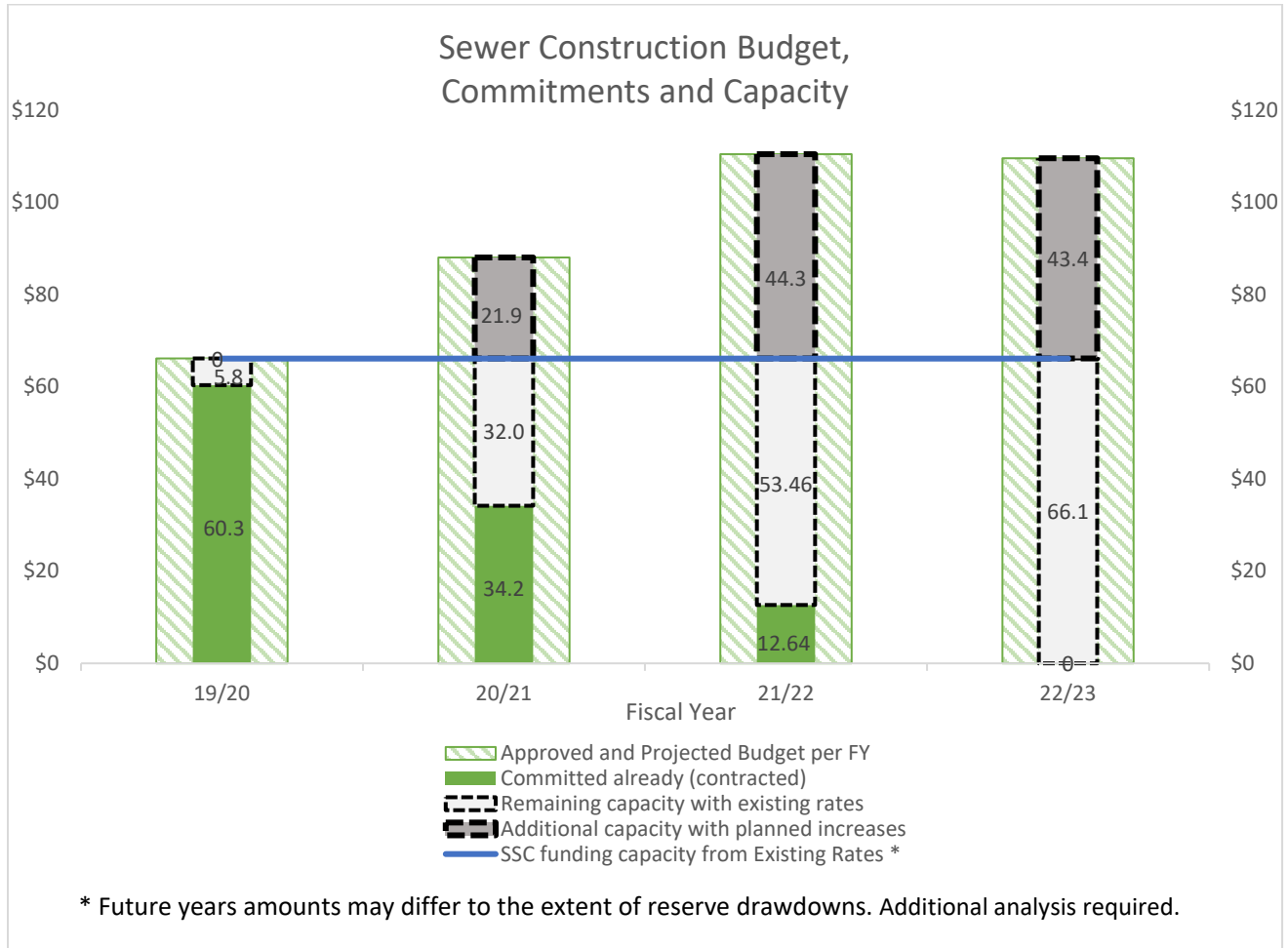
Table 1 – FY-2020-21 CIB per Program

Program	Budget to Date (1)	FY-2020-21 (2)	Future FYs (3)	Total Estimated Project Budgets (1)+(2)+(3)	FY 2020 Ten Year CIP
Collection System	\$25,258,527	\$40,165,000	\$ 86,066,000	\$151,489,527	\$335,522,000
Treatment Plant	56,120,451	32,334,000	219,225,000	307,679,451	457,156,000
General Improvements	14,004,283	3,925,000	7,665,000	25,594,283	22,470,000
Recycled Water	9,391,894	9,500,000	57,200,000	76,091,894	67,800,000
CIB Contingency	-	2,100,000	10,000,000	12,100,000	24,600,000
Totals:	\$104,775,155	\$88,024,000	\$380,156,000	\$572,955,155	\$907,548,000

The Budget to Date (1) above includes approximately 90% budget already spent for on-going projects.

FY 2019-20 Capital Improvement Budget Construction Commitments

As of April 30, 2020, the total construction commitments authorized by the Board in FY 2019-20 or prior is \$60.3 million and a total of \$46.8 million in future years. This includes all construction contracts, purchase orders, construction management, and supporting services to complete the construction phase within the CIB.



FY 2020-21 Capital Improvement Budget Major Project Emphasis

Although the CIB is comprised of budgets for many individual projects, there are several major projects that together account for most of the total capital budget. In FY 2020-21, the emphasis will be on fifteen large projects (those projects over \$1.5 million), which together account for \$67.4 million or 77% of the total CIB for the year. Each major project budget is shown below:

1. Solids Handling Facility Improvements		
FY-2020-21 Budget: \$4,000,000	Estimated total project cost:	\$128,234,000
	Estimated completion date:	FY 2025-26
2. Mechanical and Concrete Renovations		
FY-2020-21 Budget: \$2,603,000	Estimated total project cost:	\$14,047,000
	Estimated completion date:	FY 2020-21
3. Pumping Station Upgrades – Phase 1		
FY-2020-21 Budget: \$14,040,000	Estimated total project cost:	\$35,031,000
	Estimated completion date:	FY 2022-23
4. Lafayette Sewer Renovation – Phase 14		
FY-2020-21 Budget: \$4,600,000	Estimated total project cost:	\$5,200,000
	Estimated completion date:	January 2020
5. Walnut Creek Sewer Renovation – Phase 14		
FY-2020-21 Budget: \$4,573,000	Estimated total project cost:	\$5,173,000
	Estimated completion date:	January 2020
6. Martinez Sewer Renovation – Phase 6		
FY-2020-21 Budget: \$4,500,000	Estimated total project cost:	\$5,100,000
	Estimated completion date:	January 2020
7. Collection System Sewer Renovation – Phase 1		
FY-2020-21 Budget: \$4,027,000	Estimated total project cost:	\$25,318,527
	Estimated completion date:	FY 2021-22
8. Filter Plant and Clearwell Improvements – Phase 1A		
FY-2020-21 Budget: \$9,000,000	Estimated total project cost:	\$38,589,000
	Estimated completion date:	FY 2022-23
9. Steam and Aeration Blower Systems Renovations		
FY-2020-21 Budget: \$2,550,000	Estimated total project cost:	\$63,050,000
	Estimated completion date:	FY 2025-26
10. Influent Pump Electrical Improvements		
FY-2020-21 Budget: \$3,500,000	Estimated total project cost:	\$8,910,000
	Estimated completion date:	FY 2022-23
11. Pumping Station Upgrades - Phase 2		
FY-2020-21 Budget: \$2,400,000	Estimated total project cost:	\$30,550,000
	Estimated completion date:	FY 2024-25
12. Large Diameter Renovation Program		
FY-2020-21 Budget: \$1,500,000	Estimated total project cost:	\$17,000,000
	Estimated completion date:	FY 2028-29
13. Solids Site Preparation Project		
FY-2020-21 Budget: \$2,550,000	Estimated total project cost:	\$2,550,000
	Estimated completion date:	FY 2020-21

14. Outfall Improvements – Phase 7		
FY-2020-21 Budget: \$5,100,000	Estimated total project cost:	\$6,200,000
	Estimated completion date:	FY 2021-22
15. Piping Renovation – Phase 10		
FY-2020-21 Budget: \$2,500,000	Estimated total project cost:	\$3,765,000
	Estimated completion date:	FY 2021-22

Capital Improvement Budget Modifications

Changes to projects do occur and include rescheduling, consolidation, phasing, modification of scope, and renaming of projects since last fiscal year and include:

Consolidation or Phasing of Existing Projects:

- The Collection System Sewer Renovation – Phase 1 has been or will be split to fund the construction of the Walnut Creek Sewer Renovation – Phase 14, Lafayette Sewer Renovation – Phase 14, South Orinda Sewer Renovation – Phase 8, and Martinez Sewer Renovation – Phase 6 as planned and within budget.
- The Filter Plant and Clearwell Improvements will be completed in two phases; Phase 1A is in progress while Phase 1B will start predesign this fiscal year.

Modification of Scope and Budget:

- The Pumping Station Upgrades – Phase 1 and Outfall Improvements – Phase 7 budgets were increased at time of the award. The budgets for these projects and the program have been updated to reflect the changes presented to the Board.

Renaming Projects:

- None.



California Environmental Quality Act (CEQA) Compliance

The CIB is exempt from CEQA because it is a planning study (Central San CEQA Guidelines Section 15262). Some projects included in the CIB are designated as exempt under CEQA. If appropriate, a Notice of Exemption may be filed for such projects following a future action of the Board, such as an award of a construction contract. Other CIB projects are designated as needing a "Negative Declaration" or "Environmental Impact Report" to comply with CEQA. Non-exempt CEQA projects will be considered for Board approval on a case-by-case basis after preparation and certification of the appropriate CEQA documentation. The following table presents the CEQA compliance status of projects for which staff is requesting an authorization of Sewer Construction Funds. The anticipated types of CEQA documentation required for each project are listed below:

- *Exemption:* Staff will recommend an Exemption Finding, if still appropriate, when each project receives approval consideration at a future Board meeting.
- *Negative Declaration:* Staff will prepare a Negative Declaration for the project. Board consideration of approval of the project would follow its approval of the Negative Declaration.
- *Environmental Impact Report:* Staff will direct preparation of an Environmental Impact Report. Board consideration of approval of the project would follow certification of the Environmental Impact Report.
- *CEQA Documents Completed:* For these projects, CEQA compliance has already been achieved through documents previously prepared and approved.



CEQA Compliance Summary for FY 2020-21

Program/Project		Exemption	CEQA Document Required
COLLECTION SYSTEM PROGRAM			
5991	Pleasant Hill Sewer Renovation – Phase 2	X	
8419	Collection System Planning	X	
8436	Pumping Station Upgrades – Phase 1	X	
8442	Pumping Station Equipment and Piping Replacement – Phase 2	X	
8443	Large Diameter Pipeline Inspection Program – Phase 1	X	
8444	Force Main Inspection Program – Phase 1	X	
8447	Pumping Station Security Improvements	X	
8448	Manhole Modification Project	X	
8449	Collection System Modeling Support	X	
8450	Development Sewerage Support	X	
8451	Collection System Sewer Renovation – Phase 1	X	
8456	Danville Sewer Renovation – Phase 3	X	
8457	Pumping Stations Upgrades – Phase 2	X	Planning is exempt; more information is needed on future aspects of this project to determine appropriate CEQA documentation.
8458	Martinez Sewer Renovation – Phase 6	X	
8459	Lafayette Sewer Renovation – Phase 14	X	
8460	Walnut Creek Sewer Renovation – Phase 14	X	
8461	South Orinda Sewer Renovation – Phase 8	X	
8462	San Ramon Pumping Station DERWA	X	
TBD	Cured-In-Place Pipe Blanket Contract FY 2020-25	X	
TBD	Contractual Assessment District Project Financing	X	
TBD	Large Diameter Piping Renovation Program	X	

Program/Project		Exemption	CEQA Document Required
TREATMENT PLANT PROGRAM			
7304	Programmable Logic Controller Systems Upgrades	X	
7315	Applied Research and Innovations	X	
7317	Plant Control System Network Upgrades	X	
7322	Fire Protection System – Phase 2	X	
7328	Influent Pump Electrical Improvements	X	
7339	Plant Control System I/O Replacement	X	
7341	Walnut Creek/Grayson Creek Levee Rehab		Contra Costa County Flood Control and Water Conservation District will be the Lead Agency and will determine appropriate CEQA documentation.
7348	Solids Handling Facility Improvements	X	
7349	Steam and Aeration Blower Systems Renovations	X	Planning is exempt; more information is needed on future aspects of this project to determine appropriate CEQA documentation.
7351	Mechanical and Concrete Renovations	X	
7352	UV Disinfection Upgrades	X	
7353	Outfall Improvements – Phase 7	X	
7354	Treatment Plant Security Improvements	X	
7355	Odor Control Upgrades – Phase 1	X	
7357	Plant-Wide Instrumentation Upgrades	X	
7362	POB Seismic Upgrades	X	
7363	Treatment Plant Planning	X	
7364	Treatment Plant Safety Enhancement – Phase 5	X	
7369	Piping Renovation – Phase 10	X	
7370	Annual Infrastructure Replacement	X	
7371	Condition Assessment of Buried Pipelines	X	Planning is exempt; more information is needed on future aspects of this project to determine appropriate CEQA documentation.
7373	Fire Protection System – Phase 3	X	
TBD	Laboratory Roof and Seismic Upgrades	X	
TBD	Hearth Replacement	X	
TBD	Air Conditioning and Lighting Renovation	X	
TBD	Plant Electrical Replacement and Rehabilitation	X	
TBD	Contractor Staging Improvements	X	
TBD	UPCCAA Urgent Projects FY 2020-25	X	
TBD	UV Disinfection Replacement	X	
TBD	UV Hydraulic Improvements	X	
TBD	MRC Building Modifications	X	

Program/Project		Exemption	CEQA Document Required
GENERAL IMPROVEMENTS PROGRAM			
8207	General Security and Access	X	
8230	Capital Legal Services	X	
8236	District Easement Acquisition	X	
8240	IT Development	X	
8243	Server Room Relocation	X	
8250	ERP Replacement	X	
8251	Capital Improvement Program and Budget Improvements	X	Planning is exempt; more information is needed on future aspects of this project to determine appropriate CEQA documentation.
8516	Equipment Acquisition	X	
8517	Vehicle Replacement Program	X	
TBD	Property Repairs and Improvements	X	
TBD	HOB Exterior Repairs	X	
RECYCLED WATER PROGRAM			
7306	Zone 1 Recycled Water	X	
7346	Recycled Water Distribution System Surge Analysis	X	
7361	Filter Plant and Clearwell Improvements – Phase 1A	X	
7365	Recycled Water Clearwell Repairs	X	
7366	Recycled Water Distribution System Renovations Program	X	
7368	Water Exchange Project	X	Planning is exempt; more information is needed on future aspects of this project to determine appropriate CEQA documentation.
TBD	Filter Plant and Clearwell Improvements – Phase 1B	X	

Capital Improvement Budget – Collection System Program

The following are the major points of emphasis for the FY 2020-21 Collection System Program:

- Renovate sewers as they reach the end of their useful lives to avoid structural failure, sanitary sewer overflows, sewer service disruptions, and to control maintenance costs;
- Improve the electrical safety, reliability, and operations of the pumping stations;
- Promote residential septic conversion by providing finance options to protect public health and the environment; and
- Investigate and plan for potential large diameter sewer renovation.

The process for project identification, prioritization, and scheduling takes into consideration the following eight major components:

- Reduce impacts to customers/residents and communities;
- Results from Central San's *InfoMaster*® model, which is an advanced Geographic Information System integrated risk-based analytical asset management and capital planning tool;
- Results from Central San's closed-circuit TV Inspection Program that identifies lines in need of rehabilitation or replacement;
- Collection System Operations maintenance records including overflows and stoppages;
- The Pumping Station Inventory Update, which identifies necessary reliability improvements;
- Preliminary Design Report for the renovation and upgrades at six major pumping stations;
- Collection System Master Plan, which identifies capacity limitations in the collection system; and
- Coordination with capital improvement programs for paving and other agencies'/utilities' projects.

This process allows staff to establish priorities and schedules for the individual elements of the system that are incorporated into the Capital Improvement Budget and Plan. Assessment tools, such as *InfoMaster*® and closed-circuit TV inspection, are utilized to confirm the need for projects. After priorities and schedules are set, projects proceed to design and construction. At each step of the process, the level of accuracy in scope, schedule, and cost improves.

The Collection System Program is comprised of the following projects and planned expenditures:

CIB Table 2 – FY 2020-21 Collection System Program Budget/Project Summary

Project Number	Project	Budget-to-Date	FY 2020-21	Future FYs	Total Project Cost
5991	Pleasant Hill Sewer Renovation – Phase 2	\$460,000	\$500,000	\$1,500,000	\$2,460,000
7367	Concord Main Metering Station Upgrade	250,000	-	-	250,000
8419	Collection System Planning	1,185,000	200,000	400,000	1,785,000
8436	Pumping Station Upgrades – Phase 1	8,347,000	14,040,000	12,644,000	35,031,000
8442	Pumping Station Equipment and Piping Replacement – Phase 2	600,000	200,000	400,000	1,200,000
8443	Large Diameter Pipeline Inspection Program – Phase 1	765,000	530,000	546,000	1,841,000
8444	Force Main Inspection Program – Phase 1	125,000	500,000	700,000	1,325,000
8447	Pumping Station Security Improvements	207,000	75,000	300,000	582,000
8448	Manhole Modifications	1,021,000	400,000	700,000	2,121,000
8449	Collection System Modeling Support	303,000	120,000	120,000	543,000
8450	Development Sewerage Support	2,030,000	900,000	5,400,000	8,330,000
8451	Collection System Sewer Renovation – Phase 1	2,535,527	4,027,000	18,756,000	25,318,527
8456	Danville Sewer Renovation – Phase 3	4,280,000	-	-	4,280,000
8457	Pumping Stations Upgrades – Phase 2	550,000	2,400,000	27,600,000	30,550,000
8458	Martinez Sewer Renovation – Phase 6	600,000	4,500,000	-	5,100,000
8459	Lafayette Sewer Renovation – Phase 14	600,000	4,600,000	-	5,200,000
8460	Walnut Creek Sewer Renovation – Phase 14	600,000	4,573,000	-	5,173,000
8461	South Orinda Sewer Renovation – Phase 8	600,000	-	-	600,000
8462	San Ramon Pumping Station DERWA	200,000	-	-	200,000
TBD *	Cured-In-Place Pipe Blanket Contract FY 2020-25	-	600,000	1,000,000	1,600,000
TBD *	Contractual Assessment District Project Financing	-	500,000	500,000	1,000,000
TBD *	Large Diameter Piping Renovation Program	-	1,500,000	15,500,000	17,000,000
	Total Program	\$25,258,527	\$40,165,000	\$86,066,000	\$151,489,527

*New Projects in FY 2020-21

Pleasant Hill Sewer Renovation – Phase 2 – District Project 5991

Program	Phase	Priority Rank	Ranking Score
Collection System	Design/Construction	41	160

Purpose:

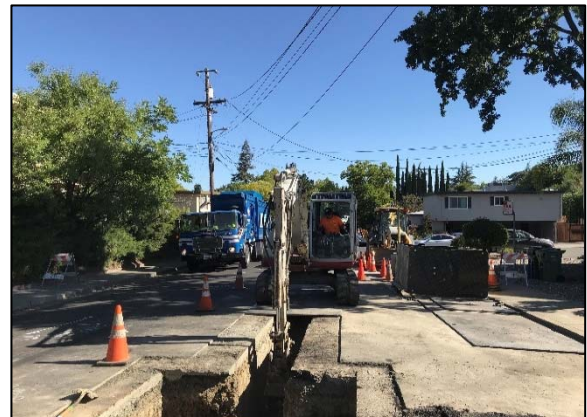
To replace and renovate small diameter sewers within the city of Pleasant Hill.

Drivers:

Central San’s 1,500+ mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful lives as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

More than 300 miles of the small diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well and are the source of over 90% of the dry weather sanitary sewer overflows (SSOs). Central San implemented a sewer renovation program in 1991 to replace small diameter sewers to control future maintenance requirements and costs, minimize the number of overflows, limit the quantity of rainfall entering the collection system, and improve the level of service provided to customers.



Description:

The Pleasant Hill Sewer Renovation Project – Phase 2 will replace or rehabilitate small diameter sewers located in both public rights-of-way and easements within the city of Pleasant Hill. Design and construction for this project will be included and coordinated with the Collection System Sewer Renovation Project – Phase 1.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): City of Pleasant Hill

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$183,000	\$-	\$-	\$-	\$183,000
Design	277,000	250,000	-	-	527,000
Construction	-	250,000	1,000,000	500,000	1,750,000
FY Total	\$460,000	\$500,000	\$1,000,000	\$500,000	\$2,460,000

Concord Main Metering Station Upgrade – District Project 7367

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	36	170

Purpose:

To improve reliability and accuracy of the Concord Main Metering Station to provide more accurate operations and maintenance costs and billing for the facility.

Drivers:

This flow meter measures 80% of the City of Concord flows to Central San and is used for billing. During a study of the existing venturi meter, it was determined that a new magnetic flow meter would capture more accurate flow data and require less maintenance. In addition, upgrades to the facility and electrical will be implemented. An intrusion alarm and monitoring system will be installed for the protection and safety of the facility. Relocation of the sump pump piping will allow for better access and reliability of the station. A new electrical connection specifically for the meter station is being installed to provide more accurate electrical billing for the station.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Concord Main Metering Station Project is installing a new magnetic flow meter, relocate the sump pump piping, install new stairs, install an intrusion alarm system, and install a new connection directly to the metering station and its associated electrical equipment and panels. This project was bid as part of the Concrete and Mechanical Renovations Project and should be completed this fiscal year FY 2020-21.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues. The costs associated with the project are shared with the City of Concord.

Location(s): City of Concord

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	250,000	-	-	-	250,000
FY Total	\$250,000	\$-	\$-	\$-	\$250,000

Collection System Planning – District Project 8419

Program	Phase	Priority Rank	Ranking Score
Collection System	Planning	64	95

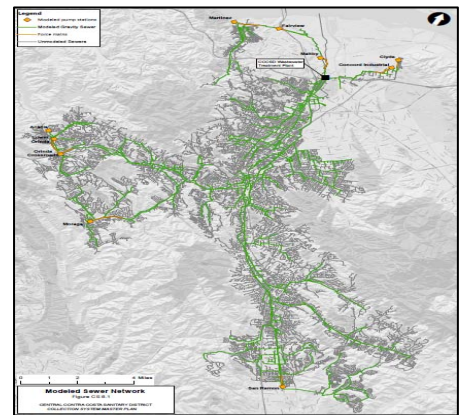
Purpose:

To complete evaluations for upcoming regulatory requirements, assess collection system renovation needs, evaluate sewer capacities, and investigate optimization and pilot opportunities.

Drivers:

Central San owns and operates over 1,540 miles of sewer and 18 pumping stations. Ongoing planning and evaluations are required to proactively address aging infrastructure, capacity needs, upcoming regulations, and sustainability drivers. An *InfoMaster*® sewer replacement risk model is maintained by staff to identify and prioritize sewer renovation needs. An *InfoWorks*® hydrodynamic model is maintained by staff to identify capacity deficiencies and renovation needs. This project includes developing the *InfoMaster*® framework needed to incorporate force main and large diameter sewer inspection results into a risk-based, long-term renovation and inspection strategy.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Use *InfoWorks*® to evaluate capacity for proposed developments, special discharge requests, sewer renovation projects, and proposed construction shutdowns and bypasses
- Update the *InfoMaster*® sewer risk model and long-term sewer renovation need projections to incorporate force main and large diameter sewer inspection results to develop long-term renovation and ongoing condition assessment strategies
- Identify and evaluate promising technologies, optimizations, and pilots applicable to collection system and pumping station operations

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Collection System and Pumping Stations

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$1,185,000	\$200,000	\$200,000	\$200,000	\$1,785,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$1,185,000	\$200,000	\$200,000	\$200,000	\$1,785,000

Pumping Station Upgrades – Phase 1 – District Project 8436

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	3	295

Purpose:

To address aging infrastructure and reliability needs at the Moraga, Flush Kleen, and Orinda Crossroads Pumping Stations.

Drivers:

As part of the Comprehensive Wastewater Master Plan, a detailed condition assessment of the pumping stations has identified several structural, mechanical, electrical, and instrumentation improvements. An Arc Flash Study has also identified several improvements that are required at these pumping stations.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

The following are major elements included in the project which is currently in construction:

- Add grinder(s) at the Moraga Pumping Station
- Construct a surge tank canopy at the Orinda Crossroads Pumping Station
- Replace wet weather diesel engine driven pumps at the Moraga and Orinda Crossroads Pumping Stations with electric motors
- New backup generators and automatic transfer switch improvements at all three sites
- Recondition or replace pumps, valves, and gates
- Repair/recoat piping and concrete
- Major electrical/controls replacement, including Arc Flash Study recommendations
- Replace worn control panels and seismically brace control panels and electrical cabinets
- Improve safety devices such as replacement of gas detection systems and eye wash stations
- Coordination with the City of Orinda, Town of Moraga, and others



Operating Department Impact and Funding Source:

The impacts on the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Moraga, Flush Kleen, and Orinda Crossroads Pumping Stations

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$450,000	\$-	\$-	\$-	\$450,000
Design	3,200,000	-	-	-	3,200,000
Construction	4,697,000	14,040,000	12,644,000	-	31,381,000
FY Total	\$8,347,000	\$14,040,000	\$12,644,000	\$-	\$35,031,000

Pumping Station Equipment and Piping Replacement – Phase 2 – District Project 8442

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	29	200

Purpose:

To replace or recondition failed and obsolete pumps, piping, valves, and other pumping station equipment; and to provide proper emergency response equipment and critical spare parts at pumping stations.

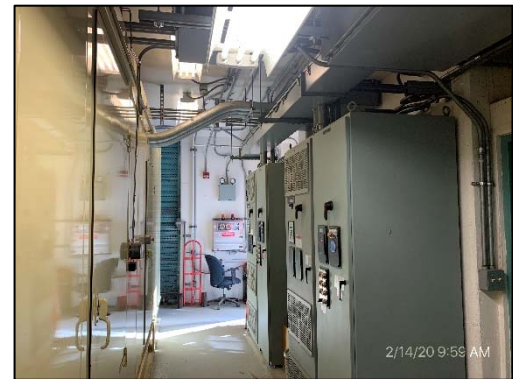
Drivers:

This ongoing project replaces aging equipment and piping in poor condition at the pumping stations.

Additionally, emergency response equipment and critical spare parts are identified to improve resiliency and reliable operations during emergency conditions, power failures, and severe wet weather conditions.

Selection of equipment is completed by Plant Operations, Plant Maintenance, and Engineering staff in coordination with the ongoing Asset Management Program.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Install control and isolation valves for shutdown and pumping station protection
- Revise control strategies and equipment response times
- Replace critical equipment at the Lower Orinda Pumping Stations, including variable frequency drives
- Recondition major equipment to meet original factory specifications
- Purchase critical spare parts for major pumping station equipment

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Pumping Stations

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	50,000	-	-	-	50,000
Construction	550,000	200,000	200,000	200,000	1,150,000
FY Total	\$600,000	\$200,000	\$200,000	\$200,000	\$1,200,000

Large Diameter Pipeline Inspection Program – District Project 8443

Program	Phase	Priority Rank	Ranking Score
Collection System	Planning	43	155

Purpose:

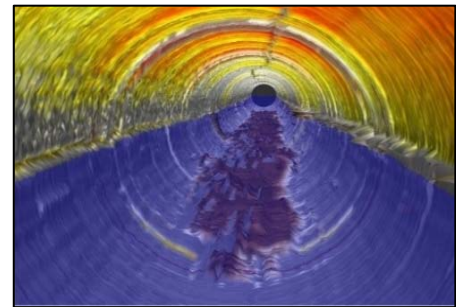
To assess the condition of large diameter trunks and interceptors and confirm the timing for renovation needs.

Drivers:

Central San owns 76 miles of wastewater trunks and interceptors ranging from 24 inches to 102 inches in diameter. The typical lifespan of large sewers ranges from 50 to 150 years depending on pipe material, hydraulic, operating, and environmental conditions. Nearly half of Central San's large sewers are over 50 years old and should be evaluated for remaining life.

Although Central San performs closed-circuit TV (CCTV) inspection of large diameter sewers, CCTV inspection is not always practical and does not always provide an accurate condition assessment. For example, CCTV cannot detect external corrosion and cannot assess the condition of the pipe invert when sediment is present. A combination of CCTV inspection, enhanced CCTV with laser profiling, sonar, hydrogen sulfide monitoring, and visual walk-over surveys are recommended to assess the condition of large diameter sewers. Inspection information can be used to ensure replacement of pipelines prior to failure and appropriate timing of replacement.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

A phased large diameter pipeline inspection program was developed and prioritized based on pipe age and consequence of failure. This project is the first of a five-year phase inspection program to perform the following:

- Review pipeline data and prioritize large diameter sewers for inspection – initial assessment will be approximately 6,000 feet of large diameter reinforced concrete sewers using enhanced CCTV
- Consider piloting and evaluating the benefits of multi-sensor inspection methods
- Consider deploying hydrogen sulfide meters for evaluating and modeling sewer conditions

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$765,000	\$530,000	\$546,000	\$-	\$1,841,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$765,000	\$530,000	\$546,000	\$-	\$1,841,000

Force Main Inspection Program – District Project 8444

Program	Phase	Priority Rank	Ranking Score
Collection System	Planning	45	140

Purpose:

To assess the condition of force mains and confirm the timing for renovation needs.

Drivers:

Central San maintains 31 force mains with a combined length of approximately 23 miles. More than 65% of the force mains are made of metallic materials which are prone to corrosion. The typical lifespan of force mains ranges from 50 to 100 years. Over half of the existing force mains were installed 40 or more years ago. The remaining lifespan of individual force mains is difficult to estimate without inspection-based condition assessment results.

