

SERVICE AREA UPGRADES PAGES 8-9 POLLUTION PREVENTION PAGES 14-15



FALL 2023

PIPE LINE

VOLUME 27 NUMBER 2



1.3

GENERAL MANAGER'S MESSAGE: OUR COMMITMENT TO TRANSPARENCY

Most of the large, complex system we rely on to collect and clean central Contra Costa's wastewater is underground and out of sight from our customers. Though our system may be largely hidden from view, our daily work is guided by fundamental values of openness and transparency.

We're proud to have maintained the Transparency Certificate of Excellence from the Special District Leadership Foundation for ten consecutive years. We're also honored to have received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for 23 years and counting. These awards reflect our commitment to excellence in local government, clear and comprehensive financial reporting practices, and accessibility and accountability to our customers. They also reflect our dedication to keeping you informed and engaged about our ongoing operations and plans for the future.

In this issue of *Pipeline*, we aim to make the invisible visible by turning the spotlight on our sewer infrastructure, including projects that will help ensure our system remains reliable and resilient for the future. We hope you'll come away with a clearer understanding of where your wastewater goes and where your rate dollars go, too. Beyond this newsletter, you can find a wealth of information on our website at **centralsan.org**, including our 2023-24 fiscal year budget and annual financial reports. I also want to extend an open invitation for you to learn more and get involved: Join a tour of our treatment plant. Invite one of our wastewater professionals to speak to your community group. Attend a public meeting. Be part of our next Citizens Academy.

At Central San, we're committed to being accessible and responsive, delivering the high-quality service you expect from us. We know our customers don't usually get to see firsthand our work to protect public health and the environment. We're thankful for your trust in us to fulfill these responsibilities with excellence.

Roger S. Bailey General Manager

WHERE DOES YOUR WASTEWATER GO?

Have you ever wondered what happens to your water after it disappears down the drain? In this *Pipeline*, we're following the flow from your home or business to our sewer pipes, treatment plant, and beyond.

PUMPING

STATION

HOME: Every time you wash your dishes or clothes, flush your toilet, or use your sink or shower, it's our job to collect and clean all that dirty water. But there are also steps you can take to protect your home or business and keep our sewer system working well. Check out our helpful tips and resources on pages 4-7.

PLANT: At our treatment plant, the wastewater undergoes screening and settling processes to remove trash, grease, grit, and other solids. Then it's on to secondary treatment, where millions of microorganisms help us further clean your wastewater (learn more on pages 10–12). Finally, we disinfect the water with ultraviolet light. From here, some of the water goes on to our recycling plant, where it is further filtered and disinfected.





STAY HAPPY & CLOG-FREE THIS HOLIDAY

There's nothing like the smells and tastes of the holidays! As we approach this season of delicious home cooking, tasty treats, and wonderful traditions, remember to keep all fats, oils, and grease (FOG) out of your kitchen drain and garbage disposal.

FOG clings to the insides of pipes, forming buildups that can clog your sewers and cause raw sewage to back up into your home, yard, or neighborhood. While hot water may seem like it dissolves FOG, it only pushes the problem further down the pipe, creating bigger issues where it is more difficult (and expensive) to fix.

For happy and clog-free holidays, remember these simple tips:

Bring your used cooking oil or grease to our Household Hazardous Waste Collection Facility. It will be recycled to produce sustainable biofuels, so you'll be protecting your pipes and the planet, too!

Before washing the dishes, scrape any remaining food into the compost or trash, and wipe greasy pots and pans with a paper towel. If you have guests helping in the kitchen, be sure they know how to handle FOG, too!

Very small amounts of FOG can be disposed of in the trash. Just pour them into a lidded container such as a milk carton or coffee can, then freeze to solidify or mix in an absorbent material (like used coffee grounds or kitty litter).



HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY

4797 IMHOFF PLACE, MARTINEZ, CA 94553 1-800-646-1431 OR CENTRALSAN.ORG/HHW

RESIDENTS: Monday–Saturday, 7 a.m. – 2 p.m. **BUSINESSES:** Monday–Saturday, by appointment **HOLIDAY CLOSURES:** Nov. 23–24, Dec. 24–Jan. 2

> WALNUT CREEK

PITTSBURG

OWN OR OPERATE A FOOD SERVICE FACILITY? HERE'S WHAT TO KNOW ABOUT FOG

If you own or operate a restaurant, coffee shop, or other commercial food service facility, keeping fats, oils, and grease (FOG) out of drain lines and the public sewer system is critical. The last thing you want is a sewage backup into your business, which is a health code violation—not to mention a nightmare to clean up!

Many food service facilities have grease removal devices installed, commonly referred to as grease interceptors and grease traps. Regular cleaning is essential to keep these devices working properly and to prevent potential issues down the line. If you have one of these devices, Central San has two key requirements you should know:

25% RULE: Grease interceptors and traps should be operated so that accumulated grease and solid waste does not exceed 25% of the unit's capacity.

90-DAY RULE: Grease interceptors should be cleaned by a permitted waste hauler at least once every 90 days. Grease traps should be cleaned regularly according to the manufacturer's instructions and be pumped by a permitted waste hauler at least once every 90 days.

Remember, we're here to help. Our expert Environmental Compliance staff can recommend best practices to reduce the risk of sewer overflows, help prevent pollution, and potentially even save you money. That's a win for your business, your customers, and the environment! For more information, visit our website at **centralsan.org/environmental-compliance** or contact us at sourcecontrol@centralsan.org or (925) 229-7288.

PROTECT YOUR PROPERTY WITH A SEWER POPPER

A sewer popper (also called an overflow protection device) protects against the mess and expense of a sewer backup by providing an emergency escape route for sewage, allowing the overflow to occur outside your home rather than inside.



You can find these inexpensive devices at your local plumbing supply or hardware store. We recommend that you have a licensed plumber install your sewer popper since elevation and location are critical for proper function. Be sure to keep your sewer popper clear of obstructions, such as dirt or vegetation, that might interfere with its operation.

Finally, note that a sewer popper will not help if a clog occurs between it and the house drains, so keep your pipes free of grease, disposable wipes, trash, and anything else that might cause a clog.

For more information, visit: centralsan.org/opd

YOUR PROPERTY MAY HAVE A SEWER EASEMENT

While the majority of our sewer pipes are located under public streets, about 40% are located in easements on private property. If you have a Central San sewer easement on your property, our professionals may occasionally access your yard for necessary pipe maintenance and repairs. We will attempt to contact you before entering your property for routine service. We appreciate your understanding!

Have questions about sewer easements? Contact our friendly Permit Counter staff at (925) 229-7371 or permits@centralsan.org.

REPLACE YOUR SEWER LATERAL WITH LOW-COST FINANCING

While Central San is responsible for taking care of our public sewer pipes, each property owner is responsible for taking care of their private sewer lateral (side sewer)—the pipe that connects your household or business plumbing to our sewer system. Central San's new Sewer Lateral Replacement program can help you manage costs if you need to replace your lateral or separate a shared lateral.

When laterals fail, repairs and cleanup can be expensive and unpleasant. Groundwater and rainwater can leak through a defective lateral and overload the system, potentially causing sewage to back up into your home, yard, or street. Replacing an aging or failing lateral provides greater reliability as well as peace of mind.

The Sewer Lateral Replacement program offers low-cost financing to help you pay for construction costs and application/ inspection fees related to a lateral replacement. Single-family residential customers with a 4-inch connection can finance up to \$12,500 at the current rate of 3.84%. Multi-family residential and non-residential customers with a 6-inch connection can finance up to \$25,000. Costs are repayable in annual installments over a 15-year term via the Contra Costa County Property Tax Roll.

