PIPELINE

INSIDE:



COVER STORY:

BUILDING BIG STUFF

Updates on major infrastructure projects for the next four years PAGE 3



17 THINGS YOU MAY NOT KNOW ABOUT US

Surprising facts about your sewer service provider

PAGES 8-9



HAPPY (AND CLOG-FREE) THANKSGIVING!

How to prevent fats, oils, and grease from ruining your holiday

PAGE 11



INSIDE OUR EDUCATION LAB

See what we're cooking up for our school programs

PAGE 14







INVESTING IN INFRASTRUCTURE

t's easy to forget about the water we use once it disappears down the drain. Afterall, few of us see where that water goes after we wash the dishes or flush the toilet. Though most of our sewer infrastructure may be out of sight for our customers, it's never out of mind for Central San.

We rely on a complex system of over 1,500 miles of underground pipes, 18 pumping stations, and our large treatment plant to collect and clean more than 36 million gallons of wastewater a day. Taking care of all that infrastructure is truly a team effort, and that includes you, our customers—even if you've never seen the inside of a sewer.

The revenues from our customers fund critical investments in our pipes, pumps, and treatment plant. Over the next four years, your rate dollars will help us to rehabilitate significant parts of our 1970s-era plant, update aging pumping station equipment, replace 28 miles of aging neighborhood sewer pipes, and complete other critical projects. These infrastructure investments will help ensure we have a lasting and reliable system, and that we can continue to provide the high level of service you expect from us.

We are grateful for the trust you place in Central San and its employees to manage your wastewater once it leaves your home or business, and we are proud to partner with you in our ongoing work to protect public health and the environment.

Roger S. Bailey, General Manager



BUILDING OUR FUTURE

his past spring, we committed to completing nine large-scale infrastructure projects over the next four years. These projects are critical to ensuring our pipes, pumps, and treatment plant continue to function properly now and into the future. We've already made significant progress:

Mechanical and concrete: Work is underway to rehabilitate the mechanical equipment and concrete structures where wastewater enters the treatment plant and cleaning begins. To continue carrying wastewater into the plant during construction, we installed a large bypass system including

temporary pipes and pumps capable of moving 40,000 gallons of wastewater per minute (photo below).

Steam and aeration blower systems: We're conducting comprehensive assessments of our over 40-year-old steam generation equipment, steam piping (photo above right), electrical equipment, aeration blowers (photo front cover), biological treatment facilities, and other steam and aeration blower facility support systems to confirm the need for near- and long-term upgrades. We will keep you informed on our work and what may need repair or replacement.

Plant Operations Building: We're completing significant seismic upgrades to our Plant Operations Building (POB) to ensure we can continue operations in the event of an earthquake. The POB houses our operations and maintenance managerial staff, as well as our Control Center—a state-of-the-art computerized system that monitors and controls every phase of the wastewater cleaning process, 24 hours a day.

Several other projects are in the planning and design phases. Watch for updates in future issues of Pipeline.







2019 WINNERS

POLLUTION PREVENTION AWARDS

ongratulations to this year's winners of our annual Pollution Prevention Awards! These local businesses are leaders in environmental protection, and we are proud to commend their commitment to preventing pollution in our community.



Pacific Gas & Electric Applied Technology Services

3400 Crow Canyon Road, San Ramon

PG&E Applied Technology Services practices pollution prevention by collecting and off-hauling federally regulated, high-strength wastewater. They eliminated all discharges to the sanitary sewer from their chemistry lab by removing and capping all sinks. PG&E also removed all mercury-bearing materials from their chemistry lab.

ENVIRONMENTAL LEADERSHIP

Since 1946, Central
San's mission has been
to protect public health
and the environment.
We are a Visionary
Partner of Sustainable
Contra Costa. Every
year we team up to
celebrate individuals
and businesses for their
efforts in keeping our
communities healthy,
beautiful, clean, and
resilient.

Contra Costa Newspapers

2505 Dean Lesher Drive, Concord

Contra Costa
Newspapers practice
pollution prevention in
various ways throughout
their processes. They
switched their plate
process from a wet
chemical to a digital
process, switched all
their outdoor lights to
LED, installed highefficiency toilets, and
they recycle all scrap
paper and aluminum.