Force main failure methods include internal and external corrosion, mechanical failure due to high pressure and surge events or due to external loads and stresses, and material or installation defects. Recommended force main inspection methods include CCTV inspection, pressure transient monitoring, acoustic leak detection, and electromagnetic inspection.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

A phased inspection program was developed and prioritized based on age and consequence of failure:

- Initial work will be to prepare an implementation plan for the force main inspections
- Highest priority force main inspections to be evaluated in this project are at the Moraga, Orinda Crossroads, Lower Orinda, Bates Boulevard, and Wagner Ranch Pumping Stations
- Other high and medium priority force mains may be considered at the San Ramon, Clyde, Concord Industrial, and Acacia Pumping Stations (Martinez force mains will be evaluated under the Pumping Station Upgrades Project – Phase 2)
- Other pumping stations have a lower risk and will be inspected in the future

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$125,000	\$500,000	\$700,000	\$-	\$1,325,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$125,000	\$500,000	\$700,000	\$-	\$1,325,000

Pumping Station Security Improvements – District Project 8447

Program	Phase	Priority Rank	Ranking Score
Collection System	Design/Construction	67	85

Purpose:

To improve physical security at the pumping stations and to protect existing critical assets.

Drivers:

In addition to worker safety, there are many critical assets that require physical security improvements to minimize the risk. In FY 2016-17, a comprehensive security study was completed for major Central San facilities that utilized the principles of American Water Works Association J100 Risk Analysis and Management for Critical Asset Protection methodology (*RAMCAP® J100*). *RAMCAP® J100* is a comprehensive approach that enables the estimation of relative risks across multiple assets while considering both malevolent and natural hazards. The *RAMCAP® J100* method is a 7-step process: 1) Asset Characterization’ 2) Threat Characterization’ 3) Consequence Analysis’ 4) Vulnerability Analysis’ 5) Threat Analysis’ 6) Risk/Resilience Analysis’ and 7) Risk/Resilience Management.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Findings related to the pumping stations will be implemented under this project or related projects. Some improvements may be implemented in collaboration with other programs. In general, recommendations include:

- Increased surveillance and intrusion detection
- Access control improvements
- Perimeter fencing repair
- Increased signage and other miscellaneous security improvements

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Related Projects: Include Moraga, Orinda, Flush Kleen, and Martinez projects

Location(s): Pumping Stations

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$0	\$-	\$-	\$-
Design	131,000	-	-	-	131,000
Construction	76,000	75,000	75,000	225,000	451,000
FY Total	\$207,000	\$75,000	\$75,000	\$225,000	\$582,000

Manhole Modifications – District Project 8448

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	22	215

Purpose:

To replace, repair, or raise manhole covers and top blocks to match roadway elevations in coordination with pavement restoration plans with agencies or existing conditions.

Drivers:

Central San's collection system includes over 36,000 sewer structures. Many of these structures are manholes or rodding inlets which can be in paved roadways, public right-of-way, and private roadways throughout the entire service area. Continual replacement of manhole covers or repairing top blocks are needed on a yearly basis as the system ages or the roadways are rebuilt.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

This project will fund the replacement or raising of manhole covers and repairing top blocks either through construction projects or reimbursements with cities or other agencies under joint powers agreements.



Operating Department Impact and Funding Source:

This project does not have an impact on the operating budgets. However, if Collection System Operations were to self-perform, it would have a significant impact. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	1,021,000	400,000	350,000	350,000	2,121,000
FY Total	\$1,021,000	\$400,000	\$350,000	\$350,000	\$2,121,000

Collection System Modeling Support – District Project 8449

Program	Phase	Priority Rank	Ranking Score
Collection System	Planning	60	100

Purpose:

To maintain and update the *InfoWorks*® hydrodynamic collection system model.

Drivers:

A new *InfoWorks*® Integrated Catchment Modeling hydrodynamic collection system model was configured and calibrated for 190 miles of the trunk sewer system. The new model replaced an old steady-state static model that was no longer supported by vendors and did not offer the same level of accuracy or useful output information that is available with new vendor-supported, state-of-the-art hydrodynamic models.

The new model is used for several critical Central San operations such as evaluating sewer capacities, identifying capacity deficiencies, developing sewer sizing criteria, evaluating impacts from increased flows due to development (paid by permit or plan review fees) and special discharges, evaluating re-routing options, and providing hydraulic grade line information that is helpful during emergencies or sewer renovation work.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Coordinate and update the *InfoWorks*® model with the Geographic Information System
- Consider expansion of the trunk sewer model into high priority development areas where anticipated sewer capacity evaluations will be required
- Identify critical areas with model-predicted surcharge conditions, and install remote level monitors and/or flow monitoring equipment and rain gauges if required

Operating Department Impact and Funding Source:

This project will have a minor impact on the operating budget due to software updating and licensing costs. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	303,000	120,000	120,000	-	543,000
FY Total	\$303,000	\$120,000	\$120,000	\$-	\$543,000

Development Sewerage Support – District Project 8450

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	38	165

Purpose:

To capitalize Central San force account labor and other expenses for planning, design, and construction of system sewer extensions.

Drivers:

Central San requires property owners to pay for main sewer extensions needed to serve their property. Where sewers are designed and installed by developers or other private parties, Central San planning, plan review, right-of-way, inspection, and record drawing/mapping efforts are required to ensure that installed sewers meet Central San’s Standard Specifications for Design and Construction. These activities are capitalized under this project.

A portion of the revenue collected for plan review and inspection is credited to the Sewer Construction Fund and offsets some of the expenditures made under this capital project.

Description:

This project is used to fund consultant and staff costs for developer installed sewer facilities.

Operating Department Impact and Funding Source:

This project will have a minor impact on the operating budgets; however, these costs are recovered under fees paid by developers. Project expenditures are funded from Capital Revenues and fees collected are credited to the Sewer Construction Fund.

Location(s): Collection System

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	2,030,000	900,000	900,000	4,500,000	8,330,000
FY Total	\$2,030,000	\$900,000	\$900,000	\$4,500,000	\$8,330,000

Collection System Sewer Renovation – Phase 1 – District Project 8451

Program	Phase	Priority Rank	Ranking Score
Collection System	Design/ Construction	14	255

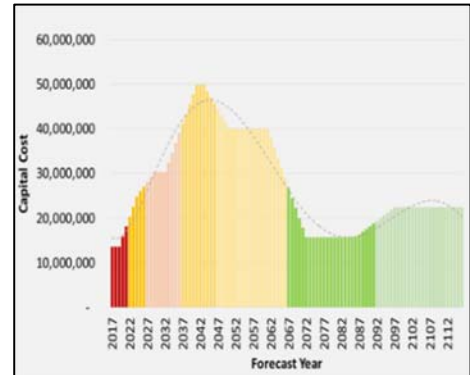
Purpose:

To plan for and design sewer replacement projects for collection system sewers that are near the end of their useful lives.

Drivers:

Nearly all of Central San’s sewers will reach the end of their useful lives within the next 100 years. The bulk of the replacement is recommended beyond the Ten-Year Capital Improvement Plan. Continual replacement will provide the best possible protection against SSOs. The *InfoMaster*® sewer replacement risk model was developed to prioritize the timing for sewer replacement and to develop a risk-based sewer replacement program. The Collection System Sewer Renovation Project – Phase 1 will span the next five fiscal years (FYs 2018-23). Central San was planning to replace up to 7.6 miles per year with increasing in years 10 through 20 in the Capital Improvement Program. Phase 1’s current approach is to replace approximately 6-7 miles per year.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project is for sewer selection planning and design work for new sewer replacement projects totaling up to 14 miles of replacement. These designs will be bid and split into individual projects for construction and will span two fiscal years. These projects include:

- Lafayette Sewer Renovation – Phase 14
- South Orinda Sewer Renovation – Phase 8
- City of Orinda, Walnut Creek, and other locations
- Miscellaneous sewer replacements in Alamo, Danville, Moraga, unincorporated Contra Costa County, and other locations or jurisdictions in the service area.

Operating Department Impact and Funding Source:

The impacts on the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$400,000	\$400,000	\$-	\$800,000
Design	-	2,000,000	2,000,000	-	4,000,000
Construction	2,535,527	1,627,000	16,356,000	-	20,518,527
FY Total	\$2,535,527	\$4,027,000	\$18,756,000	\$0-	\$25,318,527

Danville Sewer Renovation – Phase 3 – District Project 8456

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	8	270

Purpose:

To replace and renovate small diameter sewers within the Las Lomitas neighborhood in the town of Danville.

Drivers:

Central San’s 1,500+ mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful lives as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse.

More than 300 miles of the small diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well, and are the source of over 90% of the dry weather SSOs. Central San implemented a sewer renovation program in 1991 to replace small diameter sewers to control future maintenance requirements and costs, to minimize the number of overflows, to limit the quantity of rainfall entering the collection system, and to improve the level of service provided to customers.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Danville Sewer Renovation Project – Phase 3 is replacing or rehabilitate approximately 5,000 feet of small diameter sewers and install approximately 40 new private side sewers located in both public right-of-way and easements within the Las Lomitas neighborhood in the town of Danville in lieu of renovation in backyard easements. Several sewers will be abandoned, and easements quitclaimed.

Operating Department Impact and Funding Source:

This project approach is a cost savings to Central San’s capital program and to the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Town of Danville

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	400,000	-	-	-	400,000
Construction	3,780,000	-	-	-	3,780,000
FY Total	\$4,280,000	\$-	\$-	\$-	\$4,280,000

Pumping Stations Upgrades – Phase 2 – District Project 8457

Program	Phase	Priority Rank:	Ranking Score
Collection System	Planning/Design	41	160

Purpose:

To address aging infrastructure and reliability needs at the Martinez, Fairview, and Maltby Pumping Stations.

Drivers:

As part of the Comprehensive Wastewater Master Plan, a comprehensive condition assessment of the pumping stations has identified several structural, mechanical, electrical, and instrumentation improvements. An Arc Flash Study has also identified several improvements required at these pumping stations.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

The following are major elements included in the project:

- Replace corroded steel dry pits with new wet wells at the Fairview and Maltby Pumping Stations
- Replace backup generators, electrical, instrumentations, and controls improvements
- Rehabilitate or replace flow meters
- Recondition or replace pumps, valves, and gates
- Repair/recoat piping and concrete
- Major electrical/controls replacement, including Arc Flash Study recommendations
- Replace worn control panels and seismically brace control panels and electrical cabinets
- Improve safety devices such as replacement of gas detection systems and eye wash stations
- Evaluate force mains at each pumping station



Operating Department Impact and Funding Source:

The impacts on the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Martinez, Fairview, and Maltby Pumping Stations

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$150,000	\$-	\$-	\$-	\$150,000
Design	400,000	2,400,000	100,000	-	2,900,000
Construction	-	-	2,000,000	25,500,000	27,500,000
FY Total	\$550,000	\$2,400,000	\$2,100,000	\$25,500,000	\$30,550,000

Martinez Sewer Renovation – Phase 6 – District Project 8458

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	8	270

Purpose:

To replace and renovate small diameter sewers within the city and unincorporated areas of Martinez.

Drivers:

Central San’s 1,500+ mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful lives as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse.

More than 300 miles of the small diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well, and are the source of over 90% of the dry weather SSOs.

Central San implemented a sewer renovation program in 1991 to replace small diameter sewers to control future maintenance requirements and costs, to minimize the number of overflows, to limit the quantity of rainfall entering the collection system, and to improve the level of service provided to customers.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Martinez Sewer Renovation Project – Phase 6 will replace or rehabilitate up to approximately 9,000 feet of small diameter sewers located in both public right-of-way and easements.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Martinez

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	500,000	-	-	-	500,000
Construction	-	4,500,000	-	-	4,500,000
FY Total	\$600,000	\$4,500,000	\$-	\$-	\$5,100,000

Lafayette Sewer Renovation – Phase 14 – District Project 8459

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	8	270

Purpose:

To replace and renovate small diameter sewers within the city and unincorporated areas of Lafayette.

Drivers:

Central San’s 1,500+ mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful lives as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse.

More than 300 miles of the small diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well, and are the source of over 90% of the dry weather SSOs.

Central San implemented a sewer renovation program in 1991 to replace small diameter sewers to control future maintenance requirements and costs, to minimize the number of overflows, to limit the quantity of rainfall entering the collection system, and to improve the level of service provided to customers.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Lafayette Sewer Renovation Project – Phase 14 will replace or rehabilitate up to approximately 10,000 feet of small diameter sewers located in both public right-of-way and easements.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Lafayette

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	500,000	-	-	-	500,000
Construction	-	4,600,000	-	-	4,600,000
FY Total	\$600,000	\$4,600,000	\$-	\$-	\$5,200,000

Walnut Creek Sewer Renovation – Phase 14 – District Project 8460

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	8	270

Purpose:

To replace and renovate small diameter sewers within the city of Walnut Creek and unincorporated Walnut Creek.

Drivers:

Central San’s 1,500+ mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful lives as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse.

More than 300 miles of the small diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well and are the source of over 90% of the dry weather SSOs. Central San implemented a sewer renovation program in 1991 to replace small diameter sewers to control future maintenance requirements and costs, to minimize the number of overflows, to limit the quantity of rainfall entering the collection system, and to improve the level of service provided to customers.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Walnut Creek Sewer Renovation Project – Phase 14 will replace or rehabilitate up to approximately 10,000 feet of small diameter sewers located in both public right-of-way and easements. This project includes a creek crossing.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Walnut Creek

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	500,000	-	-	-	500,000
Construction	-	4,573,000	-	-	4,573,000
FY Total	\$600,000	\$4,573,000	\$-	\$-	\$5,173,000

South Orinda Sewer Renovation – Phase 8 – District Project 8461

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	26	210

Purpose:

To replace and renovate small diameter sewers within the southern portion of the City of Orinda, unincorporated Orinda, and the Town of Moraga.

Drivers:

Central San’s 1,500+ mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful lives as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse.

More than 300 miles of the small diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well and are the source of over 90% of the dry weather SSOs. Central San implemented a sewer renovation program in 1991 to replace small diameter sewers to control future maintenance requirements and costs, to minimize the number of overflows, to limit the quantity of rainfall entering the collection system, and to improve the level of service provided to customers. The construction of this project will be funded by the Collection System Sewer Renovation Project – Phase 1.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The South Orinda Sewer Renovation Project – Phase 8 will replace or rehabilitate up to approximately 5,100 feet of small diameter sewers located in both public right-of-way and easements within the southern portion of the city of Orinda, unincorporated Orinda, and the town of Moraga, south of Highway 24.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Orinda and Moraga

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	500,000	-	-	-	500,000
Construction	-	-	-	-	-
FY Total	\$600,000	\$-	\$-	\$-	\$600,000

San Ramon Pumping Station – District Project 8462

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	26	210

Purpose:

Install a Variable Frequency Drive (VFD) and rebuild the 100-hp pump at the San Ramon Pumping Station.

Drivers:

The Dublin San Ramon Services District and East Bay Municipal Utility District Recycled Water Authority and Dublin San Ramon Services District Flow Diversion Project, under a memorandum of understanding and agreement, have requested diversion of wastewater upstream of the San Ramon Pumping Station to the Dublin San Ramon Services District sewer collection system during the summer months. The small (100-hp) pump must be rebuilt to operate more reliably at a smaller flow regime, during times when the diversion is in effect.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

This project includes bidding and executing a Uniform Public Construction Cost Accounting Act contract to remove the existing 250-hp VFD, install a 100-hp VFD, and rebuild the 100-hp pump and motor.



Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): San Ramon

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$200,000	\$-	\$-	\$-	\$200,000

Cured-In-Place Pipe Contract 2020-2025 – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Collection System	Design/Construction	22	215

Purpose:

Use cured-in-place pipe (CIPP) technology to repair any urgent pipelines which require immediate action.

Drivers:

Urgent pipeline projects which require immediate repairs may arise anytime during a fiscal year. Some of these repairs cannot be completed by Central San’s Collection System Operations crews and there is typically not enough time to wait for incorporation into a sewer renovation project.

Description:

This project will include bidding and executing a blanket contract that will allow Central San to use a contractor to perform urgent CIPP work.

CIPP repair work may be triggered by one of the following situations:

- Structural failure of a pipe
- Imminent threat of pipe break or collapse
- Potential for an SSO

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	150,000	-	-	150,000
Construction	-	450,000	250,000	750,000	1,450,000
FY Total	\$-	\$600,000	\$250,000	\$750,000	\$1,600,000

Contractual Assessment District Project Financing – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Collection System	Construction	31	190

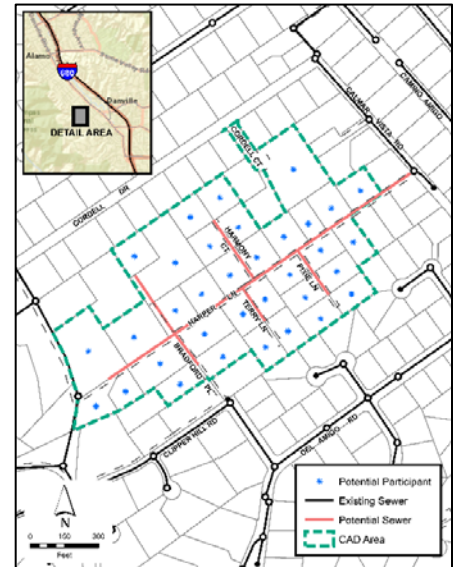
Purpose:

To provide a financing mechanism for the extension of public sewers into areas that are currently served by septic tanks, referred to as Contractual Assessment Districts (CADs) or other financing authorized by the Board of Directors.

Drivers:

In certain instances, the cost to extend public sewers into an area serviced by septic tanks can be an extreme financial burden for one owner or even a small group of owners. Central San developed the CAD Program to address this financial burden. The CAD process provides a means to finance the cost of sewer improvements over time at a fixed interest rate. The CAD assessments are placed on the customers' property tax bills each year until the entire amount is reimbursed to Central San. Each CAD is presented to the Board of Directors for approval.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project will provide funding for potential CADs or other options. Items which may be financed include:

- Central San's permit application, inspection, and related fees.
- Any Contractual Assessment District, Alhambra Valley Assessment District or reimbursement fees owed for an existing Contractual Assessment District or existing reimbursement
- Costs to third-party contractors for septic tank abandonment and connecting to the public sewer (TBD)
- Costs to third-party contractors or plumbers for sewer lateral or side sewer construction (TBD)

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues and will ultimately be paid back to Central San.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	-	500,000	500,000	-	1,000,000
FY Total	\$-	\$500,000	\$500,000	\$-	\$1,000,000

Large Diameter Piping Renovation Program – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Collection System	Design/Construction	31	190

Purpose:

To plan for and design large diameter trunks and interceptors replacement projects for collection system sewers that are near the end of their useful lives. The implementation of the repairs and replacement will be identified as part of the condition of and the timing for renovation needs that are identified in the inspection of large diameter project under District Project 8443.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Drivers:

Central San owns 76 miles of wastewater trunks and interceptors ranging from 24-inches to 102-inches in diameter. The typical lifespan of large sewers ranges from 50 to 150 years depending on pipe material, hydraulic, operating, and environmental conditions. Nearly half of Central San's large sewers are over 50 years old and will be evaluated under District Project 8443 for remaining life. The bulk of the replacement is recommended within the Ten-Year Capital Improvement Plan. Continual replacement will provide the best possible protection against SSOs. The Large Diameter Piping Renovation Project – Phase 1 will span the next five fiscal years (FYs 2020-27).



Description:

This project is for sewer selection planning and design work for a phased large diameter pipeline replacement program that will be developed and prioritized based on pipe age and consequence of failure. This project is the first of a multi-year phase replacement program and will review pipeline data and prioritize large diameter sewers for inspection. The initial assessment will be approximately 6,000 feet of large diameter reinforced concrete sewers using enhanced CCTV.

Operating Department Impact and Funding Source:

The impacts on the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Collection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$400,000	\$-	\$-	\$400,000
Design	-	1,100,000	400,000	-	1,500,000
Construction	-	-	1,600,000	13,500,000	15,100,000
FY Total	\$-	\$1,500,000	\$2,000,000	\$13,500,000	\$17,000,000

Capital Improvement Budget – Treatment Plant Program

The following are the major points of emphasis for the FY 2020-21 Treatment Plant Program:

- Replace equipment as they reach the end of their useful lives to avoid structural and mechanical failures, reduce downtime, and control maintenance costs;
- Rehabilitate aging infrastructure and assure process systems are reliable;
- Meet or exceed safety standards for employees;
- Respond to regulatory requirements related to pending air emissions regulations; and
- Increase sustainability and energy related projects for future sustainability.

Aging Infrastructure (Asset Rehabilitation and Replacement Projects)

Projects in this subprogram are targeted as asset preservation, rehabilitation, and replacement. The main projects in this program are the Mechanical and Concrete Renovations Project, which will improve the process reliability of the treatment plant by renovating and/or replacing various piping, instrumentation, equipment, and repairing concrete structures. Other projects include the Ultraviolet Disinfection Equipment Upgrades, District Project 7362; Plant-Wide Instrumentation Upgrades, District Project 7357; and Influent Pump Electrical Improvements, which will extend the useful life of existing equipment and/or facilities and replace critical infrastructure like the Headworks variable frequency drives. Another significant project will be the continuation and completion of the final design of the Solids Handling Facility Improvements, District Project 7348, which includes sludge blending tanks, solids dewatering equipment replacement (feed pumps, centrifuges, cake pumps), wet scrubber, ash handling improvements, as well as associated electrical, instrumentations, and controls improvements. Three related solids projects will be constructed ahead of the main project, which include construction of the Emergency Sludge Loading Facility Improvements, Treatment Plant Safety Enhancements - Phase 5, and the Contractor Staging Improvements projects. The Steam and Aeration Blower Systems Renovations will continue evaluation of the aging steam systems, secondary treatment processes, and associated electrical distribution systems. Other aging infrastructure projects include Piping Renovation - Phase 10, Annual Infrastructure Project, and Uniform Public Construction Cost Accounting Act Urgent Projects.

Regulatory Compliance (Includes Planning and Safety Projects)

This subprogram includes projects that emphasize preparing for future regulations and treatment plant planning, which includes pilot testing various new technologies. Work will be implemented to comply with pending new air permitting requirements, and the installation of incinerator emissions improvements is included in the Solids Handling Facility Improvements Project. Safety and security improvements will continue under this subprogram. The Solids Conditioning Building and multiple hearth furnaces seismic improvements design will continue under the Solids Handling Facility Improvements Project. The Treatment Plant Safety Enhancement Project – Phase 5, will be constructed this year and includes a second egress to the third floor of the Solids Conditioning Building.

Capacity (Expansion Projects)

There are no projects in the Expansion Program in FY 2020-21.

Sustainability (Resiliency and Energy Projects)

Under this subprogram, steam and aeration blower systems at the treatment plant will continue evaluation through condition assessments of the existing steam and electric blowers (initiate design of electrical blower replacement), and the Lighting and Air Conditioning Project will replace equipment in poor condition with high efficiency models.



All projects in this program are summarized, including planned expenditures, in the following Table 3:

CIB Table 3 – FY 2020-21 Treatment Plant Program Budget/Project Summary

Project Number	Project	Budget-to-Date	FY 2020-21	Future FYs	Total Project Cost
7304	Programmable Logic Control Systems Upgrades	\$500,000	\$120,000	\$120,000	\$740,000
7315	Applied Research and Innovations	857,274	500,000	1,000,000	2,357,274
7317	Plant Control System Network Upgrades	885,000	-	-	885,000
7322	Fire Protection System – Phase 2	1,406,000	-	-	1,406,000
7328	Influent Pump Electrical Improvements	1,410,000	3,500,000	4,000,000	8,910,000
7339	Plant Control System I/O Replacement	2,470,000	1,000,000	1,059,000	4,529,000
7341	Walnut Creek/Grayson Creek Levee Rehab	300,000	250,000	1,200,000	1,750,000
7348	Solids Handling Facility Improvements	15,984,000	4,000,000	108,250,000	128,234,000
7349	Steam and Aeration Blower Systems Renovations	5,000,000	2,550,000	55,500,000	63,050,000
7351	Mechanical and Concrete Renovations	11,444,000	2,603,000	-	14,047,000
7352	Ultraviolet (UV) Disinfection Upgrades	1,100,000	250,000	-	1,350,000
7353	Outfall Improvements – Phase 7	600,000	5,100,000	500,000	6,200,000
7354	Treatment Plant Security Improvements	855,000	550,000	400,000	1,805,000
7355	Odor Control Upgrades – Phase 1	-	300,000	1,300,000	1,600,000
7357	Plant-Wide Instrumentation Upgrades	740,000	281,000	815,000	1,836,000
7362	POB Seismic Upgrades	6,589,177	-	-	6,589,177
7363	Treatment Plant Planning	1,400,000	400,000	800,000	2,600,000
7364	TP Safety Enhancement – Phase 5	1,180,000	-	-	1,180,000
7369	Piping Renovation – Phase 10	750,000	2,500,000	515,000	3,765,000
7370	Annual Infrastructure Replacement	2,200,000	1,000,000	7,000,000	10,200,000
7371	Condition Assessment of Buried Pipelines	250,000	250,000	516,000	1,016,000
7373	Fire Protection System – Phase 3	200,000	450,000	450,000	1,100,000
TBD *	Laboratory Roof and Seismic Upgrades	-	500,000	450,000	950,000
TBD *	Hearth Replacement	-	500,000	500,000	1,000,000
TBD *	Air Conditioning and Lighting Renovation	-	750,000	750,000	1,500,000
TBD *	Plant Electrical Replacement and Rehabilitation	-	400,000	1,600,000	2,000,000
TBD *	Contractor Staging Improvements	-	2,550,000	-	2,550,000
TBD *	UPCCAA Urgent Projects FY 2020-25	-	600,000	2,400,000	3,000,000
TBD *	UV Disinfection Replacement	-	500,000	26,300,000	26,800,000
TBD *	UV Hydraulic Improvements	-	480,000	3,500,000	3,980,000
TBD *	MRC Building Modifications	-	450,000	300,000	750,000
	Total Program	\$56,120,451	\$32,334,000	\$219,225,000	\$307,679,451

*New projects in FY 2020-21

Programmable Logic Control Systems Upgrades – District Project 7304

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	18	230

Purpose:

To upgrade programmable logic control (PLC) systems to current technology for increased performance and improved compatibility to develop and maintain programming standards.

Drivers:

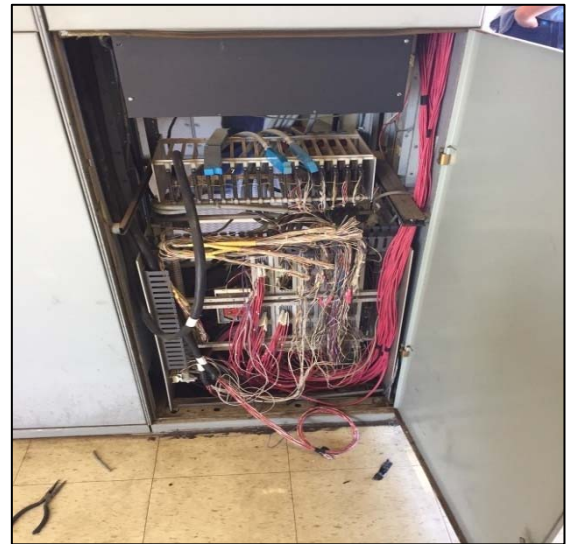
The first PLCs were installed at the treatment plant in the mid-1980s. The number of PLCs has increased from the original two PLCs to more than 30 PLCs. Programming software for the newer PLCs no longer runs efficiently on the older programming units.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

The following are major elements included in the project:

- Upgrade hardware and software necessary to maintain new PLC applications
- Replace older computers with newer computers capable of running current software
- Upgrade older PLC models to maintain compatibility with new equipment, instrumentation, and controls
- Develop and document programming standards for PLC and Supervisory Control and Data Acquisition



Operating Department Impact and Funding Source:

This project will have minor savings for the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	100,000	-	-	-	100,000
Construction	400,000	120,000	120,000	-	640,000
FY Total	\$500,000	\$120,000	\$120,000	\$-	\$740,000

Applied Research & Innovations – District Project 7315

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning/Construction	49	125

Purpose:

To implement applied research projects that evaluate promising technologies, processes, and innovations.

Drivers:

One of Central San’s goals is to embrace innovation and to be a leader in the wastewater industry. There are several emerging and innovative nutrient removal, disinfection, and solids handling technologies that may offer significant savings and reduced footprint requirements when compared to conventional technologies. Innovations in equipment and instrumentation that may be beneficial will be considered.

Prior to implementing any major renovations for nutrient removal or converting solids handling technologies, staff will evaluate the feasibility of emerging technologies and implement applied research pilots. These pilots will help verify the compatibility with wastewater and facilities, increase understanding of the technology, and help determine whether to consider the technology.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project includes techno-economic evaluations and possible pilot testing of tertiary membrane nutrient removal technologies such as membrane aerated bioreactors, aerobic granular sludge, and other promising technologies. This project also funds the purchase of research equipment required for on-site field evaluations, optimizations, bench and pilot tests, and includes replacement of an existing 25+ year-old trailer with a new trailer to support ongoing applied research efforts.

Operating Department Impact and Funding Source:

The impacts to operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$857,274	\$500,000	\$500,000	\$500,000	\$2,357,274
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$857,274	\$500,000	\$500,000	\$500,000	\$2,357,274

Plant Control System Network Upgrades – District Project 7317

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	22	215

Purpose:

To upgrade the Treatment Plant Control System Ethernet Network to Industrial Ethernet standards.

Drivers:

In 2006, Central San’s treatment plant installed a new ethernet based supervisory control and data acquisition system. At the time the supervisory control and data acquisition system was installed, ethernet was limited to the servers only and was redundant. Over time, the ethernet system expanded to the entire treatment plant, but the redundancy was not maintained. Currently, the primary path for treatment plant data traffic runs over the ethernet system that is neither redundant nor sufficiently reliable to meet control system standards.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project to meet industry redundancy and reliability standards:

- Install and configure industrial type ethernet switches
- Install fiber optic lines for the Treatment Plant Control System
- Install industrial wireless network
- Install fiber optic lines for the New Server Room, District Project 8243

Operating Department Impact and Funding Source:

This project will have minor savings for the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	885,000	-	-	-	885,000
FY Total	\$885,000	\$-	\$-	\$-	\$885,000

Influent Pump Electrical Improvements – District Project 7328

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	5	280

Purpose:

To address aging electrical components of the influent pumps and improve reliability.