Visit our website to learn more about our Sewer Lateral Replacement and other financing programs: **centralsan.org/financing-programs**



HEALTHIER HOMES: WHAT TO KNOW ABOUT PFAS

The use of toxic per- and polyfluoroalkyl substances (PFAS) in many household products continues to be cause for concern in California. In October, Governor Newsom vetoed two bills that would have phased out the use of PFAS in most menstrual and cleaning products manufactured or sold in the state.

On a brighter note, last year the state passed new laws that will phase out PFAS from most cosmetics and textiles beginning in 2025. These regulations will help limit Californians' exposure to PFAS from everyday items like personal care products, clothing, carpet, and furniture and reduce the water contamination that can occur when these products are washed or rinsed down the drain.

Once PFAS enter the environment, there's no easy way to eliminate them. PFAS that enter the wastewater stream are a particular challenge for Central San and other wastewater utilities across the country because current treatment technologies are not designed to remove PFAS.

The best solution to PFAS pollution is at the source, by keeping these harmful chemicals out of the environment in the first place. That's why Central San supports limiting the use of PFAS where safer alternatives are available. Together with our partners across the state, we'll continue to push for practical solutions to reduce the amount of PFAS entering our homes and environment.

WHAT ARE **PFAS?**

PFAS are manmade, "forever" chemicals widely used in manufacturing and industry. They are found in many everyday products such as nonstick cookware, clothing, cosmetics, and food packaging. Due to their strong chemical bonds, PFAS can build up in the environment and our bodies over time, harming the planet and our health. Studies have shown exposure to PFAS may lead to increased cancer risk, developmental delays in children, and interference with the body's natural hormones and immune response.

DEFYING GRAVITY: PUMPING STATION UPGRADES KEEP FLOW MOVING

Most of our 1,500+ miles of pipe are engineered to transport wastewater to our treatment plant by gravity. But in areas with hilly terrain, we must work against this force. In these parts of our service area, we rely on 18 pumping stations and 25 miles of pressurized pipe to push wastewater up and over the hills. Though few in number, these pipes and pumping stations carry about a quarter of our flow and are essential to their surrounding neighborhoods.

However, some of our aging pumping stations are reaching the end of their useful lives. To ensure continued reliability for our customers and protection for the environment, we're working on numerous improvements. We've already completed Phase 1 of the project, which involved major renovations at three pumping stations serving Orinda and Moraga.

Now, in Phase 2, we're replacing two pumping stations and upgrading a third that are crucial for transporting wastewater from Martinez to our treat-

ment plant. The two stations due for replacement were built in 1969 and have served the community for over half a century with limited improvements. At both sites, we're building new concrete structures that will house upgraded pumps capable of moving 12.4 million gallons of wastewater per day. The work also includes installing new electrical and controls equipment and backup generators.

Not only will these improvements enhance day-today safety and reliability, but they will also help us better prepare for the unexpected. The upgraded facilities will have increased pumping capacity during extreme wet weather, as well as more dependable backup power in the event of PG&E Public Safety Power Shutoffs, storms, earthquakes, and other emergencies.

We expect to complete Phase 2 in 2025. On top of this, we're also performing a major electrical upgrade at a pumping station serving San Ramon, and assessing other pumping stations to prepare for future renovations.



SOUTH ORINDA, PHASE 9 will replace approximately 2.0 miles of sewers primarily in Overhill Road, Scenic Drive, Valley Drive, Leslee Lane, and Lavenida Drive, as well as various locations in Orinda, south of Interstate 24. (September 2024)

PUMPING STATION UPGRADES PROJECT, PHASE 2 will replace/ retrofit 3 pumping stations in Martinez. (December 2025)

NEIGHBORHOOD UPGRADES

Central San regularly maintains, repairs, or replaces sewer lines and other parts of our wastewater collection system to ensure trouble-free service for our customers. Our construction projects may cause short-term inconveniences, but they provide long-term benefits for you and your neighbors. We appreciate your understanding!

Here's what we're currently working on (estimated completion dates in parentheses).

