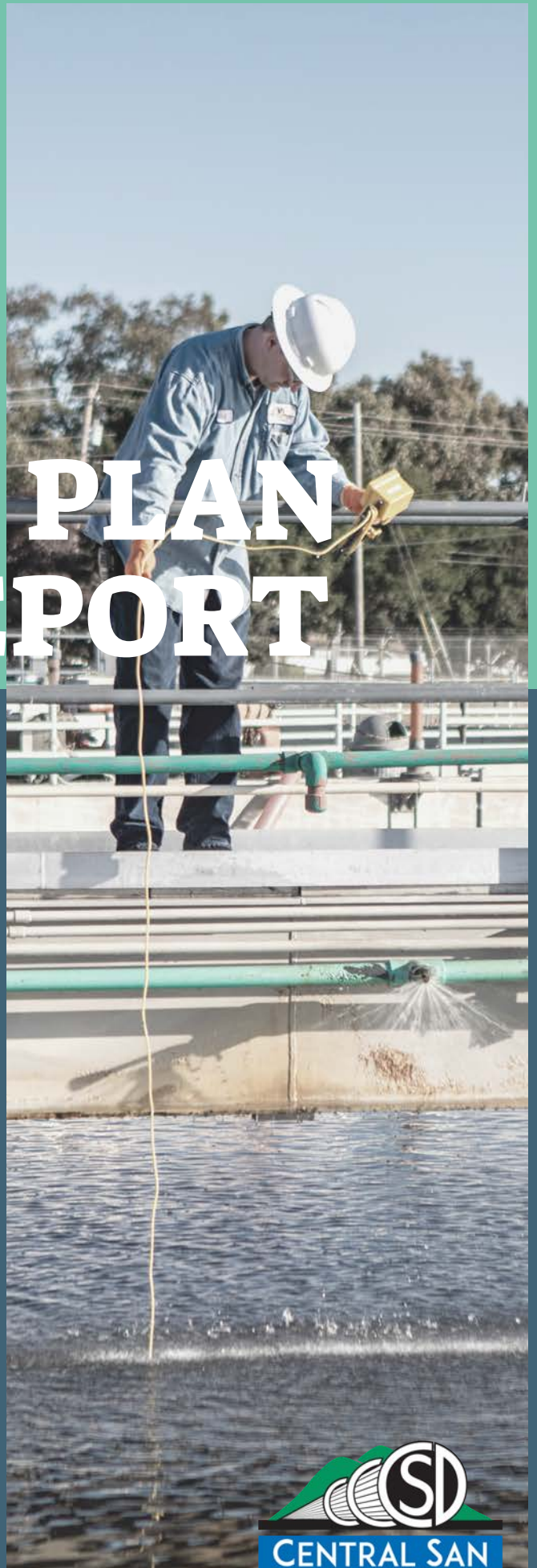




STRATEGIC PLAN ANNUAL REPORT

FY 2019-20



MESSAGE FROM THE GENERAL MANAGER

Perhaps more than any other year in our recent history, 2020 has challenged us to adjust our operations and act with flexibility to ensure the safety of our employees and the continuation of our service to the public. As we come to the close of another two-year strategic planning cycle, I am proud to report that Central San has both met the goals we set forth in our fiscal years (FY) 2018-20 Strategic Plan and overcome the unforeseen hurdles brought on by the COVID-19 pandemic.



Our employees come together with commitment and creativity, finding new ways to continue serving our community and protect public health. Now more than ever, we are proud to carry out our mission of protecting public health and the environment. I am truly thankful for our dedicated staff, who have continued to adapt, innovate, and serve. Our front-line employees work onsite every day as essential workers so that our customers can rely on us in a time of so much uncertainty.

Our prudent financial practices and optimized operations have prepared us to endure this crisis. Our strengths in financial management have allowed us to waive our planned 2020 rate adjustment to help minimize our ratepayers' hardships due to the economic recession. Throughout the pandemic, we have monitored our productivity and pushed ourselves to continue to excel. We recognize the continued need to pursue new technologies and innovations to make the best use of our financial resources, and we have not stopped doing that.

I want to thank the Board for providing the vision, resources, and support necessary to achieve our goals and respond to challenges. We will not rest on our laurels. Our FY 2020-22 Strategic Plan is ambitious and includes major infrastructure projects such as the renovations to our solids handling and recycled water production and storage facilities. We are also investing in upgrades to our pumping stations and continuing to proactively replace aging neighborhood sewer pipes to ensure reliable, trouble-free service for decades to come. We will carefully provide these services and constantly reevaluate our plans as needed to adapt to an ever-changing situation. We remain firmly committed to our mission and are proud to protect public health and the environment.


Roger S. Bailey
GENERAL MANAGER

MAJOR STRATEGIC ACCOMPLISHMENTS

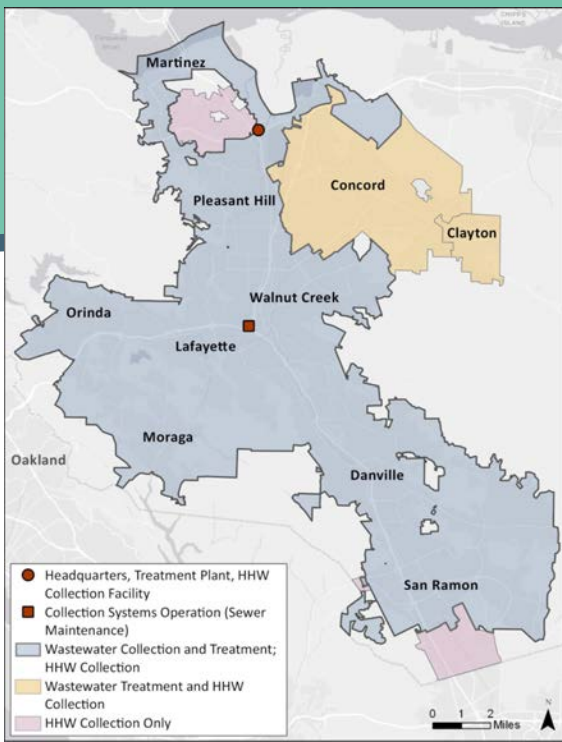


- Developed a state and national award-winning student education program, **Pipe Protectors**, and increased the number of students served with this addition.
- Renewed California Special Districts Leadership Foundation **Transparency Certificate of Excellence**.
- Achieved **22 consecutive years of 100% compliance** with Central San's National Pollutant Discharge Elimination System (NPDES) Permit, governing wastewater discharge.
- **Reduced sanitary sewer overflows** from a high of 350 in 1988 to a low of 22 in 2019.
- Achieved 19 consecutive years of receiving the Government Finance Officers Association (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 2 years ago.
- Realized **\$6.1 million** in savings from switching to CalPERS healthcare plans for employees and retirees.
- Completed the third **Management Academy**, which for the first time included participants from sister agencies.
- Paired 7 mentees with mentors in the third cycle of the **BOOST Mentorship Program**.



- Replaced **5 miles** of aging neighborhood sewer pipes in Walnut Creek, Lafayette, Orinda, and other nearby communities.
- Completed the **seismic upgrade** of the Plant Operations Building.
- Completed the first phase of the **Steam and Aeration Blower System assessments** to evaluate the remaining useful life and rehabilitation needs of this critical equipment.
- Completed **bypass in the Mechanical and Concrete Renovations Project**, allowing the 72-inch selector pipe to be inspected and repaired as needed.
- Implemented the first modules of the new **Oracle Fusion Cloud enterprise resource planning (ERP) system**, including Core Human Resources and most of the Core Financial modules for parallel operation until September 1, 2020.
- Formed a Central San **Smart Initiative Steering Committee** to review and champion initiatives to leverage data to improve operations and reduce costs.

ABOUT CENTRAL SAN



Central San is a special district which was established in 1946. It is headquartered in Martinez, California, and is proud to serve its communities (service area map pictured) with wastewater collection and treatment, household hazardous waste collection, and recycled water distribution services. Central San has 292 budgeted full-time employees led by a General Manager, 3 Department Directors, and 13 Division Managers.

MISSION, VISION, VALUES, AND GOALS

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

VALUES

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

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



FY 2018-20 STRATEGIC PLAN



GOALS

are the foundation of the Strategic Plan. They are set by the Board to identify Central San's priorities.



STRATEGIES

outline Central San's approach to achieve its Goals, overcome its challenges, accomplish its mission, and meet the community's needs in the best possible ways.



INITIATIVES

describe the actions staff will take to enact the Strategies.



KEY SUCCESS MEASURES

provide examples of the types of tasks that further the Initiatives.