Drivers:

The Influent Pump Facility is critical to operations. During wet weather, some of the pumps convey wastewater to the holding basins. Without the pumps, wastewater cannot be treated or stored in the basins. The influent pump motors are in a dry pit room below grade that is susceptible to flooding. A leak in the piping or flooding of the connected tunnels would potentially submerge the motors and the entire treatment plant would experience a catastrophic shutdown. Electrical improvements are recommended to improve reliability and resiliency. The influent pumps PLCs and variable frequency drives (VFDs) are outdated technology installed over 20 years ago and are becoming increasingly difficult to maintain. These VFDs have experienced multiple failures recently and are essential to managing flows, particularly during wet weather events.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Several major improvements in the influent pumping process area include:

- Replace influent pumps’ VFDs and upgrade influent pumps’ PLCs
- Add Influent Pump No. 6 for reliability and redundancy during peak wet weather events
- Evaluate implementation of “Smart Utility” and use of “Big Data” as part of this project
- Adding submersible sump pump and wetwell isolation gates (bid alternate) for flooding protection

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Influent Pump Station (Headworks Facility)

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	910,000	-	-	-	910,000
Construction	400,000	3,500,000	4,000,000	-	7,900,000
FY Total	\$1,410,000	\$3,500,000	\$4,000,000	\$-	\$8,910,000

Plant Control System Input and Output Replacement – District Project 7339

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	12	265

Purpose:

To upgrade obsolete PLC input and output (I/O) cards and associated systems with current technology to maintain reliable operation and vendor support.

Drivers:

PLC I/O cards are critical for equipment and instrumentation communication to the treatment plant control system for process control and monitoring. The first treatment plant PLC I/O card was installed in the mid-1980s. The number of I/O cards in use has increased from only a few to nearly 1,800 cards. Approximately 1,100 of these I/O cards are currently obsolete. Replacement units cannot be purchased from the manufacturer, nor are they fully supported. Central San maintains an inventory of over 100 spare I/O cards to reactively replace units as they fail.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

This is a multi-phase effort to replace obsolete I/O cards and improve associated control system components. The following are major elements included in the project.

- Replace obsolete I/O cards with modern Schneider X80 I/O cards
- Retrofit I/O communication, including network cards and communication cabling
- Provide uninterruptible power system (UPS) power to I/O panels
- Upgrade field wiring and devices as necessary
- Provide as-built documentation of the updated system



Operating Department Impact and Funding Source:

This project will have insignificant impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$200,000	\$-	\$-	\$-	\$200,000
Design	570,000	100,000	100,000	-	770,000
Construction	1,700,000	900,000	959,000	-	3,559,000
FY Total	\$2,470,000	\$1,000,000	\$1,059,000	\$-	\$4,529,000

Walnut Creek/Grayson Creek Levee Rehab – District Project 7341

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design	70	60

Purpose:

To reduce the risk of flood damage to the treatment plant by raising levees through a project led by the Contra Costa County Flood Control and Water Conservation District (FCD).

Drivers:

The treatment plant site is bordered by Walnut and Grayson Creeks with levees that were built by the FCD and US Army Corps of Engineers, and are currently owned and maintained by the FCD. Overtopping of the levees could catastrophically disable treatment plant operations, result in significant facility damage, negatively impact the environment due to discharge of untreated sewage, and impair the local economy. In 2007, the FCD implemented an interim flood control measure to desilt the lower Walnut Creek channel and raise the western levees of Walnut and Grayson Creeks. Based on recent modeling, the levees currently provide protection from a 30-year storm. The current flood protection standard by the California Department of Water Resources is to provide protection against at least a 200-year storm with three feet of freeboard, consider a rise in sea level, and climate change.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Due to the critical nature of the treatment plant facilities, the levees will be raised to provide a protection level of a 200-year to 500-year storm with adequate freeboard. The FCD will be the lead agency, and Central San will provide support for design review and construction coordination. Both agencies have agreed to equally share the estimated project cost of \$2.4 million. Central San anticipates accepting and storing soil on buffer property that can be used as levee material to provide in-kind contributions of up to \$500,000. Staff will continue to evaluate in-kind financial contributions.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Along the Walnut Creek and Grayson Creek Levees, Kiewit Buffer Property

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2020-21	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	200,000	-	-	-	200,000
Construction	-	250,000	300,000	900,000	1,450,000
FY Total	\$300,000	\$250,000	\$300,000	\$900,000	\$1,750,000

Solids Handling Facility Improvements – District Project 7348

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	1	315

Purpose:

To rehabilitate and replace the sludge dewatering, sludge handling, sludge blending, ash handling, furnace air pollution control equipment, and structural upgrades to the building housing this equipment.

Drivers:

The existing furnaces have significant remaining useful life; however, other solids handling equipment requires replacement. The centrifuges and cake pumps have been in service for over 25 years, are costly to maintain, and spare parts are difficult to obtain. Mixing improvements are recommended for the sludge blending/storage tanks for reliable dewatering. The ash handling equipment is in poor condition and upgrades are recommended to reliably meet ash regulatory requirements. A more efficient wet scrubber and other air pollution control improvements will be needed to reliably comply with current and future air regulations. The Solids Conditioning Building that houses the furnaces, cogeneration unit, and other critical equipment does not meet current seismic standards and the building is close to the Concord Fault. Electrical and control systems associated with this equipment will need to be replaced during the project.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Improvements to Emergency Sludge Loadout Facility and Blending Tanks will be constructed separately ahead of the main Solids Project
- Replace wet scrubber with a new venturi scrubber capable of waste heat boiler bypass
- Replace centrifuges, cake pumps, and sludge blending, storage, and mixing systems
- Furnace burner upgrades and ash handling improvements to reduce fugitive ash emissions, improve reliability, and modify the emergency sludge loadout facility
- Seismic improvements for the furnaces and the Solids Conditioning Building
- Replace electrical and control systems to accommodate new equipment

Operating Department Impact and Funding Source:

This project will have significant impact on the operating budgets based on staff time, energy and disposal costs. Project expenditures are funded from Capital Revenues and from a Clean Water State Revolving Fund loan.

Location(s): Solids Conditioning Building

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$1,000,000	\$-	\$-	\$-	\$1,000,000
Design	11,090,000	1,000,000	-	-	12,090,000
Construction	3,894,000	3,000,000	29,750,000	78,500,000	115,144,000
FY Total	\$15,984,000	\$4,000,000	\$29,750,000	\$78,500,000	\$128,234,000

Steam and Aeration Blower Systems Renovations – District Project 7349

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning/Design/Construction	19	225

Purpose:

To evaluate the existing steam system, waste heat recovery, steam turbines, electrical power distribution system, and secondary treatment systems.

Drivers:

Central San’s energy recovery system uses waste heat from the incinerator and cogeneration turbine to produce steam primarily for aeration blowers and other systems. The existing aeration system is from the 1970s and is outdated, inefficient, experiences significant air leaks, and has limited turndown capabilities. The existing steam piping, valves, and related equipment require a detailed assessment. Although it is advantageous to recover waste heat for producing aeration, it also creates a complicated interconnection. Disruptions in solids and steam systems can impact reliability of the secondary process. Similarly, disruptions in blower operation can impact the boiler, steam system, and solids emission controls.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Several major steam, electrical, and secondary process modifications are included:

- Evaluate the condition of the existing steam generation, steam driven systems and turbine, and more efficient options to produce power from the future waste heat recovery system
- Evaluate and design the addition of new electrical blowers to supplement and/or replace the existing electric blower
- Evaluate modifications to existing aeration tanks and the activated sludge system, including the secondary clarifiers and the hydraulics
- Determine impact from recycled water exchange project that would produce high quality recycled water with very low/no ammonia and low total dissolved solids to feed the two local oil refineries
- The condition assessments will also evaluate necessary improvements of the electrical distribution system

Operating Department Impact and Funding Source:

Impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Pump and Blower Building, Solids Conditioning Building, Aeration Basins, Electrical Power Distribution System, Primary/Secondary Facilities, and other Treatment Plant Areas

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$2,500,000	\$-	\$-	\$-	\$2,500,000
Design	1,750,000	1,250,000	350,000	2,250,000	5,600,000
Construction	750,000	1,750,000	4,150,000	48,750,000	57,200,000
FY Total	\$5,000,000	\$2,550,000	\$4,500,000	\$51,000,000	\$63,050,000

Mechanical and Concrete Renovations – District Project 7351

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	4	290

Purpose:

To rehabilitate or replace gates and other mechanical equipment, as well as existing concrete structures with leaks or severe cracking.

Drivers:

The gates, concrete, and other miscellaneous equipment and surfaces within the Headworks and Primary Treatment areas are exposed to corrosive environments. Slide gates throughout these areas are essential to stop and re-direct flows as required for preventive maintenance and for emergency and wet weather scenarios. Many of the slide gates have unreliable actuators, show signs of corrosion, have deteriorating seals and wedges, and in some cases, have been inoperable. Additionally, there are some structures and concrete surfaces that have spalling concrete, corroded reinforcing bars, and show signs of significant cracking. Some concrete areas require coating to prevent further corrosion. This project is to address these aging infrastructure needs and improve the safety and reliability of the existing systems.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Several major elements are included in this project:

- Repair concrete in the Headworks Drywell, West Gallery, Structure B, Structure D, Primary Sedimentation Tanks, Primary Effluent Channel, Influent Structure, and Influent Structures 1 and 1A
- Replace or rehabilitate gates and actuators in the Influent Structure, Influent Structure 1 and 1A, Pre-Aeration, Primary Sedimentation Tanks, and Primary Effluent Channel
- Replace or rehabilitate existing polyvinyl chloride liner, 60-inch and 72-inch pipelines at Structures B and C, primary collector chain and flights, embedded rails, grit piping, and effluent launders
- Odor Control System repairs have been added in these areas and other nearby structures

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Headworks, Pre-Aeration, and Primary Treatment Areas

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	1,100,000	-	-	-	1,100,000
Construction	10,344,000	2,603,000	-	-	12,947,000
FY Total	\$11,444,000	\$2,603,000	\$-	\$-	\$14,047,000

Ultraviolet Disinfection Upgrades – District Project 7352

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	7	275

Purpose:

To rehabilitate components of the existing ultraviolet (UV) disinfection system and improve reliability.

Drivers:

The UV disinfection system was constructed in the mid-1990s. One of the old denitrification tanks was re-purposed for constructing the UV channels, and some piping modifications were completed to route secondary effluent to the UV system. The existing UV technology is old, inefficient, and does not have the same controls capabilities and automated cleaning capabilities as newer UV technology. The existing system requires significant cleaning and maintenance. The existing electrical connections are worn and, in some cases, have failed. Until the existing UV system can be replaced, there are several improvements needed to improve the reliability of the existing UV disinfection system. A new system will be installed in the next several years under a separate project.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Several major elements are included in the project:

- Replace conduits and connectors between the ballasts and UV banks
- Repair and replace components of the existing UV chemical cleaning system
- Rehabilitate or replace the UV gates, actuators, stems, and seals
- Investigate methods to protect the UV system from the elements

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Ultraviolet Disinfection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	1,100,000	250,000	-	-	1,350,000
FY Total	\$1,100,000	\$250,000	\$-	\$-	\$1,350,000

Outfall Improvements – Phase 7 – District Project 7353

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	2	305

Purpose:

To inspect the land and submarine portions of the outfall pipeline to maintain or repair the pipeline and meet regulatory requirements.

Drivers:

Central San’s National Pollutant Discharge Elimination System Permit requires proper operation and maintenance of the outfall pipeline that discharges treated final effluent to Suisun Bay. Every five to ten years, the 3.5 mile, 72-inch reinforced concrete outfall pipeline built in 1958 is drained and inspected to verify pipeline alignment and condition of the pipeline and seals. As part of the 2012 Outfall Improvements Project, over 1,500 pipe joints were inspected and 368 joints were repaired with new seals. Of the over 1,500 joints, approximately 950 have been repaired.

During the project, final effluent is routed to the Wet Weather Holding Basins and temporarily discharged for several weeks through the overflow weir structure to Walnut Creek in accordance with permit requirements.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The last inspection of the outfall was in 2013 and it is due for a new inspection. This project will include many elements as completed during the previous phase:

- Coordinate inspection and temporary bypass approval with the Regional Water Quality Control Board, and obtain all other necessary permits
- Test the land portion of the outfall and install new joint seals as necessary
- Repair access manholes and inclinometers, and update pipeline survey data
- Structural and valve modifications to Structure 9000
- Repair two pier structures over submarine section
- Install new safety access hatch
- May include road improvement for safer, more efficient access to facilities

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant, Martinez, and Suisun Bay

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	500,000	-	-	-	500,000
Construction	-	5,100,000	500,000	-	5,600,000
FY Total	\$600,000	\$5,100,000	\$500,000	\$-	\$6,200,000

Treatment Plant Security Improvements – District Project 7354

Program	Phase	Priority Rank	Ranking Score:
Treatment Plant	Design/Construction	70	60

Purpose:

To improve physical security at the treatment plant and to protect existing critical assets.

Drivers:

In addition to worker safety, there are many critical assets that require physical security improvements to minimize risk.

In FY 2016-17, a comprehensive security study was completed for major Central San facilities that utilized the principles of American Water Works Association J100 Risk Analysis and Management for Critical Asset Protection methodology (*RAMCAP® J100*). *RAMCAP® J100* is a comprehensive approach that enables the estimation of relative risks across multiple assets while considering both malevolent and natural hazards. The *RAMCAP® J100* method is a 7-step process including 1) Asset Characterization, 2) Threat Characterization, 3) Consequence Analysis, 4) Vulnerability Analysis, 5) Threat Analysis, 6) Risk Analysis, and 7) Risk Management.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Findings from this study related to the treatment plant will be implemented under this project. Some improvements may be implemented in collaboration with the pumping station and general security improvement projects that were also identified under the same study. In general, recommendations include:

- Increased surveillance and intrusion detection
- Access control improvements
- Perimeter fencing repair and increased signage
- Improved guard facilities, including main gate and contractor staging areas
- Other miscellaneous security improvements

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	337,000	-	-	-	337,000
Construction	518,000	550,000	400,000	-	1,468,000
FY Total	\$855,000	\$550,000	\$400,000	\$-	\$1,805,000

Odor Control Upgrades – Phase 1 – District Project 7355

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning	60	100

Purpose:

To replace existing odor control systems for the Solids Conditioning Building, Headworks, Pre-Aeration Tanks, and Primary Effluent Channel.

Drivers:

Central San's Odor Control Facilities Plan was last updated in 2006. The update was based on an established odor threshold of 20 dilutions to threshold. To meet this threshold goal at the treatment plant and to address aging equipment, upgrades are recommended to the Solids Conditioning Building, Headworks, and Pre-Aeration Odor Control Units. The existing odor control systems use outdated technology with corrosive sodium hypochlorite systems. The odor control towers, piping, panels, ductwork, and fans are experiencing significant wear and require replacement. In addition, nearby surfaces such as concrete pads and building roofs are experiencing significant corrosion. Alternative odor control technologies that do not use sodium hypochlorite and will minimize visible misting will be considered.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Update the Odor Control Facilities Plan and confirm odor control threshold requirements for design
- Replace the Solids Conditioning Building's Odor Control Unit, ductwork, panels, and piping

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Headworks, Pre-Aeration, Primary Effluent Channel

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$100,000	\$-	\$-	\$100,000
Design	-	200,000	-	-	200,000
Construction	-	-	1,300,000	-	1,300,000
FY Total	\$-	\$300,000	\$1,300,000	\$-	\$1,600,000

Plant-Wide Instrumentation Upgrades – District Project 7357

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	52	120

Purpose:

To install new instrumentation for improved monitoring, control, and optimization of Central San facilities.

Drivers:

Collection and data leveraging are becoming increasingly useful for wastewater operations, design, and optimization. As Central San considers future equipment upgrades, potential nutrient removal, and solids handling technologies, it is important to collect data that will be useful for the evaluation and design of those facilities. There are also return streams that Central San has limited data for but could be helpful when evaluating future needs. In the meantime, there are opportunities to optimize existing processes and possibly reduce operations and maintenance costs; however, key instruments are required to evaluate these opportunities.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Energy management and efficiency measures are crucial elements when striving towards net zero energy. Power meters installed at the motor control centers and key equipment can be useful for identifying optimization opportunities. The concept of “big data” is becoming increasingly popular and is aimed at leveraging data to analyze trends to predict how a given process will perform in the future and proactively make adjustments. This project will likely be constructed with other treatment plant projects.

Description:

The following elements are included in the project:

- Develop instrumentation upgrades strategy and phasing plan
- Install flow meters for improved monitoring of return streams
- Install power meters for motor control centers and key equipment
- Install air flow meters for tracking channel aeration demands
- Install other miscellaneous instruments for improved process monitoring, control, and optimization

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	290,000	-	-	-	290,000
Construction	350,000	281,000	815,000	-	1,446,000
FY Total	\$740,000	\$281,000	\$815,000	\$-	\$1,836,000

Plant Operations Building Seismic Upgrades – District Project 7362

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	14	255

Purpose:

Improve the seismic safety of the Plant Operations Building (POB).

Drivers:

In January 2008, the State of California adopted the 2007 California Building Code. Among the updates in the 2007 California Building Code were significant changes to seismic design. In 2009, a seismic evaluation was completed for the treatment plant facilities (Martinez Wastewater Treatment Plant Seismic Vulnerability Assessment of Selected Facilities, December 2009). Included in the evaluation were recommendations to bring the POB up to date with current seismic design standards.

The POB houses staff for the Plant Operations and Plant Maintenance Divisions, the main control room, control system servers, Board Room, and Multi-Purpose Room (MPR) which also serves as an emergency operations center. The MPR is located within the POB and is frequently used by the public. Central San has plans to construct security improvements to the MPR. This would involve reconfiguring the space and modifying the existing restrooms to improve public access and comply with the Americans with Disabilities Act of 1990. Due to the construction, some of the workspaces may require some modifications. Any floorplan modifications will be done in a cost-effective manner.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

POB seismic improvements will be made to meet the Damage Control Performance Level. Work will take place in the basement, main level, and roof which will include:

- Column strengthening and addition of steel braces and columns
- Installation of new steel collector beams
- MPR enhancements to provide Americans with Disabilities Act compliant restrooms, and improve treatment plant security and access
- Headquarters Office Building lobby modifications to the reception and permit areas will improve functionality and access for the public, including the addition of an Americans with Disabilities Act compliant restroom

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Plant Operations Building

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	500,000	-	-	-	500,000
Construction	6,089,177	-	-	-	6,089,177
FY Total	\$6,589,177	\$-	\$-	\$-	\$6,589,177

Treatment Plant Planning – District Project 7363

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning	54	115

Purpose:

To complete evaluations for upcoming regulatory requirements, assess aging infrastructure, evaluate capacity requirements, and investigate opportunities to optimize operation of existing facilities.

Drivers:

As wastewater regulations develop and new treatment technologies become available, process modifications may be needed. This project includes technical evaluations to address regulatory initiatives and maintain permit compliance (e.g., Suisun Bay nutrient modeling work and National Pollutant Discharge Elimination System required studies and reports).

As flows, contaminant loads, and concentrations change, capacity evaluations are needed to confirm capacity ratings of existing facilities and to identify any potential capacity improvements required to manage dry weather and wet weather flows and loads. Technical evaluations are completed to support treatment plant operations by evaluating optimization opportunities to improve the reliability and performance of existing treatment plant processes and facilities.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Support Bay Area Clean Water Agencies nutrient evaluation, management, and reduction strategy work for the San Francisco Bay Area
- Evaluate nutrient reduction options for Central San
- Evaluate performance and optimization opportunities for miscellaneous equipment and processes (e.g., secondary treatment and Filter Plant optimizations)
- Evaluate energy reduction and renewable energy opportunities for the treatment plant

Operating Department Impact and Funding Source:

The impacts to operational budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$1,400,000	\$400,000	\$400,000	\$400,000	\$2,600,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$1,400,000	\$400,000	\$400,000	\$400,000	\$2,600,000

Treatment Plant Safety Enhancement – Phase 5 – District Project 7364

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	44	150

Purpose:

To enhance treatment plant safety through identification of safety concerns, repairs, and capital improvements.

Drivers:

Central San and the treatment plant have proactive safety programs that are administered by separate committees. These committees are responsible for addressing safety concerns at the treatment plant as identified by staff and to respond to regulatory requirements. Often this response will require construction of a capital project. The first three phases of this project addressed various safety repairs and improvements.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

The project will include treatment plant facility improvements for safety, including a second emergency exit stairway for the control room in the Solids Conditioning Building.



Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Related Projects and Bidding:

The project scope was coordinated with planned improvements with the Solids Handling Facility Improvements project.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	100,000	-	-	-	100,000
Construction	1,080,000	-	-	-	1,080,000
FY Total	\$1,180,000	\$-	\$-	\$-	\$1,180,000

Piping Renovation – Phase 10 – District Project 7369

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	34	180

Purpose:

To inspect, rehabilitate, and replace above-grade and below-grade piping and related systems at the treatment plant.

Drivers:

During the main treatment plant improvements project in the 1970s (Stage 5A Project), numerous above-grade and below-grade piping systems were installed throughout the treatment plant. These pipes convey wastewater, sludge, steam, air, and other utility services between various process areas. Many of these piping systems have been in operation for over 40 years without any major rehabilitation or replacement. Some piping systems are leaking due to corrosion and the condition of some systems is unknown because they have not been visually inspected.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Replace piping, valves, and pumps throughout the treatment plant
- Replace the pneumatic water tanks and associated controls
- Replace water piping in the Plant Operations Building equipment gallery and several pipelines
- Replace equipment identified by the Asset Management Program and Operations and Maintenance staff

Operating Department Impact and Funding Source:

This project will have insignificant impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$50,000	\$-	\$-	\$-	\$50,000
Design	600,000	-	-	-	600,000
Construction	100,000	2,500,000	515,000	-	3,115,000
FY Total	\$750,000	\$2,500,000	\$515,000	\$-	\$3,765,000

Annual Infrastructure Replacement – District Project 7370

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/ Construction	26	210

Purpose:

To fund ongoing rehabilitation and replacement of wastewater treatment plant assets. This program will be continued until FY 2024-25. A new project will be set at that time.

Drivers:

The treatment plant consists of over 4,400 assets with a range of ages. The majority of existing treatment plant equipment was installed around 40 years ago. Over time, equipment, piping systems, and other assets require rehabilitation or replacement to continue with Central San’s high level of service, reliable management, and treatment of wastewater. Some of the improvements to be funded from this project were identified as part of condition assessments. Ongoing condition assessments will be needed to confirm the timing for other rehabilitation and replacement work.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Rehabilitation and replacement work will be packaged into projects that are scoped and funded from this program.

Examples include:

- Roof replacement program, including the treatment plant warehouse and standby power facility
- Pumps: Replacement or rehabilitation of pumps, chemical system tanks, valves, and piping
- Treatment plant air, process water, and fuel oil system improvements, including piping and valves
- Actuators, control panels, and other instrumentation and electrical replacements
- California Uniform Public Construction Cost Accounting Act projects that are urgent or critical
- Refurbish coating and cathodic protection systems and other miscellaneous items
- Pre-purchase of equipment for projects (e.g. large final effluent valves for the Outfall Project)

Operating Department Impact and Funding Source:

This project will have insignificant impact on the operating budgets. Project expenditures will be funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$100,000	\$200,000	\$400,000
Design	250,000	200,000	200,000	500,000	1,150,000
Construction	1,850,000	800,000	1,200,000	4,800,000	8,650,000
FY Total	\$2,200,000	\$1,000,000	\$1,500,000	\$5,500,000	\$10,200,000

Condition Assessment of Buried Pipelines – District Project 7371

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning	64	95

Purpose:

To assess the condition and replacement needs of major buried piping systems at the treatment plant site.

Drivers:

Although several piping systems are accessible in the Central San tunnels, there are several piping systems that are buried and difficult to access for condition assessment. In addition, there are some channels and submerged piping systems that are difficult to access. Some of these piping systems are also required for continuous operation of the treatment plant and are difficult to temporarily shut down for assessment. Despite these challenges, it is important to plan any necessary bypassing operations and perform condition assessments of these pipes, some of which are over 40 years old. These pipelines are critical for Central San operations and rehabilitation or replacement may be required in the coming years.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project includes the following major elements:

- Develop a prioritized condition assessment plan for buried piping systems and difficult to access piping or channels
- Bypass pumping and piping as required
- Field inspection of buried or submerged piping systems and channels
- Identify and develop recommended rehabilitation or replacement needs

Operating Department Impact and Funding Source:

This project will have insignificant impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$250,000	\$250,000	\$258,000	\$258,000	\$1,016,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$250,000	\$250,000	\$258,000	\$258,000	\$1,016,000

Fire Protection System – Phase 3 – District Project 7373

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	60	100

Purpose:

To upgrade or replace the treatment plant fire protection systems.

Drivers:

Most of the fire protection system was built in the late 1970s, and the fire alarm control panel was upgraded in the early 2000s. There are seven existing fire protection systems (alarm, monitoring, and suppression types) at the treatment plant. The existing fire systems are the primary notifications to the Control Room operators and the occupants of buildings in the event of a fire. Wiring and devices on the fire protection system continue to be problematic and are in frequent need of repair. Repairs to the fire alarm system have become extremely complex and difficult; therefore, long-term reliable improvements to the fire protection system are needed.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Staff anticipates the recommended improvements will be implemented over a multi-year fire protection improvement program:

- Phase 1 of the project that was completed in 2013 replaced the outdated Headquarters Office Building fire protection system and corrected limited treatment plant deficiencies
- Phase 2 of the project includes a comprehensive evaluation and implementation of recommended improvements for life safety of occupied areas (public and staff) of all staffed and critical process areas in the treatment plant (substantially complete)
- Phase 3 includes replacement of the fire alarm sprinkler system in the Solids Conditioning Building, which will be a part of the Solids Handling Facility Improvements and other fire alarm improvements.

Operating Department Impact and Funding Source:

This project will have insignificant impact to the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	100,000	150,000	-	-	250,000
Construction	100,000	300,000	450,000	-	850,000
FY Total	\$200,000	\$450,000	\$450,000	\$-	\$1,100,000

Laboratory Roof and Seismic Upgrades – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	54	115

Purpose:

Maintain a functional Laboratory building.

Drivers:

In 2009, a Central San seismic evaluation was completed for the treatment plant facilities (Wastewater Treatment Plant Seismic Vulnerability Assessment of Selected Facilities, December 2009). Included in the evaluation were recommendations to bring the Laboratory up to date with current seismic design standards.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

The Laboratory building houses staff under the Environmental and Regulatory Compliance Division in Engineering. The Laboratory is located within the Martinez campus and is occupied seven days a week. Since the Laboratory building was constructed in early 2000 under the 1994 Building Code, many of the modifications needed are relatively minor. Staff is proposing to perform the seismic modification now due to the deterioration of the roof, which is in very poor condition. Any floor plan modifications will be done in a cost-effective manner.



Description:

The Laboratory roof and seismic improvements will be made to meet the Damage Control Performance Level. Modifications and the new roof will likely consist of the following:

- New lateral bracing at the moment frames
- New columns at existing brace locations (two or more) and other modifications as needed
- Replace the existing roof membrane with a roof system that is more suited for the building
- Relocate an existing air-cooled unit in the office area and evaluate the Laboratory flooring

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Laboratory

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	150,000	-	-	150,000
Construction	-	350,000	450,000	-	800,000
FY Total	\$-	\$500,000	\$450,000	\$-	\$950,000

Hearth Replacements – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Construction	38	165

Purpose:

Continue to maintain an operable the Multiple Hearth Furnaces (MHFs) inside the Solids Conditioning Building.

Drivers:

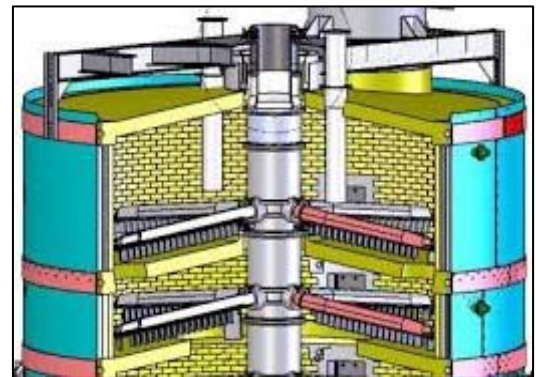
The MHFs are an essential process equipment for the handling and disposal of the solids from the treatment process. The Plant Maintenance Division for the Operations Department has been monitoring the hearths within the MHFs. Based on the most recent inspection, replacement of two hearths and possibly up to three is recommended (one hearth replacement in MHF No. 1 and possibly up to two in MHF No. 2).

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

This project will be performed by a specialty contractor with the experience needed to rebuild brick and masonry in an existing incinerator. Work includes, but is not limited to, the following:

- Confined space entry
- Demolish and rebuild a hearth within MHF Nos. 1 and 2
- Other repairs, if identified, as needed



This project will be coordinated or completed during the Solids Handling Facility Improvements Project
Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Plant Operations Building

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	-	500,000	500,000	-	1,000,000
FY Total	\$-	\$500,000	\$500,000	\$-	\$1,000,000

Air Conditioning and Lighting Renovation – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	59	110

Purpose:

To replace and improve the efficiency of air conditioning and lighting equipment at the treatment plant campus.

Drivers:

The drivers for this project include aging infrastructure and energy efficiency. A number of air conditioning units at the Treatment Plant campus have reached the end of their useful life. This project will replace those units with more efficient versions, as well as completing a lighting retrofit to replace existing indoor and outdoor lighting with newer generation LED lighting. All energy efficiency investments will be made in accordance with the payback criteria in Central San’s Energy Policy and are recommended in advance of the implementation of Central San’s solar energy project on the Lagiss Property.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

- Rehabilitation and replacement work will be packaged into projects that are scoped and funded from this program. The most likely path forward for implementation is through a combination of procurements, possibly including the California Uniform Public Construction Cost Accounting Act for air conditioning units and a best value procurement for a lighting contractor.

Operating Department Impact and Funding Source:

Project expenditures will be funded from Capital Revenues. The recommended efficiency improvements have a simple payback period of 9.4 years based on incremental costs (the cost to invest in additional efficiency for air conditioning units at the end of their useful life) and will save Central San approximately \$84,000 per year in utility costs. Project expenditures will be funded from Capital Revenues.

Location(s): Treatment Plant campus, including Headquarters Office Building, Plant Operations Building, and other District buildings

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	150,000	-	-	150,000
Construction	-	600,000	750,000	-	1,350,000
FY Total	\$-	\$750,000	\$750,000	\$-	\$1,500,000

Plant Electrical Replacement and Rehabilitation – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	38	165

Purpose:

To fund ongoing rehabilitation and replacement of the treatment plant electrical systems assets.

