



CENTRAL SAN

STRATEGIC PLAN ANNUAL REPORT

FISCAL YEAR 2018-19



RESPONSIBLE, INNOVATIVE, AND CUSTOMER FOCUSED

MESSAGE FROM THE GENERAL MANAGER

As fiscal year (FY) 2018-19 comes to a close at the Central Contra Costa Sanitary District (Central San), we reflect upon the accomplishments and progress made during the first year of executing our FY 2018-20 Strategic Plan. This Plan is founded in the six Goals set by our Board of Directors and the 17 Strategies, 45 Initiatives, and 58 Metrics that drive our performance and allow us to measure our success.

I am pleased to report that we are successfully fulfilling our FY 2018-20 Strategic Plan, setting us up to continue into the second year. As we evaluate our progress, we will begin the formation of the next Strategic Plan for FY 2020-22. Some of the highlighted accomplishments from FY 2018-19 include the following:



RECEIVED THE NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES (NACWA) PEAK PERFORMANCE PLATINUM AWARD FOR 21 CONSECUTIVE YEARS OF 100% COMPLIANCE WITH OUR TREATMENT PLANT WASTEWATER DISCHARGE PERMIT



UPGRADED BAR SCREENS IN OUR HEADWORKS FACILITY, WHICH REMOVE 276 TONS OF PLASTIC AND DEBRIS PER YEAR, ALLOWING US TO TREAT THE WATER MORE EFFICIENTLY



REPLACED 6 MILES OF NEIGHBORHOOD SEWER PIPES TO PROTECT AGAINST SANITARY SEWER OVERFLOWS AND MAINTAIN THE INFRASTRUCTURE THAT KEEPS THE WATER FLOWING BENEATH THE GROUND



REDUCED SANITARY SEWER OVERFLOWS (SSOs) TO 30 (OR 1.9 SPILLS PER 100 MILES OF PIPELINE)



SWITCHED TO CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM (CALPERS) HEALTH BENEFITS FOR EMPLOYEES AND RETIREES, SAVING **\$5.8 million** ANNUALLY, EFFECTIVE JULY 2019



HOSTED THE FOURTH SESSION OF OUR CITIZENS ACADEMY, CENTRAL SAN ACADEMY, WITH **40** PROGRAM GRADUATES



FORMALIZED AN OPTIMIZATIONS PROGRAM TO IDENTIFY OPPORTUNITIES FOR INCREASED EFFICIENCY AND TO ESTABLISH A FRAMEWORK FOR TRACKING AND COMMITTING TO INNOVATIONS AND CONTINUOUS IMPROVEMENT. THIS YEAR, STAFF ACROSS CENTRAL SAN WORKED ON APPROXIMATELY **50** OPTIMIZATION PROJECTS, NOT INCLUDING **28** "DON'T JUST FIX IT; IMPROVE IT" ACTIONS COMPLETED BY PLANT MAINTENANCE STAFF.

As we move into FY 2019-20, we aim to complete the tasks set forth in our FY 2018-20 Strategic Plan and simultaneously look forward to the following two fiscal years as we create our FY 2020-22 Plan. This will serve as the road map for our organization to continue providing critical service to protect our customers' health and environment.

We take pride in our role in the community as environmental stewards and aim to deliver our critical service with excellence while providing the highest value to our customers. We will renew our commitment to successfully execute our mission, provide responsive customer service, continuously improve through optimization and innovation, act in a fiscally responsible manner, and remain disciplined and focused on being a world-class organization.

ROGER S. BAILEY
GENERAL MANAGER

ABOUT CENTRAL SAN

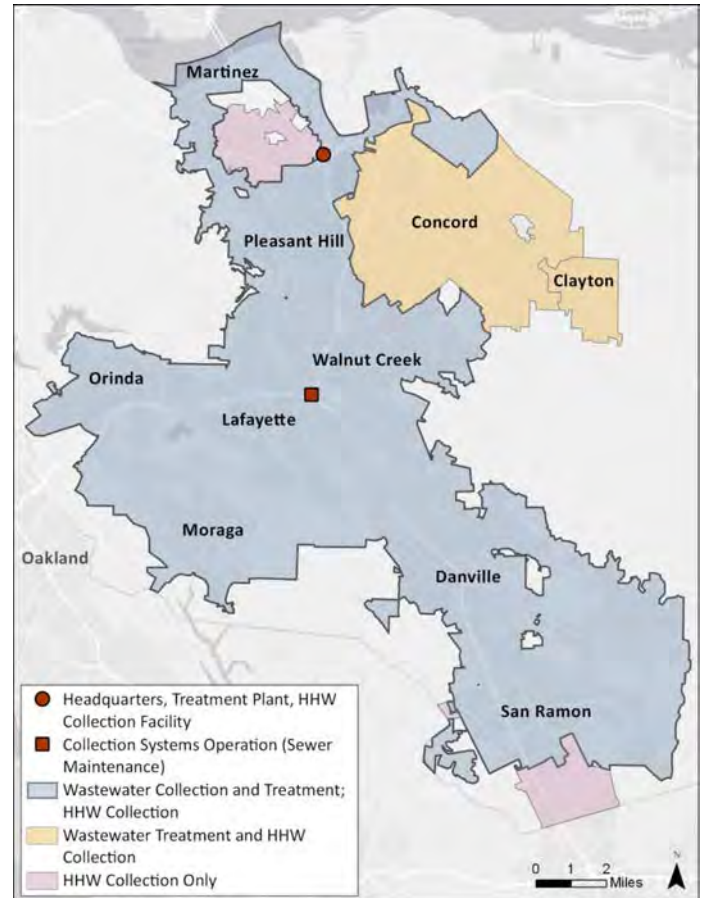
A SPECIAL DISTRICT RESPONSIBLE FOR THE COLLECTION AND TREATMENT OF WASTEWATER FOR NEARLY 500,000 RESIDENTS AND MORE THAN 3,000 BUSINESSES

Established in 1946, Central San is headquartered in Martinez, California, approximately 30 miles east of San Francisco. Central San serves the communities pictured in the service area map on the right.

Central San has 291 budgeted full-time employees led by a General Manager, a Deputy General Manager, two Department Directors, and 13 Division Managers.

BEYOND WASTEWATER TREATMENT

Since 1997, Central San has operated a Household Hazardous Waste Collection Facility (HHWCF) that serves approximately 24,000 residential and small business customers, keeping more than two million (M) pounds of hazardous waste per year out of landfills and waterways. Central San also operates a Residential Recycled Water Fill Station to provide customers with recycled water at no additional charge.



CENTRAL SAN IN NUMBERS

1,540

MILES OF SEWER PIPELINES

35 MILLION GALLONS OF WATER CLEANED DAILY

18 PUMPING STATIONS

196

MILLION GALLONS OF RECYCLED WATER DISTRIBUTED EACH YEAR

MISSION

To protect public health and the environment



VISION

To be a high-performance organization that provides exceptional customer service and regulatory compliance at responsible rates

PEOPLE

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

PRINCIPLES

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

COMMUNITY

- Value water sector partners
- Foster excellent community relationships
- Be open, transparent, and accessible
- Understand service level expectations
- Build partnerships

VALUES



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



ABOUT THE STRATEGIC PLAN

The FY 2018-20 Strategic Plan sets forth the big-picture objectives (the six Goals depicted below) and lays out a plan to achieve those Goals through a series of Strategies and Initiatives, whose performance can be measured by the completion of Key Success Measures and Metrics. The Strategic Plan is reviewed every two years to evaluate new objectives and adjust metrics to challenge staff to perform optimally.



IN NUMBERS

6 GOALS

show Central San's priorities for running an effective, efficient, responsible utility in service to its customers and the environment. These are set by the Board and are the foundation upon which the Plan is created.

17 STRATEGIES

explain actions that can be taken during FY 2018-20 to fulfill the Goals.

45 INITIATIVES

demonstrate what can be done to further the Strategies.

58 METRICS

provide targets for performance that can help measure how well the Strategic Plan is being fulfilled.

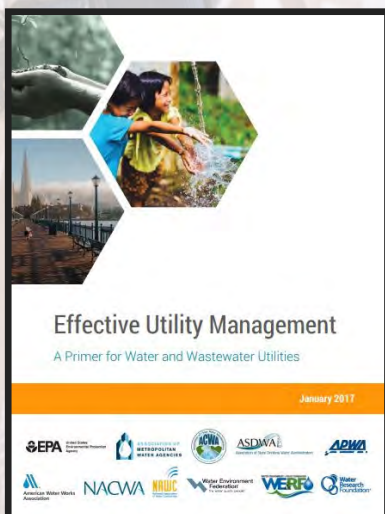
EFFECTIVE UTILITY MANAGEMENT

THE FRAMEWORK FOR THE STRATEGIC PLAN

In creating the Strategic Plan, Central San utilized the Effective Utility Management (EUM) framework, put together by the Environmental Protection Agency and a selection of water sector associations. This framework is regarded as the industry standard for strategic planning and performance metrics monitoring.