KEY METRICS

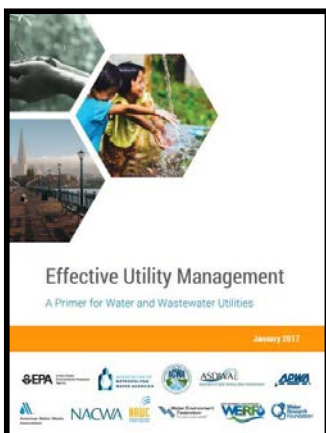
set targets, track progress, and evaluate performance.

STRATEGIC PLANNING

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. FY 2019-20 represents the conclusion of the FYs 2018-20 Strategic Plan.



EFFECTIVE UTILITY MANAGEMENT



Since 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, U.S. Environmental Protection Agency, 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.



Build External Customer Relationships and Awareness

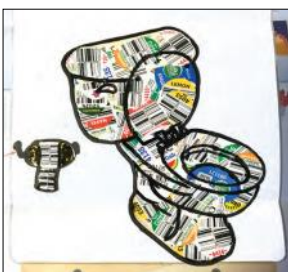
- ◆ Responded to **6,795** Permit Counter customer service phone calls and **4,531** emails.
- ◆ Received and cleared over **28,341** USA locating requests on time.
- ◆ Responded to **285** collection system service requests.
- ◆ Responded to **39** Public Records Act requests.
- ◆ Oversaw over **44,000** visits to the Household Hazardous Waste Collection Facility (HHWCF) and Residential Recycled Water Fill Station by residents, small businesses, reuse customers, retail partners, and fill station users.
- ◆ Collected **1,693,000** pounds of household hazardous waste (HHW).
- ◆ Collected **10,400** pounds of pharmaceuticals.
- ◆ Remodeled **lobby** (pictured above) to install a customer restroom, new lobby furniture and signage, and an open floor plan.
- ◆ Grew social media following on YouTube, Facebook, Twitter, and Instagram by about **43%**.



- ◆ Presented results of **customer research** to assess awareness, satisfaction, desire to learn more about Central San, and methods of best receiving information.
- ◆ Received **66** applications for the next session of Central San Academy.
- ◆ Increased number of students served with the recently developed state and national award-winning student education program, **Pipe Protectors**.
- ◆ Hosted **intra-agency information exchanges** with Monterey One Water and City of Oakland staff.
- ◆ Updated 2014 **Standard Specifications** for Design and Construction to broaden the topics covered and reorganize the information to be more user friendly.



- ◆ Engaged kids and the young-at-heart in the spring *Pipeline* to **upcycle plastic produce stickers into art** (pictured), to show off their artistic skills and help Central San keep the stickers out of the sewer system.
- ◆ Ran **641** cable TV and online Wipes Clog Pipes commercial programming spots, reaching **63%** of service area households.
- ◆ Developed “Maintaining a Reliable Infrastructure – The Collection System,” “Pipe Protectors,” and “Wipes Fail 'Flushable' Test” **videos** to communicate District information.



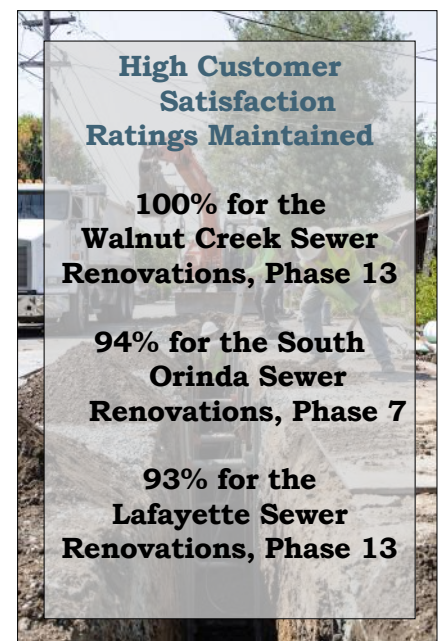


Foster Employee Engagement and Interdepartmental Collaboration

- ◆ Deployed a survey to assess **employee engagement levels**.
- ◆ Replaced both **intranet sites** to improve internal communication and update the Plant Information Management System.
- ◆ Continued to hold **cross-divisional committee meetings**, including the Information Technology (IT) Leadership, Succession Planning, and Smart Initiative Steering Committees.
- ◆ Continued to publish the *Lateral Connection* monthly employee **newsletters**.
- ◆ Processed **525** procurement requests while maintaining an average **5-star rating** on internal customer satisfaction surveys, as measured by the ticketing system also used for IT Helpdesk requests.
- ◆ Provided **Records Program services** to all departments, including updating retention schedules, indexing over **350** new records boxes, and creating and printing over **1,500** new file folder labels.

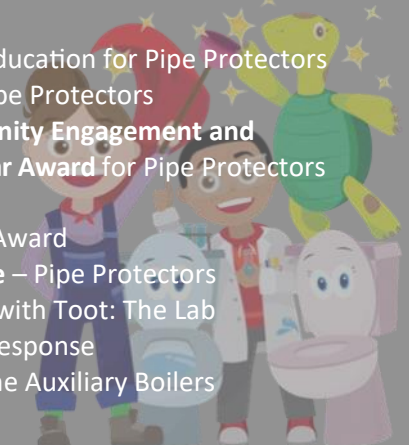
Maintain a Strong Reputation in the Community

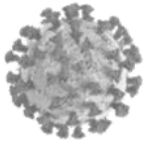
- ◆ **Advocated** at the state and national levels on issues affecting Central San.
- ◆ Created the **“Wipes Are Costly to Sewer Agencies in California”** map (pictured on page 11) as a compelling visual case study of wipes’ impact.
- ◆ Continued to **meet** with city managers and other stakeholders to discuss potential construction impacts to the community.
- ◆ Board Members continued to **present at council meetings** and **attend interagency events**.
- ◆ Staff continued to take roles in various **professional organizations** to present at conferences, network with peers, and increase visibility.
- ◆ Director of Finance & Administration obtained representation on the County's **Treasury Oversight Committee**.
- ◆ General Manager served on the **boards** of National Association of Clean Water Agencies (NACWA), California Association of Sanitation Agencies (CASA), WateReuse, and John Muir Health to strengthen ties to the water sector and the community Central San serves.



AWARDS

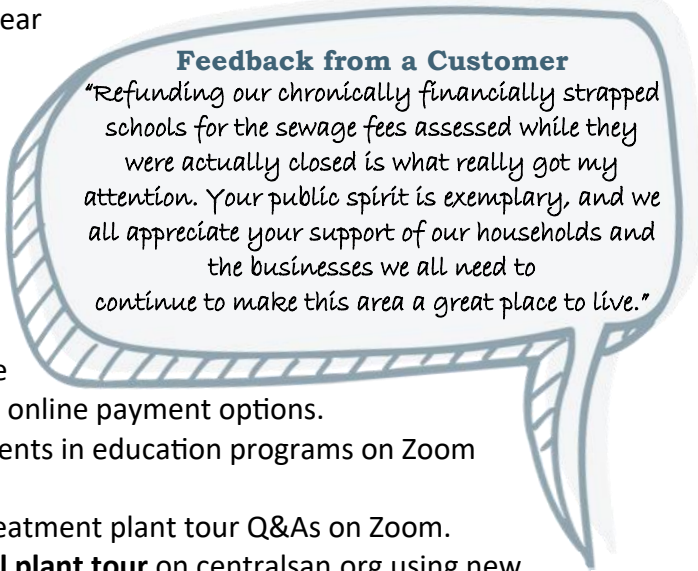
- ◆ Water Resources **Utility of the Future Today**
- ◆ California Special Districts Leadership Foundation **Transparency Certificate of Excellence**
- ◆ **Achievement of Excellence in Procurement** Award for the 9th consecutive year
- ◆ Government Finance Officers Association (GFOA) **Certificate of Achievement for Excellence in Financial Reporting** for the 19th consecutive year
- ◆ **Excellence in IT Practices** Award from Municipal Information Systems Association of California for the third consecutive year
- ◆ **National Environmental Achievement** Award in Public Information and Education for Pipe Protectors
- ◆ CASA 2019 Award of **Excellence for Public Outreach and Education** for Pipe Protectors
- ◆ California Water Environment Association (CWEA) SF Bay Section **Community Engagement and Outreach Award for Best Use of Social Media** and **Large Project of the Year Award** for Pipe Protectors
- ◆ **1st Place in CWEA Statewide Awards**
 - ◆ Community Engagement and Outreach: **Best Use of Social Media** Award
 - ◆ Community Engagement and Outreach: **Project of the Year – Large – Pipe Protectors**
 - ◆ Community Engagement and Outreach: **Film Festival: Adventures with Toot: The Lab**
 - ◆ Community Engagement and Outreach: **Film Festival: Power Fail Response**
 - ◆ Community Engagement and Outreach: **Film Festival: Fuel Oil to the Auxiliary Boilers**





COVID-19 Response

- ◆ Ensured **essential services** remained intact while following state and local health orders to provide a **safe and healthful working environment**.
- ◆ Swiftly **closed or suspended public-facing services**, including the customer lobby, HHWCF), Residential Recycled Water Fill Station, Environmental Services Inspections, school programs, events, and tours.
- ◆ Implemented a **customer relief program** through a one-year waiver of incremental sewer service charge (SSC) rate adjustment, saving about **\$30** for residential customers, about **5%** from commercial customer bills, and returning about **\$180,000** to K-12 schools to reflect decreases in water use for the time period they were closed.
- ◆ Assisted CASA with the creation of a **multi-agency COVID-19 response video**.
- ◆ Modified operations for employee and customer safety
 - ◇ Maintained daily **Permit Counter operations** via phone and e-mail accessibility and the addition of convenient online payment options.