PLEASANT HILL, PHASE 2 will replace approximately 1.7 miles of sewers primarily in the southeast portion of the Gregory Gardens area. (March 2024)

DOWNTOWN WALNUT CREEK, LOCUST STREET will replace approximately 1 mile of sewers within the Locust Street area of Downtown Walnut Creek from Mt. Diablo Boulevard to Giammona Drive, including cross streets. (May 2024)

LAFAYETTE, PHASE 15 will replace approximately 2.5 miles of sewers in the Happy Valley, Deer Hill, Lafayette Hills, Downtown, and Trails neighborhoods of Lafayette. (August 2024)

SAN RAMON PUMPING STATION ELECTRICAL UPGRADES will replace major electrical equipment at a pumping station in San Ramon. (December 2023)

To learn more about these or other construction projects, please contact Senior Community Affairs Representative Chris Carpenter at (925) 229-7200 or ccarp@centralsan.org, or visit:

centralsan.org/construction

MEET OUR MICROORGANISMS

If you look closely around Central San, you will see all kinds of life despite the concrete and steel facade-from hawks nesting above our main office building to rabbits racing through our storage basins. However, some of the most amazing lifeforms found at our treatment plant are the ones you can't see-at least, not with the naked eye.

Our giant aeration tanks are home to millions of microorganisms in all shapes and sizes. These tiny "bugs" (as we call them in the wastewater industry) play a critical role in the treatment process by consuming and breaking down pollutants in the wastewater. We aid the growth of our microorganisms by pumping oxygen into these tanks, creating the ideal conditions for them to thrive. This is why keeping our pump and blower system up to date is of the utmost importance (see page 12 to learn about our aeration system upgrades).

STALKED CILIATES

Like all forms of life, our bugs require a balance within their environment. Our plant operators and laboratory chemists work closely together to carefully monitor and adjust the treatment process to keep these hard workers happy around the clock.

Outside of our treatment plant, these microorganisms can be found naturally in riverbeds, estuaries, sediments, and soil. Most bugs have a normal lifespan of only a few hours to a few days, so countless generations have called our treatment plant home. We're thankful for our bugs and their essential role in our wastewater treatment process-and we hope you are now, too!

ROTIFER

Hey there! My name is **Sludgy**, and I am made of tiny wastewater "bugs"-millions of microorganisms that help clean your wastewater. If this is the first time you have ever thought about "bugs" and our important role, you are not alone! As a proud member of the Pipe Protectors crew, I love helping people of all ages learn more about what it takes to make dirty water clean again.

Below are some wastewater bugs for you to color. There's also space for you to draw your own. What do you think they look like while helping to clean our dirty water?

TREATMENT PLANT / KIDS' PAGE 11

When you're done, cut out this page and mail it to:

SLUDGY CENTRAL SAN **5019 IMHOFF PLACE MARTINEZ, CA 94553**

Include your name and return address, and we'll send you a set of stickers featuring me and the rest of the Pipe Protectors crew!

NAME:

AGE:

ADDRESS:

STEAM & AERATION UPGRADES KEEP "BUGS" HAPPY

When it comes to cleaning your wastewater, our treatment plant's steam and aeration blower systems play crucial roles. These systems capture waste heat from our incinerator and convert it to steam. This steam, in turn, powers giant blowers that produce air that is bubbled through our aeration basins. The abundant oxygen supports beneficial microorganisms-called "bugs" in our industry-that consume and break down pollutants in the wastewater (read more on page 10).

However, our steam and aeration systems were built almost half a century ago and are showing their age. We recently completed comprehensive condition assessments of these large, complex systems and are working on improvements to ensure their continued reliability for the future.

To provide full backup for the steam-powered blowers, we are installing three new electric blowers. Each of these blowers has the capacity to move

GET AN INSIDE LOOK

Want to learn more about your wastewater system? We offer several ways to get an inside look!