The framework consists of 10 “key attributes”: a set of reference points intended to help effectively managed and high performing wastewater utilities keep a balanced focus on all important operational areas.

Central San aligned each Strategy with at least one of the 10 EUM attributes listed on the right. This ensures that priorities are in line with best management practices, and all facets of Central San's operations are addressed.



10 KEY ATTRIBUTES

PRODUCT QUALITY

CUSTOMER SATISFACTION

EMPLOYEE AND LEADERSHIP
DEVELOPMENT

OPERATIONAL OPTIMIZATION

FINANCIAL VIABILITY

INFRASTRUCTURE STRATEGY
AND PERFORMANCE

ENTERPRISE RESILIENCY

COMMUNITY SUSTAINABILITY

WATER RESOURCE
SUSTAINABILITY

STAKEHOLDER
UNDERSTANDING AND
SUPPORT



PROVIDE EXCEPTIONAL CUSTOMER SERVICE AND MAINTAIN AN EXCELLENT REPUTATION IN THE COMMUNITY

To be a wastewater utility of excellence, Central San believes in building and maintaining trusted relationships with its customers.

Build External Customer Relationships and Awareness

Central San provides a high level of service through responsive, accessible, and transparent communications.

Communicating with Customers

- Hosted **40** participants in the fourth session of the **Central San Academy**, a program which invites members of the public to learn about Central San’s mission and how it is fulfilled via a combination of classroom presentations, live demonstrations, group activities, and a facilities tour.
- Developed a new industry standard by **updating the Proposition 218 Notice** to customers that provides easy-to-understand language about potential rate increases using maps, graphics, and photos to highlight the work of Central San.
- Performed **customer surveys** to better understand satisfactory service, communication needs, and program awareness.

Social Media Engagement

- Drove **social media engagement to an all-time high** of **>10,000** views in less than 3 weeks on YouTube (that video now has >15,000 views total) by engaging in the Wipes Clog Pipes educational awareness campaign.
- Continued to **increase the number of followers and impressions** across all social media platforms.
- Created **“Tenant Tips”** outreach material that will be utilized statewide in apartment and tenant agreements, reducing impacts to sewer systems across California
- Produced and aired a **public service announcement** which promoted the recycling of cooking oil at the HHWCF and reached **45%** of the service area by airing **522** times across cable networks.
- Produced a **Maintaining a Reliable Infrastructure video** to showcase the value of Central San’s skilled technicians in the treatment plant and Central San’s commitment to infrastructure replacement.

Providing High-Quality Customer Service

- Created an **interactive map** on www.centernalsan.org for visitors to view capital improvement work on the collection system.
- Began **livestreaming Board meetings** on www.centernalsan.org.
- Responded to **377 customer service phone calls** for assistance with sewer-related issues.
- Received and cleared over **28,700 Underground Service Alert locating requests** on time.
- Oversaw over **59,000 visits to the HHWCF and Residential Recycled Water Fill Station** by residents, small businesses, reuse customers, retail partners, and fill station users.



PROVIDE EXCEPTIONAL CUSTOMER SERVICE AND MAINTAIN AN EXCELLENT REPUTATION IN THE COMMUNITY



Foster Employee Engagement and Interdepartmental Collaboration

Keeping employees well informed and engaged with the mission of Central San helps staff to provide better customer service, both internally and externally.

- Continued to publish the *Lateral Connection* monthly employee **newsletters** to share information on Central San initiatives and events.
- Updated the **Operations and Capital Projects Schedule**, which tracks major equipment replacement timelines and other critical information, facilitating coordination between the two groups.
- Held cross-divisional **Records Retention meetings** to collaboratively update the retention schedules.
- Continued to hold **cross-divisional committee meetings**, including the Information Technology (IT) Leadership Committee, Succession Planning Committee, and Employee Activities Organization.

Maintain a Strong Reputation in the Community

Central San aims to be known for its high-quality customer service and to be held in high regard, not just by local stakeholders and customers, but also by industry peers.

- Received **high customer satisfaction ratings** for sewer renovation projects in high-traffic areas
 - 👍 **95%** for the Walnut Creek Sewer Renovations, Phase 12 construction project
 - 👍 **97%** for the South Orinda Sewer Renovations, Phase 6 construction project
 - 👍 **90%** for the North Orinda Sewer Renovations, Phase 7 construction project.
- Board Members continue to **present at council meetings** and **attend interagency events** such as the Contra Costa Mayor's Conferences, East Bay Leadership Council events, California Special Districts Association chapter meetings, and other community-based events with chambers of commerce.
- General Manager **presented to the Contra Costa Taxpayers Association**.
- Staff reached over **2,700** customers via **speaker's bureau and facilities tours**.
- Staff has taken roles in various professional organizations, helping Central San participate in knowledge-sharing conversations, influence policy changes that protect its stakeholders' interests, and develop relationships with industry peers.
 - ◇ General Manager participated in the **American and Global Water Summits** and a **Leading Utilities of the World Workshop**, where he presented on Central San's Asset Management and Plant Maintenance Programs.
 - ◇ Associate Engineer served as **President of the San Francisco Bay Section (SFBS) of the California Water Environment Association (CWEA)**.
 - ◇ Safety Officer served as **Chair of the Safety Committee of the SFBS of the CWEA**.



📍 Objectives for FY 2019-20

- 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 customers.
- Continue to **invest in informative public and student education programs** to communicate the mission of Central San.
- Distribute **employee engagement survey** and implement findings.
- **Renew Transparency Certificate of Excellence** from the California Special Districts Leadership Foundation.
- **Update the 2014 Standard Specifications for Design and Construction** to provide more current information to customers and contractors.
- **Enhance the Board Room audio/visual equipment** to improve the meeting recordings.



Building on a Strong Foundation of Student Education Programs

Central San has expanded student education programs aimed at the youth of our population. This builds a better customer — a conscious customer — to reduce impacts on infrastructure and the environment and to support Central San’s mission, vision, and values.

These programs increase the quality and quantity of educational programming, support student career pathways, and position Central San as a wastewater and environmental leader in the community. They were designed to meet student, teacher, and state needs; expand offerings for all grade levels; align with new state and federal standards and frameworks; increase hands-on learning for students; create opportunities outside the classroom; and build Central San’s educational professional network.



SEWER SCIENCE

A 5-day classroom lab where over **1,500 high school students** test wastewater through the entire treatment process. This program is supported in **53** classrooms across **6** high schools.



MARINE SCIENCE INSTITUTE (MSI) DELTA DISCOVERY VOYAGE

Hands-on learning aboard MSI’s research vessel educating over **1,700 5th-graders** on where their water comes from and where it goes. **25** elementary schools in Central San’s service area participated this year.

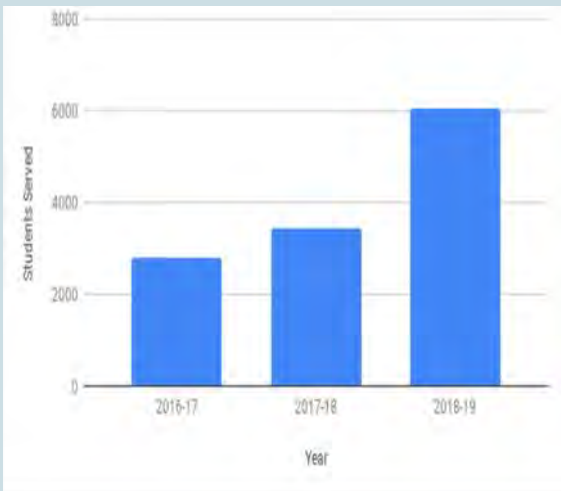
WATER WIZARDS

A classroom program teaching over **1,400 3rd, 4th, and 5th graders** how water moves from their homes to Central San’s treatment facility. This program is supported in **17** schools and **57** classrooms.



PIPE PROTECTORS

A newer program where over **1,100 kindergarten, 1st, and 2nd graders** learn what happens to their water after it goes down the drain. After being launched in **17** schools and **42** classrooms, the program has become so popular that Central San has had to **revise its current contract to keep up with the demand.**



This FY, nearly **6,000** students were served in these programs.