Drivers:

To refurbish electrical switchgears to maintain the reliability of critical electrical infrastructure at the treatment plant. The treatment plant consists of thousands of electrical assets with a range of ages. The majority of existing treatment plant equipment was installed around 40 years ago. Over time, electrical systems and other assets require rehabilitation or replacement to continue with Central San’s high level of service, reliable management, and treatment of wastewater. Some of the improvements to be funded from this project were identified as part of a condition assessment. Ongoing condition assessments will be needed to confirm the timing of other rehabilitation and replacement work.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The electrical switchgear throughout the treatment plant was installed in the 1970s and has been well maintained using preventive techniques, such as thermographic imaging to identify potential problems and correct them prior to failure. On-going inspections show that several trip units on the circuit breakers require replacement. Treatment plant electrical rehabilitation and replacement work will be packaged into projects that are scoped and funded from this program. Examples include the following: electrical gears replacement program for the treatment plant and standby power facility; replacement or rehabilitation of motor control centers, switchgears, and transformers; duct banks; conductors; actuators and control panels; and other instrumentation and electrical replacements.

- California Uniform Public Construction Cost Accounting Act projects that are urgent or critical
- Pre-purchase of equipment for projects (e.g. variable frequency drives)

Operating Department Impact and Funding Source:

This project will have insignificant impact on the operating budgets. Project expenditures will be funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	50,000	50,000	150,000	250,000
Construction	-	350,000	350,000	1,050,000	1,750,000
FY Total	\$-	\$400,000	\$400,000	\$1,200,000	\$2,000,000

Contractor Staging Improvements – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	52	120

Purpose:

To increase security, organize, and prepare the treatment plant for several large future projects, such as the Solids Handling Facility Improvement and Filter Plant and Clearwell Improvements – Phase 1A Projects.

Drivers:

Safety and security is the primary driver for this project. The current contractor staging area is not built to secure contractor business from normal daily operations. The treatment plant’s main gate is used for all activities. This project will provide security and safety improvements so that the contractor’s activities can be separated and monitored separately from daily operations.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The project elements to be evaluated, designed and constructed include:

- Contractor main staging area for construction trailers and contractor use; site grading and paving; temporary material storage and stockpiling; concrete washout and equipment washing area; access improvements and other facilities; and increase available space and laydown areas for equipment and material storage
- Shipping, receiving, parking and designated area for contractors; delivery routes to minimize traffic disruption, turnarounds, and additional parking areas
- Construction entrance, including a new entrance off Imhoff Drive; widen existing treatment plant roads, as needed; and a new security guard facility, safety orientation, badging area, and gates
- Improved site lighting, fencing, signage, striping, security cameras, and badging system
- Miscellaneous elements, including demolition of abandoned infrastructure and construction of additional staging areas throughout the treatment plant

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$50,000	\$-	\$-	\$50,000
Design	-	350,000	-	-	350,000
Construction	-	2,150,000	-	-	2,150,000
FY Total	\$-	\$2,550,000	\$-	\$-	\$2,550,000

UPCCAA Urgent Projects FY 2020-25 – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/ Construction	19	225

Purpose:

To fund ongoing rehabilitation and replacement of treatment plant infrastructure, equipment, and systems that meet the guidelines provided by the California Uniform Public Construction Cost Accounting Act (UPCCAA), adopted by Central San in late 2018.

Drivers:

The majority of existing treatment plant equipment was installed approximately 40 years ago. Over time, electrical, mechanical, instrumentation, and other systems require rehabilitation or replacement to continue with Central San’s high level of service, reliable management, and treatment of wastewater. The majority of these systems are designed and scheduled for replacement under other capital projects; however, there are cases where a project is not in place or an asset will need to be addressed sooner than planned. These cases which are usually smaller construction contracts (under \$200,000) can be informally bid and built under the UPCCAA. This project will help fund those contracts not accounted for in other ongoing treatment plant projects.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The UPCCAA Urgent Projects FY 2020-25 is a five-year program used to fund informal projects in the treatment plant. Examples include, but not limited to:

- Critical variable frequency drives replacements
- Pumps, piping, and critical valves replacements
- Civil work such as site repaving and concrete repairs
- Other public work type projects

Operating Department Impact and Funding Source:

This project will have insignificant impact on the operating budgets. Project expenditures will be funded from Capital Revenues.

Location(s): Miscellaneous Areas within the Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	100,000	100,000	300,000	500,000
Construction	-	500,000	500,000	1,500,000	2,500,000
FY Total	\$-	\$600,000	\$600,000	\$1,800,000	\$3,000,000

UV Disinfection Replacement – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning	48	135

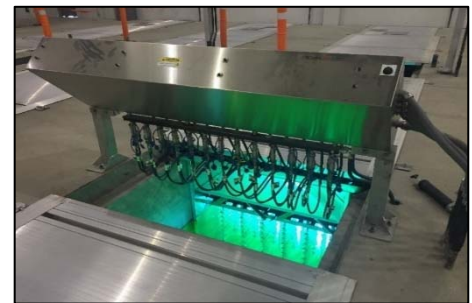
Purpose:

To replace the existing ultraviolet (UV) disinfection system.

Drivers:

The UV disinfection system was constructed in the mid-1990s to replace the use of chlorine gas. At the time, existing denitrification tanks were re-purposed for the UV channels, and some flow routing modifications were made to the secondary clarifiers. The UV disinfection system is now over 20 years old, and a full system replacement will be required soon. New UV disinfection systems are as much as 10-times more efficient, requiring less space and less energy, and are equipped with improved controls and built-in cleaning systems that can reduce maintenance needs.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project includes the evaluation of the following major elements:

- Replace existing UV disinfection system, includes assessment of existing system
- Upgrades to the UV support facilities
- Expand and modify the UV electrical building and equipment to allow simultaneous construction of a new UV disinfection system while operating a portion of the existing disinfection system

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant - Ultraviolet Disinfection System

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$500,000	\$-	\$-	\$500,000
Design	-	-	1,500,000	-	1,500,000
Construction	-	-	-	24,800,000	24,800,000
FY Total	\$-	\$500,000	\$1,500,000	\$24,800,000	\$26,800,000

UV Hydraulic Improvements – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Planning	49	125

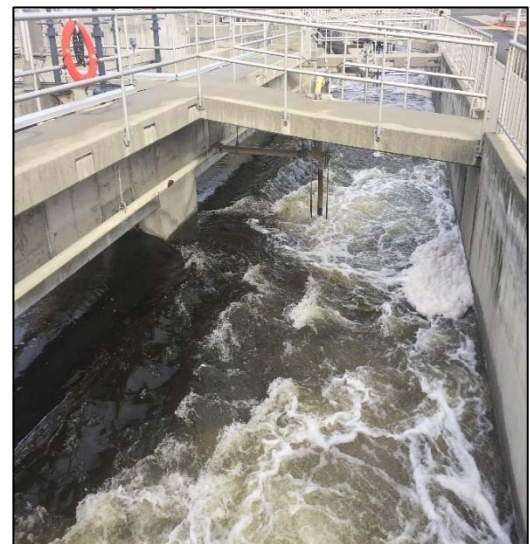
Purpose:

To increase hydraulic capacity of the ultraviolet (UV) disinfection system.

Drivers:

The UV disinfection system was constructed in the mid-1990s. At the time, existing denitrification tanks were re-purposed for the UV channels, and some flow routing modifications were made to the secondary clarifiers. To provide reliable hydraulic capacity for a 20-year wet weather event, the secondary treatment and disinfection systems require improvements to increase the hydraulic capacity from the current capacity of approximately 100 million gallons per day up to 127 million gallons per day. The current capacity is limited by hydraulic bottlenecks in the UV effluent channel and in the final effluent pipeline that cause hydraulic backups in the upstream secondary treatment and disinfection systems.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project includes the following major elements:

- Hydraulic Evaluation – Confirm UV and final effluent hydraulics and hydraulic improvements
- Dose Validation Testing – Confirm disinfection capacity of UV disinfection system using latest disinfection criteria
- Parallel Final Effluent Pipe – Construct a parallel final effluent pipe adjacent to the existing 72-inch final effluent pipe to relieve hydraulic bottleneck. A parallel pipe also enables isolation and inspection of existing underground final effluent pipe.

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant - Ultraviolet Channel, Final Effluent Channel, Final Effluent Pipe

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$200,000	\$-	\$-	\$200,000
Design	-	280,000	-	500,000	780,000
Construction	-	-	-	3,000,000	3,000,000
FY Total	\$-	\$480,000	\$-	\$3,500,000	\$3,980,000

MRC Building Modifications – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Treatment Plant	Design/Construction	69	80

Purpose:

Update the Maintenance Reliability Center (MRC) Building for improved space planning and to replace outdated facilities.

Drivers:

The MRC building is located in the center of the treatment plant and is currently occupied by the Plant Maintenance Superintendent, three Maintenance Planners, and three of the Plant Maintenance Shops. The MRC building was originally a pump building and laboratory in 1948 and was remodeled in 1957 and 1972. The last modification was a seismic remodel in 1997. Central San plans to improve security and reconfigure the office space in order to consolidate staff into one building, including the Plant Maintenance Division Manager and Reliability Engineering’s Senior and Utility Systems Engineers. Reconfiguring the building’s interior will include evaluating the conference room, lunchroom, and office space. Updating the shower facilities and restrooms with hands-free faucets will also be incorporated. Any floorplan modifications will be completed in a cost-effective manner. In addition, the design will evaluate past seismic recommendations and bring the building up to current code requirements.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The MRC Building Modifications’ scope of work will include:

- Evaluate seismic retrofit required to meet current Building Code. The MRC is a complex facility that includes four building components with distinct structural systems.
- Upgrade the women’s and men’s communal showers with individual shower partitions
- Upgrade restrooms, including plumbing modifications to hands-free faucets, and recycled water plumbing for toilets and urinals
- Improved security access with badges, cameras, and Information Technology improvements
- Increase office space (possibly three additional offices) to house the Plant Maintenance Division Manager and Reliability Engineering’s Senior and Utility Systems Engineers, including space for an updated conference room.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	150,000	-	-	150,000
Construction	-	300,000	300,000	-	600,000
FY Total	\$-	\$450,000	\$300,000	\$-	\$750,000

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Capital Improvement Budget – General Improvements Program

The General Improvements Program is primarily concerned with property, administrative buildings, management information systems including information technologies, asset management, and new equipment and vehicle needs as described in more detail below:

- **Vehicle Replacement Program** – The CIB includes a yearly allowance for the vehicle replacement budget. Specific vehicles are replaced each year as approved through the annual budget process.
- **Equipment Acquisition** –New Equipment items are budgeted and shown in this document. They are purchased and approved similar to the Vehicle Replacement Program on a yearly basis.
- **Management Information Systems** – The Management Information Systems subprogram reflects the importance of Information Technology (IT) in the daily operation of Central San. Central San has developed an IT Master Plan that envisions implementing specific improvements and extends several years into the future. An allowance to meet anticipated future information technology needs has been included in the Ten-Year Capital Improvement Plan. Funding for upgrades of Central San’s Enterprise Resource Planning software platform is included in the CIB.
- **General Projects** – Projects include improvements to Central San’s buildings or properties, legal expenses, easement acquisition, and security systems. Central San has invested significant resources in its assets, and the purpose of the Asset Management Program, which includes Treatment Plant, Collection System, General Improvements, and Recycled Water assets, is to optimize the lifecycle of these assets to deliver high quality and reliable services in a sustainable manner for customers with an acceptable level of risk.

All projects in the General Improvements Program are summarized, including all past, current, and planned budgets required to complete each project as shown on the following Table 4:

CIB TABLE 4 – FY 2020-21 General Improvements Program Budget/Project Summary

Project Number	Project	Budget-to-Date	FY 2020-21	Future FYs	Total Project Cost
8207	General Security and Access	\$284,777	\$200,000	\$-	\$484,777
8230	Capital Legal Services	198,665	10,000	40,000	248,665
8236	District Easement Acquisition	333,047	75,000	75,000	483,047
8240	IT Development	3,238,794	500,000	1,000,000	4,738,794
8243	Server Room Relocation	2,000,000	-	-	2,000,000
8250	Enterprise Resource Planning Replacement	3,705,000	1,200,000	300,000	5,205,000
8251	Capital Improvement Program and Budget Improvements	350,000	140,000	400,000	890,000
8516	Equipment Acquisition	976,000	250,000	750,000	1,976,000
8517	Vehicle Replacement Program	2,918,000	900,000	4,500,000	8,318,000
TBD *	Property Repairs and Improvements	-	300,000	600,000	900,000
TBD *	HOB Exterior Repairs	-	350,000	-	350,000
	Total Program	\$14,004,283	\$3,925,000	\$7,665,000	\$25,594,283

*New Projects in FY 2020-21

General Security and Access – District Project 8207

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	45	140

Purpose:

To improve safety for employees and the public, meet safety standards, reduce exposure to liability, reduce property loss, and reduce operations and maintenance expenses.

Drivers:

Security system improvements are routinely identified and refined. Additional security measures for essential public service facilities are required. In 2016, a comprehensive security study was completed for major facilities that utilized the principles of American Water Works Association J100 Risk Analysis and Management for Critical Asset Protection methodology. This is a comprehensive approach that enables the estimation of relative risks across multiple assets while considering malevolent and natural hazards.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

Findings from this study that are applicable to non-treatment plant facilities and properties will be implemented under this project. Improvements include:

- Installing security upgrades to the Headquarters Office Building’s Lobby to secure the area and clearly identify the public use of the building. Cameras for surveillance, alarm system upgrades for intrusion, and associated systems will be provided.
- Access control improvements and additional card readers, perimeter fencing repair, and gates
- Increased signage, improved lighting, and other miscellaneous security system improvements
- Evaluate the replacement and improvements to the security guard shack at the plant

Operating Department Impact and Funding Source:

Impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Martinez campus

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	284,977	200,000	-	-	484,977
FY Total	\$284,977	\$200,000	\$-	\$-	\$484,977

Capital Legal Services – District Project 8230

Program	Phase	Priority Rank	Ranking Score
General Improvements	All	21	220

Purpose:

To streamline the processing of legal bills.

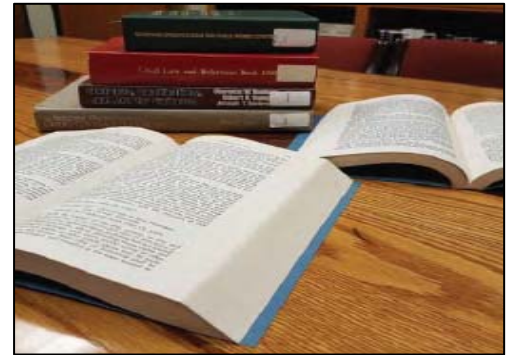
Drivers:

In the past, legal expenses were charged to individual capital projects. This process required extra staff time each month to review legal bills and get approvals from several different project managers.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

Capital legal service expenses are no longer charged to individual capital projects. The processing of legal bills has been streamlined by charging legal expenses to one capital account with four charge numbers for the four programs. This reduces the amount of time all parties must spend processing the legal bill.



Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Central San-wide

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$198,665	\$10,000	\$20,000	\$20,000	\$248,665
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$198,665	\$10,000	\$20,000	\$20,000	\$248,665

District Easement Acquisition – District Project 8236

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	54	115

Purpose:

To improve or acquire new property land rights for existing or new sanitary sewers that are located on private properties and are not associated with a current capital project for sewer renovation work.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Drivers:

As capital projects are designed, sanitary sewer easements may have to be acquired for those specific projects. This project provides funds for the acquisition of easements for projects where specific funds are not identified within the sewer renovation capital improvement projects in the CIB. Central San is currently evaluating and updating the status of the existing capitalized easements, perfecting easements, and right-of-ways.



Description:

Examples of easements that may be acquired through this project include:

- Easements for existing sewers where no easements currently exist
- Easements for sewers relocated through other public agency projects
- Upgraded easements or access rights for existing sewers
- Upgraded easements for Central San’s outfall pipeline
- Easements for recycled water distribution pipelines

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Central San service area

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	333,047	75,000	75,000	-	483,047
FY Total	\$333,047	\$75,000	\$75,000	\$-	\$483,047

Information Technology Development – District Project 8240

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	33	185

Purpose:

To replace and upgrade Information Technology (IT) infrastructure and software as needed.

Drivers:

An IT Development Plan was developed to centralize efforts and funding in the development of computer and telecommunication technology within Central San. Central San budgets IT on an annual basis.

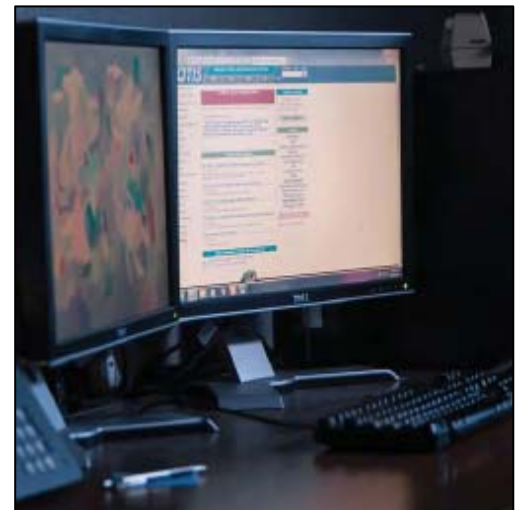
The IT Master Plan was approved in 2015 and its implementation is within the Capital Improvement Program (CIP) and the Ten-Year Capital Improvement Plan.

Description:

This project is the implementation of the IT Master Plan which includes the following major elements:

- Network infrastructure upgrades
- Disaster recovery/business continuity
- Cloud-based technology improvements
- Business application suite improvements
- Increasing mobile presence
- Desktop technology refreshment
- Web redesign and enhancement
- Cybersecurity
- Audio/video related tools/equipment for presentations and collaboration at Central San facilities

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Central San-wide

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	3,238,794	500,000	500,000	500,000	4,738,794
FY Total	\$3,238,794	\$500,000	\$500,000	\$500,000	\$4,738,794

Server Room Relocation – District Project 8243

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	13	260

Purpose:

To relocate all servers, network, and other related computer equipment from its former location in the Plant Operations Building (POB) basement to the first level.

Drivers:

The server and equipment formerly in the POB basement are critical for day-to-day Central San operations, customer service, communication, and data management.

This project was initiated after a major IT server failure at the main network facility in the POB basement. That room was a decommissioned laboratory room which is vulnerable to failures of nearby water and wastewater process pipelines. Several alternatives for relocation of the server room to a more reliable and resilient location were evaluated, and a new server room attached to the existing POB has been constructed.

Description:

The following are major elements included in the project:

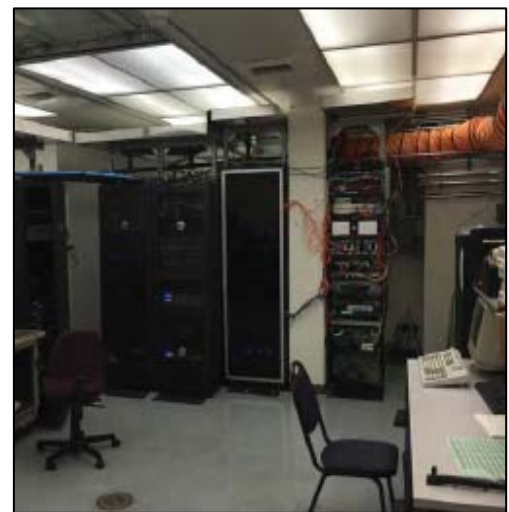
- Relocation of server, network, and related computer equipment to a new Central San server room that will be integrated with the POB facility (constructed in FY 2019-20)
- Re-routing of communication cabling and conduits to the new facility
- Professional migration of existing equipment

Operating Department Impact and Funding Source:

This project will have an insignificant impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Plant Operations Building

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$85,000	\$-	\$-	\$-	\$85,000
Design	250,000	-	-	-	250,000
Construction	1,665,000	-	-	-	1,665,000
FY Total	\$2,000,000	\$-	\$-	\$-	\$2,000,000

Enterprise Resource Planning Replacement – District Project 8250

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	5	280

Purpose:

To replace the legacy Enterprise Resource Planning (ERP) system that manages Central San’s finances, budget, human resources, procurement, payroll and other related resources.

Drivers:

The existing SunGard ERP system uses outdated technology that does not meet the current and future Central San business needs. The latest generation of ERP systems has been developed to implement modern best-practice processes that will help Central San to streamline and optimize many business processes.

This project will eliminate the need for staff to use many manual processes and workarounds that are currently in use to accomplish work. It will enable more organizational transparency by providing visibility into financial and business data in ways that are not currently possible and will provide the latest generation of technology to ensure full integration with future business applications.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following are major elements included in the project:

- Conversion of data from SunGard system to new ERP system
- Implementation of Human Resources, Finance, Payroll, and related systems
- Staff training
- Integration with related Central San systems

A replacement of Central San’s permitting software functionality, currently provided by the SunGard system, is not included in these costs but may be funded from IT Development or other project sources.

Operating Department Impact and Funding Source:

This project is expected to have an annual ongoing impact of approximately \$200,000 on the Operating Budget, upon the full retirement of the previous ERP system and cessation of maintenance costs for that legacy system. Other operating efficiencies may offset, in part, some of these direct costs. Project expenditures are funded from Capital Revenues.

Location(s): Martinez and Walnut Creek Campuses and Cloud

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	200,000	-	-	-	200,000
Construction	3,405,000	1,200,000	300,000	-	4,905,000
FY Total	\$3,705,000	\$1,200,000	\$300,000	\$-	\$5,205,000

Capital Improvement Program and Budget Improvements – District Project 8251

Program	Phase	Priority Rank	Ranking Score
General Improvements	Planning	67	85

Purpose:

Provide for the capitalization of the staff time necessary for the data gathering and production of the CIB and CIP, and for upgrades to the current program management system software, E-builder, and to standardize specifications and drawings used for all Capital Projects.

Drivers:

Several drivers are included in the CIP; however, the main driver is aging infrastructure and replacement of critical equipment and systems at Central San. In order to keep up with the increase in the CIP, staff has modernized its program and project management software system to be more effective in delivering project with implementation of E-builder. As of July 1, 2019, E-builder will be done with its pilot stage and go live for all projects.

Description:

Upgrades of additional processes, such as master commitments upgrades, and other project management and reporting tools will be evaluated or included in E-Builder. In addition, an annual budget will be included in this project to account for the yearly CIB and CIP. This project will also fund efforts to standardize design specifications and drawings for all projects.

Operating Department Impact and Funding Source:

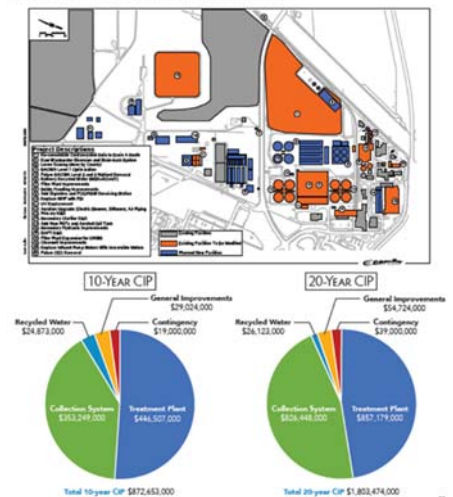
This project will not have an impact on operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Central San-wide

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

CAPITAL IMPROVEMENT PLAN

The Comprehensive Wastewater Master Plan encompasses a \$1.8 billion (2014 dollars) 20-year capital improvement program (CIP) for the collection system and treatment plant, with \$23 million of capital improvements within the first ten years. These short-term and long-term investments in our systems align with our mission to always protect public health and the environment and maintain the excellent service levels our customers expect from Central San.



Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	-	-	-	-	-
Construction	250,000	140,000	150,000	250,000	790,000
FY Total	\$350,000	\$140,000	\$150,000	\$250,000	\$890,000

Equipment Acquisition – District Project 8516

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	36	170

Purpose:

To provide new, safe, and cost-effective equipment for operations and maintenance of Central San facilities.

Drivers:

This project is developed as a multi-year program to procure new equipment required for operations and maintenance of assets throughout Central San.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

This project is a multi-year program to procure new equipment such as:

- Two Documenting Calibrators
- Certified Instrument Test Bench
- Miller FILTAIR SWX-S Single-Arm Package
- VIBSCANNER 2, Hybrid Triaxial
- CNC Plasma Cutting System
- Boom Truck Remote Controller
- Electric Scissor Lift



Operating Department Impact and Funding Source:

This project will have an insignificant impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Central San-wide

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	976,000	250,000	250,000	500,000	1,976,000
FY Total	\$976,000	\$250,000	\$250,000	\$500,000	\$1,976,000

Vehicle Replacement Program – District Project 8517

Program:	Phase:	Priority Rank:	Ranking Score
General Improvements	Construction	29	200

Purpose:

Provide safe and cost-effective vehicle replacement.

Drivers:

Central San will budget and acquire vehicles under this project and use asset management principles and historic replacement costs to provide an effective vehicle replacement strategy. Staff, comprised of Engineering and Operations, has forecasted a yearly budget (average costs from FY 2016-2026 plan) which will be used to fund the project. Underspensing in a year will result in a carryforward to future years. This approach will also recognize that due to long lead times, especially on specialized vehicles, the budget for this program can carry forward to the next fiscal year when delivery takes place.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The following vehicles are being considered in FY 2020-21:

Description	Description
Various Carts and Shuttles	¾ Ton 2x4 Truck w/Fuel Tank (1)
Mid-Size Eight Passenger Vehicle (1)	¾ Ton 4x2 Truck w/Small Crane (1)
Four-Door Sedan (1)	¾ Ton 4x2 Truck (2)
Sewer Pipe Camera with Transporter (1)	¾ Ton 4x4 Truck (1)
Trac Steer Loader (1)	½ Ton 4x4 Truck (2)
Manhole Casting and Cover Replacement Machine (1)	½ Ton 4x2 Truck (1)
Midsize Truck (1)	

Operating Department Impact and Funding Source:

Project will not have an impact on operating budgets. Expenditures are funded from Capital Revenues.

Location(s): Central San-wide

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	2,918,000	900,000	900,000	3,600,000	8,318,000
FY Total	\$2,918,000	\$900,000	\$900,000	\$3,600,000	\$8,318,000

Property Repairs and Improvements – District Project TBD

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	54	115

Purpose:

Protect and enhance the Central San's property through repairs, improvements, and needed upgrades.

Drivers:

Central San owns various properties surrounding the treatment plant that require occasional capital repairs, improvements, and upgrades, including 4737 Imhoff, the Annex, Headquarters Office Building, Household Hazardous Waste Collection Facility, and others. The Imhoff Place properties also serve as a buffer between the treatment plant and nearby neighborhoods, and are used as rental property and to house some Central San work groups and equipment. Central San also owns several buildings at the Collection System Operations Building and Vehicle Maintenance Shop that houses additional staff and equipment.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project will fund needed improvements to Central San's buildings, buffer properties, rental properties, and the surrounding parking lots and grounds. Items identified include resealing and stripping the asphalt parking lots, replacing broken concrete walkways, and repairing or upgrading interior work areas. This project may be combined and or coordinated with the HOB Exterior Repairs Project.

Operating Department Impact and Funding Source:

This project will have an insignificant impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Central San-wide

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	-	-	-	-
Construction	-	300,000	150,000	450,000	900,000
FY Total	\$-	\$300,000	\$150,000	\$450,000	\$900,000

HOB Exterior Repairs – District Project TBD

Program	Phase	Priority Rank	Ranking Score
General Improvements	Construction	54	115

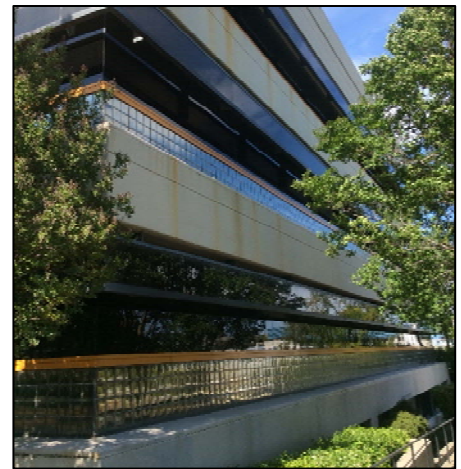
Purpose:

Protect and enhance Central San’s property through repairs, improvements, and needed upgrades.

Drivers:

The Headquarters Office Building in Martinez was built in the 1980’s to serve as the main administration building for Central San and includes a permit counter open to the public, Engineering, Development Services, IT, Finance, Human Resources, Purchasing, and other groups. The building exterior paint, caulking, roof parapet, coatings on steel awnings, and other items are beyond their useful life and in poor condition.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

This project will re-coat the exterior stucco and perform other repairs so that the building is watertight for years to come. This project will be coordinated or combined with the Property Repairs and Improvements Project.

Operating Department Impact and Funding Source:

This project will have no impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Headquarters Office Building

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	30,000	-	-	30,000
Construction	-	320,000	-	-	320,000
FY Total	\$-	\$350,000	\$-	\$-	\$350,000

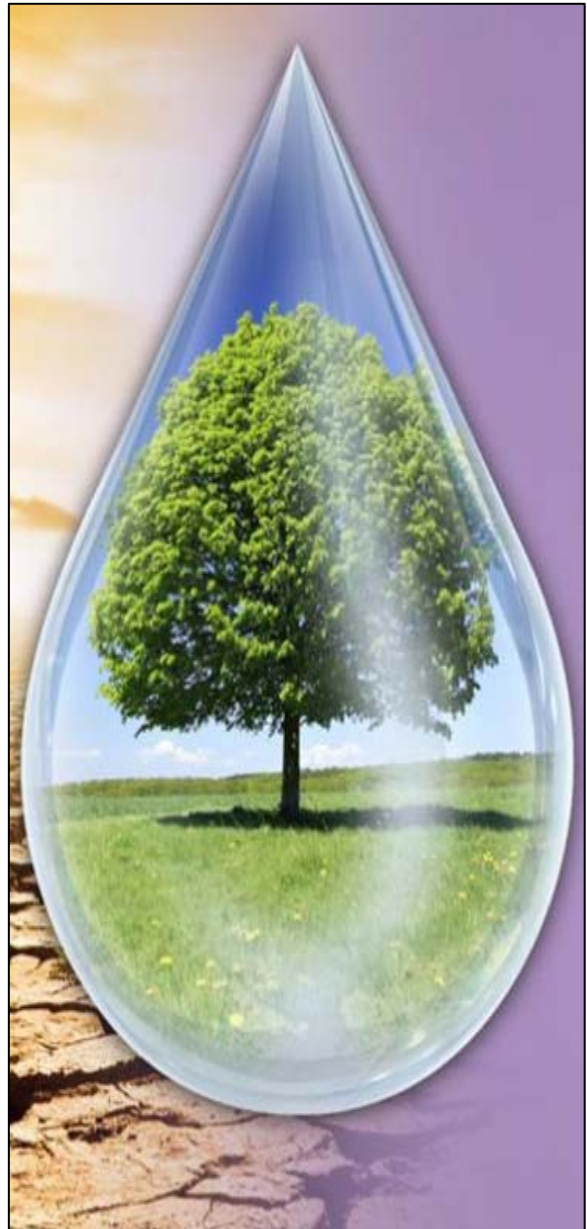
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Capital Improvement Budget – Recycled Water Program

Central San provides landscape irrigation water that meets all the requirements of the State Water Resources Control Board's Division of Drinking Water and the San Francisco Regional Water Quality Control Board for unrestricted landscape irrigation. Recycling water means less water is diverted from the Delta environment. Recycled water is a valuable resource, especially during drought years when water for landscape irrigation is less available because of water rationing.