- ◇ Served **266** students in education programs on Zoom (pictured).
- ◇ Held **2** virtual treatment plant tour Q&As on Zoom.
- ◇ Created a **virtual plant tour** on centralsan.org using new 360-degree photos and audio guides.
- ◇ Restricted **sewer construction projects** from performing activities in backyard easements.
- ◇ Pivoted **community outreach** for the Lafayette Sewer Renovations project to an online format.

REOPENING AN IMPORTANT SERVICE

The HHWCF and Recycled Water Fill Station reopened for service in June with modified operations for increased safety, including an **online appointment system** to limit rush times, spread visitors over the day, simplify staff scheduling, and keep the workload manageable without extra contractors.

New signage and a greeter are now posted at the gate to answer questions and provide information about other community waste services via contactless information sheets that customers can take a picture of.



Objectives for FY 2020-21

- ◆ Plan the **75th Anniversary event**, to be held as allowed by the public health and safety situation.
- ◆ Hold a virtual or live fifth session of **Central San Academy**.
- ◆ Continue to **coordinate interdepartmentally** on major projects such as the Solids Handling Facility Improvements Project and the ERP software replacement.

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

Performance in Key Metrics

GOAL ONE



Metric	Target	Performance
Average onsite response time for collection system emergency calls, during working hours	<20 minutes	30.46 minutes*
Average onsite response time for collection system emergency calls, after hours	<40 minutes	34.32 minutes*
Average customer service rating for emergency calls	≥3.8 out of 4.0	3.84 out of 4.0
Median customer satisfaction rating on construction projects	>95%	96%
Median customer satisfaction rating on permit counter interactions	>95%	100%
Number of students served by education programs	>4,000 per year	6,189
New employees attending annual customer service training within 6 months of employment	100%	100%
Participants in Plant/HHW Facility tours and District presentations	>500	783
Participants in citizens academy, Central San Academy	>30 per session	N/A - 2020 Academy will be held virtually in fall 2020**
Purchasing internal customer survey rating of satisfactory or better	≥70%	100%
Awards or recognitions achieved	10	16

*Performance may have been affected by modified working schedules to adhere to social distancing mandates due to COVID-19, impacting the fourth quarter of the FY.
 **2020 in-person Academy postponed due to COVID-19.

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 beyond Central San’s control
Work in progress	Performance fell short, but within reach, of the target



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

- ◆ Achieved **22nd** year of continuous 100% compliance with all NPDES permit requirements governing wastewater discharge.
- ◆ Revised the programmable logic controller (PLC) program to **improve waste heat boiler (WHB) level control** on both furnaces and installed hardware on the furnace No. 1 WHB control loop, adding stability during operation and allowing maintenance to be performed on the PLC without a furnace burnout.
- ◆ Initiated District-wide **Spill Prevention, Control, and Countermeasure Program** revamp efforts.
- ◆ Submitted **Title V permit renewal** application to Bay Area Air Quality Management District (BAAQMD).
- ◆ Submitted 2019 **Five-Year Review Report for Soil Cap** to Department of Toxic Substances.
- ◆ Obtained regulatory permits for **Outfall Improvements Project, Phase 7**.
- ◆ Developed **health risk reduction strategies** in preparation for compliance with BAAQMD Rule 11-18.
- ◆ Environmental & Regulatory Compliance Division Manager served as **liaison** to CASA Legislative Committee, presented at Water Environment Foundation **Nutrient Symposium**, and completed term as **Chair of the Bay Area Clean Water Agencies (BACWA) Executive Board**, leading BACWA through the adoption of the second Nutrient Watershed Permit and the recruitment of its new Executive Director and Assistant Executive Director.
- ◆ Communications and Government Relations Manager was reappointed to **California Special Districts Association legislative committee**.
- ◆ Staff served in leadership roles as **co-chairs** for pre-treatment and permits committees.
- ◆ Gave a tour of the Collection System Operations (CSO) facilities to 13 members of the **State and Regional Water Quality Control Boards** to help familiarize the members with Central San's operations.
- ◆ Worked with the Division of Safety of Dams to obtain a **"low hazard" determination** for clearwell dam.
- ◆ Supported the CASA-sponsored **wipes proper labeling legislation**, AB 1672.
- ◆ Maintained 2019 anthropogenic **greenhouse gas (GHG) emissions** below the Cap and Trade inclusion threshold.



Chemists on the Water

Each month, Central San conducts thousands of laboratory tests to ensure that the water being returned to the environment is safe and clean. These tests include monthly water sampling from four locations in Suisun Bay where effluent is discharged.

Although not required, these tests help ensure Central San is doing its part to protect the estuary and its wildlife.

Chemists measure temperature, pH, conductivity, and other characteristics that indicate the general health of a water body. They also test for ammonia, phosphorous, and other nutrients that are commonly associated with wastewater and which can negatively impact an ecosystem.

Central San's ongoing testing has not found significant differences between the water at the outfall pipe and the water in other parts of the bay - an indicator that there is limited impact to the environment.



Strive to minimize the number of sanitary sewer overflows (SSOs)

- ◆ Responded to **22** SSOs.
- ◆ Cleaned **769** miles of sewers.
- ◆ Completed **17,238** work orders on schedule **94.40%** of the time.
- ◆ Performed **19.8%** of all cleaning work on “hotspots.”
- ◆ Closed circuit televised **151** miles of sewers.
- ◆ Began reviewing **6-month, 1-, 2-, 3-, 5-, and 7-year frequency cleaning schedules** for optimization.

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

- ◆ Adopted a new **Internal Audit Function Board Policy**.
- ◆ Completed **2** internal audits.
- ◆ Updated the **Delegation of Authority to the General Manager Board Policy**.
- ◆ Conducted employee workshops on **Ethics Compliance, Brown Act, and Public Records Act** and Board Member training on **sexual harassment prevention**.
- ◆ Coordinated biennial review of **20** existing Board policies and amendments to **11** Board policies.
- ◆ Developed a new **records destruction policy** and **Records Program Handbook**.

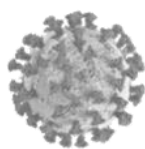




Simulating Overflows in House

When an overflow occurs, Central San is required to report it to the state. To train staff to estimate flow rates by sight under different conditions, staff designed and constructed an **overflow simulator** which can produce overflows at rates from **1 to 200 gallons per minute**, through various outlets.

In addition to the training, crews will carry a chart of each type of maintenance hole they may encounter in the field. As one of the few wastewater agencies to have its own permanent, on-site simulator, Central San will be sharing theirs with partner agencies in need.



COVID-19 Response

- ◆ Increased **outreach** in the midst of nationwide rises in overflows due to wipes.
- ◆ Strategically **prioritized pipeline cleaning schedules** to ensure service and combat overflows despite reduced staffing.
- ◆ Communicated and complied with local county and state **health orders** to keep essential workers safe.

Objectives for FY 2020-21

- ◆ Bid and award capital projects needed to meet regulatory requirements:
 - ◇ **Filter Plant and Clearwell Improvements - Phase 1A**, which will include replacing critical electrical gear and increase reliability at recycled water storage facilities.
 - ◇ **Solids Handling Facility Improvements**, which will include air pollution control equipment needed to reliably comply with current air regulations.
 - ◇ **Influent Pump Electrical Improvements**, which will replace the variable frequency drives at the Headworks Facility at the treatment plant.
- ◆ Construct the **Outfall Improvements Phase 7**, which will inspect and repair the 72-inch final effluent pipeline that travels from the treatment plant to Suisun Bay.