- Sewer Science: 53 courses, 1,590 Students
- Delta Discovery: 67 voyages, 1,722 Students
- Water Wizards: 57 classes, 1,425 Students
- Pipe Protectors: 42 classes, 1,135 Students





This FY, Central San collaborated with local educators to grow its programs to reach even more students and produced videos that make environmental messaging fun with characters like the Pipe Protectors. New programs include the following:

SEWER SCIENCE 2.0

A multi-day classroom lab whose curriculum aligns with Next Generation Standards, adds more hands-on learning, and has expanded programming from Sewer Science for **6th, 7th, and 8th graders**, including subject-specific curriculum.



KITCHEN SEWER SCIENCE

A kitchen-classroom learning experience for **non-profit, high school, and college culinary students** to help them understand how to keep fats, oils, and grease out of the sewer. This program supports best management practices for current and future restaurant employees to protect Central San's infrastructure and prevent SSOs.



TEACHER TRAINING ACADEMY

A three-day curriculum training for local **science teachers** to learn about and use Central San's educational resources, providing more classrooms to pilot new curricula in the future, and integrating Central San as part of the curricular infrastructure of the schools in the service area.



ADVENTURES WITH TOOT: AN EDUCATIONAL VIDEO



Screened at Water Environment Federation's Technical Exhibition and Conference (WEFTEC) in October 2018



Won the California Public Information Officers (CAPIO) Excellence in Public Information and Communication Award for Video Production – Long Form



Won the Communicator Awards presented by the Academy of Interactive & Visual Arts

- 2019 Award of Excellence – Craft Category – Best Animation
- 2019 Award of Distinction – Educational Video





An Award-Winning Organization

Central San is honored to be recognized by industry organizations and peers for its practices, achievements, and extraordinary staff.



COLLECTION SYSTEM

- First Place — CWEA 2018 Large Collection System of the Year in the Bay Area
- Second Place — CWEA 2018 Large Collection System of the Year in the State of California



WASTEWATER TREATMENT

NACWA Peak Performance Platinum Award, recognizing 21 consecutive years of 100% compliance with the treatment plant wastewater discharge permit



SOCIAL MEDIA ENGAGEMENT

- CWEA Award for Community Engagement and Outreach — Best Use of Social Media
- CWEA Photo of the Year



PLANT MAINTENANCE

2018 Uptime Award for Best Reliability Engineering for Maintenance Program from Reliabilityweb.com



FINANCIAL REPORTING

- Government Finance Officers Association (GFOA) Distinguished Budget Award for FY 2018-19 Budget
- GFOA Certificate of Achievement for Excellence in Financial Reporting for the Comprehensive Annual Financial Report (18th consecutive year)



INFORMATION TECHNOLOGY

Municipal Information Systems Association of California (MISAC) Award for Excellence in IT Practices



PURCHASING

Achievement of Excellence in Procurement Award, recognizing organizational excellence in public purchasing (8th consecutive year)



DEDICATED STAFF

- CWEA Mechanical Technician Person of the Year — Machinist Bill Bowers
- CWEA Andy Stamatelos Special Service Award — Senior Plant Operator Nick Hansen, recognizing outstanding service to the SFBS



PROVIDE EXCEPTIONAL CUSTOMER SERVICE AND MAINTAIN AN EXCELLENT REPUTATION IN THE COMMUNITY



PERFORMANCE IN KEY METRICS

Metric	Target	Performance
Average onsite response time for collection system emergency calls, during working hours	<20 minutes	30.3 minutes
Average onsite response time for collection system emergency calls, after hours	<40 minutes	34.2 minutes
Average customer service rating for emergency calls	≥3.8 out of 4.0	3.9 out of 4.0
Median customer satisfaction rating on construction projects	>95%	89%
Median customer satisfaction rating on permit counter interactions	>95%	100%
Number of students served by education programs	>4,000 per year	6,056
New employees attending annual customer service training within 6 months of employment	100%	100%
Participants in Plant/HHW Facility tours and District presentations	>500	2,756
Participants in citizens academy, Central San Academy	>30 per session	40
Purchasing internal customer survey rating of satisfactory or better	≥70%	100%
Awards or recognitions achieved	10	13

Legend	
Target met	Performance met or exceeded the target
Work in progress/ Stretch goal	Performance fell short of the target, which is a stretch goal because <ul style="list-style-type: none"> • Current and past performance is not within reach of the target, and/or • Performance is affected by circumstances out of our control
Work in progress	Performance fell short, but within reach, of the target

GOAL TWO



STRIVE TO MEET REGULATORY REQUIREMENTS

The primary function of Central San is to clean wastewater to protect the health and safety of the community. It is not a responsibility that is taken lightly.

Strive to achieve 100% permit compliance in air, water, land, and other regulations

Central San is required to comply with hundreds of permits as part of its operation.



Received the **NACWA Peak Performance Platinum Award** for the **21st** consecutive year, recognizing **100%** compliance with Central San's wastewater discharge permit.

- Maintained 2018 anthropogenic **greenhouse gas (GHG) emissions below the Cap and Trade inclusion threshold.**
- Evaluated preliminary treatment plant health risks in preparation for **compliance with Bay Area Air Quality Management District (BAAQMD) Rule 11-18.**
- Performed **root cause analyses** on incidences of non-compliance with air permit requirements.
- Completed **34** mandatory **recycled water cross-connect tests.**
- Communication Services and Intergovernmental Relations Manager is heading **customer outreach support on Assembly Bill 1672, supporting labeling on flushable wipes.**
- Environmental and Regulatory Compliance Division Manager served as **Chair of the Bay Area Clean Water Agencies' (BACWA) Executive Board**, and staff served in leadership roles on associated committees.

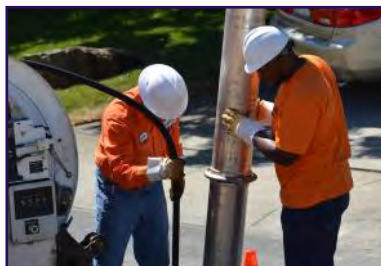
Strive to minimize the number of SSOs

Central San hit an all-time low of 28 overflows in calendar year 2018, but that does not mean the job is complete. Collection system crews continue to work to reduce spills.



Awarded **First Place** — **CWEA 2018 Large Collection System of the Year in the Bay Area.**

- Responded to **30 SSOs** (1.95 overflows per 100 miles).
- Cleaned **797 miles** of sewers.
- Completed **19,066 work orders** on schedule **98.6%** of the time.
- Performed **20%** of all cleaning work on **"hotspots."**
- Closed circuit **televised 205 miles** of sewers.





Comply with all federal, state, and local regulations related to District administration

In addition to permits governing discharge and the treatment process, Central San—as a local government agency—has administrative regulations to follow.

- Conducted **training** on harassment, ethics, Public Records Act requests, and e-mail records management.
- Adopted **4 new Board Policies** on Purchasing, Informal Bidding, Delegation of Authority to the General Manager, and Climate Change.
- Completed **biennial review** of existing Board Policies, with amendments to **10** policies.
- Reviewed and updated **Deferred Compensation and Cafeteria Plan (Section 125) documents**.
- Began comprehensive review of the **Master Records Retention Schedules** to ensure each department's business needs are met within legal guidelines and that physical or electronic records are represented accurately.

📍 Objectives for FY 2019-20

- Continue to **optimize cleaning frequencies** and **group locations of sewer cleaning** to prevent SSOs through more efficient cleaning cycles.
- Continue to operate and maintain the treatment plant to ensure eligibility for the **NACWA Peak Performance Award Platinum Status** for the 22nd consecutive year.
- **Complete final design and successfully bid the Solids Handling Facility Improvements**, which will include the installation of new air pollution control equipment needed to reliably comply with current air regulations.
- **Develop new policy and procedure for managing records** that meets the requirements of Government Code §60201(b)(2) and ensures evidence of compliance with retention policies.