In 1996, Central San and the Contra Costa Water District reached an agreement allowing Central San to supply recycled water to specific areas of the cities of Concord and Pleasant Hill. That area is referred to as Zone 1. About 200 million gallons of recycled water are used annually by irrigation customers, including two golf courses, parks, a community college, an elementary school, three middle schools, a high school, and the city of Pleasant Hill. This project will ultimately deliver 1.5 million gallons per day for irrigation use in the City of Pleasant Hill area. Central San will continue to collaborate with local water purveyors to identify cost-effective landscape irrigation and industrial recycled water projects.

Central San currently produces over 500 million gallons of recycled water per year for use at the treatment plant site, for irrigation customers, and for a range of commercial uses. Over 200 million gallons per year of recycled water is provided to a variety of customers in the city of Pleasant Hill, the city of Concord, and businesses near Central San's treatment plant in Martinez. Recycled water is used for landscape irrigation at schools, parks, playgrounds, private businesses, golf courses, street medians, industrial processes, and commercial applications such as truck washing, concrete manufacturing, dust control, and toilet and urinal flushing. Central San uses over 300 million gallons per year at the treatment plant for process water and landscape irrigation for Central San properties. Central San continues to pursue several projects as described in the following pages.



The major emphasis of the Recycled Water Program for the next fiscal year will be to finalize design and bid the Filter and Clearwell Improvements Project, Phase 1A. This project will improve Central San’s existing recycled water treatment facilities, storage, and related support facilities, to address aging infrastructure needs, and maintain reliable recycled water service to customers and for use at Central San’s treatment plant. Central San will also continue efforts to add new cost-effective customers in Central San’s Zone 1 service area, pursue outside funding assistance (such as federal and state grants for all Central San recycled water projects), and work with water supply agencies to develop recycled water supply alternatives, such as the Water Exchange Project with Contra Costa Water District and Santa Clara Valley Water District.

All projects in the Recycled Water Program are summarized; including all past, current, and planned budgets required to complete each project as shown on the following Table 5:

CIB Table 5 – FY 2020-21 Recycled Water Program Budget/Project Summary

Project Number	Project	Budget-to-Date	FY 2020-21	Future FYs	Total Project Cost
7306	Zone 1 Recycled Water	\$632,894	\$100,000	\$-	\$732,894
7346	Recycled Water Distribution System Surge Analysis	205,000	-	-	205,000
7361	Filter Plant and Clearwell Improvements – Phase 1A	5,989,000	9,000,000	23,600,000	38,589,000
7365	Recycled Water Clearwell Repairs	1,700,000	-	-	1,700,000
7366	Recycled Water Distribution System Renovations Program	515,000	-	1,600,000	2,115,000
7368	Water Exchange Project	350,000	-	-	350,000
TBD *	Filter Plant and Clearwell Improvements – Phase 1B	-	400,000	32,000,000	32,400,000
	Total Program	\$9,391,894	\$9,500,000	\$57,200,000	\$76,091,894

*New Project in FY 2020-21

Zone 1 Recycled Water – District Project 7306

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Construction	66	90

Purpose:

To provide recycled water for landscape irrigation customers within the Zone 1 distribution area, which includes the City of Pleasant Hill and portions of the cities of Concord and Martinez.

Drivers:

In 2001, Central San completed the Zone 1 Implementation Plan that provided estimated connection costs and revenues for customers identified in the Zone 1 Project Agreement with Contra Costa Water District. Depending on the extent of use, demand for recycled water in Zone 1 for landscape irrigation and commercial uses ranges from 200 to 400 million gallons per year.

Central San staff evaluates potential new recycled water landscape irrigation sites near the existing recycled water distribution system and works with developers to evaluate options for connecting to the system.

Description:

This project provides funds for the planning, design, and construction of recycled water facilities for landscape irrigation and commercial customers in the Zone 1 distribution area.

Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Zone 1 Recycled Water Distribution System – cities of Pleasant Hill, Concord, and Martinez

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2020-21	Future FYs	Total
Planning	\$117,000	\$-	\$-	\$-	\$117,000
Design	-	-	-	-	-
Construction	515,894	100,000	-	-	615,894
FY Total	\$632,894	\$100,000	\$-	\$-	\$732,894

Recycled Water Distribution System Surge Analysis – District Project 7346

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Planning	60	100

Purpose:

To update the recycled water distribution model and conduct a pressure transient and surge analysis of the Recycled Water Distribution System.

Drivers:

The recycled water distribution system has experienced several pipeline breaks over the last few years. An analysis of pressures within the recycled water distribution system during different operating conditions is recommended to confirm whether the existing recycled water surge tank is adequately sized given current recycled water demands and operations, to evaluate other potential distribution system hydraulic bottlenecks and deficiencies, and to optimize pumping operations and controls if required.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

Several elements are included in the project:

- Monitor and evaluate pressure in the recycled water distribution system
- Evaluate the size and optimization of recycled water surge tank, pumps, and distribution system
- Evaluate opportunities to manage pressure transients
- Software modeling of the distribution system



Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Zone 1 Recycled Water Distribution System – cities of Pleasant Hill, Concord, and Martinez

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$205,000	\$-	\$-	\$-	\$205,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$205,000	\$-	\$-	\$-	\$205,000

Filter Plant & Clearwell Improvements – Phase 1A – District Project 7361

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Design	14	255

Purpose:

To rehabilitate and replace components of the existing Filter Plant recycled water facilities.

Drivers:

The recycled water facilities produce disinfected tertiary effluent that meets Title 22 recycled water requirements and is used on-site for utility water and is pumped offsite for various residential and commercial recycled water uses. The Filter Plant, Clearwell structure, and related facilities were constructed in the mid-1970s. The existing Filter Plant media has been partially replaced over the years. The last partial media replacement effort was 15 years ago. The electrical and instrumentation infrastructure is mostly original, showing signs of significant wear, and requires replacement to ensure operational reliability. Opportunities to minimize energy demands and reduce chemical dosing requirements will be included in the rehabilitation project. Additional improvements will be incorporated in a future Phase 1B project.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Phase 1A project includes the following major elements:

- Rehabilitate and replace various electrical equipment (motor control centers, switchgear, substation), and programmable logic controls
- Replace one filter (bid alternate) and chemical addition improvements and rehabilitate coagulant flash mixing, backwash gates, and other miscellaneous equipment and valves
- Replace sodium hypochlorite piping and pumps used for Title 22 disinfection compliance
- Clearwell storage improvements (two new storage tanks) and related equipment
- Replace pump motors and electrical at the Clearwell Pumping Station

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$1,130,000	\$-	\$-	\$-	\$1,130,000
Design	2,870,000	-	-	-	2,870,000
Construction	1,989,000	9,000,000	12,500,000	11,100,000	34,589,000
FY Total	\$5,989,000	\$9,000,000	\$12,500,000	\$11,100,000	\$38,589,000

Recycled Water Clearwell Repairs – District Project 7365

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Construction	22	215

Purpose:

Commission the west cell of the Clearwell structure and perform repairs to the east cell as needed.

Drivers:

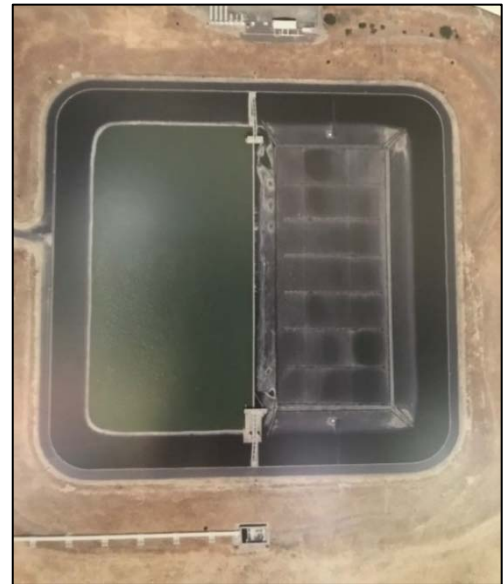
The Clearwell structure was installed in 1975. A cover was installed on the east cell to reduce chlorine usage, prevent algae growth, and maintain recycled water quality. The east cell cover has deteriorated rapidly in recent years. However, it is not feasible to repair the east cell cover due to lack of redundancy. This project will dewater, clean, and dispose of solids from the west cell and install a new modular cover on the west cell to obtain redundancy and ensure reliability of the recycled water supply system.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

The project includes the following major elements:

- Dewater, clean, and dispose of solids from the west cell
- Installation of a new modular cover on the west cell
- Repair east cell cover as needed
- Minor mechanical modifications to operate the west cell



Operating Department Impact and Funding Source:

This project will not have an impact on the operating budgets. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	60,000	-	-	-	60,000
Construction	1,640,000	-	-	-	1,640,000
FY Total	\$1,700,000	\$-	\$-	\$-	\$1,700,000

Recycled Water Distribution System Renovations Program – District Project 7366

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Planning	49	125

Purpose:

To renovate existing recycled water distribution system facilities.

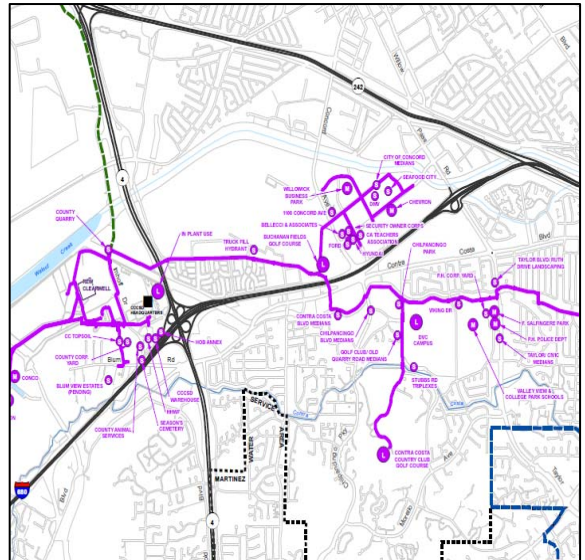
Drivers:

Central San’s recycled water distribution system consists of approximately 13 miles of recycled water distribution piping, which includes several isolation valves, pressure reducing valves, air relief valves, hydrants, flow meters, and other connections and appurtenances. The recycled water distribution system includes pressured pipes installed over various years ranging from the mid-1990s to 2015 and now serves over 30 customers. Eventual renovations and upgrades to the distribution system components will be required to maintain reliable service to Central San’s recycled water customers.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

This project includes renovation of recycled water piping, valves, meters, and other appurtenances. In addition, this project will include upgrades to overall system reliability and continued condition assessment and inspection of various recycled water distribution system assets.



Operating Department Impact and Funding Source:

The impacts to operational budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Zone 1 Recycled Water Distribution System – cities of Pleasant Hill, Concord, Martinez

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$100,000	\$-	\$-	\$-	\$100,000
Design	200,000	-	-	-	200,000
Construction	215,000	-	200,000	1,400,000	1,815,000
FY Total	\$515,000	\$-	\$200,000	\$1,400,000	\$2,115,000

Water Exchange Project – District Project 7368

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Planning	45	140

Purpose:

To develop a project to recycle as much of Central San’s wastewater supply as possible.

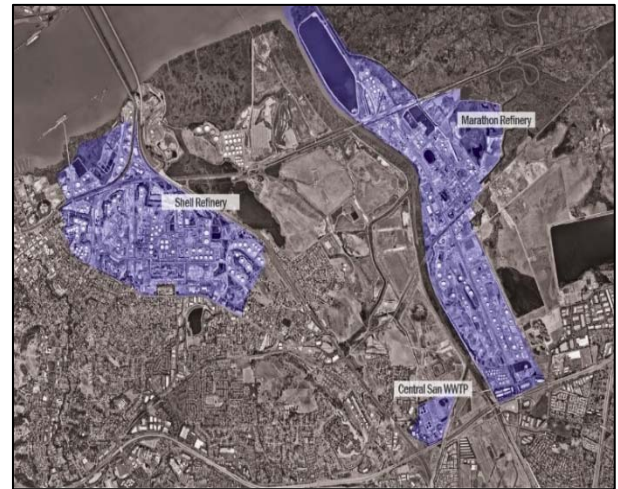
Drivers:

Central San’s Board of Directors is interested in taking advantage of Central San’s wastewater supply to augment the region’s water supply. This project seeks to produce recycled water for meeting Central San’s current and future recycled water irrigation customer demands and for meeting the recycled water quality and demands of the nearby Shell and Marathon refineries in the city of Martinez.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability

Description:

The planning-level effort for this project involves evaluating a cost-effective treatment train that will produce both irrigation-quality recycled water to meet Central San’s current (utility water and Zone 1) and future (Concord Community Reuse Project) Title 22 demands, in addition to producing approximately 19 million gallons per day of industrial-quality recycled water to provide to Contra Costa Water District to serve to their City of Martinez refinery customers. The refineries’ current water supply (raw Central Valley Project water) would be freed up and exchanged through Contra Costa Water District and conveyed to Santa Clara Valley Water District via the proposed Transfer-Bethany Pipeline and the South Bay Aqueduct.



Operating Department Impact and Funding Source:

The impacts to operational budgets have not yet been determined. Project expenditures are funded from Capital Revenues.

Location(s): Treatment Plant and city of Martinez

Project Budget					
Phase:	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$350,000	\$-	\$-	\$-	\$350,000
Design	-	-	-	-	-
Construction	-	-	-	-	-
FY Total	\$350,000	\$-	\$-	\$-	\$350,000

Filter Plant Improvements – Phase 1B – District Project TBD

Program	Phase	Priority Rank	Ranking Score
Recycled Water	Design	34	180

Purpose:

To rehabilitate and replace components of the existing Filter Plant recycled water facilities.

Drivers:

The recycled water facilities produce disinfected tertiary effluent that meets Title 22 recycled water requirements and is used on-site for utility water and is pumped offsite for various residential and commercial recycled water uses. The Filter Plant, Clearwell structure, and related facilities were constructed in the mid-1970s. The existing Filter Plant media has been partially replaced on a routine basis over the years. The last partial media replacement effort was 15 years ago. Some of the Filter and some of the elements associated with the Clearwell storage and recycled water pumping replacement are being implemented under the earlier phase, Filter and Clearwell Improvement Phase 1A Project, DP 7361. That project is scheduled to go in construction this Fiscal year. The electrical and instrumentation infrastructure is mostly original, showing signs of significant wear, and requires replacement to ensure operational reliability.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Sustainability



Description:

The Phase 1B project includes the following major elements:

- Rehabilitate and replace various electrical equipment (motor control centers, switchgear, substation), and PLCs at the Filter Plant
- Replace the other three filters
- Add a chlorine contact tank to meet the requirements for Title 22 disinfection compliance
- Forebays storage improvements or new storage tanks and related equipment
- Replace pump motors and electrical at the Applied Water Pumping Station

Operating Department Impact and Funding Source:

The impacts to the operating budgets have not yet been determined. Project expenditures are funded from Capital Revenues. This project may be funded using a future SRF loan.

Location(s): Treatment Plant

Project Budget					
Phase	Budget-to-Date	FY 2020-21	FY 2021-22	Future FYs	Total
Planning	\$-	\$-	\$-	\$-	\$-
Design	-	400,000	400,000	2,200,000	3,000,000
Construction	-	-	-	29,400,000	29,400,000
FY Total	\$-	\$400,000	\$400,000	\$31,600,000	\$32,400,000

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Ten-Year Capital Improvement Plan (FY 2020 – FY 2030)

OVERVIEW

Central San has developed a Ten-Year Capital Improvement Plan (Ten-Year CIP) for capital facilities and financing needs. The Ten-Year CIP covers the period starting on July 1, 2020 and ending June 30, 2030. It incorporates the recommendations from the June 2017 Comprehensive Wastewater Master Plan (CWMP). The Ten-Year CIP is updated every year. Specifically, the plan identifies and prioritizes capital projects needed to accomplish Central San’s Vision, Mission, Values, and Goals. It also includes planning-level cost estimates for proposed projects and projections for the various sources of revenue needed to meet the cash flow requirements. The principal purpose of the Ten-Year CIP is to provide the Board of Directors (Board) with the information needed to formulate a long-range policy regarding:

- **Priority and Schedule** – Identify, prioritize, and schedule the projects necessary to accomplish Central San’s Vision, Mission, Values, and Goals.
- **Financing** – Plan for sufficient financial resources to complete the proposed projects.

The CWMP was a critical tool used by Central San to implement the following strategies from Central San’s Strategic Plan (FY 2020-2022):

- **Achieve 100% Compliance in all Regulations** by meeting all air, water, land, and other requirements and by striving to minimize sanitary sewer overflows through the implementation of best management practices.
- **Reduce Reliance on Non-Renewable Energy** by using sustainable practices that minimize waste, maximize resources, and improve the community.
- **Manage Assets Optimally to Prolong Their Useful Life** by facilitating long-term capital renewal and replacement and by protecting Central San personnel and assets from threats and emergencies.
- **Improve and Modernize Operations through Technology and Efficiency Measures** by streamlining workflows, leveraging data, and encouraging the review and pilot testing of new technology to optimize the way Central San works.

The following Ten-Year CIP section provides a general description of the plan and a discussion of potential, unbudgeted future capital projects. As projects develop and are prioritized, they are grouped into the four programs (Treatment Plant, Collection System, General Improvements, and Recycled Water Program) as shown in the Capital Improvement Budget (CIB).

A brief description of each program and a list of major projects for the Ten-Year CIP are provided in the Capital Improvement Plan sections for each of the four programs. In total, the estimated costs for all the projects listed in the Ten-Year CIP is \$907.5 million.

Ten-Year Capital Improvement Plan Budget Process

The Ten-Year CIP assumes that funds will be available to support the plan. These funds come from all revenue sources as discussed in the *Financial Overview* section. The only two discretionary sources of revenue are the sale of bonds or adjustment of the capital component of the Sewer Service Charge. The Capital Plan assumes that two bond issuances will occur, but the Board has yet to approve the issuance of the bonds. Central San has also applied for State Revolving Fund (SRF) loans, which may offset in part the need for bond proceeds. The Ten-Year CIP is currently funded on a year-by-year basis when the CIP for the upcoming fiscal year is formally authorized and adopted by the Board. Changes in capital revenue forecasts or changes in recommended expenditures may result in changes to this Ten-Year CIP.

2017 Comprehensive Wastewater Master Plan

The CWMP was completed in June 2017. A key deliverable of the CWMP was an updated Capital Improvement Plan for the next 20-year planning horizon (2017-2037). The CWMP included descriptions, rationales, and estimated costs for collection system and wastewater treatment plant capital improvement projects and ongoing programs to address aging infrastructure, meet existing and anticipated regulatory requirements, accommodate planned growth, optimize energy use, and implement Central San's vision for the treatment plant that is consistent with Central San's Strategic Plan.

The CWMP was also a critical tool for maintaining a high level of service, establishing long-term fiscally responsible policies for Central San's customers, and providing a clear direction for Central San. To accomplish this, the CWMP:

- Confirmed Capital Improvement Program projects, costs, and site layouts for future facilities
- Identified linkages among the major capital improvement projects and repair and replacement strategies such that the projects can be resorted and rescheduled as changes in planning assumptions and needs occur
- Identified triggers for implementing applied research (if applicable), preliminary design, design, and construction of the recommended capital improvement projects to determine efficient "just-in-time" project implementation
- Identified new or updated policies, programs, and guidelines for the Board considerations to address overall program implementation including project prioritizations, implementation costs, project delivery methods, potential funding sources, and an estimated schedule for implementing plan elements
- Confirmed and incorporated operations, maintenance, and energy management strategies
- Accelerated and coordinated condition assessments with the implementation of the Asset Management Plan and confirmed long-term repair and replacement strategies

Some of these potential future projects identified in the CWMP are not currently included in the Ten-Year CIP. Central San's CIP will be updated annually as projects are clarified. These future projects are not included in the CIP and amount to about \$920.0 million, of which approximately \$510.0 million may be within the next 20 years.

These projects include the following:

- Nutrient Removal (Nutrient Watershed Permit): Possibly within 10 years **
- Water Exchange (Refinery Recycled Water) Project - 20 million gallons per day
- Advanced Treatment/Contaminants of Emerging Concern Removal **
- Renewable Energy Projects (triggered by increased power demands from nutrient removal) **
- Concord Community Reuse Project Recycled Water Facilities Improvements *
- Concord Community Reuse Project Collection System Improvements *
- Concord Community Reuse Project Recycled Water Distribution System (Central San's current plan is to wholesale recycled water to Contra Costa Water District who will be in charge of the new distribution system, including storage) *

* Projects expected to be cost neutral to Central San

**Projects identified but not currently required by regulations

Ten-Year Capital Improvement Plan – Collection System Program

The Collection System Program includes projects that will address aging and deteriorating infrastructure needs, meet regulatory requirements, address any capacity deficiencies, and improve sustainability or help meet sustainability related goals. The emphasis of the Ten-Year CIP – Collection System Program will be on rehabilitating and replacing deteriorating sewers, new development and sewer expansion by developers within Central San's service area, upgrading aging pumping stations, and implementing large diameter and force main inspection programs. The inspection programs will help to update the condition of existing infrastructure and to confirm the timing and cost of rehabilitation or replacement of large diameter sewers and force mains. Overall, these projects are targeted at reducing the risk of sewer system overflows in Central San's collection system.

Central San staff will continue to update the new collection system hydrodynamic model (*InfoWorks*®) to confirm the need and timing for future projects required to alleviate capacity deficiencies and to determine sewer replacement needs.

The *InfoMaster*® program uses closed-circuit television inspection scoring results, sewer cleaning frequency data, pipe age, and other information to assign a likelihood of failure score to each pipe segment in the collection system. The consequence of failure for each pipe segment was determined using factors such as pipeline size, flow conditions, and proximity to waterways, hospitals, schools, and roads. The overall risk of each segment is based on the likelihood of failure and consequence of failure scores, and a decision matrix developed through workshops with staff were used to prioritize the replacement of each pipe segment. *InfoMaster*® then helps to develop a long-term sewer replacement strategy or program based on the timing/prioritization, and cost for sewer replacement needs. Staff will then work to group sewers of concern geographically and bid as capital projects.

The following tables identify major projects in the Ten-Year CIP – Collection System Program. The projects have been grouped into one of five project categories: 1) Collection System Rehabilitation and Replacement, 2) Pumping Stations, 3) Regulatory Compliance, 4) Collection System Expansion, and 5) Contractual Assessment Districts and Development Sewerage.

**Ten-Year CIP – Collection System Program Projects
Collection System Rehabilitation and Replacement**

Project Title	Year(s)	Location	Description
Manhole Modifications Project	Present through 2030	Collection System	This program will fund manhole modifications and replacement throughout the collection system.
Cured-in-Place Pipe Contract	Present through 2030	Collection System	Implement cured-in-place pipe repair projects to address pipelines that require immediate action. Projects are completed in 5-year cycles.
Collection System Sewer Renovation – Phases 2 and 3	2022 to 2032	Collection System	This program will fund rehabilitation and replacement of aging sewers throughout the collection system. Aging infrastructure needs will continue to be identified, prioritized by risk, and packaged into capital projects by geographical areas throughout the collection system. This program is also coordinated with miscellaneous relief projects for sewers identified by the hydraulic model as having wet weather hydraulic capacity deficiencies and large-diameter renovation.
Force Main Inspection and Replacement	Present to 2028	Collection System	Evaluation and potential force main rehabilitation or replacement for the Acacia, Bates, Maltby, and Martinez Pumping Stations.
Large Diameter Renovation Program	Present to 2030	Collection System	Future rehabilitation or replacement of large diameter sewers based on the inspection program. This program will fund rehabilitation and replacement of aging large diameter sewers throughout the collection system. Aging infrastructure needs will continue to be identified, prioritized by risk, and packaged into capital projects by priority throughout the collection system.

**Ten-Year CIP – Collection System Program Projects
Pumping Stations**

Project Title	Year(s)	Location	Description
Pumping Station Upgrades – Phase 2	Present through 2025	Martinez, Fairview, and Maltby Pumping Stations	Rehabilitation and replacement of miscellaneous pumps, piping, valves, electrical systems, and other equipment identified in the field. Acquire necessary pumping station emergency response equipment and critical spare parts.
Pumping Station PLC Upgrades	2023 to 2027	Miscellaneous Pumping Stations	Upgrade outdated programmable logic controller software language for all pumping stations.
Pumping Station Improvements	2023 to 2026	Buchanan North and South, Concord Industrial, and Other Pumping Stations	Implement major pumping station upgrades to address structural, mechanical, electrical, instrumentation, and other improvements.

**Ten-Year CIP – Collection System Program Projects
Regulatory Compliance**

Project Title	Year(s)	Location	Description
Collection System Planning	Present through 2030	Collection System	Continued planning to identify potential capital improvement projects required to address aging infrastructure needs, regulatory drivers, capacity deficiencies, and sustainability and optimization opportunities. Projects are performed in 5-year cycles, includes 5-and 10-year updates to Master Plan.
Collection System Modeling Support	Present through 2030	Collection System	Continued build-out of the collection system modeled network to include areas of planned development, and other major upgrades and updates to the hydraulic model.
Large Diameter Pipeline Inspection Program	Present through 2030	Collection System	Phased inspection program for large-diameter trunks and interceptors to update condition and prioritize rehabilitation and replacement needs.
Force Main Inspection Program	Present through 2030	Collection System	Phased inspection program for force mains to update condition and prioritize rehabilitation and replacement needs.

**Ten-Year CIP – Collection System Program Projects
Contractual Assessment Districts and Development Sewerage**

Project Title	Year(s)	Location	Description
Development Sewerage Support	Present through 2030	Central San-wide	Capitalized staff labor and expenses for the survey, rights-of-way, and inspection for construction of developer installed sewer facilities.

Ten-Year Capital Improvement Plan – Treatment Plant Program

The Treatment Plant Program includes projects that will address aging infrastructure needs, meet regulatory requirements, address any hydraulic or process capacity deficiencies, and improve sustainability or help meet sustainability related goals. The emphasis of the Ten-Year CIP – Treatment Plant Program will be on the repair and replacement of aging treatment plant infrastructure, improving existing facilities to ensure reliable compliance with increasingly stringent regulatory requirements, improving the resiliency of existing facilities against security threats and natural hazards such as seismic and flooding events, and improving overall energy efficiency.

Central San staff will continue to evaluate treatment alternatives and applied research projects and pilots to address potential nutrient removal regulations, confirm the optimal long-term solids handling strategy, and strive to move closer to net zero energy in support of Board Policy 027 – Energy.

The following tables identify all the projects in the Ten-Year CIP – Treatment Plant Program. The projects have been grouped into one or more of three project categories: 1) Liquid Treatment Process, 2) Solids Handling Process, or 3) General Treatment Plant and Safety Improvements.

Ten-Year CIP – Treatment Plant Program Projects
Liquid Treatment Process

Project Title	Year(s)	Location	Description
Wet Weather Flow Management	2026 to 2030	Headworks, Wet Weather Holding Basins	Implement improvements for wet weather flow management and holding basin operation such as raw wastewater diversion pipeline, drain back pumping, sixth influent pump, and improved basin grading and drainage.
Primary Expansion	2026 to 2031	Pre-Aeration, Primaries	Construct up to two additional primary sedimentation tanks and corresponding new pre-aeration (grit removal) tank, improve wet weather grit handling, and replace primary sludge pumps.
Nutrient Removal Optimizations – Level 1	2022 to 2027	Primary Sedimentation Tanks, A/N Tanks	If required by regulations, construct chemically enhanced primary treatment and modify aeration and nitrification tanks and secondary treatment process to operate in a seasonal nitrification/denitrification treatment mode during dry weather months.
Secondary Treatment Hydraulic Improvements	2023 to 2028	Secondary Clarifiers and Mixed Liquor Flow	Increase secondary treatment wet weather capacity to accommodate a 20-year wet weather storage event. This includes a mixed liquor flow split structure for the secondary clarifiers, up to two additional secondary clarifiers, and mixed liquor channel improvements such as new gates.
UV Hydraulic Improvements	Present to 2025	UV Channel, Final Effluent Channel	Increase wet weather hydraulic capacity through UV disinfection and final effluent channel to accommodate a 20-year wet weather storage event. This includes low lift pumps to alleviate UV channel hydraulic bottlenecks and installing a new parallel final effluent pipe.
UV Disinfection Replacement	Present to 2027	UV Channel	Replace the aging existing UV disinfection process with a new, more energy efficient UV disinfection process.
Condition Assessment of Buried Pipelines	Present to 2023	Treatment Plant	Inspect the condition of several large diameter, critical pipelines on the treatment plant site such as primary effluent, mixed liquor, secondary effluent, final effluent pipelines, and wet weather bypass pipelines. These inspections will require complicated shutdowns and temporary bypass pumping and piping.
Outfall Improvements – Phase 8	2026 to 2028	Treatment Plant	Inspect outfall pipe and make necessary repairs. This project will require complicated shutdowns and temporary bypass pumping and piping.
Steam and Aeration Blower System Renovation Project	Present though 2026	Treatment Plant	To replace, rehabilitate, and/or improve the steam turbines, aeration blowers, and improve the secondary treatment systems related to aeration energy requirements. Coordinated with the existing steam system and heat recovery in the Solids Conditioning Building.