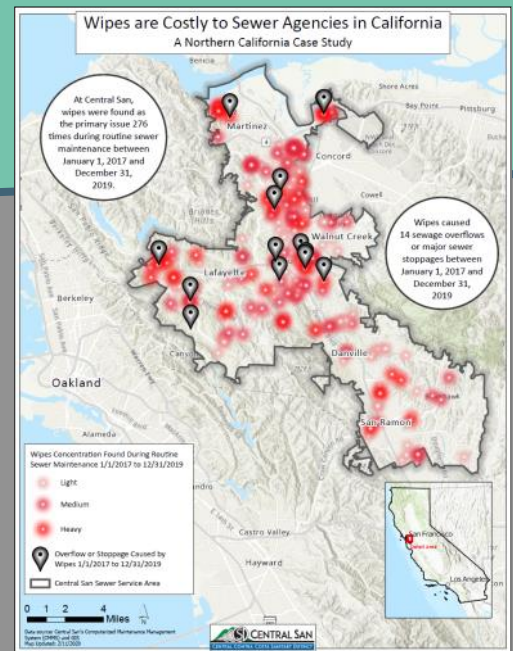
GOAL TWO



STRIVE TO MEET REGULATORY REQUIREMENTS

Spreading the Word on Wipes Clog Pipes - and Putting the Message to the Test

Wipes are not flushable, no matter what the labels may say. Since 2017, wipes have caused around **20** sewage overflows or stoppages in Central San's service area and were identified as the primary potential blockage issue **over 250** times during routine maintenance. To respond, Central San has increased maintenance schedules and installed additional equipment to help break up the wipes. It also created a map (pictured) to help the public understand the impact of improper disposal of these wipes. In collaboration with CASA, the map was included in a presentation to state legislators to highlight the need for improved labeling and performance standards for wipes.



THE "FLUSHABLE" TEST

With all the misinformation on wipes, Central San, in collaboration with CASA, decided to put their "flushability" to the test. Staff tagged 12 wipes from 10 popular North American brands and 2 imported ones made of natural fiber, plus 1 toilet paper sample, and sent them downstream through 3,000 feet of active sewer line for 30 to 40 minutes. They collected them downstream and compared how well (or not) they broke down in the pipe.



THE VERDICT

9 of the 10 popular brands North American brands were **fully or mostly intact** after the test, while 1 wipe (made of natural fibers) mostly disburbed. In contrast, the toilet paper and both imported wipe products completely broke down. All but 1 of the tested products were labeled as flushable or disburstable.

This test proved that **more than 9 out of 10 times, so-called flushable wipes are not.**

Staff have been using these test results to support further education and outreach to customers, encouraging them to dispose of wipes where they belong: in the trash.



STRIVE TO MEET REGULATORY REQUIREMENTS

Performance in Key Metrics

GOAL TWO



Metric	Target	Performance
National Pollutant Discharge Elimination System (NPDES) compliance	Zero (0) violations	Zero (0) violations
Title V compliance	Zero (0) violations	5 violations*
Recycled Water Title 22 compliance	Zero (0) violations	Zero (0) violations
Anthropogenic GHG emissions	<25,000 metric tons (MT) CO ₂ e	23,038 MT CO ₂ e in calendar year 2019. On track to meet 2020 target.
Sanitary sewer overflows (SSOs)	<2.5 spills per 100 miles of pipeline	1.43 spills per 100 miles of pipeline
Spills to public water	<3	6
Percent of spills <500 gallons	>95%	80.75%
Pipeline cleaning schedules completed on time	>95%	94.43%**
Pipeline cleaning quality assurance / quality control (QA/QC)	On ≥3% of pipelines cleaned on an annual basis	2.44%**
Pipeline cleaning QA/QC passing rate	>98%	96.57%**
Annual Environmental Compliance Inspections and permitting completed on time	100%	100%***
HHW management compliance	Zero (0) violations	Zero (0) violations
Biennial review of all existing Board policies	100%	100%

*The scheduled Solids Handling Facility Improvements Project will install new wet scrubber technology to significantly reduce future violations related to bypass damper openings.

**Performance may have been affected by modified working schedules to adhere to social distancing mandates due to COVID-19, impacting the fourth quarter of the FY.

***Non-emergency Environmental Compliance inspections and field work were suspended due to COVID-19. All industrial user permitting activities were completed.



Conduct Long-Range Financial Planning

- ◆ 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.
- ◆ Presented **alternatives for Board input** consistent with debt management policy, fiscal reserve policy, Capital Improvement Plan, 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. This application was upsized in August 2020 to \$173.1 million to reflect the revised project cost and request for funding of other project costs not in the original application.
- ◆ Spearheaded the establishment of a new **Rate Stabilization reserve account** in the Running Expense and Sewer Construction funds to help hedge against the adverse impacts of cost pressure volatility on SSC stability, and funded the account with **\$2.6 million** from available FY 2018-19 closeout funds.
- ◆ Issued **accurate and timely** interim monthly financial reports allowing for diligent monitoring budget and accountability.
- ◆ **Fully funded** the Other Post-Employment Benefits actuarially determined contribution and paid an **additional \$1.25 million (M)** toward the unfunded actuarial accrued liability.
- ◆ **Fully funded** the actuarially determined contribution requirements determined by the Contra Costa County Employees' Retirement Association pension administrator and paid an **additional \$1.25M** toward the Section 115 secondary pension trust.
- ◆ Received the GFOA **Certificate of Achievement for Excellence in Financial Reporting** award (pictured) for the **19th** consecutive year.
- ◆ Received the GFOA **Distinguished Budget Presentation** award for the second consecutive year following Central San's first ever submission 2 years ago.



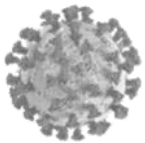
Manage Costs

- ◆ Successfully transitioned all employees and retirees to **CalPERS** health benefit plans on July 1, 2019 for **\$6.1M** in annual savings in healthcare costs.
- ◆ 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.
- ◆ Received an **unqualified audit opinion** and **zero reported material weaknesses** or significant deficiencies in internal controls as part of the annual financial audit.
- ◆ Delivered **Benchmarking Study** comparing Central San's performance against other water and wastewater agencies statewide and nationwide over 3 fiscal years.
- ◆ Fully implemented the **Uniform Public Construction Cost Accounting Act (UPCAA)** for savings on administrative costs of bidding and streamlining the bidding process for informal projects.
- ◆ Continued to evaluate, design, and manage construction sewer renovation projects **in-house** at costs below the industry standards or compared to outside services.



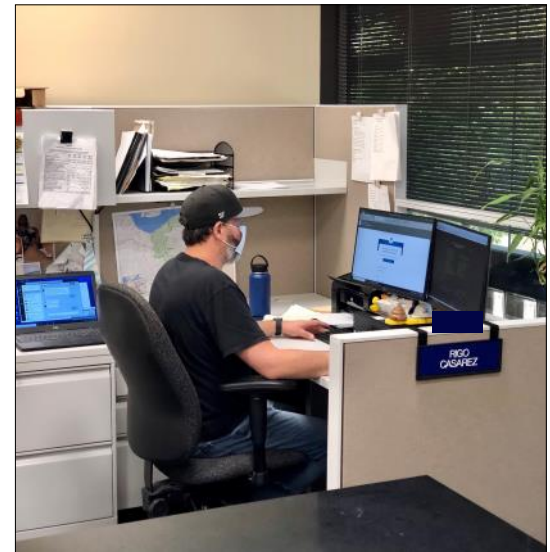
Manage Costs (continued)

- ◆ Completed cycle counts of warehouse inventory, including counting **5,600** line items for a total piece count of **81,648** and total value count of **\$2,041,839**.
- ◆ Leveraged spend through annual requirements contracts for **38%** 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.
- ◆ Utilized the buying power of public entities through **sourced cooperative purchasing agreements**.
- ◆ 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.
- ◆ Presented the **Internal Audit Plan** for calendar year 2020 to the Board.
- ◆ Managed claims aggressively to reduce costs and facilitate resolution, resulting in an average cost per overflow claim of **\$24,800**, meeting the target of <\$25,000.
- ◆ Established **pre-loss measures** to address or resolve situations affecting Central San's 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, with the initial semi-annual report presented in July 2020.



COVID-19 Response

- ◆ **Tracked all COVID-19-related costs** so all eligible expenses can be included with the reimbursement claim that will be submitted to state and federal assistance programs.
- ◆ Provided an assessment in the FY 2020-21 budget document of **COVID-19 impacts** on costs and rates.
- ◆ Modified business processes as needed to adapt to the pandemic, resulting in **optimizations** such as the following:
 - ◇ Contactless and online payments for Permit Counter customers being helped via email and phone
 - ◇ Virtual plant tours
 - ◇ Student education programs conducted via Zoom
 - ◇ Remote financial deposits
 - ◇ Use of electronic signature programs.