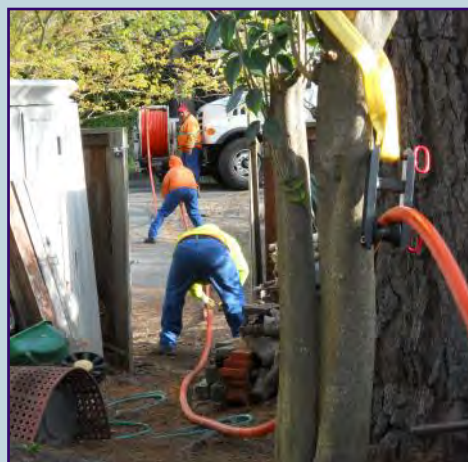
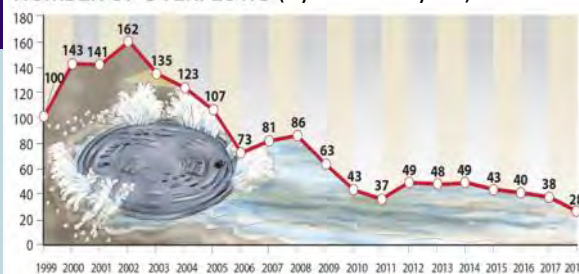


Achieving the All-Time Lowest Sanitary Sewer Overflow Rate in Calendar Year 2018

Central San’s community relies on **1,540 miles** of underground pipes that carry millions of gallons of wastewater to the treatment plant every day. Unfortunately, clogs (which can be caused by everyday objects like bathroom wipes and tree roots) can block the water, causing a pressure build-up and water to flow where it is not designed to go. Reducing these overflows is a top priority for Central San.

In calendar 2018, a multi-year collaborative effort by dedicated employees to innovate and optimize resulted in the **lowest number of SSOs in Central San’s history.**

NUMBER OF OVERFLOWS (by calendar year)



*“Years ago, we were having incidents in the last ten feet of the line, in part because crews thought they were reaching the end of the line with their cleaning tools but were not. Now, we work hard to ensure a **quality clean**, which increases efficiency. If we do find a line with heavy grease or roots, **we clean it again, as many times as it takes.** We also have a crew that looks at lines after they are cleaned, which helps to verify the best cleaning results.”*

- Field Operations Superintendent Steve Sauter



Changes in the approach to cleaning, utilization of the best tools, and an increased concentration on quality assurance have helped to successfully reduce SSOs. Technical adjustments, including optimizing cleaning schedules and deploying iPads in the field, have also increased effectiveness. Strategic and cooperative planning between field crews and engineering staff have improved access to public sewer lines and the ability to fix small issues more quickly.

These and other changes have led to the successful decrease of unwanted overflows and allowed Central San to continue to have **one of the highest reliability ratings in California.**

STRIVE TO MEET REGULATORY REQUIREMENTS

PERFORMANCE IN KEY METRICS

GOAL TWO



Metric	Target	Performance
NPDES compliance	Zero violations	Zero violations
Title V compliance	Zero violations	3 violations (project has been scheduled to resolve this with new wet scrubber technology)
Recycled Water Title 22 compliance	Zero violations	Zero violations
Anthropogenic GHG emissions	<25,000 metric tons (MT) CO ₂ e	23,619 MT CO ₂ e in calendar year 2018
Sanitary sewer overflows (SSOs)	<2.5 spills per 100 miles of pipeline	1.95 spills per 100 miles of pipeline
Spills to public water	<3	7
Percent of spills <500 gallons	>95%	87%
Pipeline cleaning schedules completed on time	>95%	99%
Pipeline cleaning quality assurance / quality control	On ≥3% of pipelines cleaned on an annual basis	3.8%
Pipeline cleaning quality assurance / quality control passing rate	>98%	95.6%
Annual Environmental Compliance Inspections and permitting completed on time	100%	100%
HHW management compliance	Zero violations	Zero violations
Biennial review of all existing Board policies	100%	100%

GOAL THREE





BE A FISCALLY RESPONSIBLE AND EFFECTIVE WASTEWATER UTILITY

Central San exercises restraint and is prudent with its finances, keeping its Operations and Maintenance (O&M) budget essentially flat for the last six years. This is made possible in part by implementing cost-saving efficiencies and optimizations.


Conduct Long-Range Financial Planning

Central San looks to the future when planning necessary infrastructure improvements, as well as the ways to fund them, and has a long-term plan to fund both current and future needs and obligations.

- **Refinanced outstanding debt** to save **\$8.2M** in interest costs over the next decade.
- **Fully funded the Other Post-Employment Benefits (OPEB) actuarially determined contribution** and **paid an additional \$2.5M** toward the **Unfunded Actuarial Accrued Liability (UAAL)**.
- **Developed the FY 2019-20 Budget** with a **6th** year of keeping the O&M budget essentially flat.
- Conducted **annual reviews** of current rates and fees, capacity fees, and businesses for consistency, reasonableness, and to ensure the appropriate fees are being collected.
- Developed **rate alternative scenarios** that reduced 10-year Capital Improvement Plan (Ten-Year CIP) cash flow and Central San's reliance on debt by **\$34M**.
- Included in Intended Use Plan funding list for a **State Revolving Fund loan** in the amount of **\$89.6M** for the Solids Handling Facility Improvements Project.
-  **Awarded the GFOA Certificate of Achievement for Excellence in Financial Reporting** for the Comprehensive Annual Financial Report for the 18th consecutive year.
-  **Awarded the GFOA Distinguished Budget Award** for the FY 2018-19 Budget.
- Presented **new rate structure** for mixed-use businesses and non-residential customers as part of the proposed sewer service rate structure which was approved by the Board in April 2019.

Manage Costs

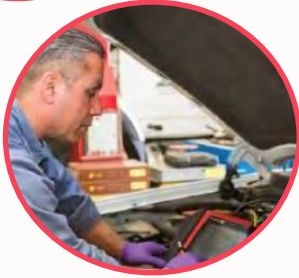
Central San audits its processes to ensure internal controls, manages claims effectively to reduce risk, and regularly reviews its ways of doing business for opportunities for optimization to reduce costs.

- Presented **Internal Audit Program workplan** for calendar year 2019 and **audit plan** for 2020.
- **Implemented findings** from the initial audits completed in FY 2017-18.
- Conducted **Payroll and Risk Control Audits**.
-  Received **Achievement of Excellence in Procurement Award** for the **8th** consecutive year, recognizing organizational excellence in public purchasing.
- Completed **cycle counts** of **\$3.5M** worth of warehouse inventory, which includes supplies and spare parts. As part of the cycle counts, staff counted **5,788** total line items for a total piece count of **102,567**.
- Executed **blanket contracts** to cover similar work shared by multiple projects to save on engineering and administration costs.
- **Leveraged spend, through annual requirements contracts** for **31%** of the total procurement spend for goods and services, not including construction, construction-related professional services, and utility payments. This improves efficiency, shortens processing time, and saves money through negotiated pricing contracts.
- **Managed claims aggressively** to reduce costs and facilitate resolution, resulting in an average cost per overflow claim of **\$8,809**.
- Completed **initial risk inventory** with input from managers and commenced process for development of strategic risk inventory that will serve as a basis for internal audit workplans and Enterprise Risk Management.
- Continued developing **Mitigation Plan**.
- Developed **interdepartmental standard operating procedure for claims arising from capital projects**.



Optimizing to Reduce Costs

- **Transitioned all employees and retirees to CalPERS health** benefit plans, which is projected to **save an estimated \$5.8M per year** in healthcare costs.
- Implemented new **Health Reimbursement Arrangement (HRA)** for Tier III employees to offset some of their future retiree healthcare costs without additional OPEB liability.
- **Consolidated delivery** of postal service mail with package deliveries from the warehouse for staffing efficiency.
- **Reduced vehicle fleet** by **2** vehicles after reviewing automatic vehicle location data analytics, eliminating maintenance costs and registration fees for those vehicles.
- Implemented the **Uniform Public Construction Cost Accounting Act (UPCCAA)** for savings on administrative costs of bidding and streamlining the bidding process for smaller projects.
- Obtained **new tools and equipment** to increase work efficiency, such as an Iron Worker for the Mechanical Shop.
- Completed **Lime Reduction Bench Scale Study** and recommended full-scale testing for potential savings in lime procurement costs.
- Continued to **optimize cleaning schedules** to dispatch staff more efficiently and clean sewers as needed to best prevent overflows.
- **Replaced the furnace combustion oxygen measuring system** with one that will require less maintenance.