Ten-Year CIP – Treatment Plant Program Projects Solids Handling Process

Project Title	Year(s)	Location	Description
Steam and Aeration Blower System Renovation Project	Present through 2026	Treatment Plant	To replace, rehabilitate, and or improve the existing steam system and waste heat recovery in the Solids Conditioning Building. Coordinated with the related aeration blower systems.

Ten-Year CIP – Treatment Plant Program Projects General Treatment Plant and Safety Improvements

Project Title	Year(s)	Location	Description
Treatment Plant Planning	Present through 2030	Treatment Plant	Continued planning to identify potential capital improvement projects required to address aging infrastructure needs, regulatory drivers, capacity deficiencies, and sustainability and optimization opportunities. Projects performed in five-year cycles.
Applied Research and Innovations	Present through 2030	Treatment Plant	Implement applied research projects that evaluate promising and innovative technologies and processes. Projects performed in five-year cycles.
Surcharge Soil Pile Relocation	2025 to 2028	Surcharge Pile, Basin A South	Excavate and relocate surcharge pile soils to Basin A South and replace soil cap.
Treatment Plant Supervisory Control and Data Acquisition Improvements	2022 to 2026	Treatment Plant	Complete an evaluation and implementation plan for the upgrade and replacement of the supervisory control and data acquisition, programmable logic controllers, and communications networks, and determine workforce planning needs.
Treatment Plant Network Resiliency Evaluation	2024 to 2026	Treatment Plant	Complete resiliency evaluation of network system and evaluate needs for redundancy in communications, information systems, and process control systems.
Fire Protection System – Phases 3 and 4	Present to 2023	Treatment Plant	Continue phased upgrades and replacement of the fire alarm systems throughout the treatment plant. Previous plan had six phases, combined to four phase this year due to critical to safety.
Warehouse Seismic Upgrades	2022 to 2025	Warehouse	Implement upgrades to the Warehouse building to meet current seismic design standards and improve overall seismic safety.
Miscellaneous Seismic Upgrades	2022 to 2024	Filter Plant, UV, Headworks, Fuel Oil, Hypo Tanks, Substations	Implement seismic upgrades to miscellaneous structures and process equipment around the treatment plant.

Project Title	Year(s)	Location	Description
Treatment Plant Safety Enhancements – Phases 5 through 8	Present to 2028	Treatment Plant	Continue to implement safety-related enhancements around the treatment plant to proactively address safety concerns.
Aging Infrastructure Replacement Program	Present through 2031	Treatment Plant	This program will fund aging infrastructure projects around the treatment plant. Aging infrastructure needs will continue to be packaged together and implemented as spinoff capital projects from this program (eg. piping replacement projects, equipment replacement, and electrical/instrumentation/control systems rehabilitation). Program is performed in five-year cycles.

Ten-Year Capital Improvement Plan – General Improvements Program

The General Improvement Program includes projects that will address aging infrastructure needs, meet regulatory requirements, and improve sustainability or help meet sustainability related goals. This includes implementing property and building improvements, addressing equipment needs, acquiring new properties if required, completing development of the Asset Management Program, information management system and data management system upgrades, general security improvements enhancement, and cybersecurity. Many of Central San’s buildings are over 25 years of age and are starting to require general building upgrades to both the interiors and exteriors such as painting, replacing ceiling tiles, upgrading fixtures, replacing roofs, replacing worn furniture and other equipment, and upgrading buildings to meet current seismic standards. The emphasis of the General Improvement Program for the Ten-Year CIP will be on upgrading many of those aging buildings. In addition, Central San will continue to require routine acquisition of new equipment, vehicle replacement, security improvements, information technology improvements, and improved cybersecurity enhancements.

The following tables identify major projects in the Ten-Year CIP – General Improvements Program. The projects have been grouped into one of three (3) project categories: 1) Vehicles and Equipment Acquisition, 2) Buildings and District Property, and 3) Information Technology Development.

**Ten-Year CIP – General Improvements Program Projects
Vehicles and Equipment Acquisition**

Project Title	Year(s)	Location	Description
Equipment Acquisition	Present through 2030	Central San-wide	Acquisition of new equipment for operation and maintenance of Central San assets.
Vehicle Replacement Program	Present through 2030	Central San-wide	Continued replacement and acquisition of new Central San vehicles.

**Ten-Year CIP – General Improvements Program Projects
Buildings and District Property**

Project Title	Year(s)	Location	Description
Future Property Repairs and Improvements	2025 to 2030	Central San-wide	Improvements to Central San’s buildings, buffer properties, rental properties, and the surrounding parking lots and grounds.
District Easement Acquisition	Present through 2030	Central San-wide	Improve or acquire new property land rights for existing or new sanitary sewers that are located on private properties.
General Security and Access	Present through 2030	Central San-wide	Continued implementation of general security improvements for Central San buildings and properties.

**Ten-Year CIP – General Improvements Program Projects
Information Technology Development**

Project Title	Year(s)	Location	Description
Information Technology Development	Present through 2030	Central San-wide	Continued implementation of Central San-wide information technology improvements.

Ten-Year CIP – Recycled Water Program

The Recycled Water Program includes projects that will address aging infrastructure needs, meet regulatory requirements, address any capacity deficiencies, and improve sustainability or help meet sustainability related goals. The emphasis of the Ten-Year CIP – Recycled Water Program will be on continued expansion of the Zone 1 Recycled Water Program in support of Board Policy 019 – Recycled Water, implementing improvements to the existing recycled water filter plant and related support facilities to address aging infrastructure to ensure reliable supply of recycled water, replacing and installing new clearwell liner and covers, and initiating ongoing rehabilitation and replacement of recycled water distribution system assets.

Central San staff will continue to explore and plan for other potential recycled water projects and related improvements and expansions that may be required. These other projects will likely involve the wholesale of recycled water to a water purveyor. The following table identifies major projects in the Ten-Year CIP – Recycled Water Program.

Ten-Year CIP – Recycled Water Program Projects

Project Title	Year(s)	Location	Description
Zone 1 Recycled Water	Present to 2030	Zone 1 Area within the Cities of Concord, Martinez, and Pleasant Hill	Continue to expand Zone 1 Recycled Water Program, where cost-effective, for landscape irrigation at schools, parks, private businesses, golf courses, street medians, and for commercial applications such as truck washing, concrete manufacturing, dust control, and toilet and urinal flushing.
Recycled Water Distribution System Renovations	Present through 2030	Zone 1 Area within the Cities of Concord, Martinez, and Pleasant Hill	Implement a recurring rehabilitation and replacement program for recycled water distribution system assets such as the recycled water surge tank, distribution piping, valves, and flow meters.
Filter Plant & Clearwell Improvements – Phase 1A	Present to 2023	Treatment Plant	Complete the rehabilitation and replacement of the recycled water treatment facilities, including two large storage tanks and related electrical, instrumentations and control systems.
Filter Plant & Clearwell Improvements – Phase 1B	Present to 2028	Treatment Plant	Complete the rehabilitation and replacement of the recycled water treatment facilities, including the remaining three filters, forebays, applied water pumps, chlorine contact basins, and related electrical, instrumentations and control systems.

Ten-Year CIP Expenditures

The Ten-Year CIP provides a basis for policy decisions concerning Central San’s long-range CIP and management of the Sewer Construction Fund. The Ten-Year CIP also serves as the capital improvement expenditure basis for performing the fee analysis.

This plan includes projected expenditures totaling \$907.5 million (in 2020 dollars) over the period from FY 2020-21 through FY 2029-30. A summary of the planned expenditures by program, without inflation, for the Ten-Year CIP is included in Tables 1-5.

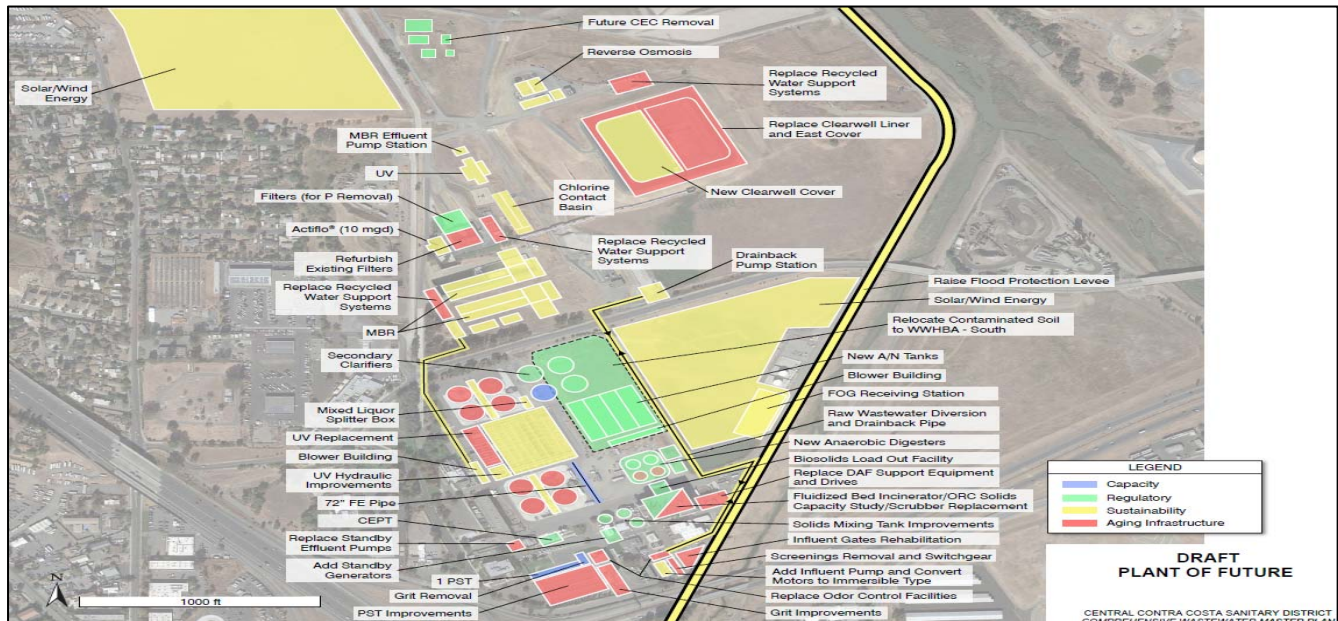


Illustration of a Potential Central San Treatment Plant of the Future

Table 1 - Ten-Year Program: Collection System		Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Project #	Project Name	10 Year Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
5991	Pleasant Hill Sewer Renovation - Phase 2	2,000,000	500,000	1,000,000	500,000	-	-	-	-	-	-	-
8419	Collection System Planning	600,000	200,000	200,000	200,000	-	-	-	-	-	-	-
8436	Pump Station Upgrades - Phase 1	26,684,000	14,040,000	12,644,000	-	-	-	-	-	-	-	-
8442	Pump Station Equipment & Piping Replacement - Phase 2	600,000	200,000	200,000	200,000	-	-	-	-	-	-	-
8443	Large Diameter Pipeline Inspection Program - Phase 1	1,076,000	530,000	546,000	-	-	-	-	-	-	-	-
8444	Force Main Inspection Program - Phase 1	1,200,000	500,000	700,000	-	-	-	-	-	-	-	-
8447	Pump Station Security Improvements	375,000	75,000	75,000	75,000	75,000	75,000	-	-	-	-	-
8448	Manhole Modifications	1,100,000	400,000	350,000	350,000	-	-	-	-	-	-	-
8449	Collection System Modeling Support	240,000	120,000	120,000	-	-	-	-	-	-	-	-
8450	Development Sewerage Support	6,300,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	-	-	-
8451	Collection System Sewer Renovation - Phase 1	22,783,000	4,027,000	18,756,000	-	-	-	-	-	-	-	-
8457	Pump Station Upgrades - Phase 2	30,000,000	2,400,000	2,100,000	9,000,000	10,000,000	6,500,000	-	-	-	-	-
8458	Martinez Sewer Renovation - Phase 6	4,500,000	4,500,000	-	-	-	-	-	-	-	-	-
8459	Lafayette Sewer Renovation - Phase 14	4,600,000	4,600,000	-	-	-	-	-	-	-	-	-
8460	Walnut Creek Sewer Renovation - Phase 14	4,573,000	4,573,000	-	-	-	-	-	-	-	-	-
TBD	Cured-In-Place Pipe Blanket Contract (FY 2021-25)	1,600,000	600,000	250,000	250,000	250,000	250,000	-	-	-	-	-
TBD	Contractual Assesment District Project	1,000,000	500,000	500,000	-	-	-	-	-	-	-	-
TBD	Large Diameter Renovation Program	17,000,000	1,500,000	2,000,000	4,000,000	4,000,000	2,500,000	1,500,000	1,500,000	-	-	-
TBD	Collection System Master Plan (5-Year Update)	500,000	-	500,000	-	-	-	-	-	-	-	-
TBD	Collection System Sewer Renovation - Phase 2	103,891,000	-	-	19,891,000	21,000,000	21,000,000	21,000,000	21,000,000	-	-	-
TBD	Large Diameter Pipeline Inspection Program - Phase 2	2,750,000	-	-	550,000	550,000	550,000	550,000	550,000	-	-	-
TBD	Collection System Modeling Support 2022+	985,000	-	-	120,000	120,000	120,000	125,000	125,000	125,000	125,000	125,000
TBD	Force Main Inspection Program - Phase 2	1,400,000	-	-	-	700,000	700,000	-	-	-	-	-
TBD	Pump Station Improvements	2,530,000	-	-	-	515,000	515,000	1,500,000	-	-	-	-
TBD	Pumping Station SCADA Upgrades	1,675,000	-	-	-	175,000	500,000	500,000	500,000	-	-	-
TBD	Force Main Replacement Program	12,800,000	-	-	-	200,000	700,000	1,500,000	8,200,000	2,200,000	-	-
TBD	Collection System Planning 2023+	1,400,000	-	-	-	200,000	200,000	200,000	200,000	200,000	200,000	200,000
TBD	Pump Station Equipment & Piping Replacement 2023+	1,400,000	-	-	-	200,000	200,000	200,000	200,000	200,000	200,000	200,000
TBD	Manhole Modifications 2023+	2,450,000	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
TBD	Pump Station PLC Upgrades	860,000	-	-	-	-	210,000	650,000	-	-	-	-
TBD	Cured-In-Place Pipe (CIPP) Blanket Contract (FY 2026+)	1,800,000	-	-	-	-	-	600,000	300,000	300,000	300,000	300,000
TBD	Collection System Master Plan (10-Year Update)	1,000,000	-	-	-	-	-	-	1,000,000	-	-	-
TBD	Large Diameter Renovation Program 2027+	4,500,000	-	-	-	-	-	-	-	1,500,000	1,500,000	1,500,000
TBD	Collection System Sewer Renovation - Phase 3	63,000,000	-	-	-	-	-	-	-	21,000,000	21,000,000	21,000,000
TBD	Large Diameter Pipeline Inspection Program - Phase 3	1,650,000	-	-	-	-	-	-	-	550,000	550,000	550,000
TBD	Development Sewerage Support 2027+	2,700,000	-	-	-	-	-	-	-	900,000	900,000	900,000
TBD	Force Main Replacement - Bates	2,000,000	-	-	-	-	-	-	-	-	2,000,000	-
Collection System Total:		\$ 335,522,000	\$ 40,165,000	\$ 40,841,000	\$ 36,036,000	\$ 39,235,000	\$ 35,270,000	\$ 29,575,000	\$ 34,825,000	\$ 27,325,000	\$ 27,125,000	\$ 25,125,000

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Table 2 - Ten-Year Program: Treatment Plant		Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Project #	Project Name	10 Year Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7304	PLC Systems Upgrades	240,000	120,000	120,000	-	-	-	-	-	-	-	-
7315	Applied Research & Innovations	1,500,000	500,000	500,000	500,000	-	-	-	-	-	-	-
7328	Influent Pump Electrical Improvements	7,500,000	3,500,000	3,500,000	500,000	-	-	-	-	-	-	-
7339	Plant Control System I/O Replacement	2,059,000	1,000,000	1,059,000	-	-	-	-	-	-	-	-
7341	Walnut Creek/Grayson Creek Levee Rehab	1,450,000	250,000	300,000	500,000	400,000	-	-	-	-	-	-
7348	Solids Handling Facility Improvements - Phase 1	112,250,000	4,000,000	29,750,000	32,500,000	31,000,000	14,000,000	1,000,000	-	-	-	-
7349	Steam Aeration & Blower Systems Renovations	58,050,000	2,550,000	4,500,000	13,000,000	15,500,000	15,500,000	7,000,000	-	-	-	-
7351	Mechanical and Concrete Renovations	2,603,000	2,603,000	-	-	-	-	-	-	-	-	-
7352	UV Disinfection Upgrades	250,000	250,000	-	-	-	-	-	-	-	-	-
7353	Outfall Improvements - Phase 7	5,600,000	5,100,000	500,000	-	-	-	-	-	-	-	-
7354	Treatment Plant Security Improvements	950,000	550,000	400,000	-	-	-	-	-	-	-	-
7355	Odor Control Upgrades - Phase 1	1,600,000	300,000	1,300,000	-	-	-	-	-	-	-	-
7357	Plant-Wide Instrumentation Upgrades	1,096,000	281,000	815,000	-	-	-	-	-	-	-	-
7363	Treatment Plant Planning	1,200,000	400,000	400,000	400,000	-	-	-	-	-	-	-
7369	Piping Renovation - Phase 10	3,015,000	2,500,000	515,000	-	-	-	-	-	-	-	-
7370	Annual Infrastructure Replacement FY 2019-20+	8,000,000	1,000,000	1,500,000	1,500,000	2,000,000	2,000,000	-	-	-	-	-
7371	Condition Assessment of Buried Yard Pipelines	766,000	250,000	258,000	258,000	-	-	-	-	-	-	-
7373	Fire Protection System - Phase 3	900,000	450,000	450,000	-	-	-	-	-	-	-	-
TBD	Laboratory Seismic & Roof Upgrades	950,000	500,000	450,000	-	-	-	-	-	-	-	-
TBD	MHF Hearth	1,000,000	500,000	500,000	-	-	-	-	-	-	-	-
TBD	MRC Building Improvements	750,000	450,000	300,000	-	-	-	-	-	-	-	-
TBD	Air Conditioning and Lighting Renovations Project	1,500,000	750,000	750,000	-	-	-	-	-	-	-	-
TBD	Plant Electrical Replacement and Rehabilitaton	2,000,000	400,000	400,000	400,000	400,000	400,000	-	-	-	-	-
TBD	Solids Preparation Project	2,550,000	2,550,000	-	-	-	-	-	-	-	-	-
TBD	UPCCAA Urgent Projects FY 2020-21+	3,000,000	600,000	600,000	600,000	600,000	600,000	-	-	-	-	-
TBD	UV Disinfection Replacement	26,800,000	500,000	1,500,000	-	2,800,000	7,400,000	8,400,000	6,200,000	-	-	-
TBD	UV Hydraulic Improvements	3,980,000	480,000	-	-	500,000	3,000,000	-	-	-	-	-
TBD	Piping Renovation - Phase 11	3,265,000	-	750,000	2,000,000	515,000	-	-	-	-	-	-
TBD	TP Safety Enhancements - Phase 6	800,000	-	200,000	600,000	-	-	-	-	-	-	-
TBD	Fire Protection System - Phase 4	860,000	-	-	860,000	-	-	-	-	-	-	-
TBD	Controls System Upgrades - Phase 2	600,000	-	-	120,000	120,000	120,000	120,000	120,000	-	-	-
TBD	Electrical Infrastructure	18,000,000	-	-	-	2,000,000	2,000,000	2,000,000	2,000,000	5,000,000	5,000,000	-
TBD	Miscellaneous Seismic Upgrades	750,000	-	-	250,000	500,000	-	-	-	-	-	-
TBD	Nutrient Removal Level 1 - Optimization	11,450,000	-	-	450,000	1,000,000	4,000,000	5,000,000	1,000,000	-	-	-
TBD	Treatment Plant SCADA Upgrades	8,575,000	-	-	575,000	2,000,000	3,000,000	3,000,000	-	-	-	-
TBD	Warehouse Seismic Upgrades	1,200,000	-	-	300,000	600,000	300,000	-	-	-	-	-
TBD	WWTP Master Plan (5-Year Update)	500,000	-	-	500,000	-	-	-	-	-	-	-
TBD	Secondary Treatment Hydraulic Improvements	26,850,000	-	-	-	1,850,000	2,000,000	10,000,000	7,000,000	6,000,000	0	-

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Table 2 - Ten-Year Program: Treatment Plant (Continued)		Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Project #	Project Name	10 Year Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
TBD	Applied Research & Innovations 2023+	3,000,000	-	-	-	500,000	500,000	400,000	400,000	400,000	400,000	400,000
TBD	Treatment Plant Planning 2023 +	2,800,000	-	-	-	400,000	400,000	400,000	400,000	400,000	400,000	400,000
TBD	TP Safety Enhancements - Phase 7	840,000	-	-	-	-	40,000	120,000	680,000	-	-	-
TBD	Treatment Plant Network Resiliency Evaluation	258,000	-	-	-	-	52,000	206,000	-	-	-	-
TBD	Annual Infrastructure Replacement FY 2025-26+	12,500,000	-	-	-	-	-	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
TBD	CO-Gen Replacement	24,000,000	-	-	-	-	-	500,000	1,500,000	8,000,000	8,000,000	6,000,000
TBD	Surcharge Soil Pile Relocation	15,850,000	-	-	-	-	-	1,450,000	7,200,000	7,200,000	-	-
TBD	Treatment Plant Seismic Study	300,000	-	-	-	-	-	300,000	-	-	-	-
TBD	Tunnel Improvements	4,500,000	-	-	-	-	-	2,250,000	2,250,000	-	-	-
TBD	UPCCAA Urgent Projects FY 2025-26+	2,500,000	-	-	-	-	-	500,000	500,000	500,000	500,000	500,000
TBD	Plant Electrical Replacement and Rehabilitaton 2025+	2,000,000	-	-	-	-	-	400,000	400,000	400,000	400,000	400,000
TBD	Outfall Improvements - Phase 8	4,582,000	-	-	-	-	-	-	582,000	4,000,000	-	-
TBD	Primary Expansion	25,500,000	-	-	-	-	-	-	1,000,000	2,500,000	11,000,000	11,000,000
TBD	Standby Generator Expansion	5,200,000	-	-	-	-	-	-	2,600,000	2,600,000	-	-
TBD	Wet Weather Flow Management	18,582,000	-	-	-	-	-	-	800,000	2,000,000	6,782,000	9,000,000
TBD	WWTP Master Plan (10-Year Update)	1,000,000	-	-	-	-	-	-	500,000	500,000	-	-
TBD	Controls System Upgrades - Phase 3	375,000	-	-	-	-	-	-	-	125,000	125,000	125,000
TBD	Odor Control Upgrades - Phase 2	7,280,000	-	-	-	-	-	-	-	780,000	1,500,000	5,000,000
TBD	TP Safety Enhancements - Phase 8	780,000	-	-	-	-	-	-	-	50,000	80,000	650,000
TBD	Solids Handling Facility Improvements - DAFT Tanks	900,000	-	-	-	-	-	-	-	-	-	900,000
Treatment Plant Total:		\$ 457,156,000	\$ 32,334,000	\$ 51,317,000	\$ 55,813,000	\$ 62,685,000	\$ 55,312,000	\$ 45,546,000	\$ 37,632,000	\$ 42,955,000	\$ 36,687,000	\$ 36,875,000

Table 3 - Ten-Year Program: General Improvements		Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Project #	Project Name	10 Year Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
8207	General Security and Access	200,000	200,000	-	-	-	-	-	-	-	-	-
8230	Capital Legal Services	50,000	10,000	20,000	20,000	-	-	-	-	-	-	-
8236	District Easement Acquisition	150,000	75,000	75,000	-	-	-	-	-	-	-	-
8240	IT Development FY 2016-25	1,500,000	500,000	500,000	500,000	-	-	-	-	-	-	-
8250	ERP Replacement	1,500,000	1,200,000	300,000	-	-	-	-	-	-	-	-
8251	Capital Improvement Plan & Budget (Document Management)	540,000	140,000	150,000	150,000	100,000	-	-	-	-	-	-
8516	Equipment Acquisition	1,000,000	250,000	250,000	250,000	250,000	-	-	-	-	-	-
8517	Vehicle Replacement Program FY 2016-26	5,400,000	900,000	900,000	900,000	900,000	900,000	900,000	-	-	-	-
TBD	Property Repairs and Improvements	900,000	300,000	150,000	150,000	150,000	150,000	-	-	-	-	-
TBD	HOB Exterior Repairs	350,000	350,000	-	-	-	-	-	-	-	-	-
TBD	Security Improvements Study (5-Year)	500,000	-	200,000	100,000	100,000	100,000	-	-	-	-	-
TBD	District Easement Acquisition 2022+	600,000	-	-	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
TBD	Capital Legal Services 2023+	180,000	-	-	-	20,000	20,000	20,000	20,000	20,000	20,000	60,000
TBD	Equipment Acquisition FY 2024+	1,600,000	-	-	-	-	250,000	250,000	250,000	250,000	250,000	350,000
TBD	Security Improvements Study (10-Year)	500,000	-	-	-	-	-	100,000	100,000	100,000	100,000	100,000
TBD	IT Development FY 2023+	3,100,000	-	-	-	500,000	500,000	400,000	400,000	400,000	400,000	500,000
TBD	Future Property Repairs and Improvements 2025+	1,000,000	-	-	-	-	-	150,000	150,000	150,000	150,000	400,000
TBD	Vehicle Replacement Program FY 2026+	3,400,000	-	-	-	-	-	-	800,000	800,000	800,000	1,000,000
General Improvements Total:		\$ 22,470,000	\$ 3,925,000	\$ 2,545,000	\$ 2,145,000	\$ 2,095,000	\$ 1,995,000	\$ 1,895,000	\$ 1,795,000	\$ 1,795,000	\$ 1,795,000	\$ 2,485,000

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Table 4 - Ten-Year Program: Recycled Water		Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Project #	Project Name	10 Year Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
7306	Zone 1 Recycled Water	100,000	100,000	-	-	-	-	-	-	-	-	-
7361	Filter Plant and Clearwell Improvements - Phase 1A	32,600,000	9,000,000	12,500,000	11,100,000	-	-	-	-	-	-	-
7366	Recycled Water Distribution Systems Renovations Program	1,600,000	-	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	-
TBD	Zone 1 Recycled Water 2021+	900,000	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
TBD	Filter Plant and Clearwell Improvements - Phase 1B	32,400,000	400,000	400,000	1,600,000	-	5,000,000	11,000,000	13,000,000	1,000,000	-	-
TBD	Recycled Water Distribution Systems Renovations Program	200,000	-	-	-	-	-	-	-	-	-	200,000
Recycled Water Total:		\$ 67,800,000	\$ 9,500,000	\$ 13,200,000	\$ 13,000,000	\$ 300,000	\$ 5,300,000	\$ 11,300,000	\$ 13,300,000	\$ 1,300,000	\$ 300,000	\$ 300,000

Table 5 - Ten-Year Program: Totals by Program		Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Programs		10 Year Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Collection System		335,522,000	40,165,000	40,841,000	36,036,000	39,235,000	35,270,000	29,575,000	34,825,000	27,325,000	27,125,000	25,125,000
Treatment Plant		457,156,000	32,334,000	51,317,000	55,813,000	62,685,000	55,312,000	45,546,000	37,632,000	42,955,000	36,687,000	36,875,000
General Improvements		22,470,000	3,925,000	2,545,000	2,145,000	2,095,000	1,995,000	1,895,000	1,795,000	1,795,000	1,795,000	2,485,000
Recycled Water		67,800,000	9,500,000	13,200,000	13,000,000	300,000	5,300,000	11,300,000	13,300,000	1,300,000	300,000	300,000
Subtotal		882,948,000	85,924,000	107,903,000	106,994,000	104,315,000	97,877,000	88,316,000	87,552,000	73,375,000	65,907,000	64,785,000
Contingency		24,600,000	2,100,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Total with Contingency		\$ 907,548,000	\$ 88,024,000	\$ 110,403,000	\$ 109,494,000	\$ 106,815,000	\$ 100,377,000	\$ 90,816,000	\$ 90,052,000	\$ 75,875,000	\$ 68,407,000	\$ 67,285,000

(Note: All costs in 2020 dollars)

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Debt Program

Since 2009, Central San has utilized a pay-as-you-go philosophy for capital expenditures. In 2009, and in some earlier years, Central San utilized long-term financing through obligations issued by the Central Contra Costa Sanitary District Facilities Financing Authority. The 2009 obligations (certificates of participation) were issued for the purpose of providing funding for new capital expenditures and to refinance existing debt. In 2018, Central San refinanced the 2009 obligations by issuing revenue bonds. Both types of financial obligations are referred to in this document as bonds or debt.

Central San’s debt service is presently funded by ad valorem tax and interest income. Debt service is projected at \$2.5 million, a reduction from \$3.0 million in FY 2019-20 due a reduction in the principal repayment schedule for the 2018 bonds (from \$2.1 million to \$1.7 million). Table 1 summarizes the debt service sub-fund budget.

Table 1 – Debt Service Sub-Fund Budget Summary

Debt Service Sub-Fund	FY 201-18 Actual	FY 2019-20 Budget	FY 2020-21 Budget
Debt Service Revenue:			
Reserve Account Bond Interest Income	\$2,437	\$-	\$-
Ad Valorem Tax (Portion Allocated to Debt Service)	3,502,568	2,982,415	2,517,605
Total Revenue	\$3,505,005	\$2,982,415	\$2,517,605
Debt Service Expense:			
2009 Bond Interest Payment and Amortized Costs, Less Subsidy on Build America Bonds (BABs)	\$250,355	\$-	\$-
2018 Bond Interest Payment and Amortized Costs	774,651	837,415	777,605
Recycled Water Loan Interest Payment	-	-	-
Total Interest Payment and Amortization Costs	\$1,025,006	\$837,415	\$777,605
2009 Bond Principal Payment	2,480,000	-	-
2018 Bond Principal Payment	-	2,145,000	1,740,000
Recycled Water Principal Payment	-	-	-
Total Principal Payments	2,480,000	2,145,000	1,740,000
Total Debt Service Interest, Amortized Cost, and Principal Payments	\$3,505,006	\$2,982,415	\$2,517,605

2018 Revenue Bonds

In September 2018, Central San issued \$19.5 million of Wastewater Revenue Refunding Bonds in two series (tax-exempt Series A for \$15.1 million and federally taxable Series B for \$4.3 million) to refund outstanding 2009 bonds. The transaction was undertaken to take advantage of lower interest rates and to reduce risk of reduced credits from the federal government budget related sequestration affecting the Series 2009 Build America Bonds (BABs). The transaction resulted in \$8.2 million of interest savings through FY 2029-30, from lower interest rates and reducing outstanding principal through eliminating a debt service reserve fund that was previously held for the 2009 bonds. The 2018 Revenue Bonds have a revised rate covenant as compared to the 2009 bonds, providing for a Net Revenues Covenant and a Gross Revenues Covenant.