Objectives for FY 2020-21

- ◆ Hire a new full-time **Internal Auditor**.
- ◆ Enter into a **Financing Agreement** for the California SRF loan to help supplement the construction costs of the Solids Handling Facility Improvements Project.
- ◆ Continue advancing the **Enterprise Risk Management model** function.
- ◆ Launch the **Finance and Purchasing modules** of the new Oracle ERP system and implement electronic business workflows to improve operational efficiency and the effectiveness of internal controls.
- ◆ Launch **Permitting and Community Development modules** of the new Oracle ERP system in fall 2020 and **Payroll and Budgeting modules** in early 2021.
- ◆ **Begin using alternative diesel fuels** for CSO vehicles, resulting in cleaner emissions, reduced maintenance, and improved reliability.

GOAL THREE



BE A FISCALLY RESPONSIBLE AND EFFECTIVE WASTEWATER UTILITY

Performance in Key Metrics

Metric	Target	Performance
Maintain service affordability	Sewer Service Charge less than average of Bay Area agencies Sewer Service Charge plus Ad Valorem tax less than average of Bay Area agencies	Target Met
Standard and Poor's (S&P) and Moody's Credit Ratings	AAA/Aa1	AAA rating from S&P / Aa1 rating from Moody's
Debt service coverage ratio	>2.0x	40 (based on pre-audit FY 2019-20 figures)
Actual reserves as a percentage of target	100%	174.6% (O&M) 167.7% (Sewer Construction) (based on pre-audit FY 2019-20 figures)
Operating expenditures as a percentage of operating budget	>95%	93.3% (based on pre-audit FY 2019-20 figures)
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	1.06
Temporary modified duty provided (Return to Work Program)	>95% of recordable injuries	93.3%*
Difference in inventory value in Purchasing database vs. value submitted to Accounting	<1%	1.23%
Accuracy of physical inventory count vs. book value	≥95%	98.9%

*COVID-19 prevented immediate availability of modified duty for one situation but it was made available as soon as circumstances permitted, with temporary modified duty back at 100% at the end of the FY.



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

- ◆ Completed the **Classification Study Phase 1**, developing naming conventions.
- ◆ Hosted **HR @ Your Service** training sessions.
- ◆ Began offering **financial wellness seminars**.
- ◆ Started presenting **monthly wellness seminars** on topics related to physical and mental health.
- ◆ Enhancements to the **performance evaluation forms** have been approved by the bargaining units, and a procedure is being drafted for rollout.
- ◆ Identified vendor for the implementation of an agency-wide **learning management system** to centralize tracking of all employee training.
- ◆ Held the third session of the **Management Academy** (graduates pictured below), which for the first time allowed **15** participants from sister public agencies in addition to the **24** graduates from Central San.
- ◆ Paired **7** mentees with mentors in the third cycle of the **BOOST Mentorship Program**.
- ◆ Improved **Mechanical Maintenance Technician Trainee Program** by updating the training material, adding modules, and modifying the curriculum to better suit learning and development in the subject matter.
- ◆ Added new **technical learning libraries content** and implemented **training and development checklists**.
 - ◇ Several staff members have gained **Level I certification** in areas of asset condition monitoring techniques.
 - ◇ **4** staff members obtained **Certified Reliability Leader** certification.
 - ◇ **2 Operators-in-Training** are currently gaining operational experience and working to complete their in-house training requirements towards advancement to Plant Operator I.
- ◆ Engaged the **next generation** of wastewater workers.
 - ◇ Created a **technical trades internship program** and started with two interns from Los Medanos College.
 - ◇ Continued coordinating with other agencies to support **development of the regional workforce**.
 - ◇ Held the first student **externship program**, hosting two students from the University of Michigan.



Picture Perfect

Central San is proud of all its staff - from the Plant Maintenance Technicians, to the Engineers, to the Administrative staff, to the CSO crews, and everyone in between - the team represents a wide range of talents and skills that lift up Central San to its status as a high-performing organization.

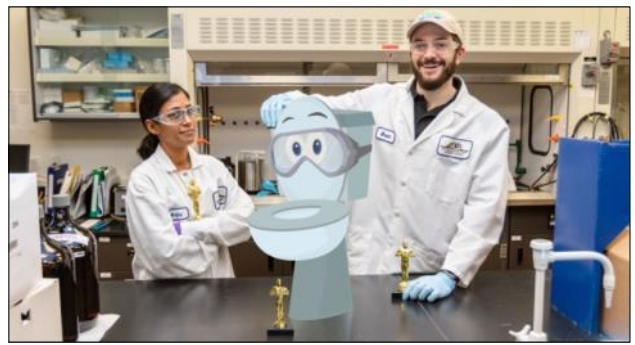




- ◆ Transitioned to **Kaiser Occupational Health**, Central San’s provider for workers’ compensation related injuries, for all pre-employment medical activity.
- ◆ Enhanced hiring process to include a **hands-on practical exam** for Mechanical Shop recruitments.

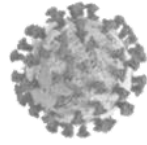
Enhance Relationship with Employees and Bargaining Units

- ◆ 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 to improve dialogue outside of formal negotiations.
- ◆ General Manager and the Executive Committee Members of the bargaining units **meet quarterly**.
- ◆ Began tracking status of resolution of issues arising from the Local One and Management Support / Confidential Group **Labor Management Committees**.



Meet or Exceed Industry Safety Standards

- ◆ CSO Division and Administration and Engineering and Technical Services Departments completed calendar year 2019 with **zero lost workdays**.
- ◆ Updated the **Exposure Control Plan** for Bloodborne and Infectious Pathogens.
- ◆ Oversaw Hazardous Materials Business Plan with **no violations**.
- ◆ Had **zero Cal/OSHA violations**.
- ◆ Launched **Safety page** on San Central intranet to provide more efficient access to safety information.



COVID-19 Response

In response to the pandemic and state and local health orders, Central San adopted temporary policies and provisions to balance three important objectives: maintaining workforce and public **safety**, continuing the essential **services** provided by Central San, and ensuring staff **remain productive** and **maintain their livelihood**. Measures adopted to promote these objectives included the following:

- ◆ **Closed facilities** to the public and pivoted to services **online** where possible.
 - ◆ Permitted a large portion of the workforce to **telework on an interim basis** during the COVID-19 situation and provided the necessary **technology** to accommodate this.
 - ◆ Adopted and kept updated a **COVID-19 Exposure Prevention Plan** to serve as the guiding document for preventive measures, hazard assessment and controls, and safe return-to-work protocols, based on Centers for Disease Control and Cal/OSHA guidelines.
- ◆ Provided COVID-19 related **administrative leave through July 1, 2020** to employees who were unable to telework and over the age of 65, or who were at potentially heightened risk of more severe health implications if they were to be exposed.
 - ◆ Secured sufficient masks and other **personal protective equipment (PPE)**.
 - ◆ Enhanced and increased **cleaning and disinfection** of common areas.
 - ◆ Modified operations to promote social distancing:
 - ◇ **Administered temporary work schedules** to reduce the number of staff in confined spaces such as maintenance areas, vehicles, and other work areas.
 - ◇ **Reduced mail delivery.**
 - ◇ **Worked as a team to reallocate tasks** to limit staff on site (e.g., the Instrument Shop staff took over the Laboratory’s testing of dissolved oxygen in the aeration and nitrification tanks).
 - ◇ Adopted numerous **technologies** to mitigate the risk of spreading the virus and facilitate continuation of work, such as Microsoft Teams and DocuSign.
 - ◇ Conducted **virtual Board meetings**.
 - ◇ Put the **summer student program** on hold; **internships** were unaffected.
 - ◇ **Postponed in-person Central San Academy** session and began planning a mini virtual session to take place in the fall.
 - ◆ Required contractors to provide a **COVID-19 Protection Plan**.
 - ◆ **Restricted entry** to critical locations such as the Plant Operations Control Rooms.
 - ◆ Created a **Cleaning and Disinfection Schedule Matrix** to define trigger points based on capacity in employee workspaces and proposed cleaning schedules.
 - ◆ Began developing an **Engineering Controls Plan** for returning staff to the workplace in a careful and phased manner, with the input of the employees and bargaining unit representatives.
 - ◆ Developed and provided to the Board a financial impact assessment related to COVID-19 **productivity impacts**.
 - ◆ Launched a **Manager Dashboard** (pictured) which displays weekly performance data for various divisions and staffing status (hybrid working, teleworking, reserve, onsite, etc.).