WALKING TOURS: Join us for a guided walk around our wastewater treatment plant in Martinez to see firsthand how we clean millions of gallons of wastewater every single day. Sign up for one of our quarterly public tours, or contact us to arrange a custom tour for your group. To learn more, visit: centralsan.org/tours

VIRTUAL EXPERIENCE: Get a 360-degree look at the wastewater treatment process from the comfort of your home. Our award-winning, interactive Virtual Experience features photos, videos, fun facts, hands-on science activities for kids, hidden prizes, and more. Visit: **centralsan.org/experience**

35,000 cubic feet of air per minute and can be powered by our existing power system or standby generators. This will ensure that we have sufficient airflow during planned maintenance, Public Safety Power Shutoffs, or unexpected power outages.

We also have started the phased repair and replacement of mechanical equipment and concrete structures in our aeration basins. During Phase I, we plan to renovate four of our eight basins, with the remaining four to be upgraded in Phase 2, starting in 2026. These upgrades will enhance the efficiency of our biological treatment processes, improve reliability in the event of an earthquake, help us better protect the environment, and prolong the lifespan of these critical facilities.



GO WITH THE FLOW: Walk, bike, or run the path of wastewater from your home, school, or office-all the way to our treatment plant! Using our interactive map, you can explore the Iron Horse Regional Trail and learn about the sewer infrastructure under your feet. Visit: centralsan.org/go-with-the-flow

SPEAKERS BUREAU: Looking for a speaker for your group or event? Central San offers free presentations on pollution prevention and the world of wastewater. Talks can be in-person or virtual and tailored to your group's interests. To learn more, contact Ben Lavender at blavender@centralsan.org or (925) 335-7723.



CONNECT WITH US!

Follow Central San for upcoming tours and events, pollution prevention tips, news, photos, and more.



PROTECTING **OUR WATERS**

Our scientists analyze the wastewater before it enters the treatment plant, at every stage of the treatment process, and after the treatment process is complete. In addition, they collect and analyze samples from several locations in Suisun Bay, measuring water temperature, pH, conductivity, nutrient levels, and other characteristics that tell us about the overall health of the water body.

At Central San, we take our responsibility to safeguard the environment seriously. Every day, our chemists perform hundreds of tests at our award-winning Environmental Laboratory to verify that the cleaned, treated water we release into Suisun Bay meets all regional, state, and federal water quality requirements.

We're pleased to report that our ongoing monitoring has found no significant differences between the water near our outfall pipe and the water in other parts of the Bay-that's good news! Although these tests are not required by our discharge permit, we believe they are an important part of our commitment to protect the estuary and its wildlife.

2023 POLLUTION PREVENTION AWARD WINNERS

Congratulations to our Pollution Prevention Award Winners and Recycled Water Champions! Central San is proud to commend these businesses, organizations, and individuals who are helping keep our community healthy, beautiful, clean, and resilient.

POLLUTION PREVENTION PARTNER



MT. DIABLO UNIFIED STEM ENRICHMENT AND SUPPORT TEACHERS

The Science, Technology, Engineering, and Math (STEM) enrichment and support teachers of Mt. Diablo Unified School District have partnered with Central San over the past several years to bring hands-on wastewater education to thousands of students. Through our collaboration with the STEM teachers, this past year we were able to support 25 elementary schools, reaching 80% of the school district's 4th and 5th graders. Our focus was "What Goes Down the Kitchen Sink?"—helping students connect their behavior to impacts on the environment.

RECYCLED WATER BUSINESS CHAMPION



CONTRA COSTA COUNTRY CLUB Pleasant Hill

This is Central San's second time recognizing Contra Costa Country Club as a Recycled Water Business Champion. This 145-acre green oasis in Pleasant Hill uses recycled water for irrigation. First honored in 2015, they have remained a reliable and cooperative recycled water partner, further adjusting their recycled water usage to accommodate Central San during periods of plant maintenance. We appreciate their partnership and commitment to conserving the region's water supplies.