In short:

- Net Revenues (Gross Revenues excluding capacity fees and after payment of Operations and Maintenance (O&M) Costs) plus Tax Revenues are to be at least 125% of debt service in a fiscal year.
- Gross Revenues (Gross Revenues including capacity fees and after payment of O&M Costs) plus Tax Revenues are to be at least 100% of debt service in a fiscal year.

Figure 2 shows coverage ratios using the pre-2018 covenants and using the 2018 covenants.

2009 Bonds/Certificates of Participation (No Longer Outstanding)

The 2009 Wastewater Revenue Certificates of Participation, Series A and Series B (bonds) were originally issued for \$19.6 million and \$34.5 million, respectively, on November 12, 2009 and December 3, 2009. The proceeds were used in part to finance new capital expenditures (\$17.3 million of Series A and \$12.7 million of Series B), to refund previous debt (\$20.2 million of Series B), and to pay costs of issuance. The Series A Bonds were federally taxable BABs, which received a rate subsidy from the federal government. Coupons on this series ranged from 5.20% to 5.70%, while yields ranged from 3.45% to 3.78% net of the subsidy. The Series B bonds were tax-exempt bonds that were used to refund the 1998 and 2002 bond issuances and raise an additional \$30.0 million in new proceeds, with coupons ranging from 4.0% to 5.0% and yields ranging from 0.40% to 3.79%. The two bonds originally totaled \$54.1 million and were secured by a pledge of tax and net revenues of the wastewater system. Both bonds had original maturities through September 1, 2029. The Series A bonds were called through an extraordinary call provision and redeemed in September 2018. The Series B bonds were advance refunded with the establishment of an escrow account from Series 2018 B bond proceeds and will be formally retired on the normal call date of September 1, 2019.

Reclamation Loan (No Longer Outstanding)

In FY 2017-18, Central San paid the final installment on a \$2.9 million loan from FY 1998-99 with the California State Water Resources Control Board (SWRCB). The loan advanced Central San funds for the design and construction costs for projects related to recycled water treatment programs. Central San repaid advances from the California SWRCB over a 20-year period ending in FY 2017-18.

Additional Planned Debt Issuance

Central San anticipates utilizing long-term financing in FY 2020-21 to finance certain projects outlined in the 10-Year CIP, including those specified in the Comprehensive Wastewater Master Plan. A new Debt Management and Continuing Disclosure Policy was adopted during FY 2017-18, which specifies the conditions under which debt and other forms of external financing can be used.

In December 2018, Central San applied for an \$89.6 million loan through a competitive process with the California SWRCB to fund solids handling improvements to the treatment plant. Central San’s project was selected as part of the Intended Use Plan for State Revolving Fund (SRF) funds at a public hearing on June 18, 2019. Central San has continued to dialogue with SWRCB regarding the project and anticipates requesting an increase in the funding amount from \$89.6 million to reflect higher than anticipated project costs that those specified upon the completion of the 90% design specifications in early 2020. After finalization of a loan agreement, borrowings are expected to commence in FY 2020-21, with 3 million drawn from the loan facility.

Central San’s 10-year financial plan also anticipates additional borrowing (subject to Board approval) which may be in the form of either revenue bonds or an additional loan from the Clean Water SRF and Water Recycling Funding Programs of the SWRCB.

Figure 1 and Table 2 summarize Central San’s historical and currently outstanding debt service obligations.

Figure 1 – Debt Service by Type

Figure 1 shows annual debt service for past and existing bonds. As described above, potential additional debt issuances could add to debt service requirements in future years.

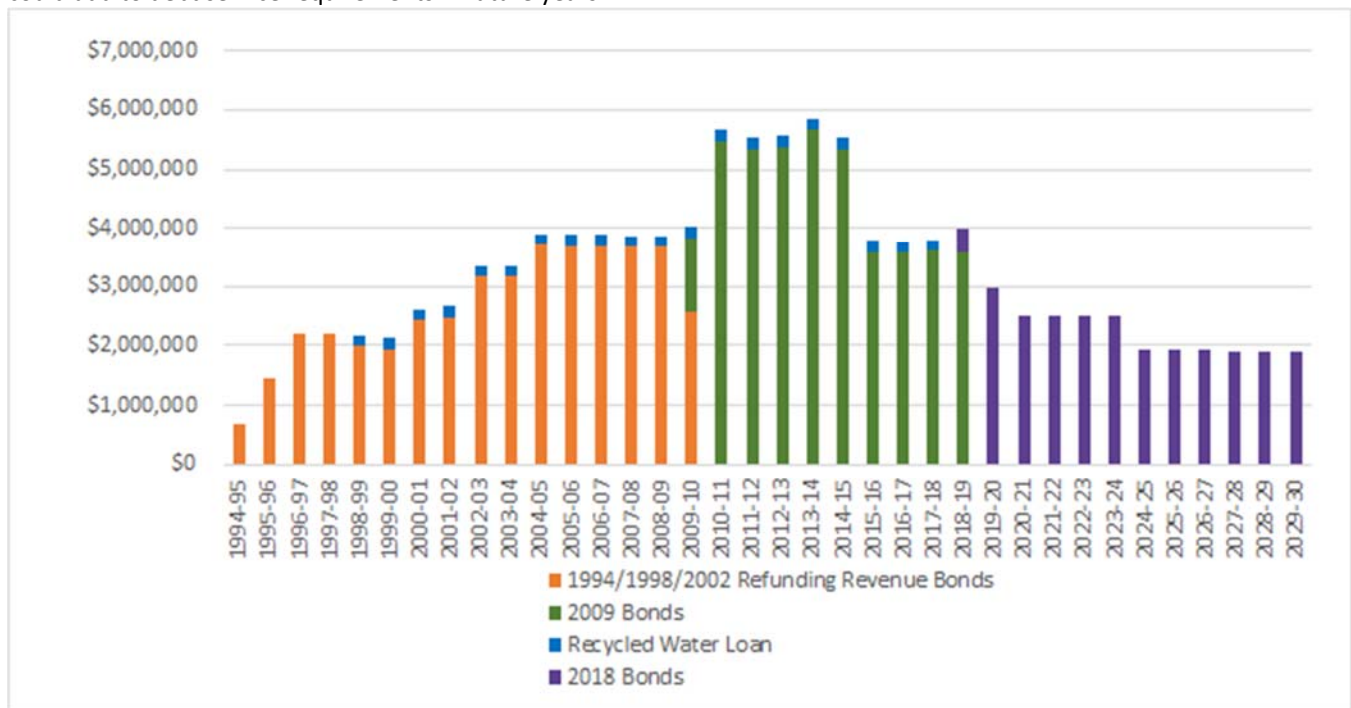


Table 2 – Debt Summary (Currently Outstanding Debt)

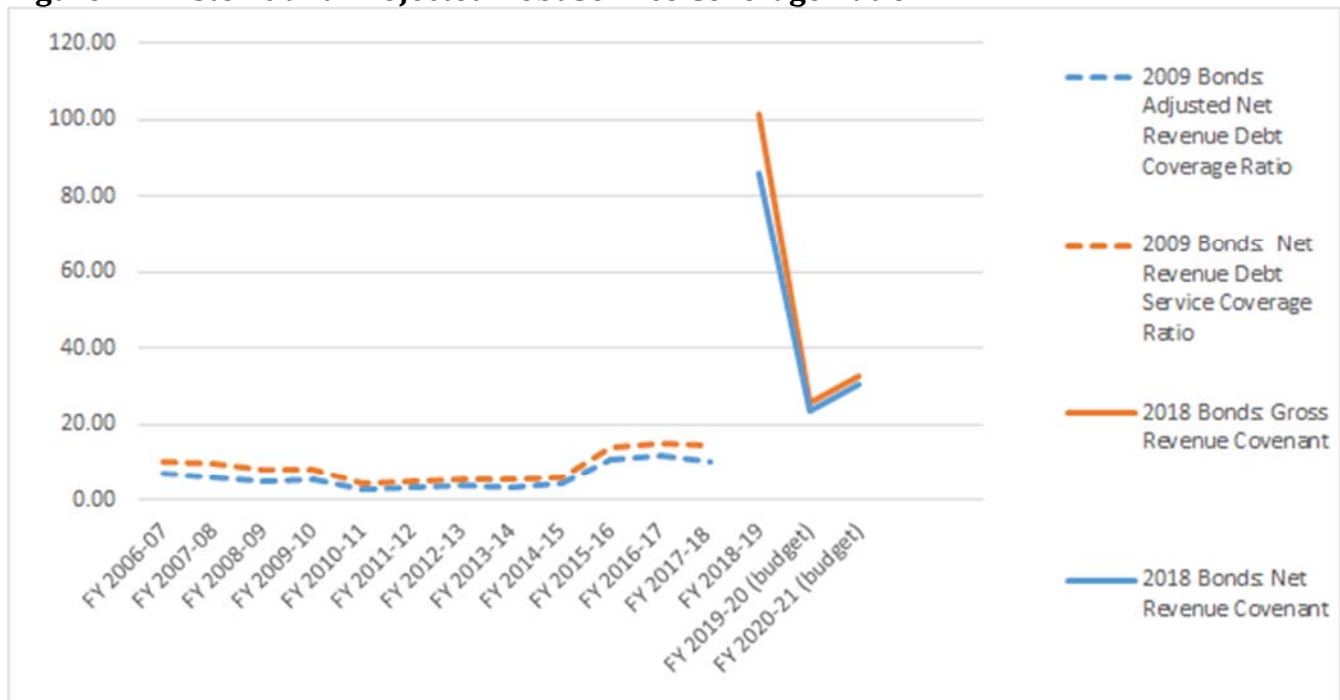
Debt service related to the currently outstanding 2018 Series A and Series B bonds is shown below.

2018 Bonds			
Fiscal Year	Principal	Amortization and Interest	Total Debt Service
2019-20	\$2,145,000	\$837,415	\$2,982,415
2020-21	1,740,000	777,605	2,517,605
2021-22	1,805,000	706,227	2,511,227
2022-23	1,885,000	624,797	2,509,797
2023-24	1,965,000	539,267	2,504,267
2024-25	1,465,000	458,875	1,923,875
2025-26	1,535,000	383,875	1,918,875
2026-27	1,610,000	305,520	1,915,520
2027-28	1,685,000	222,875	1,907,875
2028-29	1,765,000	136,625	1,901,625
2029-30	1,850,000	46,250	1,896,250

Debt Related Covenants

An important financial performance metric is the Debt Service Coverage Ratio. The Board’s targeted coverage ratio is 2.0 times. As shown in Figure 2, Central San will more than meet that target. FY 2018-19 coverage was very high due to several factors including: (1) low debt service in FY 2018-19 due to the refinancing of debt; (2) lower than typical Operating Expenses Less Depreciation due to a large OPEB adjustment (\$30.4 million) from the transition to the CalPERS healthcare plan.

Figure 2 – Historic and Projected Debt Service Coverage Ratio



As noted previously, the calculation has changed slightly in connection with the 2018 bonds. Through FY 2018-19, Bond Covenants on 2009 bonds provided for the following covenants:

- **Net Revenue:** This ratio must be above 1.00 to meet the Debt Rate Covenant (Net Revenue / Total Debt Service)
- **Adjusted Net Revenue:** Net Revenue less Capital Improvement Fees (capacity fees) and City of Concord Capital Charges. This ratio must be above 1.25 to meet the Debt Rate Covenant (Adjusted Net Revenue / Total Debt Service)

The Series 2018 A and B Revenue Bonds have the following covenants:

- **Net Revenues Covenant:** Net revenues (gross revenues excluding capacity fees and after payment of O&M costs) plus tax revenues are to be at least 125% of debt service in a fiscal year.
- **Gross Revenues Covenant:** Gross revenues (gross revenues including capacity fees and after payment of O&M Costs) plus tax revenues are to be at least 100% of debt service in a fiscal year.

Externally Imposed Debt Limits

Central San, as a sanitary district, is subject to certain limits on the direct issuance of bonds payable from proceeds of taxes levied on taxable property in the district. Total bonds issued by Central San cannot exceed 15-20% (depending on some factors) of the assessed value of real and personal property in the District (Health and Safety Code Section 6651). Bond issuances of this nature would require an election with 2/3 voter approval (H&S Code 6644). Central San has no bonds subject to this limitation outstanding. Refunding bonds are not subject to the limitation and election requirement. In 2009 (and previously in 1994 and 2002), Central San financed a portion of its capital improvements through the use of a joint powers authority (JPA), using a form of an installment sale agreement with a similar payment structure as a bond. In such an arrangement, the financing authority issues bonds or certificates of participation, with the installment sale agreement supporting the JPA bonds (payments on the installment agreement received by the JPA pay the JPA's bonds). This structure is typical for California special districts and is not subject to the bond election and debt limits described in the preceding paragraph.

External financing of part of the capital program is anticipated FY 2020-21 through a loan from the California SWRCB for the Solids Handling Facility Improvements project. This financing, and other financing currently anticipated within the 10-year financial planning horizon, is forecast to be well below the limits noted above.

Agency Debt Limits

Central San's Debt Management and Continuing Disclosure Policy adopted during FY 2017-18 (and subsequently updated in FY 2019-20) specifies the conditions under which debt and other forms of external financing can be used. This policy is intended to cover both Central San and the Central Contra Costa Sanitary District Facilities Financing Authority, for "debt" in a broad sense, as well as other external financial obligations such as an Installment Sale Agreement, which is not a bond and technically is not considered a debt. This policy (Board Policy 029) provides certain guidance on the use of debt and financial obligations, as follows:

**Debt Management and Continuing Disclosure Policy
Standards for Use of Debt Financing**

The District shall integrate its debt issuances with the goals of its Capital Improvement Program (CIP) by timing the issuance of debt to ensure that projects are available when needed in furtherance of the District's public purposes (as articulated in, inter alia, the District's mission, vision and goals) and are consistent with the rate and financial planning parameters specified in the District's long-term financial plans. The Board shall be presented with a long-term financial plan in each instance Sewer Service Charge rates are to be adjusted.

- 1. The long-term financial plans will specify an expected debt issuance amount over a decade or more long-term planning horizon.
 - a. The District shall target rate or tax revenue funding of, at a minimum, the value of the collection system replacement program (specifically, pipeline replacement) component of the CIP.*
 - b. Not more than 60% of the overall CIP shall be financed with debt.**
- 2. All projects in the CIP are eligible to use debt financing, so long as the minimum rate or tax revenues are generated as described in this section.*

This policy does not contemplate the use of debt financing to fund ongoing operating and maintenance expenditures; exceptions beyond a de-minimis amount would require approval of the Board. With respect to debt repayment and amortization, the debt repayment period should be structured so that the weighted average maturity of the debt does not exceed 100% of the expected average useful life of the project being financed.

Supplemental Financial Information

This section contains supplemental financial information regarding salaries and benefits, an additional analysis of Changes in Net Position and Fund Equity, and a chart of Central San ad valorem property tax collections compared to assessed values.

**Table 1 – Salaries, Benefits, Retiree and Unfunded Liabilities Detail
Total Central San**

Total Central San					
	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2020-21 Budget	Budget to Budget Variance
Salaries	\$37,906,114	\$36,317,044	\$40,043,011	\$41,903,973	\$1,860,962
Salary Vacancy	(1,193,000)	-	(585,000)	(1,078,000)	(493,000)
Overtime	1,222,429	1,220,692	1,481,380	1,695,518	214,138
Standby	375,200	393,510	377,000	419,000	42,000
Compensated Absences Payout	850,000	981,593	850,000	850,000	-
Total Salaries	\$39,160,743	\$37,931,246	\$41,316,391	\$42,940,491	\$1,624,100
Current Employee Benefits	\$19,395,318	\$18,469,890	\$18,420,313	\$18,751,483	\$331,170
Benefit Vacancy	(1,006,000)	-	(636,000)	(581,000)	55,000
Total Benefits (Active Employees)	\$18,389,318	\$18,469,890	\$17,784,313	\$18,170,483	\$386,170
Total Salaries and Benefits (Active Employees)	\$57,550,061	\$57,382,729	\$59,950,704	\$61,960,974	\$2,010,270
Capitalized Administrative O/H	-	-	-	-	-
Total Salaries and Benefits (Active Employees) after Capitalized Administrative O/H	\$57,550,061	\$57,382,729	\$59,950,704	\$61,960,974	\$2,010,270
OPEB UAAL	\$5,100,284	\$4,934,255	\$2,346,076	\$2,451,000	\$104,924
Pension UAAL / Unfunded Liabilities / Additional Contributions	13,220,478	13,706,313	12,436,841	13,376,016	939,175
Total UAAL and Additional Contributions	\$18,320,762	\$18,640,568	\$14,782,917	\$15,827,016	\$1,044,099
Total Salaries, Benefits, UAAL & Additional Contributions (Active and Retiree)	\$75,870,823	\$76,023,297	\$74,733,621	\$77,787,990	\$3,054,369

**Table 2 – Salaries, Benefits, Retiree and Unfunded Liabilities Detail
Operations & Maintenance Sub-Fund**

Operations & Maintenance Sub-Fund					
	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2020-21 Budget	Budget to Budget Variance
Salaries	\$34,840,679	\$33,323,178	\$36,494,440	\$37,749,821	\$1,255,381
Salary Vacancy	(1,111,000)	-	(538,000)	(990,000)	(452,000)
Overtime	1,120,808	1,132,231	1,381,653	1,514,370	132,717
Standby	375,200	393,510	377,000	419,000	42,000
Compensated Absences Payout	850,000	981,593	850,000	850,000	-
Total Salaries	\$36,075,687	\$35,830,512	\$38,565,093	\$39,543,191	\$978,098
Current Employee Benefits	\$18,101,055	\$17,239,368	\$17,066,934	\$17,209,569	\$142,635
Benefit Vacancy	(1,006,000)	-	(636,000)	(581,000)	55,000
Total Benefits (Active Employees)	\$17,095,055	\$17,239,368	\$16,430,934	\$16,628,569	\$197,635
Total Salaries and Benefits (Active Employees)	\$53,170,742	\$53,069,880	\$54,996,027	\$56,171,760	\$1,175,733
Capitalized Administrative O/H	(3,979,723)	(4,012,147)	(4,448,369)	(5,083,396)	(635,027)
Total Salaries and Benefits (Active Employees) after Capitalized Administrative O/H	\$49,191,019	\$49,057,733	\$50,547,658	\$51,088,364	\$540,706
OPEB UAAL	\$5,100,284	\$4,934,255	\$2,346,076	\$2,451,000	\$104,924
Pension UAAL / Unfunded Liabilities / Additional Contributions	13,220,478	13,706,313	12,436,841	13,376,016	939,175
Total UAAL and Additional Contributions	\$18,320,762	\$18,640,568	\$14,782,917	\$15,827,016	\$1,044,099
Total Salaries, Benefits, UAAL & Additional Contributions (Active and Retiree)	\$67,511,781	\$67,698,301	\$65,330,575	\$66,915,380	\$1,584,805

**Table 3 – Salaries, Benefits, Retiree and Unfunded Liabilities Detail
Sewer Construction Sub-Fund**

Sewer Construction Sub-Fund					
	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2020-21 Budget	Budget to Budget Variance
Salaries	\$3,065,435	\$2,993,866	\$3,548,571	\$4,154,152	\$605,581
Salary Vacancy	(82,000)	-	(47,000)	(88,000)	(41,000)
Overtime	-	-	-	-	-
Standby	101,621	88,460	99,727	181,148	81,421
Compensated Absences Payout	-	-	-	-	-
Total Salaries	\$3,085,056	\$3,082,326	\$3,601,298	\$4,247,300	\$646,002
Current Employee Benefits	\$1,294,263	\$1,230,523	\$1,353,379	\$1,541,914	\$188,535
Benefit Vacancy	-	-	-	-	-
Total Benefits (Active Employees)	\$1,294,263	\$1,230,523	\$1,353,379	\$1,541,914	\$188,535
Total Salaries and Benefits (Active Employees)	\$4,379,319	\$4,312,849	\$4,954,677	\$5,789,214	\$834,537
Capitalized Administrative Overhead	3,979,723	4,012,147	4,448,369	5,083,396	635,027
Total Salaries and Benefits (Active Employees) after Capitalized Administrative Overhead	\$8,359,042	\$8,324,995	\$9,403,046	\$10,872,610	\$1,469,564
OPEB UAAL	-	-	-	-	-
Pension UAAL / Unfunded Liabilities / Additional Contributions	-	-	-	-	-
Total UAAL and Additional Contributions	-	-	-	-	-
Total Salaries, Benefits, UAAL & Additional Contributions (Active and Retiree)	\$8,359,042	\$8,324,995	\$9,403,046	\$10,872,610	\$1,469,564

Table 4 shows the allocation of Central San Salaries & Benefits and unfunded liabilities to the O&M Fund and the Sewer Construction Fund.

Table 4 – Salaries, Benefits (Detailed), Retiree and Unfunded Liabilities

Account Description	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	Percent Variance
O&M Salaries & Benefits - Active Employees							
O&M Salaries	\$36,075,687	\$35,830,512	\$38,565,093	\$36,932,653	\$39,543,191	\$978,098	2.5%
O&M Benefits (Active Employees)							
O&M Workers' Compensation	483,026	419,341	812,844	735,010	826,417	13,573	1.7%
O&M Medical, Health, Vision	6,684,177	6,729,164	5,951,499	5,541,422	5,938,569	(12,930)	-0.2%
O&M Dental	531,242	513,811	542,663	478,363	482,595	(60,068)	-11.1%
O&M Retirement - Normal Cost	5,291,401	4,715,811	5,345,728	5,187,473	5,181,105	(164,623)	-3.1%
O&M Deferred Comp	1,956,261	1,946,946	1,990,654	2,073,898	2,378,209	387,555	19.5%
O&M Federal Medicare Tax	500,940	503,185	527,051	514,465	543,359	16,308	3.1%
O&M Other Benefits	230,292	65,124	241,571	155,820	218,315	(23,256)	-9.6%
O&M OPEB (Health) - Normal Cost	2,256,262	2,203,115	1,499,089	1,494,000	1,504,000	4,911	0.3%
O&M OPEB (Dental) - Normal Cost	156,713	132,316	153,836	134,000	135,000	(18,836)	-12.2%
O&M OPEB (Life) - Normal Cost	10,741	10,554	2,000	2,000	2,000	-	0.0%
O&M Accrued Compensated Absence (now included in Salaries)	-	-	-	-	-	-	0.0%
O&M Benefit Vacancy Factor	(1,006,000)	-	(636,000)	-	(581,000)	55,000	-8.6%
O&M Benefits (Active Employees)	\$17,095,055	\$17,239,368	\$16,430,934	\$16,316,451	\$16,628,569	\$197,635	1.2%
O&M Capitalized Administrative Overhead Credit (indirect costs associated with non-productive hours and Admin Overhead)	(\$3,979,723)	(\$4,012,147)	(\$4,448,369)	(\$4,681,539)	(\$5,083,396)	(\$635,027)	14.3%
O&M Benefits less Cap O/H Credit (Active)	\$13,115,332	\$13,227,221	\$11,982,565	\$11,634,912	\$11,545,173	\$(437,392)	-3.7%
O&M Salaries & Benefits	\$49,191,019	\$49,057,733	\$50,547,658	\$48,567,565	\$51,088,364	\$540,706	1.1%

Table 4 – Salaries, Benefits (Detailed), Retiree and Unfunded Liabilities (Continued)

Account Description	FY 2018-19 Budget	FY 2018-19 Actual	FY 2019-20 Budget	FY 2019-20 Projected	FY 2020-21 Budget	Budget to Budget Variance	Percent Variance
Capital							
Capital Salary and Benefits*	\$4,379,319	\$4,312,849	\$4,954,677	\$5,035,963	\$5,789,214	\$834,537	16.8%
Portion of Capitalized Overhead from above	3,979,723	4,012,147	4,448,369	4,681,539	5,083,396	635,027	14.3%
Capital Salary, Benefits and Capitalized Overhead	\$8,359,042	\$8,324,995	\$9,403,046	\$9,717,502	\$10,872,610	\$1,469,564	15.6%
O&M and Capital Salaries and Benefits (Active)	\$57,550,061	\$57,382,729	\$59,950,704	\$58,285,067	\$61,960,974	\$2,010,270	3.4%
OPEB UAAL / Unfunded Liabilities							
O&M OPEB (Health) - UAAL	\$4,616,204	\$4,507,467	\$2,035,911	\$2,029,000	\$2,156,000	\$120,089	5.9%
O&M OPEB (Dental) - UAAL	353,394	298,376	195,164	170,000	176,000	(19,164)	-9.8%
O&M OPEB (Life) - UAAL	130,686	128,412	115,000	115,000	119,000	4,000	3.5%
O&M OPEB (Vision) - UAAL	-	-	-	-	-	-	0.0%
Total OPEB UAAL / Unfunded Liabilities	\$5,100,284	\$4,934,255	\$2,346,076	\$2,314,000	\$2,451,000	\$104,924	4.5%
Pension UAAL / Unfunded Liabilities / Additional Contributions							
Pension UAAL / Unfunded Liabilities	\$10,720,478	\$11,206,313	\$11,186,841	\$11,254,802	\$12,126,016	\$939,175	8.4%
Pension Additional UAAL Contributions	2,500,000	2,500,000	1,250,000	1,250,000	1,250,000	-	0.0%
Total Pension UAAL / Unfunded Liabilities	\$13,220,478	\$13,706,313	\$12,436,841	\$12,504,802	\$13,376,016	\$939,175	7.6%
Total							
Total O&M Salaries & Benefits, Capital, OPEB & Pension UAAL and Additional Contributions	\$75,870,823	\$76,023,297	\$74,733,621	\$73,103,869	\$77,787,990	\$3,054,369	4.1%

* Comprised of capitalized Salaries & Benefits charged to Central San Capital projects.

Table 5 – Changes in Net Position and Fund Equity

	FY 2017-18 Actual	FY 2018-19 Actual	FY 2019-20 Projected	FY 2020-21 Projected
Total Operating Revenue	\$92,496,435	\$85,678,166	\$90,705,844	\$66,737,311
Total Non-Operating Revenues	22,542,065	24,898,986	23,407,315	22,305,505
Total Revenues	\$115,038,500	\$110,577,152	\$114,113,159	\$89,040,816
Total Operating Expenses	\$109,681,078	\$73,278,924	\$106,901,430	\$111,666,338
Non-Operating Expense - Interest	1,230,680	1,025,006	1,521,300	517,250
Total Expenses	\$110,911,758	\$74,303,930	\$108,422,730	\$112,183,588
Income Before Capital Contributions	\$4,126,742	\$36,273,222	\$5,097,429	(\$23,266,772)
Total Capital Contributions	31,760,548	46,886,850	68,958,552	84,640,730
Change in Net Position	35,887,290	83,160,072	74,055,981	61,497,958
Beginning Net Position	626,637,016	620,971,490	655,137,322	729,786,303
Restatement - Governmental Accounting Standards Board 75	(41,552,816)	-	-	-
Ending Net Position	\$620,971,490	\$704,131,562	\$729,193,303	\$791,284,261
Net Investment in Capital Assets	\$623,307,342	\$655,586,304	\$675,000,000	\$699,000,000
Restricted for Debt Service *	4,421,504	(271,370)	-	-
Unrestricted **	(6,757,356)	48,816,628	54,786,303	92,284,261
Total Net Position	\$620,971,490	\$704,131,562	\$729,786,303	\$793,284,261

* The \$4.4 million restricted for debt service for FY 2017-18 reflected the balance in the debt service reserve fund. Due to a refinancing of 2009 bonds subsequently in September 2018, this debt service reserve was eliminated during FY 2018-19.

** Central San implemented Governmental Accounting Standards Board Pronouncement No. 75 during FY 2017-18 which required a restatement to reduce beginning Net Position by \$41.6 million and resulted in a negative unrestricted Net Position balance of \$6.8 million.

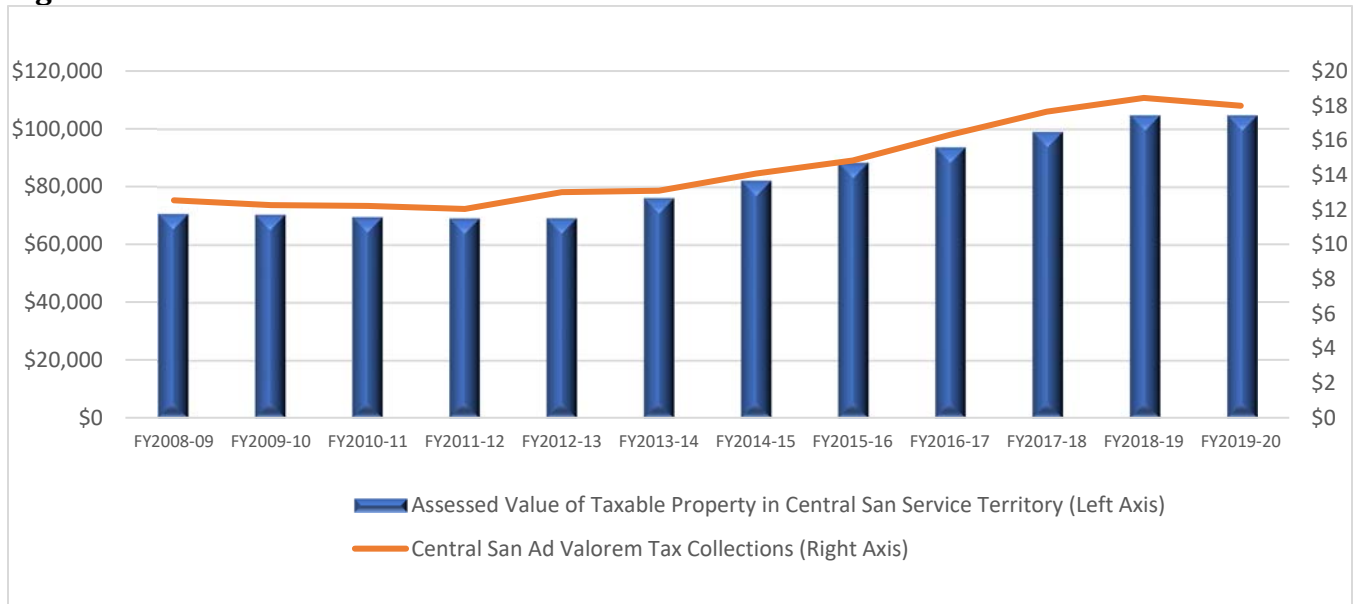
Net Position is classified into three categories: Net Investment in Capital Assets, Restricted for Debt Service, and Unrestricted. The classification is based on availability or accessibility of the resource, rather than its origin. Net position is a measure of the overall financial condition of Central San.