*Central San has accomplished significant cost savings, but **we will never be complacent** with those efforts or the way we work. We are always evaluating our operations and looking for new technologies, innovations, and optimization opportunities to provide the highest service to our customers at responsible rates. – Roger Bailey, General Manager*

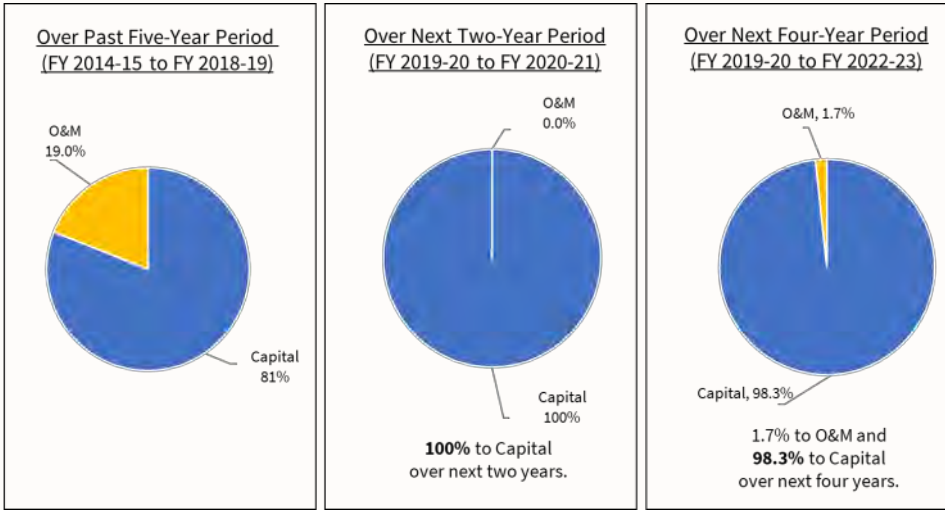
Objectives for FY 2019-20

- Continue to **manage unfunded liabilities** by reporting on and offering alternatives for applying favorable variances towards these obligations or other priorities.
- Prepare a **SRF loan application** for the Filter Plant Project by the December 31, 2019 State deadline.
- Begin implementation of **new enterprise resource planning (ERP) software**, which will re-engineer business processes in key divisions District wide, improving efficiencies and service levels.
- Identify **improvements to financial reports** to address areas of Board interest through the ERP software.
- Continue to drive performance, efficiency, and effectiveness through the **Optimizations Program** and fulfillment of the **Strategic Plan**.
- Implement **new permitting software** and migrate data from the legacy *SunGard*® system.
- Further **improve workflow** using electronic signature and digital transaction management services.
- Complete final design and successfully bid the **Pumping Station Upgrades – Phase 1** project to replace the diesel-driven engines and electrical switchgear at the Moraga and Orinda Crossroads Pumping Stations for improved reliability and safety.
- Investigate and provide recommendations for the use of **alternative, renewable diesel fuels**.

Central San's revenue is primarily generated from sewer service charges, payments from the City of Concord for wastewater treatment for the cities of Concord and Clayton, property tax revenue, and capacity fees.

Central San's total budget for FY 2018-19 was \$139.6M. This FY, Central San continued to utilize its rate revenue toward needed infrastructure improvements, prudently manage its debt, maintain strong credit ratings, and pay down its unfunded liabilities in pension and retiree healthcare costs.

Responsible Use of Rate Revenue



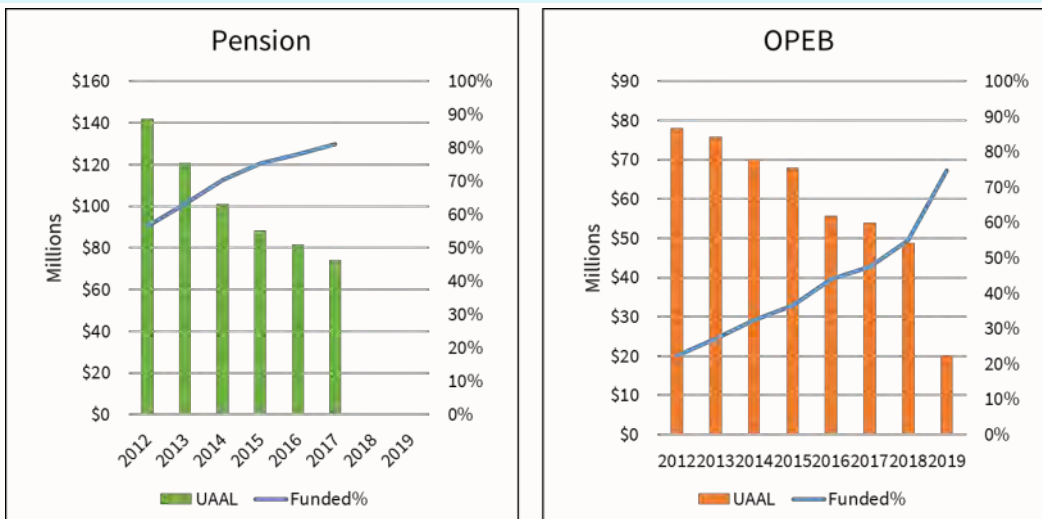
In advance of the April 2019 public hearing to adjust rates, Central San communicated the need to fund infrastructure repairs and replacements via an updated Proposition 218 notice and social media.

A record low number of protests were received, and three customers spoke **in favor** of the rate increase at the hearing. 100% and 98.3% of the new rate revenue will be used toward capital improvements in the coming FYs.

Debt Management

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, but Central San has **minimal debt service**. The newly adopted four-year rate plan includes a debt issuance of **\$154M** (split between \$77M in FY 2020-21 and \$77M in FY 2022-23, which had already been pushed back one year due to previously planned cost savings from the transition to CalPERS healthcare and other financial planning improvements). Subsequent to the adoption of the four-year rate plan, Central San was **approved for an application for \$89.6M** of State Revolving Fund loans, which will further reduce borrowing needs due to lower interest costs. Central San has strong **AAA and Aa1** credit ratings issued by Standard & Poor's and Moody's, respectively.

Paying Down Pension and Healthcare Costs



Since 2012, Central San has been paying off its unfunded liabilities in pension and OPEB costs to maintain a more secure financial position.

When possible, payments exceeding the minimum amount have been made to achieve this **steady drop in unfunded liabilities**.



Metric	Target	Performance
Maintain service affordability	<p>Sewer Service Charge less than average of Bay Area agencies</p> <p>Sewer Service Charge plus Ad Valorem tax less than average of Bay Area Agencies</p>	Target Met
Standard and Poor's (S&P) and Moody's Credit Ratings	AAA/Aa1	AAA rating from S&P (no rating from Moody's)
Debt service coverage ratio	>2.0x	15x (pre-audited figure)
Actual reserves as a percentage of target	100%	113% (O&M) 185% (Sewer Construction) (pre-audited figures)
Operating expenditures as a percentage of operating budget	>95%	96.5%
Reported material weaknesses or significant deficiencies in internal controls as part of annual financial audit	Zero (0)	Zero (0)
Workers' Compensation experience modifier	<1.0	0.74
Temporary modified duty provided (Return to Work Program)	>95% of recordable injuries	100%
Difference in inventory value in Purchasing database vs. value submitted to Accounting	<1%	0.93%
Accuracy of physical inventory count vs. book value	≥95%	99%

GOAL FOUR



RECRUIT, DEVELOP, AND RETAIN A HIGHLY TRAINED AND SAFE WORKFORCE

Without the skills and expertise of its staff, Central San would not be able to fulfill its mission or be a high-performance organization.



Ensure Adequate Staffing and Training to Meet Current and Future Operational Levels

Staff development can come in many forms, and Central San has continued to enhance training opportunities for its staff and contribute to the future of the wastewater industry workforce.

- Identified potential vendors for the implementation of an agency-wide **learning management system** to centralize tracking of all employee training.
- Proposed enhancements to the **performance appraisal process**, discussed with the bargaining units, and planned its implementation.
- Held the second session of the **Supervisory Academy**, with **21** graduates.
- Evolved the third session of the **Management Academy**, allowing **15** participants from sister public agencies, plus **24** graduating from Central San.
- Paired **6** mentees with mentors in the second **Mentorship Program** cycle.
- Hosted bi-monthly **HR @ Your Service** training sessions for employees.
- Updated **The Gavel – A User’s Guide to the Board Meeting Process** for staff and the **Board Member Handbook** for Board Members.
- Implemented **RedVector®** for Plant Maintenance Shops training and continued to develop the checklist for all shops to be trained using this.
- Improved **Mechanical Maintenance Technician Trainee Program**, including updating “TPC” study guides and manuals.
- Continued to develop the future workforce by providing training in conjunction with the **Bay Area Water/Wastewater Workforce Reliability (BAYWORK)** task force.
- Implemented **background checks** for all new employees.

Enhance Relationship with Employees and Bargaining Units

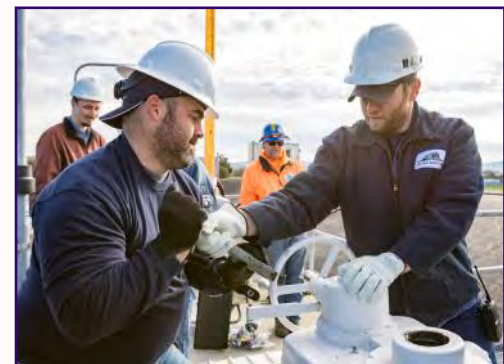
Central San strives to offer a competitive employment package, address workplace issues early, and create a culture of appreciation and employee engagement to attract and retain top talent.