RECYCLED WATER CITIZEN CHAMPION

From July 2022 to June 2023, Glen Tufts visited Central San's recycled water fill station 334 times. In total, he collected 66,800 gallons of recycled water for irrigating his garden, helping save precious drinking water supplies. Glen proves one person can make a huge impact on water savings. Thank you, Glen, for being a frequent and dedicated recycled water customer!

POLLUTION PREVENTION AWARD WINNERS



Cerus is committed not only to safeguarding the world's blood supply but also to reducing their environmental impact. They disinfect all blood products prior to discharging to the sewer, and installed a second autoclave to disinfect solids such as gloves and other personal protective equipment, allowing them to divert off-hauling these materials as hazardous wastes. Cerus is also conscientious about how they store their chemicals, ensuring that they do not enter the water environment.



SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT CORPORATION YARD San Ramon

San Ramon Valley Unified School District has a long history of complying with all environmental discharge requirements. Not only do they have an energetic disposition when it comes to completing required reports and working with Central San inspectors, they also actively seek advice on how to prevent pollutants from entering the sewer and storm drain systems. They apply Best Management Practices, such as sealing all floor drains in the mechanical shop and providing quality training for their team. To further their commitment, they hired a consultant specifically to work on continuing compliance.

ORINDA FAMILY DENTISTRY Orinda

Orinda Family Dentistry uses the latest technology to accelerate patient care and protect the environment. They use resin and a 3D printer to create impressions of patients' mouths, eliminating the need for a wet model trimmer which traditionally discharges wash water filled with solids to the sewer. They also use enzymatic cleaners instead of high-strength sterilization chemicals, off-haul all amalgam wastes, and employ all-digital photography in place of chemical film developers.



At Side Gate Brewery & Beer Garden, sustainable practices improve their bottom line while helping the local environment and community. On brew days, they cool boiling beer using a plated heat exchanger filled with tap water to absorb heat. The heated water can then be used for other purposes, saving water and natural gas for heating while requiring no discharges to the sanitary sewer. Side Gate also partners with local farmers who use their spent grain as nutritious feed for their livestock. The brewery saves on disposal costs, and the farmers save money and resources—a win for everyone and the environment!



PRSRT STD U.S. Postage PAID PERMIT #1867 SACRAMENTO, CA

WE ARE HERE TO HELP

		the 1st and 3rd Thursday of each
General Information	(925) 228-9500 or CentralSan.org	month at 2:30 p.m. in the Central San Board Room, 5019 Imhoff Place, Martinez. Meetings can be
Sewer Overflows	(925) 933-0990	
Household Hazardous Waste InfoLine	(800) 646-1431 or CentralSan.org/HHW	live-streamed at centralsan.org
Recycled Water Fill Station InfoLine	(925) 335-7717	
Sewer connection permits/Permit Counter	(925) 229-7371	
Community Information Line	(925) 335-7702	
Student Education Programs	(925) 335-7723 or CentralSan.org/Learn	
Environmental Compliance	(925) 229-7288	
Report illegal discharges into sewer system	(925) 229-7288 (during business hours); (925) 229-7214 (after hours)	
Treatment Plant InfoLine (Report Odors)	(925) 335-7703	
Employment Opportunities	CentralSan.org/Careers	

The Central Contra Costa Sanitary District
PIPELINE

Written and designed by Central San staff to communicate pollution prevention messages to the people and communities we serve.

Ann Vallée, Editor, Writer Kelsey Lansang, Graphic Designer Joseph Zumbo, Photographer

View archived issues at CentralSan.org

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PIPELINE is printed with soybased inks on Recycled Paper

Please share or recycle this newsletter.



Central San serves nearly half a million customers within its 146-square-mile service area.

Wastewater collection & treatment; Household Hazardous Waste (HHW) disposal.

Board meetings are open to the public and are usually held on

- Wastewater treatment & HHW disposal in Concord & Clayton by contract.
- HHW disposal only.
- Central San headquarters, treatment plant, HHW Facility & Residential Recycled Water Fill Station.