Over time, trends in net position provide indications of Central San's financial strength. Central San's financial condition is affected by numerous factors including financial policies, rate and spending decisions, and external factors such as overall economic trends affecting the service territory, new regulatory requirements, and accounting pronouncements.

The largest portion of Central San's net position is the investment in capital assets (e.g., land buildings, machinery, equipment, intangible assets, and sewer line infrastructure), less any related debt used to acquire those assets that are still outstanding.

The following figure shows historical Central San ad valorem property tax collections in comparison to assessed value of taxable property in the District’s service territory*. Figure 2 is provided to illustrate the general correlation between increasing property values and Central San property tax revenues.

Figure 2 – Central San Ad Valorem Tax Collections



* The chart in the FY 2019-20 budget book showed Central San ad valorem property tax collections compared to Countywide property valuations.

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Glossary

Terms and Definitions Used in the Budget Document	
Accrual Basis of Accounting	The basis of accounting under which transactions are recognized when they occur, regardless of the timing of related cash flows. An example of accrual basis occurs when an invoice is sent out for services: a receivable is booked and revenue is recorded even though no cash has been received at the time the invoice is mailed to the customer. (See Cash Basis of Accounting and Modified Accrual Basis of Accounting.)
Administration of Capital	Central San-wide and department operations costs incurred by administration support functions which are not directly charged to each capital project but allocated using a rate applied to direct labor dollars.
Ad Valorem Tax	Also referred to as Property Tax. A tax based on the assessed value of taxable property. Central San receives a portion of the ad valorem taxes levied by Contra Costa County on properties in the service area.
Amortization	The action or process of gradually writing off the initial cost of an asset, the action or process of reducing or paying off a debt with regular payments, or a period in which debt is reduced or paid off by regular payments.
Adopted Budget	A balanced financial plan for a specific period authorized by the Board for expenditure or obligation.
Amended Budget	An adopted balanced financial plan reflecting budgetary transfers that occurred since adoption of the budget. The total budget amount must stay within the Board-approved appropriation limit.
Appointment Type	Indicates the character of a position. The following are examples of appointment types for Central San: Regular, District Temporary, and Consultant.
Arbitrage	Borrowing in one market (such as bonds) at one interest rate and investing in another market (such as certificates of deposit) at a higher interest rate. Such activities are highly restricted by the federal government, and any excess interest earned in this manner is not tax-exempt and is subject to rebate to the Federal Government.
Asset	An economic resource owned by the entity that is expected to benefit future operations. Examples of assets are cash, investments, receivables, and capital or fixed assets.
Authorized Position	A position created and established by the Board.
Balanced Budget	A budget in which approved funding sources (i.e. revenues and authorized uses of excess reserves) are equal or greater to expenditures.
Balance Sheet	See Statement of Net Position, the current term.
Board of Directors	The five public officials elected at large to represent Central San's service area. Also known as the Board.
Bonds	A written promise to pay a sum of money (principal or face value) at a future date (maturity date) along with a periodic interest amount paid at a specified percentage of the principal (interest rate). Bonds are typically used to finance long-term capital improvements. Debt service payments are made to repay the bond holders. Central San's goal is to limit debt-funded capital to no more than 60% of the total Capital Program over a ten-year period.
Budget	A plan of financial operation, embodying an estimate of proposed expenditures for a given period (typically a fiscal year) and the proposed means of financing them (revenue estimates).
Build America Bonds (BABs)	A type of municipal bond created under the American Recovery and Reinvestment Act of 2009. These bonds are sold at a taxable rate rather than a lower tax-exempt rate, and Central San receives cash rebates from the U.S. Treasury to offset the higher interest cost.

Terms and Definitions Used in the Budget Document	
Capacity Fee	Also called Facility Capacity Fee, this is a charge paid at the time of connection to compensate Central San for capital facilities that provide wastewater treatment (i.e., interceptors, primary and secondary treatment facilities, and wet weather treatment plants) to new connections. See <i>Connection Fees</i> and <i>Pumping Capacity Fees</i> .
Capital	Referring to the Sewer Construction Fund.
Capital Appropriation	Board-approved funding for capital reference projects for which relatively accurate time estimates can be made. Unspent appropriations carry forward to the next fiscal year.
Capital Assets	Land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, works of art and historical treasures, infrastructure, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period.
Capital Budget	A financial plan for providing the purchase, construction, or rehabilitation of fixed assets such as equipment, facilities, and systems. The capital budget is usually enacted as a part of the complete annual budget, which includes both operating and capital outlays. The capital budget should be based on a longer-term capital improvement program (CIP).
Capital Cash Flow	Projected cash disbursements for capital projects for a given time period. The estimated capital cash flow is used to determine the amount of revenue required and the rate impacts, or the amount and timing of borrowings to meet the projected expenditure needs for a given time period.
Capital Expenditures	Expenditures related to the purchase or construction of equipment, building structures, aqueducts, and water/sewer pipelines that have a useful life greater than one year and a cost greater than \$5,000.
Capital Improvement Plan (CIP)	A plan for capital expenditures to be incurred each year over a fixed period of several future years setting forth each capital project, identifying the expected beginning and ending date for each project, the amount to be expended in each year, and the method of financing those expenditures.
Capital Labor	The portion of labor costs supporting the capital improvement program.
Cash Basis of Accounting	A basis of accounting under which transactions are recognized only when cash changes hands.
Cash Reserves	Easily liquidated cash and investments available to meet operating, capital, self-insurance, and debt service obligations. Reserves may be restricted or unrestricted. The O&M and Capital Funds Available are unrestricted cash reserves, made up of cash and investments (see <i>Funds Available</i> and <i>Funds Required</i>).
Central Contra Costa Sanitary District Facilities Financing Authority (CCCSD FFA)	A joint powers authority utilized by Central San as a long-term financing vehicle for its capital program.
Certificates of Participation (COP)	A form of financing used by municipal or government entities which allows an individual to buy a share of the lease revenue of an agreement made by these entities.
Comprehensive Annual Financial Report (CAFR)	The CAFR is prepared at the close of each fiscal year to show the actual audited condition of Central San's funds and serves as the official public record of Central San's financial status and activities.

Terms and Definitions Used in the Budget Document	
Contra Costa County Employees' Retirement Association (CCCERA)	The retirement association for 16 local agencies in Contra Costa County, including the County itself. CCCERA's retirement benefit structure is based upon the County Employees Retirement Law (CERL) of 1937, commonly referred to as the "37 Act."
CCF	One hundred cubic feet, which equals 748 gallons or one unit.
Chart of Accounts	An index of all the financial accounts in Central San's general ledger. Used as an organizational tool that helps provide a digestible breakdown of all the financial transactions Central San conducted during the fiscal year. At the highest level, the basic categories are assets, liabilities, revenues, expenses and equity.
Civil Service System	The system used for the selection, examination, employment, classification, advancement, suspension, and discharge of employees. Applies only to Regular and Intermittent employees or employees who have attained civil service status but are working in a position excluded from the civil service.
Collection System	Pipelines and pumping stations that convey wastewater from customers to the treatment plant.
Commercial Paper	Short-term financing for capital projects.
Connection Fees (Capacity Fees. Facility Capacity Fees)	A fee charged when new or additional Residential Unit Equivalents (RUE) connect to the sewer to contribute their fair share of service and facility costs. (See <i>Capacity Fees</i> and <i>Pumping Capacity Fees</i>).
Consent Decree	An agreement or settlement to resolve a dispute between two parties.
Cost of Service Study	Equitably assigns cost responsibility to customers through rates and charges developed as part of the study.
Credit Rating	A rating assigned by a nationally recognized statistical rating agency, providing an indication to creditors of the ability of Central San to meet its financial obligations when due. Central San currently has credit ratings from two firms: Standard & Poor's and Moody's. A better credit rating allows Central San to borrow at a lower cost than a less favorable credit rating.
Debt-Funded Capital	Expenditures for capital projects which are funded by bonds, state loans, or other debt.
Debt Policy	A policy adopted by the Board that discusses when and how bonds and other forms of indebtedness may be used by Central San.
Debt Service	Expenditures for interest and principal repayment on bonds or other debt.
Debt Service Coverage	The ratio of net revenues to debt service requirements, calculated in accordance with bond documents. Central San's debt policy specifies that Central San will target a debt service coverage ratio of at least 2.0x. Central San's bond covenants require at least 1.00x coverage on a "gross revenue" basis and 1.25x on a net revenue basis.
Debt Service Fund	One of four sub-funds of the enterprise fund used to account for Central San's operations. This sub-fund accounts for activity associated with the payment of Central San's long-term bonds and loans.
Defeasement	Relieving the agency of a particular liability (such as a specific bond series) by refunding the liability through an escrow or trust fund. Legally defeased liabilities do not need to be appropriated each year as the trust fund is removed from the control of the agency. (Central San defeased its 1994 debt using 1998 Revenue Refunding Bonds, and certain 2009 bonds with the 2018 Series Bonds)

Terms and Definitions Used in the Budget Document	
Deficit	The excess of expenditures or expenses over revenues during a single accounting period.
Department	A major organizational unit with overall managerial responsibility for functional programs. Central San currently has three Departments: Administration, Engineering & Technical Services, and Operations. Each Department is overseen by a Director and is comprised of several separate and distinguishable Divisions.
Depreciation	A reduction in the value of an asset with the passage of time, due in particular to wear and tear.
Distribution System	Wastewater treatment plants, storage reservoirs, pumping plants, pipelines, and appurtenances that treat and transmit water to customers.
District Code	A system of rules, which are compiled and arranged by a municipal corporation, and are adopted and used to regulate the conduct of its inhabitants and government.
District Temporary	Temporary staffing positions that are restricted to working no more than 12 months, do not receive customary benefits, and do not have civil service status.
Division	A major organizational unit of a Department responsible for providing different services to the public as well as other divisions of Central San.
Effective Utility Management (EUM)	A framework developed in 2007 by the Environmental Protection Agency and water industry leaders that indicates where effectively managed water/wastewater utilities should focus.
Encumbrance	The obligated and unspent portion of a contingent liability established through a purchase order that is chargeable to an account. It ceases to be an encumbrance when it is paid by the recording of an invoice or a reduction of the purchase order's outstanding balance occurs.
Enterprise Fund	Pursuant to the law and generally accepted accounting principles, Central San reports its financial activities in a consolidated enterprise fund in its annual financial statements. In governmental accounting, an enterprise fund is a type of proprietary fund used to report self-sustaining activities that derive the major portion of its revenue from user fees charged to external users for goods or services. For financial reporting purposes, Enterprise funds use the <i>economic resources</i> measurement focus and accrual basis of accounting used for private-sector business enterprises and not-for-profit organizations. This contrasts from "governmental funds" used by cities and counties, which use the <i>current financial resources</i> measurement focus and modified accrual basis of accounting. Central San uses one enterprise fund with four "sub-funds" (see below) to facilitate improved internal budgeting and accounting.
Expenditure	The payment of an obligation from Central San's cash amounts.
Facility Capacity Fees	See <i>Connection Fees</i> above.
Fiduciary Fund	A fund in which assets are held by a governmental unit in a trustee capacity or as an agent for individuals, private organizations, and/or other governmental units. There are four types of fiduciary funds: Pension (and other employee benefit), Investment, Private-Purpose and Agency.
Fiscal Year	The 12-month period that begins on July 1 and ends on June 30 of the following year.
Full-Time Equivalent (FTE)	An employee who works full time counts as 1 FTE.

Terms and Definitions Used in the Budget Document	
Fund	An independent fiscal and accounting entity with a self-balancing set of accounts, recording cash and/or resources together with all related liabilities, obligations, reserves, and equities which are segregated for the purpose of carrying on specific activities or attaining certain objectives. One type of government fund is an enterprise fund and is the only type of government fund used by Central San.
Fund Balance (Net Position)	Assets minus liabilities (also called net position).
Funded Position	Authorized position for which the Board has appropriated funding in a fiscal year.
Generally Accepted Accounting Principles (GAAP)	Generally Accepted Accounting Principles are the accounting rules that are required to be followed by organizations in the U.S. These Principles are established by two organizations: The Financial Accounting Standards Board for commercial and not-for-profit entities, and the Governmental Accounting Standards Board for governmental entities in the United States.
Governmental Accounting Standards Board (GASB)	Governmental Accounting Standards Board is the body that specifies the accounting rules for governmental agencies in the U.S. The Board issues GASB statements that can require significant changes to an agency's financial reporting.
GASB 45	An accounting requirement published in 2004 by the Governmental Accounting Standards Board (GASB) that addresses how the accounting and financial reporting for post-employment benefits other than pensions (OPEB) should be performed. This Statement establishes standards for the measurement, recognition, and display of OPEB expense/expenditures and related liabilities (assets), note disclosures, and, if applicable, required supplementary information (RSI) in the financial reports of state and local governmental employers.
GASB 68	An accounting requirement of the Governmental Accounting Standards Board effective in 2014 that addresses Accounting and Financial Reporting for Pensions, which revises and establishes new financial reporting requirements for most state and local governments that provide their employees with pension benefits.
General Fund Reserves	An account used to record funds that are not legally restricted for specified purposes, such as those committed to repay obligations. General Fund Reserves provide for self-insurance claims, unplanned revenue changes, working capital, workers' compensation, and unanticipated contingencies.
General Manager	The Chief Executive Officer of Central San, hired by the Board.
General Obligations (GO) Bonds	When a government pledges its full faith and credit to the repayment of the bonds it issues, those bonds are general obligation (GO) bonds. Sometimes, the term is also used to refer to bonds which are to be repaid from taxes and other general revenues.
Government Finance Officers Association (GFOA)	Government Finance Officers Association represents public finance officials throughout the U.S. and Canada; it provides best practice guidance, consulting, networking opportunities, publications, training programs, and recognition programs to its members.
Goal	The long-term continuing mission of a department, division, or program. Goals define the strategic results to be achieved and therefore indicate the relevance, permanence, scope, and effectiveness of that outcome.
Household Hazardous Waste Collection Facility (HHWCF)	The service and facility operated by Central San providing for the safe disposal of items that, in the absence of this service, could be inappropriately disposed of through the sewer system, risking pollution of the Bay.

Terms and Definitions Used in the Budget Document	
Infrastructure	The tangible physical components that ensure delivery of reliable, high-quality wastewater service now and in the future. Typical components are reservoirs, pumping plants, pipelines, and anaerobic digesters.
Internal Control	The plan of organization and all other coordinated methods and procedures adopted to safeguard assets; check the operations data; promote operational efficiency, economy, and effectiveness; and encourage adherence to prescribed managerial policies that will accomplish the objectives of the organization.
InfoMaster®	GIS-based Asset Integrity Management and Capital Planning Tool
InfoWorks®	New Sewer System Hydrodynamic Model
Key Performance Indicators (KPI)	Indicators with specific targets that measure how well Central San is progressing in achieving its goals under the Key Metrics of the Strategic Plan.
Liability	A debt of the business; an amount owed to creditors, employees, government bodies, and others; a claim against assets.
Modified Accrual Basis of Accounting	The accrual basis of accounting adapted to the government fund type under which revenues are recognized when they become both "measurable" and "available to finance expenditures of the current period." Expenditures are generally recognized when the related fund liability is incurred.
Modified Cash Flow Basis	Income and expense accounting method that records revenue when cash is received and records expenses when cash is paid.
Net Assets	See <i>Fund Balance</i> .
One-Time Revenue	A revenue that cannot reasonably be expected to continue, such as a single-purpose federal grant, an interfund transfer, or use of a reserve. Continual use of one-time revenues to balance the annual budget can indicate that the revenue base is not strong enough to support current service levels.
Operating Appropriation	Board-approved funding for operating expenses. Unspent appropriations do not rollover to the next fiscal year.
Operating Budget	A financial plan to fund ongoing operations costs incurred to operate Central San, excluding the building of capital assets, which are included in the capital budget.
Operating Deficit	When current expenditures exceed current revenues.
Operating Departments	The three units of Central San that carry out the mission of the agency: Administration, Engineering & Technical Services, and Operations.
Operating Labor	The portion of Central San's labor costs supporting day-to-day operations.
Operating & Maintenance (O&M) Fund	One of four sub-funds of the enterprise fund used to account for Central San's operations. This sub-fund provides for the general operations, maintenance, and administration of Central San. Also referred to as the "Running Expense" fund, which is the legal name of this fund pursuant to the Sanitary Act of 1923.
Organization	A group of staff organized into one unit or section working under a division or department. This is the lowest level at which operating budgets are developed.
Other Post-Employment Benefits (OPEB)	In addition to pensions, many state and local governmental employers provide other post-employment benefits (OPEB) as part of the total compensation offered to attract and retain the services of qualified employees. OPEB includes post-employment healthcare, as well as other forms of post-employment benefits (e.g., life insurance) when provided separately from a pension plan.
Other Purchased Services	Category of expenses at the highest "grandparent" roll-up level for financial and budgetary reporting purposes in the new chart of accounts. Includes services purchased not connected to property. Includes "parent" roll-up expense categories such as: professional services, technical services, and other services (i.e. administrative, other public agency services, etc.).

Terms and Definitions Used in the Budget Document	
Overhead (Administrative Overhead and Non-Work Hours)	Administrative Overhead and Non-Work Hours include indirect costs and the value of time off (holidays, sick leave, vacation, etc.). These costs are expressed as a percent of salary. For Central San accounting, salaries and benefits are separate from overhead (whereas consulting firms typically view employee benefits in "overhead"). Indirect costs are costs that are incurred for a common or joint purpose benefiting more than one cost objective or task and are not readily assignable.
Pay as You Go (or PAYGO)	A term used to describe paying expenses as they are incurred, as opposed to pre-paying, pre-funding, or setting money aside for future expenses. Used primarily to refer to the strategy of paying for capital projects.
Public Employees' Pension Reform Act (PEPRA)	California's Public Employees' Pension Reform Act established a new less costly retirement tier for employees newly hired or which did not have prior service with a reciprocal retirement system prior to January 1, 2013.
Performance Measures	Specific quantitative measures of work performed within an activity or program (e.g., total miles of pipes cleaned). Also, a specific quantitative measure of results obtained through a program or activity (e.g., reduced incidence of vandalism due to a new street lighting program).
Program	Broadly defined group of related reference projects combined to facilitate planning and decision making.
Project or Reference Project	Project level identified in the CIP comprised of a discrete set of tasks that can be carried out independently but require coordination with other projects to ensure overall program success. Appropriation requests and projected cash flows are authorized at this level.
Proposed Budget	The recommended balanced financial plan for a specific period of time submitted for consideration to the Board prior to the start of the Proposition 218 notification process.
Proprietary Fund	Proprietary funds are used to account for a government's ongoing organizations and activities that are similar to businesses found in the private sector. These funds are considered self-supporting in that the services rendered by them are generally financed through user charges or on a cost reimbursement basis. There are two types of proprietary funds: Enterprise and Internal Service.
Pumping Capacity Fees	A component of connection fees for units that are located in areas tributary to one or more of Central San's pumping stations. (See <i>Capacity Fees</i> and <i>Connection Fees</i> .)
Purchased Property Services	Category of expenses at the highest "grandparent" roll-up level for financial and budgetary reporting purposes in the new chart of accounts. Includes services purchased to operate, repair, maintain, and rent property owned or used by Central San. Includes "parent" roll-up expense categories such as: repairs & maintenance, hauling & disposal, security, rentals, cleaning and construction.
Rate (or Cash) Funded Expenditures	Annual operations and maintenance expenses as well as the portion of the capital program that are funded from current revenues.
Rates	Charges for services to customers that cover the costs of such services while allowing Central San to remain reserve neutral.
Rate Stabilization Fund Reserve	Restricted-use reserves in the O&M and Sewer Construction Funds to help mitigate against sewer service charge increases that may otherwise be caused by unforeseen volatility in operational expenses and/or revenues. Deposits to and from this restricted-use reserve must be authorized by the Board. Amounts placed in these reserve accounts are in excess of and separately distinguishable from minimum working capital reserves of the O&M and Sewer Construction Funds specified by the Reserve Policy.

Terms and Definitions Used in the Budget Document	
Regular Position	Full-time, civil service position.
Fiscal Reserves Policy	A document outlining minimum reserve thresholds, identifying current and potential reserves, and explaining what reserves are, or will be used for.
Reserves	See <i>Cash Reserves</i> .
Residential Unit Equivalent (RUE)	A measure of sewage volume and strength equivalent to a typical residential household.
Restricted Reserves	Monies that, by action of the Board, State Law, or Bond Covenants, are required to be spent on specific programs or held for specified purposes.
Restricted Revenue	Monies that are legally earmarked for a specific use, as may be required by state law, bond covenants, or grant requirements. For instance, capacity fees must be used within the Sewer Construction Fund; the revenue cannot be transferred to O&M.
Revenue	Monies received from rates, charges, and other sources. Revenues are used to pay for expenditures.
Revenue Bonds	Bonds (instruments and indebtedness) issued by the public sector to finance a facility or equipment purchase, which, unlike general obligation bonds, are not backed by the full faith and credit of the government. Instead, their revenues are generated from the facility or equipment that they finance. Because they are state or local government bonds, their interest earnings are typically tax-exempt under the Internal Revenue Code.
Revenue-Funded Capital	Expenditures on capital projects which are funded by revenues of Central San rather than by debt, grants, or other funds.
Running Expense Fund	Legal term used by the Sanitary District Action of 1923 (<i>California Health & Safety Code</i> section 6792) to fund to be used for ongoing running expenses of Sanitary Districts. Synonymous with Operating & Maintenance (O&M) Fund.
Service Area	The cities and areas served by Central San, including Lafayette, Orinda, Moraga, Danville, Alamo, Walnut Creek, Pacheco, and portions of San Ramon and Martinez. Concord's and Clayton's residents' and businesses' wastewater is collected by that City and treated by Central San through a contractual arrangement; therefore, Concord and Clayton are considered to be in Central San's service area. (Also called Service Territory).
Self-Insurance Fund	One of four sub-funds of the enterprise fund used to account for Central San's operations. This fund covers the cost of claims not covered by Central San's insurance coverage, the cost of insurance premiums, interest earnings on the fund, and other associated costs.
Sewer Construction (Capital) Fund (S/C)	One of four sub-funds of the enterprise fund used to account for Central San's operations. This sub-fund provides for the treatment plant and collection system renewal and replacement expenditures, as well as office facilities renewal, vehicle and equipment replacement, information systems replacement, and miscellaneous capital expansion needs.
Strategies, Initiatives, Metrics (SIM)	The key components of the Strategic Plan that specify the overall goals in the coming years, consisting of the Strategies (highest level objectives), Initiatives (how the strategies will be achieved), and Metrics (measurements of progress).
Sinking Fund	A method by which a government may set aside money over time to pay for a project or obligation.
Staffing Plan	The classes and positions that have been authorized by the Board and have been determined necessary to carry out Central San functions. Central San's current staffing level is based on a 2015 Organization and Staffing Plan, which resulted from a study conducted by Raftelis Financial Consultants, recommending 290 FTE positions.

Terms and Definitions Used in the Budget Document	
Strategic Plan	The document that provides a blueprint for how Central San will respond to future challenges and changing priorities over a two-year period. It outlines specific goals, strategies, and objectives to guide Central San and establishes criteria to measure progress.
Strategy	Highest level of capital improvement activities, generally a grouping of related programs. Represents key capital objectives as defined in the Mission Statement, Strategic Plan, and Board policies and directives.
Statement of Net Assets (Balance Sheet prior to GASB 34)	A statement reporting the present financial position of an entity by disclosing the value of its assets, liabilities, and equities as of a specified date. Assets minus liabilities equal fund balance (also called Net Assets).
Sub-Funds	<p>As noted previously, Central San is considered one enterprise fund with four “sub-funds” to facilitate improved internal budgeting and accounting. The sub-funds used and included in this budget document are as follows:</p> <ul style="list-style-type: none"> • Running Expense Sub-Fund - (also referred to as Operations and Maintenance, O&M, or R/E) accounts for the general operations of Central San. Substantially accounts for all operating revenues and expenses. • Sewer Construction Sub-Fund - (also referred to as Capital or S/C) accounts for non-operating revenues that are to be used for acquisition or construction of plant, property, and equipment. • Self-Insurance Sub-Fund - (also referred to as S/I) accounts for interest earnings on cash balances and cash allocations from other funds, temporary investments, and costs of insurance premiums and claims not covered by Central San's insurance policies. • Debt Service Sub-Fund - A sub-fund that accounts for activity associated with the payment of Central San's long-term bonds and loans.
Subsidy Payment	Relating to Build America Bonds (BABs), the subsidy payment represents funds from the federal government to offset part of the interest cost paid by Central San as the issuer of bonds. The BABs were issued in 2009 in lieu of traditional tax-exempt debt. Central San pays a taxable rate of interest to investors, investors pay the Federal Government Income Tax on that interest, and the federal government remits a specified percentage of the interest payment to Central San.
Supplies & Materials	Category of expenses at the highest “grandparent” roll-up level for financial and budgetary reporting purposes in the new chart of accounts. Includes amounts paid for items that are consumed or deteriorated through use or lose their identity through fabrication or incorporation into different or more complex units or substances. Includes “parent” roll-up expense categories such as: utilities & fuel, chemicals, and general supplies.
Unfunded Actuarial Accrued Liability (UAAL)	The difference between the actuarial accrued liability and the actuarial value of assets accumulated to finance that obligation. This is a term used in connection with pension plans or commitments to provide other post-employment benefits (OPEB) to employees.

Terms and Definitions Used in the Budget Document	
Unfunded Liability	Liability that has been incurred during the current or a prior year, that does not have to be paid until a future year, and for which reserves have not been set aside. This is similar to a long-term debt in that it represents a legal commitment to pay at some time in the future.
Vacancy Factor	Recognizing that not all Funded Positions will be occupied throughout a fiscal year, this allowance reduces budgeted funding to reflect such vacancies. While positions are vacant, some costs are incurred on occasion for temporary staff or consulting resources, reducing the vacancy factor.
Working Capital	The capital of a business which is used in its day-to-day trading operations, calculated as the current assets minus the current liabilities. The measure of working capital indicates the relatively liquid portion of total enterprise fund capital, which constitutes a margin or buffer for meeting obligations.
Working Capital Reserves	<p>The amount of working capital deemed to be unrestricted and liquid to meet current demands. Central San must strive to maintain “working capital reserves” in excess of the Minimum Working Capital Reserves (see definition above) specified in the Fiscal Reserves Policy.</p> <p>Unlike commonly defined “working capital”, the calculation of “working capital reserves” excludes certain current assets with strict purpose restrictions (i.e. Section 115 Prefunding Pension Trust assets, Rate Stabilization Fund Reserve Account, etc.) and other current assets that are not expected to be quickly converted to cash or consumed in operations (i.e. parts and supplies, loans receivable). Generally, the calculation of working capital reserves incorporates the following current assets and liabilities: unrestricted cash and investments, receivables, prepaid expenses, trade payables.</p>
Working Capital Reserve Target	<p>Central San’s Fiscal Reserves Policy specifies minimum working capital reserve targets for its O&M and Sewer Construction Funds. These policy targets are adjusted annually as part of the budget adoption process and are based on each fund’s respective operating budget as follows:</p> <ul style="list-style-type: none"> • O&M Fund – Five months (41.7%) of gross operating expenses at the start of each fiscal year. • Sewer Construction Fund – One half (50%) of the annual Capital Improvement Budget at the start of each fiscal year, excluding capital projects that are to be funded with debt proceeds. <p>The working capital reserve target is used in the 10-year planning process as the amount net liquidity that is needed on June 30 of any fiscal year to meet cash flow needs through mid-December, when the first sewer service charge and property tax payments are received from Contra Costa County. At the entity-wide aggregate level this includes working capital reserves of the O&M and Sewer Construction funds but excludes restricted balances held in the Self-Insurance and Debt Service funds.</p>

Acronyms and Abbreviations

Acronyms and Abbreviations Used in the Budget Document	
Board	Board of Directors
CAD	Contractual Assessment Districts, Computer Aided Design
CalPERS	California Public Employees' Retirement System
CCERA	Contra Costa County Employees' Retirement Association
CCTV	Closed-Circuit TV
CCWD	Contra Costa Water District
Central San	Central Contra Costa Sanitary District
CEQA	California Environmental Quality Act
CIB	Capital Improvement Budget
CIP	Capital Improvement Plan -- covers 10 years
CIP	Capital Improvement Program
CIPP	Cured-in-Place Pipe
DERWA	Dublin San Ramon Services District - East Bay Municipal Utility District Recycled Water Authority
ERP	Enterprise Resource Planning
FCD	Flood Control and Water Conservation District
FY	Fiscal Year - July 1 through June 30
GASB	Government Accounting Standards Board
GFOA	Government Finance Officers Association
HHW	Household Hazardous Waste
IT	Information Technology
MGD	Million Gallons per Day
MPR	Multi-Purpose Room
O&M	Operations & Maintenance
OPEB	Other Post-Employment Benefits
PLC	Programmable Logic Controller
POB	Plant Operations Building
POPEB	Other Post-Employment Benefits
RAMPCAP J100	Risk Analysis and Management for Critical Asset Protection
SCB	Solids Conditioning Building
SIF	Self-Insurance Fund
SSC	Sewer Service Charge
SSO	Sanitary Sewer Overflow
Ten-Year CIP	Ten-Year Capital Improvement Plan
UV	Ultraviolet
VFD	Variable Frequency Drives