- Completed **labor negotiations**.
- Added **new component to Commuter Benefit Program**, giving participating employees the ability to get up to **\$265** per month tax free.
- Implemented **Catastrophic Leave Program**, allowing employees to donate accrued sick leave hours to a bank for other employees to use so they may continue to stay in paid status.
- **Enhanced hiring process** to include a hands-on practical exam.
- **Engaged with community and technical colleges** for recruitment and program development.
- Established **Labor Management Committee** with Local One bargaining unit and resumed meetings with the Management Support / Confidential Group.
- **Transitioned to Kaiser Permanente** as occupational healthcare provider for workers’ compensation related injuries.

Meet or Exceed Industry Safety Standards

Central San’s mission is to protect public health and safety, and this cannot be done without safeguarding the wellbeing of its staff.

- Administration and Engineering staff had **zero** Lost Work Days.
- Completed **113** safety work orders.
- Reported **zero** California Division of Occupational Safety and Health (Cal/OSHA) violations.
- Responded quickly to the District Safety Committee (DSC) open action items (the current timeframe for an open action item is less than 60 days).
- Reviewed **15** Safety Suggestions via the DSC.
- Transitioned to the **Target Solutions**® online platform to improve efficiency and compliance with online trainings, records retention, and tracking of certifications.



Objectives for FY 2019-20

- Continue the **Mentorship Program**.
- Launch third **Supervisory Academy** in 2020, applying the same learning enhancement as the Management Academy by inviting staff from other agencies to participate.
- Purchase and implement a **learning management system**.
- Investigate **additional cost-effective benefits** to offer to employees.
- Propose a **culture statement** for Board adoption that emphasizes Central San’s priorities, including recognizing the value of employees.
- Implement **on-boarding protocols** that identify required training, medical evaluations, and testing for each job classification.
- Continue to apply the latest arc-resistant electrical equipment, arc-quenching devices, and design systems and best management practices, procedures, and devices to reduce arc flash hazards and **make it safer for staff to operate and service electrical equipment**.
- Continue to **monitor safety metrics**, including both leading and lagging indicators, to **identify trends** in incident reports, first-aids-only, near misses, and inspection findings.



GOAL FOUR



Central San's Skilled Staff

Central San is comprised of 291 budgeted full-time employees, all skilled at their particular roles in the organization. The Plant Maintenance Division has welders, machinists, electricians, and other tradesmen who work in tandem to reduce downtime and prolong the life of Central San's aging equipment. They are also innovative, constantly finding new ways to perform their tasks. This is just one example of the type of work they perform on a daily basis.

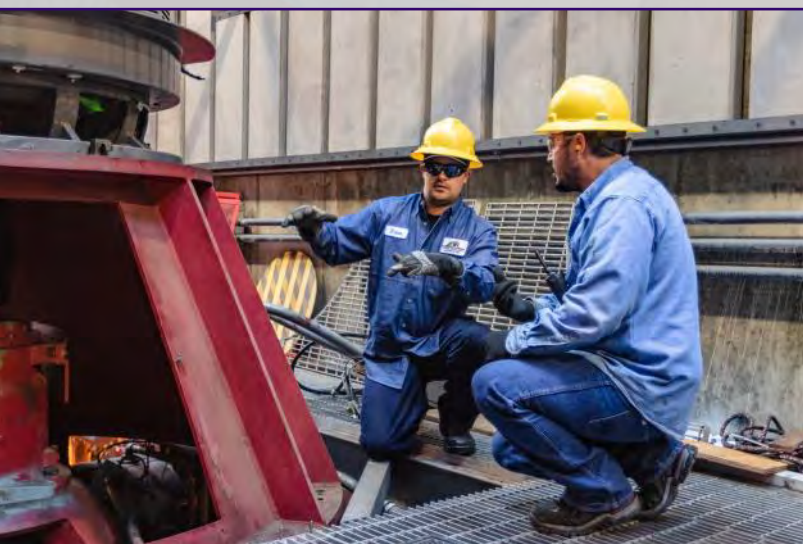
Central San's **Headworks facility** is the first stage of the complex process to treat wastewater, where inorganic matter — such as stones, grit, sand, sticks, and plastics — is removed from the wastewater stream to protect and reduce wear on the downstream process equipment.

This FY, two influent pumps in the Headworks Pump Room required new wear rings. This is considered routine maintenance, but, with **pumps that weigh about a thousand pounds**, even the "routine" necessitates careful planning and expert skill. For this particular task, a large crane and the coordination of numerous Plant Maintenance staff was needed.

Electric and Instrumentation technicians unwired and removed anything attached to the pumps and motors that would hinder their removal.

Mechanical Maintenance focused primarily on the rigging of the crane and the replacement of the casing wear rings, and the **Machine Shop** removed and installed the impeller wear rings on the rotating elements within the pumps.

Thanks to the work of these technicians, pump efficiency and durability increased, crucial instruments inside the pumps are better protected, and the Headworks facility can **effectively remove about 276 tons of plastic** from the wastewater stream coming into Central San's treatment plant each year.





Metric	Target	Performance
Average time to fill vacancy (from request to hire)	<60 days	58.8 days
Turnover rate at or below American Water Works Association (AWWA) industry median	≤7.8% (FY 17-18 median)	5.7%
Average annual training hours (external and internal training)	15 hours per full-time equivalent employee (FTE)	22.7 hours per FTE
Actual versus budgeted usage of training dollars	>80%	73.8%
Performance evaluations completed on time	100%	95%
Participation in annual Wellness Expo	Increase by 10% each year	-15.6%
Internal promotions (excludes entry-level positions)	≥25%	45.8%
Formal grievances filed	Zero	2 grievances filed
Employee injury and illness lost time incident rate less than 2016 Bureau of Labor Statistics (BLS) California Sewage Treatment Facilities Rate	<6.8	2.6




GOAL FIVE MAINTAIN A RELIABLE INFRASTRUCTURE

The pipes, pumps, and equipment that convey wastewater are the core of Central San’s operation. Using technology and human ingenuity, Central San services and repairs assets as needed – with an emphasis on preventive maintenance – to protect this equipment and prolong useful life.

Manage Assets Optimally throughout Their Lifecycle

A comprehensive Asset Management Program optimizes asset lifecycles to maintain reliable and high-quality service in a sustainable manner, integrating technology and data from multiple databases to empower Central San’s workforce to enable best outcomes through servicing based on predictive capabilities.

- Completed several critical projects, including the **upgrade to the bar screens** at the Headworks Facility and **sewer renovations in Walnut Creek, Lafayette, and Orinda.**
- Created a **Treatment Plant Spare Parts Tool** which allows Plant Maintenance staff to view what spare parts are available in the warehouse before beginning any work.
- Initiated two-year program to perform **condition assessments of the steam aeration and blower systems.**
- Evaluated feasibility of a new **wet ash handling system.**
- Completed **982 services** on vehicles and equipment.
- Made **additions to the Asset Condition Monitoring program** such as a breaker overload testing program and winding analyzer program, which will lower equipment downtime costs and increase reliability.
- **Identified 16 preventative maintenance program tasks** needing improvements.
- Completed **28 “Don’t Just Fix It; Improve It” initiatives** to increase maintenance effectiveness, lower costs, and increase equipment reliability.
-  Won 2018 Uptime Award for **Best Reliability Engineering for Maintenance Program** from Reliabilityweb.com.
- Continued to **convert sewer pipeline cleaning schedules** so each line has a scheduled cleaning date.
- Initiated a **valve exercising program** to ensure treatment plant valves do not lose function due to lack of use.
- Completed **hydraulic transient analysis and capacity evaluation** for the recycled water distribution system, which will identify opportunities to improve reliability and maximum hydraulic delivery capacity.



A Visit from Friends in the City

Central San often initiates collaboration with fellow wastewater agencies to share knowledge and learn from each other’s successes. **Interagency collaboration** is an integral activity toward Central San’s goal to continuously improve.

This FY, Central San was honored to host several members of the **San Francisco Public Utilities Commission Wastewater Enterprise (SFPUC-WWE)** to share ideas on Asset Management, Reliability-based Maintenance, and Asset Handover.

It was very worthwhile; I think all the SFPUC staff (including me) really benefited from the information exchange. Central San obviously takes great pride in its facilities, and I think that also made an impression for our staff.

– Gregory Norby, SFPUC-WWE Assistant General Manager

Facilitate Long-Term Capital Renewal and Replacement


The Comprehensive Wastewater Master Plan foresees necessary infrastructure changes over the next two decades. To better understand and track how all the planned work comes together, staff has implemented a new project management information system software, e-Builder®.