GOAL FOUR



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

Objectives for FY 2020-21



Objectives for FY 2020-21

- ◆ Launch third **Supervisory Academy** and hold a series of **virtual writing workshops**.
- ◆ Implement the **learning management system**.
- ◆ Advance initiatives from recommendations from the **employee engagement survey**.
- ◆ Continue to **work collaboratively** and keep open lines of **communication** with bargaining units to resolve workplace issues in their early stages and prevent grievances.
- ◆ Continue to **modify working schedules and conditions** to reflect social distancing best practices and ensure **proper PPE** is provided.
- ◆ Implement additional **administrative and engineering controls** to safely bring staff back to the office in a thorough, thoughtful way that prioritizes the health and safety of all employees, customers and the community.



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

Performance in Key Metrics

GOAL FOUR



Metric	Target	Performance
Average time to fill vacancy (from request to hire)	<60 days	54 Days
Turnover rate at or below American Water Works Association industry median	≤7.8% (FY 17-18 median)	5.09%
Average annual training hours (external and internal training)	15 hours per full-time equivalent employee (FTE)	23.9 hours per FTE
Actual versus budgeted usage of training dollars	>80%	64%*
Performance evaluations completed on time	100%	100%
Participation in annual Wellness Expo	Increase by 10% each year	+14%
Internal promotions (excludes entry-level positions)	≥25%	69%
Formal grievances filed	Zero (0)	Zero (0)
Employee injury and illness lost time incident rate less than 2016 Bureau of Labor Statistics (BLS) California Sewage Treatment Facilities Rate	<6.8	2.57

*Performance may have been affected by travel restrictions and event postponements due to COVID-19, impacting the fourth quarter of the FY.



Manage Assets Optimally throughout Their Lifecycle

- ◆ Developed software for a **Reliability Engineering Tool** to see which assets do not have preventive maintenance work order cycles, which have predictive maintenance work order cycles, and which have a maintenance program assessment performed on them.
- ◆ Initiated a **valve exercising program** in the computerized maintenance management system, Cityworks, for recycled water distribution system control valves.
- ◆ Added **new layers** in the geographic information system, GeoPortal, for annual sewer renovation planning forecast and large diameter pipeline corrosion planning information.
- ◆ Increased **accessibility of Asset Management and Reliability Engineering information** such as “Don’t Just Fix It; Improve It” (DJFI) initiatives, spares management, new workflows, job plans.
- ◆ Created **links in GeoPortal** to reliability analysis information and maintenance program tasks.
- ◆ Completed **940** services on vehicles and equipment to maintain **100%** uptime.
- ◆ Finished converting cleaning schedules from routine to scheduled to ensure **each line has a scheduled cleaning date**.
- ◆ Completed **18** DJFI initiatives to increase maintenance effectiveness, lower costs, and increase equipment reliability.
- ◆ Completed **111** QA/QC Maintenance Planner updates to incorporate Maintenance staff’s suggestions to work orders.
- ◆ Trained **3** staff members in performing root cause analyses and completed **1** root cause analysis, which will be tracked and monitored in Cityworks along with any action items.
- ◆ Developed Cityworks **templates for predictive technologies**.
- ◆ Began development of an **Asset Health Indicator Tool**.
- ◆ Continued to strategically review maintenance procedures and identify opportunities for **continuous improvement**, including failure reporting and corrective action processes.
- ◆ Made additions to the Asset-Centered Maintenance (ACM) program such as **breaker overload testing** and **winding analyzer programs**, which help lower equipment downtime costs, increase reliability, increase the effectiveness of the motor management program, and enhance acceptance testing of new or overhauled equipment.
- ◆ Created **dashboards** for various key metrics and ACM templates for each technology to better monitor, analyze, and act on exceptions.



Public Safety Power Shutoffs: All in a Day's Work

During PG&E's October 2019 power shutoffs, staff had a meticulous plan to keep all operations going - including all 18 pumping stations. Many of these are in sensitive watershed areas where a spill could have a significant impact. The shutoffs impacted westside stations from October 9-11 and again October 26-28, and Central San is proud to report there was **no impact to the environment or service.**

This is thanks to the dedicated **Pumping Stations team**, who do everything from mechanical work to carpentry, plumbing, electrical work, and even landscaping to keep the facilities - some dating back to the 1950s - running smoothly. They are often on-call at odd hours to make sure that, if something goes wrong, someone is available to respond 24 hours a day, 7 days a week. Coincidentally, many of the operators' daily tasks are already what one might do to prepare for a power shutoff, including testing generators and alarms, exercising valves, testing all portable equipment, and much more. The Plant Maintenance Shops assist with keeping the Pumping Stations up and running through preventive maintenance, fabricating parts, and keeping vehicles serviced and ready to respond whenever needed.

For this prepared and talented staff,
the power shutoffs were all in a day's work.

Facilitate Long-Term Capital Renewal and Replacement

- ◆ Constructed a new, more secure **Server Room** to house IT equipment.
- ◆ Completed several critical treatment plant projects, including the **Treatment Plant Piping Renovations, Phase 9**, and **Plant Operations Building Seismic Upgrades**.
- ◆ 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 Pumping Station Upgrades, Phase 1.
- ◆ Completed annual Basin A South **soil cap seep repairs**.
- ◆ Transitioned **e-Builder** program management information system to Capital Projects.
- ◆ Used **3-D modeling** to design projects such as the Solids Handling Facility Improvements to help avoid conflicts and construction problems.
- ◆ Achieved great strides in **cataloging as-builts**, which are critical for staff to troubleshoot and understand systems, apply Asset Management principles to upgrade or replace equipment, and perform capital design and construction.
 - ◇ Over **7,000** Treatment Plant and **3,400** Electrical, Instrumentation and Controls Program sheets are now scanned and stored in various databases.
 - ◇ Staff is establishing **minimum requirements** and **3-D CAD standards** for future projects, keeping in mind the potential future of using 4-D, 5-D, and 6-D in the future. Standards assure consistency in drawing production and uniformity in file structure for all drawings.



Protect District Personnel and Assets from Threats and Emergencies

- ◆ Upgraded 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**.
- ◆ Presented an **Emergency Management Program** report to the Board.
- ◆ Updated and presented the **Pandemic Response Plan** to the Board.
- ◆ Participated in the **Operational Area Council** to contribute to creating an effective and multijurisdictional approach to disaster preparedness and planning.
- ◆ Completed the **strategic risk inventory**, which serves as the foundation for the ongoing Enterprise Risk Management Program, and presented to the Board in December 2019.
- ◆ Activated **Emergency Operations Center** to monitor natural hazard conditions.
- ◆ Made **security improvements** to assist with increased treatment plant activity.
- ◆ Developed scope and design of the **pumping stations security improvements**.
- ◆ Upgraded **Treatment Plant control network** and its equipment to a redundant ring architecture, with work expected to be complete in August 2020.





Condition Assessments for the Steam and Aeration Blower Systems Renovations

– Staff completed a challenging two-year condition assessment effort to estimate the remaining useful life of the complex steam and blower system which powers the treatment plant. The assessment included reviewing each of the assets' records and inspecting and testing the equipment - some of which is over 40 years old - in person. The team used **non-destructive methods** to test the boilers and the steam piping, allowing them to put

equipment immediately back into service after testing. For 100 feet of steam piping, an advanced method called **guided ultrasonic wavelength inspection** was used. The assessment effort culminated in workshops with the consultants and Central San staff to discuss the results. This multi-divisional effort was an exercise in coordination and a big first step for the Steam and Aeration Blower Replacements Project.

The COVID-19 pandemic impacted the fourth quarter of the capital program. Many projects continued; however, new construction timelines were changed to allow contract and safety provisions for COVID-19.

Mechanical and Concrete Renovations – Large bypass pipes were installed across the plant to carry wastewater from the primary sedimentation tanks (PSTs) to the secondary treatment process. This allowed the 72-inch selector pipe to be inspected and any minor repairs to be completed.

During the pandemic, staff replaced and installed new **gates** in the PSTs, Distribution Channel, and Pre-Aeration Tanks; replaced and installed new **stainless steel upper rails** for flights in the PSTs; and completed **coating work** in the Headworks Wet Wells and tanks. The project was completed in July 2020.



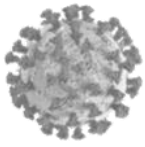
Emergency Sludge Loadout Facility (ESLF)

Upgrades – Construction on this project began in October 2019 and included the installation of new **discharge and silo isolation gates**, improvement of **ventilation and odor control**, and new **control systems**. *During the pandemic*, staff completed a successful **test run** of the facility. Over 3 days, staff loaded 12 truckloads of sludge - about 206 tons - which were hauled to the Fairfield-Suisun Sewer District for use as biofertilizer. The test helped identify a few minor modifications to improve performance, while also giving Operators a chance to try out the controls.