- **Migrated data** into e-Builder® to better manage Engineering projects.
- **Set up integration with ERP software** so data from the new ERP will feed into e-Builder®.
- Trained staff on and **completed implementation of e-Builder®.**

Protect District Personnel and Assets from Threats and Emergencies

Central San's reliability of service is critical to the community, so significant time and resources are invested in protecting Central San from security threats and making sure that Central San continues to operate in the event of an emergency.

Protecting Intangible Assets

-  Awarded MISAC Award for **Excellence in IT Practices**, including efforts to enhance cybersecurity.
- Designed and began construction of a **new, more secure Data Center**, including migrating equipment and data to the new location.

Identifying and Addressing Potential Risks

- Conducted and presented results of **Risk Control Audit** to Management Team.
- Initiated **Enterprise Risk Management** planning process via strategic risk identification workshops.
- Provided training on **internal controls** to Management Team.

Enhancing Campus Security and Safety

- Completed **Vital Contractors Section of the Continuity Plan.**
- Developed scope and design of **pumping stations security improvements.**
- Updated **Post Orders** for contracted security guards.
- Coordinated and implemented procedural changes to **maintain security during on-site construction activities.**
- Conducted **16 Contractor Safety Orientations**, reviewed **109 Design and Safety Submittals**, and attended **42 Construction Progress Meetings.**
- Began **Fire System, Gas Detection System, and Fall Protection safety upgrades.**
- Created a new **maintenance access road** to the clearwell overflow structure.
- Constructed **new potable water system** and upgraded infrastructure to ensure safety.

Preparing for Emergencies

- Prepared and presented **Emergency Management Program** report to the Board.
- Updated and restocked **emergency supplies cache.**
- Participated in the **Operational Area Council** to contribute to creating an effective and multijurisdictional approach to disaster preparedness and planning.
- Conducted annual **Emergency Operations Center activation exercise.**
- Developed a **Crisis Communications Plan.**



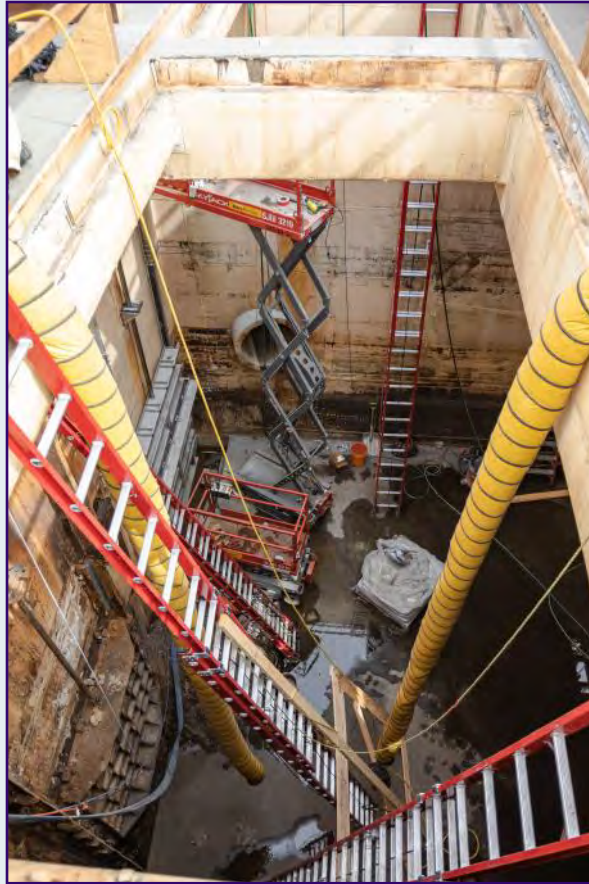


Bypassing the Flow

During a corrosion assessment, the gates at the influent structure — the beginning of the Headworks Facility — were determined to be at the end of their useful life. To replace these critical pieces of infrastructure, Central San could not just simply turn off the tap and stop the flow from entering the plant.

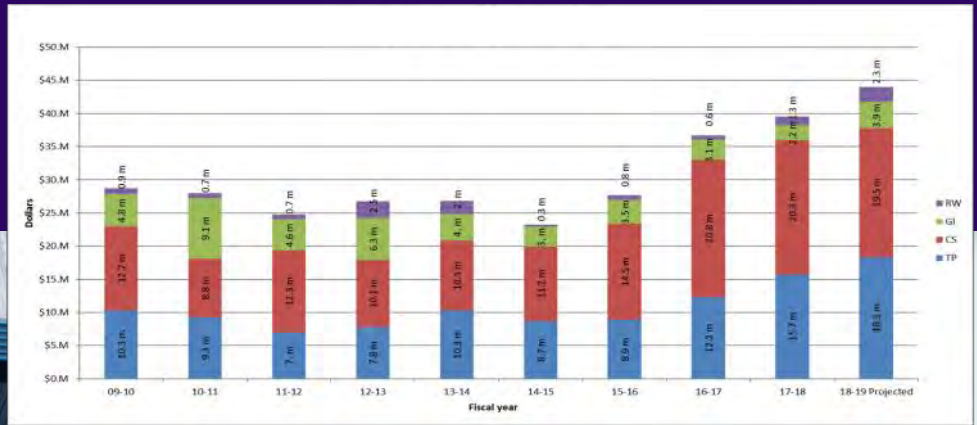
Instead, an organized project was needed to ensure Central San could continue its service while putting in new gates.

The solution? An intricate **bypass system** to isolate the structure so all **5** gates could be removed and replaced without disrupting the treatment process. A cross-divisional team of Capital Projects, Plant Operations, and Collection System Operations (CSO) staff worked together to relocate instruments so the data the operators use to run the treatment plant would still be available.



Investing in Infrastructure

Central San has spent about **\$306M** over the last ten years on upgrading its assets, some of which are over **70** years old.



RW – Recycled Water / GI – General Improvements / CS – Collection System / TP – Treatment Plant

A Massive Coordinated Effort

With project management by Capital Projects, Plant Operators helped to coordinate the routine maintenance activities that would need to continue, and CSO assisted with the isolation of channels that are part of the collection system.

The bypass was created using **12 pumps** at **4 locations** to isolate the influent from entering the plant. The water is instead pumped around the influent structure and returned to the treatment plant at the Headworks Facility. All in all, it took **3 weeks** to set up all the piping and pumps, and **another 3 weeks** to replace the gates.

Sewage Never Sleeps

Throughout this project, which was initiated in FY 2018-19 and completed in FY 2019-20, **2** construction crews, **3** inspectors, and **2** pump monitors worked **24 hours a day, 7 days a week** until the gates were replaced.

Maintaining and upgrading Central San's facilities requires hard work, planning, and coordination, and this project is just one example of the many projects that staff cooperatively undertakes to help Central San continue to fulfill its mission.



 **Objectives for FY 2019-20**

- Develop **prioritization models** for vertical assets and recycled water distribution system assets.
- **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 the 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, Preventive Maintenance Optimization analysis, and Defect Elimination initiatives on critical equipment and systems.
- Continue to **develop the Asset Centered Maintenance Program and integrate with analytics** for earliest warning of equipment degradation.
- Continue work on **two-year program to perform condition assessments for the Steam Aeration and Blower System Project**.
- Initiate **valve exercising program** for recycled water distribution system.
- Perform comprehensive update to **Standard Specifications for Design and Construction**.
- Develop a **planning tool for future capital spending for e-Builder®**.
- Complete **construction of new Data Center and migration of equipment** into the new location.
- Finalize **security system design criteria** for upcoming capital projects.
- Incorporate **emergency response activities into the Emergency Operations Plan and Continuity of Operations** where applicable.
- Continue implementation of **recommendations from security assessment**.



MAINTAIN A RELIABLE INFRASTRUCTURE

PERFORMANCE IN KEY METRICS



Metric	Target	Performance
Safety-prioritized work orders completed on time	100%	87.0%
Regulatory Title V work orders completed on time	100%	99.0%
Planned treatment plant preventative maintenance completed on time	>95%	83.8%
Planned pumping station preventative maintenance completed on time	>95%	Data unavailable (Tracking system has been implemented for FY 2019-20 reporting)
Uptime for vehicles and equipment	100%	99.5%
Miles of pipeline replaced	>0.5% of assets (7.6 miles per year for the next five years starting in FY 2017-2022)	0.4% (6.1 miles)
Capital expenditures as a percentage of capital budgeted cash flow including carry forward	>90%	84% (pre-audited figure)
Information system outages affecting normal business operations	100% uptime	100% uptime
Data backup and recovery	Zero lost data	Zero lost data
Potable water system monthly testing meets all water quality standards	100%	100%



EMBRACE TECHNOLOGY, INNOVATION, AND ENVIRONMENTAL SUSTAINABILITY

Central San does what it can to protect the environment through the promotion of recycled water use, utilizing non-renewable energy where possible, and piloting and using the newest technologies to optimize business operations.

Augment the Region's Water Supply

Central San continues to do its part to help ensure a sustainable water supply for the community by providing recycled water to residents and businesses at no additional cost and pursuing regional partnerships to expand the use of recycled water, thereby freeing up potable water.

- Collaborated with Dublin San Ramon Services District – East Bay Municipal Utility District Recycled Water Authority (DERWA) to define a project and develop and execute a Temporary Wastewater Diversion Agreement to allow DERWA to **divert approximately 1.3 MGD of raw wastewater** from Central San's San Ramon Pumping Station to Dublin San Ramon Services District for the production of recycled water to meet DERWA's peak summer irrigation demand.
- **Distributed 1.5M gallons of recycled water** through the Residential Fill Station.
- Continued working with the City of Concord to **provide recycled water to the Concord Community Reuse Project**, also known as the redevelopment the Concord Naval Weapons Station.
- **Expanded the use of recycled water to restrooms** within the treatment plant.
- Continued the **Free Commercial Truck Fill Program**.

Working Toward an Innovative Recycled Water Exchange

Central San has been collaborating with the Contra Costa Water District (CCWD) and Santa Clara Valley Water District (SCVWD) to bring to life an **exchange of water** which would allow Central San to provide two nearby refineries with recycled water for their industrial processes, so the commensurate potable water can be sent to SCVWD for their use. This FY, staff worked to complete a Preliminary Feasibility Evaluation of the Refinery Recycled Water Exchange Project. Central San also hosted a **Water Exchange Treatment Train Technical Peer Review Workshop** with industry experts to share ideas and discuss how to drive the project forward.



Reduce Reliance on Non-Renewable Energy

With solar panels already at the CSO building and HHWCF, Central San continues to explore ways to utilize renewable energy in place of non-renewable power.

- Hired a consultant to evaluate **solar energy opportunities** and prepared to issue a request for proposal.
- Continued working with Pacific Gas and Electric (PG&E) on **strategic energy management**, including holding an onsite workshop.

Encourage the Review and Testing of Technology to Optimize and Modernize Business Operations

Even though Central San practices fiscal responsibility, it is always looking for ways to become more efficient in its operations, whether on the administrative side or the technical treatment side.

Optimizations to Modernize and Improve Operations

- **Established formal Optimizations Program** to commit to efficiency, effectiveness, and continuous improvement by establishing a framework to track and report progress.
- Produced and presented an **Optimizations Program Annual Report** to the Board.
- **Eliminated paper timesheets** through the implementation of an electronic timekeeping system, *IntelliTime*®.



- Continued use of **tablets in the field for Environmental Compliance inspections.**
- Began **logging recycled water meter readings** in *Cityworks*® maintenance system software.
- Improved **reliability of the Ultraviolet (UV) Disinfection Basins** by replacing obsolete control hardware and pilot testing low UV transmittance.
- Installed **automated sludge retention time control software** to improve the effectiveness of the secondary treatment process.
- Began **livestreaming Board meetings in house.**
- Selected and procured **new air pollution control equipment** at the treatment plant.
- **Expanded use of DocuSign**®, which is now being used by more divisions for electronic signatures and routing.
- Conducted chemical inventory and reconciled safety data sheets with **online repository, MSDSonline**®.

Piloting and Testing Potential Efficiencies and Technologies

- Implemented a **pilot project for new recycled water meter technology** (*Water Pigeon*®).
- Completed **Phase 1 of the Hydrothermal Processing of Wastewater Solids (HYPOWERS)** project, to test an emerging hydrothermal resource recovery process for solids handling. Phase 1 included planning and preliminary design for a Department of Energy evaluation and successful submittal of a **\$3M** California Energy Commission grant. Staff also helped obtain an additional **\$3M** in grant funding, presented the project to the Bay Area Biosolids Coalition, and collected sampling and dewatering of solids feedstock for bench testing.
- Completed a desktop evaluation and recommended pilot testing of two innovative nutrient removal technologies: **AquaNereda**® (an aerobic granular sludge technology) and **Membrane Aerated Biofilm Reactor**.
- Performed **Filter column and chemical testing.**
- Teamed with Senz2V (*Staal Instruments*®) on **level monitoring pilot proposal for the ImagineH2O Urban Water Challenge.**

Brainstorming and Learning Ideas for the Future

- Facilitated **Board Long-Term Vision Planning Board Workshop** to discuss challenges and opportunities, an expanded vision of what Central San could become, constraints that could limit the ability to achieve that vision, and how those constraints can be addressed.
- General Manager attended the **American and Global Water Summits** and **Leading Utilities of the World Workshop** to gain a broader view in the water world and learn about new innovations in the industry.
- Staff continued to **stay apprised of new technologies** by participating in knowledge-sharing groups and events such as the Water Research Foundation Leaders Innovation Forum for Technology (WERF LIFT), Isle Technology Approval Group, CWEA, and other conferences and presentations.



Objectives for FY 2019-20

- Continue to **work toward the fruition of the Recycled Water Exchange.**
- **Complete evaluation of additional cost-effective solar energy projects.**
- Continue to support the **Satellite Water Recycling Facility at Diablo Country Club** as needed.
- Continue **working with DERWA and its representatives** to complete tasks to allow the temporary diversion from Central San's San Ramon Pumping Station.
- **Replace desk phones** with new digital phones equipped with advanced mobile and collaboration features, which could reduce the amount of licensing needed for desktop phones.
- Implement new permitting software as an early adopter of the *Oracle*® technology to **replace legacy permitting and billing systems.**
- **Optimize plan review workflow** for Development Mainline Construction.
- Review **mobile applications software** for Construction Inspectors.
- Begin using *Cityworks*® for **Recycled Water Customer Compliance Annual Inspections.**
- Participate in **Phase 2 of the HYPOWERS project.**



Metric	Target	Performance
Gallons of recycled water distributed to external customers	>240M gallons per year	195,857,981 gallons
kWh of electricity produced	>18M kWh per year (reported as a rolling average)	22.7M kWh (reported as a rolling average)
kWh of solar power produced at CSO and HHWCF	>220,000 kWh per year (reported as a rolling average)	299,000 kWh (reported as a rolling average)
Reviews or pilot tests of new and promising technology	>3 per year	7
Research papers and findings presented	>3 papers or presentations per year	6 (2 papers and 4 presentations)

ENDING ONE PLAN AND BEGINNING ANOTHER

Every two years, Central San staff collaborates to formulate the roadmap for the goals for the next two years and the actions needed to accomplish them.



During FY 2019-20, staff will continue to fulfill and complete the goals set forth in the second and final year of the FY 2018-20 Strategic Plan.

In the spirit of continuous improvement, the FY 2018-20 Plan will

- Integrate **American Water Works Association benchmarking performance indicators** into the key metrics for the ability to measure Central San against itself year to year in industry standards and against others nationwide and statewide.
- **Make the goals more concise** to more easily communicate them to staff and the public.

As staff looks to update the Plan for an additional two years, Central San will not shy away from addressing current and anticipated challenges or from continuing to set stretch goals within the key metrics. Staff will not coast on its success; instead, it will ask what it can do better. As a result, the Strategic Plan will continue to reflect Central San’s attitude as an organization.

ACRONYMS FOUND IN THIS DOCUMENT

CSO	Collection System Operations
CWEA	California Water Environment Foundation
DERWA	Dublin San Ramon Services District – East Bay Municipal Utility District Recycled Water Authority
DSC	District Safety Committee
ERP	Enterprise Resource Planning
EUM	Effective Utility Management
GHG	Greenhouse Gas
HHW	Household Hazardous Waste
HHWCF	Household Hazardous Waste Collection Facility
HYPOWERS	Hydrothermal Processing of Wastewater Solids
IT	Information Technology

M	Million
MISAC	Municipal Information Systems Association of California
NACWA	National Association of Clean Water Agencies
O&M	Operations and Maintenance
OPEB	Other Post-Employment Benefits
SCVWD	Santa Clara Valley Water District
SFBS	San Francisco Bay Section (of CWEA)
SRF	State Revolving Fund
SSO	Sanitary Sewer Overflow
SFPUC-WWE	San Francisco Public Utilities Commission Wastewater Enterprise
UV	Ultraviolet



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