Plant Operations Building (POB) Seismic Upgrade and Server Room Relocation Project

– This project strengthened the POB, constructed a new secure server room, and renovated the lobby and permit counter. The **lobby** is now a large open space with a reception desk, permit counter, restroom, and new signage and furniture. The seismic work on the POB was **completed** with employees returning to their work areas in early 2020. *During the pandemic*, the **Server Room** electrical, uninterruptible power supply, and other systems passed testing, and the Fire Marshal issued approval. In July 2020, construction was completed and the new Server Room was up and running.



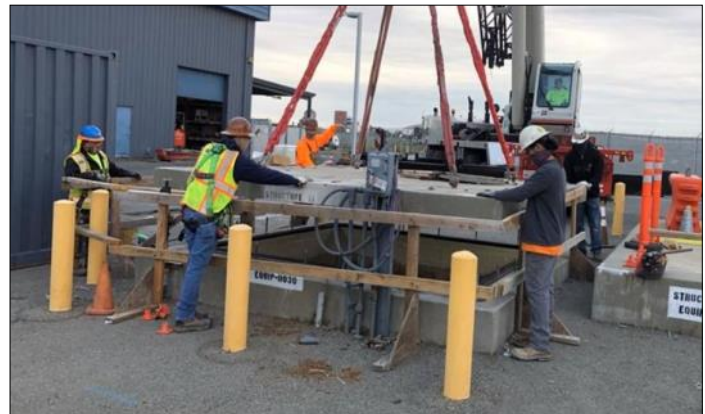


COVID-19 Response

In response to state and local health orders restricting construction activities, Central San reviewed all projects to distinguish which ones are essential for ensuring reliable service and which might be postponed.

In projects that moved forward during the pandemic, contractors were required to do the following:

- ◆ Update their company **Illness and Injury Prevention Plan** to include COVID-19 provisions and associated training.
- ◆ Have daily COVID-19 **safety logs** and **sign-in sheets**.
- ◆ Wear **PPE**.
- ◆ Provide **handwashing and sanitizing stations**.
- ◆ Coordinate work activities to **minimize interactions** with Central San staff, subcontractors, private residents, and construction management staff.
- ◆ Post **signage** reminding of the need for physical distancing.
- ◆ Perform **temperature checks**.



Objectives for FY 2020-21

- ◆ **Utilize a repeatable and comprehensive approach to maintenance that optimizes asset lifecycle** based on reliability, cost, and criticality, including continuing to perform additional analyses and defect elimination initiatives on critical equipment and systems.
- ◆ Drive the **development of the ACM Program** and integrate with analytics for earliest warning of equipment degradation.
- ◆ **Develop a prioritization model** for vertical assets.
- ◆ **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.
- ◆ **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.
- ◆ **Successfully bid and award the Influent Pump Electrical Improvements Project**, which will replace the variable frequency drives at the Headworks Facility at the treatment plant.
- ◆ **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.
- ◆ Implement the **Large Diameter Pipe and Force Main Inspection and condition assessment programs**.
- ◆ 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**.

MAINTAIN A RELIABLE INFRASTRUCTURE

Performance in Key Metrics

GOAL FIVE



Metric	Target	Performance
Safety-prioritized work orders completed on time	100%	93%
Regulatory Title V work orders completed on time	100%	91%
Planned treatment plant preventative maintenance completed on time	>95%	91%
Planned pumping station preventative maintenance completed on time	>95%	Data unavailable (Pumping Stations will be added to Cityworks by the end of 2020 or early 2021)
Uptime for vehicles and equipment	100%	100%
Miles of pipeline replaced	>0.5% of assets (7.6 miles per year for the next five years starting in FY 2017-2022)	0.35%* (5.25 miles)
Capital expenditures as a percentage of capital budgeted cash flow including carry forward	>90%	82%* (based on pre-audit FY 2019-20 figures)
Information system outages affecting normal business operations	100% uptime	99.99% uptime**
Data backup and recovery	Zero lost data	Zero lost data
Potable water system monthly testing meets all water quality standards	100%	100%

*The COVID-19 pandemic impacted the fourth quarter of the capital program. Some construction timelines were changed to allow contract and safety provisions for COVID-19.

**One outage lasting a couple hours.



Augment the Region's Water Supply

- ◆ Distributed approximately **222 million gallons** of recycled water to Zone 1 customers.
- ◆ Distributed approximately **7.7 million gallons** of recycled water through the Commercial Truck Fill Program.
- ◆ Distributed approximately **1 million gallons** of recycled water through the Residential Recycled Water Fill Station.
- ◆ Extended the Memorandum of Understanding with Contra Costa Water District (CCWD) and Valley Water and assigned Board liaisons to continue efforts toward the proposed **Refinery Recycled Water Exchange**.
- ◆ Collaborated with Dublin San Ramon Services District (DSRSD) – East Bay Municipal Utility District Recycled Water Authority (DERWA), a recycled water joint powers authority, 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 million gallons per day (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 to **expand internal recycled water use** by increasing the number of restrooms and Central San facilities that can benefit from the water source.

Reduce Reliance on Non-Renewable Energy

- ◆ Issued a Request for Proposal (RFP) for a Power Purchase Agreement for a 1.75-megawatt **solar energy project** on Central San's Lagiss property that meets the cost-effectiveness criteria in Central San's Energy Policy.
- ◆ Continued developing the **Strategic Energy Management Program**.
- ◆ Began assisting in the effort to investigate the growing challenge of **recycling certain materials** to obtain a better understanding of the issue from the agencies in the service area and how it can be overcome.

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

Replacing Central San's CentralSquare/SunGard HTE ERP system with Oracle Fusion Cloud has been a highly complex and time-consuming effort involving conference room pilots, user acceptance testing, closing of configuration gaps, data conversion system documentation, and training staff. The project was already on an aggressive schedule when the pandemic impacted staff availability and consumed any padding built into the project timeline. Despite these challenges, the timeline was largely held intact, with the financial systems being used in a parallel test on July 1, 2020, with full cut-over planned for September 2020.

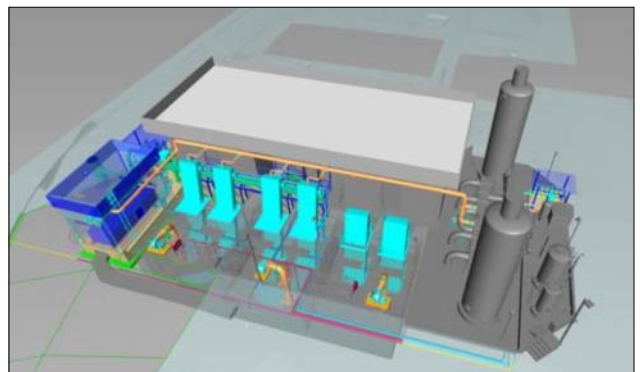
When launched, the new ERP will increase automation, be more user-friendly for employees, make it easier to produce reports, allow for real-time data entry synchronization and authorization, and create more centralized record keeping. This FY, staff performed the following to advance this endeavor:

- ◆ Implemented the first modules, including the **Core Human Resources** system (Human Capital Management), the **Employee Self-Service** module, and much of the **Core Financials** systems.
- ◆ Completed preliminary design of a **biweekly payroll system** for launch in December.
- ◆ Began running **parallel Oracle and HTE systems** on Financials (general ledger, cash management, payables, receivables, fixed assets, expenses, and employee travel reimbursements) and Projects (used for capital project accounting as well as monthly financial reporting) in preparation for the full cut-over which took place in September 2020.



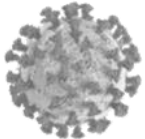
In addition to the ERP replacement, staff across the organization have continued to use technologies, innovations, and applied research and development to continue to optimize operations.

- ◆ Maintained **Optimizations Program** to commit to efficiency, effectiveness, and continuous improvement by tracking and reporting progress and presented **Optimizations Program Annual Report** to the Board.
- ◆ 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.
- ◆ Commenced planning efforts to hold first **Innovations Fair** to celebrate employees' optimizations and inspire future ideas.
- ◆ Optimized **1-, 2-, 3-, and 6-month pipeline cleaning schedules** to dispatch CSO staff more efficiently and clean sewers as needed to best prevent overflows.
- ◆ Continued participation in the Hydrothermal Processing of Wastewater Solids (**HYPOWERS**) pilot project. Phase 2 is pending funding and Department of Energy approval, which is anticipated in summer or fall 2020.
- ◆ Completed **filter column testing** to optimize existing granular media filters used for producing Title 22 recycled water.
- ◆ Completed **nitrification rate testing, oxygen transfer efficiency testing, and wastewater sampling** for improved treatment process modeling and evaluation.
- ◆ Completed evaluation of a pilot project for new recycled water meter technology (**Water Pigeon**) and initiated a second trial phase using a new design from the vendor.
- ◆ Completed business case evaluation for new **tertiary membrane filtration** to improve recycled water production compared with renovating existing filters.
- ◆ Obtained new Plant Maintenance **tools and equipment** to increase work efficiency through ACM, such as RDI Technologies' motion amplification and ultrasound technologies.
- ◆ Piloted and installed infrastructure for **mobile supervisory control and data acquisition (Dynac)** software.
- ◆ Upgraded Filter Plant, Headworks, and Dewatering **PLC programs** from 1980s-era software to modern software.
- ◆ Moved toward **smart motor control centers and variable frequency drives** controlled over Ethernet.
- ◆ Continued to design and perform constructability reviews using **3-D modeling** (pictured) in the Solids Handling Facility Improvements Project.
- ◆ Optimized the **plan review workflow** for Development Mainline Construction.
- ◆ Developed a **Septic Parcel Identification web application** to assist in identifying parcels that are potential septic conversion candidates.
- ◆ Optimized the **Asset Registry** by enhancing Geographic Information System 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 a **Pipeline Cleaning Schedules** web application and analysis tool to optimize how staff cleans the pipes using geospatial location information.





- ◆ Began developing a dashboard using data from Cityworks, which records work orders, estimated labor hours, actual labor hours, when a work order has been completed or closed, and more. This work order table includes over **470,000** records and organizes data by work categories, such as preventive or reactive maintenance, as well as by Maintenance Shops. As Central San continues to amass data on its assets, work orders, and inspections, the ability to easily digest and understand the data will be valuable for decision-making.



COVID-19 Response

- ◆ Began participating in a **wastewater COVID-19 research project** with Stanford University to better understand the fate and transport of the SARS-COV-2 virus in wastewater.
- ◆ Modified operations to reopen the **Residential Recycled Water Fill Station** safely on June 27, 2020 - in time for the summer irrigation season.
- ◆ 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, the internal control structure, and operational efficiency.
- ◆ Implemented **electronic signature technology** for various business processes, increasing functionality, visibility and tracking, reducing the use of paper, and improving processing time.
- ◆ Transitioned to **online meetings and trainings** using Microsoft Teams.
- ◆ Created dashboards to provide critical insights to help guide staff allocation and resources
 - ◇ **Emergency Response Dashboard** to track staffing resources.
 - ◇ **Manager Dashboard** to track performance, such as feet of sewer mains cleaned, daily influent flow treated, plant maintenance activities performed, permits processed, engineering capital projects in construction or out to bid, safety trainings completed, and other metrics.
- ◆ Transitioned Central San’s student education programs, public tours, and events to **virtual formats** to continue to reach out to customers about the essential work Central San does (portions of the virtual plant tour are pictured below).

Headworks

0:00 / 1:55

Powered by 360player.io

Wastewater, which is generated by homes and businesses located throughout Central San’s service area, flows through a collection system of underground pipes to our wastewater treatment plant in Martinez.

The first process area that the wastewater encounters upon reaching the treatment plant is known as the headworks. Wastewater also enters the headworks via septic trucks, or “honey trucks.” These trucks deliver their wastewater directly into our system by pumping their contents into holding tanks below ground.

This combined wastewater flow is screened to remove large objects.

Primary Treatment

0:00 / 1:13

Powered by 360player.io

Click and drag to look around

Primary sedimentation is a simple process found in most wastewater treatment plants. It serves to remove substances in the wastewater that are lighter or heavier than water.

The primary sedimentation tanks mirror a natural physical process, similar to when a swiftly moving river flows into a tranquil lake. As the water slows, grease, plastics and other light substances collect on the water’s surface while heavy substances sink to the bottom as sludge. The difference from nature is that, in the primary sedimentation tanks, we can mechanically collect and remove the bottom sludge and the floatable materials, known as scum.



Objectives for FY 2020-21

- ◆ Complete preliminary feasibility evaluation with CCWD and Valley Water to **advance the Refinery Recycled Water Exchange**.
- ◆ 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.
- ◆ **Initiate a cost-effective 1.75 MW solar energy project** with the selected vendor from the RFP process.
- ◆ Go live with the Purchasing/Contracting/Inventory, Permitting/Community Development, Payroll, and Budgeting **ERP modules**.
- ◆ Evaluate and review **new Sewer Service Billing software** to replace SunGard.
- ◆ Work on at least 3 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.
- ◆ 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.
- ◆ Develop **additional dashboards** to show work orders completed or closed, work order trends, and other useful indicators tied to strategic goals, to make data in Cityworks more accessible and actionable.



GOAL SIX**EMBRACE TECHNOLOGY, INNOVATION,
AND ENVIRONMENTAL SUSTAINABILITY****Performance in Key Metrics**

Metric	Target	Performance
Gallons of recycled water distributed to external customers	>240M gallons per year	222M gallons*
kWh of electricity produced	>18M kWh per year (reported as a rolling average)	22.2M 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)	284,000 kWh (reported as a rolling average)
Reviews or pilot tests of new and promising technology	>3 per year	8
Research papers and findings presented	>3 papers or presentations per year	7** (3 papers and 4 presentations)





*Performance may have been affected by the Residential Recycled Water Fill Station being closed due to COVID-19, impacting the fourth quarter of the FY.

**1 planned presentation was postponed to October 2020 and 1 was canceled due to COVID-19.



ON TO THE NEXT TWO YEARS

Staff will begin to fulfill and complete the goals set forth in the first year of the new FY 2020-22 Strategic Plan. This plan retains the framework of the FY 2018-20 Strategic Plan, with a few revisions:

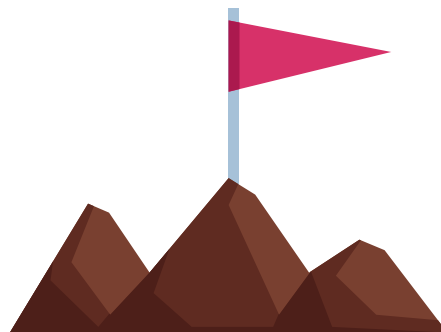
-  Updated the **Vision and Values** to emphasize forward thinking, innovation, and Central San's commitment to customers and the environment.
 -  Integrated American Water Works Association **benchmarking performance indicators** into the key metrics for improved ability to compare Central San in industry standards and against other agencies nationwide and statewide.
 -  Made the **goals** more concise to easily communicate them to staff and the public.
-  Central San has not shied away from addressing current and anticipated challenges or from continuing to set stretch goals within the key metrics. A new **Goal 7: Agility and Adaptability** holds Central San accountable for continuing to respond to the COVID-19 pandemic and any other potential public health or natural disasters.

KEY CHALLENGES AND OPPORTUNITIES FOR FY 2020-22

In planning the priorities and initiatives for the next two FYs, Central San identified the following key challenges and opportunities to be addressed:

- Balancing the need for financial resources against impacts to the customer
- Adjusting operations in response to the COVID-19 pandemic
- System optimization and utilization of Big Data
- Driving employee performance and rewarding excellence
- Evolving regulatory requirements
- Aging infrastructure
- Climate resiliency
- Maintaining a sustainable water supply

Central San will work hard over the next two years to uphold its level of service and excellence with these challenges and opportunities in mind.



ACRONYMS

found in this document

ACM	Asset-Centered Maintenance
BAAQMD	Bay Area Air Quality Management District
BACWA	Bay Area Clean Water Agencies
CASA	California Association of Sanitation Agencies
CCWD	Contra Costa Water District
CSO	Collection System Operations
CWEA	California Water Environment Foundation
DERWA	Dublin San Ramon Services District – East Bay Municipal Utility District Recycled Water Authority
DJFI	Don't Just Fix It; Improve It
DSC	District Safety Committee
DSRSD	Dublin San Ramon Services District
ERP	Enterprise Resource Planning
EUM	Effective Utility Management
FY	Fiscal Year
GFOA	Government Finance Officers Association
GHG	Greenhouse Gas

HHW	Household Hazardous Waste
HHWCF	Household Hazardous Waste Collection Facility
HYPOWERS	Hydrothermal Processing of Wastewater Solids
IT	Information Technology
M	Million
MGD	Million Gallons per Day
NACWA	National Association of Clean Water Agencies
NPDES	National Pollutant Discharge Elimination System
PLC	Programmable Logic Controller
POB	Plant Operations Building
PPE	Personal Protective Equipment
PST	Primary Sedimentation Tank
QA/QC	Quality Assurance/Quality Control
RFP	Request for Proposal
SRF	State Revolving Fund
SSC	Sewer Service Charge
SSO	Sanitary Sewer Overflow
WHB	Waste Heat Boiler