POLLUTION PREVENTION PARTNER



Mary Watson Craft Group

Mary Watson and her craft group, featured in our Spring issue of Pipeline, have keen eyes for potential: They use recycled materials to create an array of decorative items. Mary sources her materials from many places, including discarded pallets from hardware stores, old fences, and a community resource particularly close to our heart - the Reuse Room at Central San's Household Hazardous Waste Collection Facility! "Sometimes I go to the Reuse Room and find more than I can carry," Mary explained.



REUSE ROOM PRODUCTS

Our Reuse Room offers
an ever-changing
variety of useable
products in their
original containers, from
latex paint to household
cleaners. Stop by on
your next visit to our
Household Hazardous
Waste Collection
Facility! Learn more at:
centralsan.org/hhw

RECYCLED WATER CHAMPIONS

Brosamer & Wall, Inc.

1777 Oakland Blvd, Ste 300, Walnut Creek

Brosamer & Wall is currently working on the Highway 4 widening project between Martinez and Concord. So far they have used over 775,000 gallons of recycled water for dust control and other construction purposes.



George Markison, Recycled Water Citizen Champion

From July 2018 to June 2019, Mr. Markison visited Central San's Residential Recycled Water Fill Station 232 times. Over the past year, he has used more than 26,000 gallons of recycled water for landscape irrigation, saving precious local drinking water.

SCHOOL IS BACK IN SESSION THIS SPRING

n the face of it, devoting your free time to learning the nitty-gritty of sewer services might not seem like the obvious choice. But for the last four years, some of your friends and neighbors have been doing exactly that through our citizens' school, Central San Academy.

This spring we'll be opening our academy doors for the fifth time.

Join us to learn:

- How we collect and clean wastewater—marshaling engineering, science, and technology to protect public health and the environment
- How we dispatch crews, armed with big trucks and tools, to clean and maintain your neighborhood sewers
- How we set rates to maintain our aging infrastructure
- How we continually seek innovative and cost-efficient ways to better serve you

The interactive curriculum is taught by staff from all parts of our organization. We combine classroom presentations, group activities, live demonstrations, and facilities tours to provide a hands-on experience (as much as you want to be with wastewater, at least). The course concludes with a celebratory graduation and Q&A session with members of our Board of Directors.



Central San Academy is free and open to anyone 18 years or older. Classes are typically held one evening a week for six consecutive weeks. One class will be a daytime facilities tour so participants can see our plant in action. We even serve our students a light meal at each session!

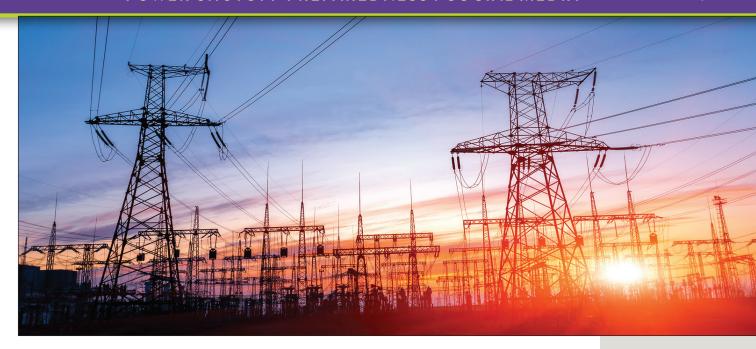
Our Spring 2020 session will be held in Walnut Creek. Stay tuned to our website for specifics on class location and time. To learn more and sign up for email updates, visit: centralsan.org/academy





A GROWING INTEREST

Since Central San Academy first launched in 2016, 138 members of our community have graduated, including 40 in spring 2019.



WE'RE **PREPARED** FOR PG&E'S PUBLIC SAFETY POWER SHUTOFF (PSPS)

eginning this 2019 wildfire season, Pacific Gas and Electric (PG&E) has notified customers that they may turn off electricity in designated areas during extreme fire danger. Specific areas and the number of customers that might be affected will depend on the weather and hazardous conditions.

How does this impact your Central San sewer service?

Central San has a response plan to maintain service for all customers during a PG&E PSPS, should it arise. While most of Central San's facilities are located outside the mid-to-high fire-threat areas, electricity outages still may occur that impact our customers and our facilities for up to two or more days, depending on weather and emergency conditions. That is why Central San has used an abundance of caution to ensure resources—such as backup generators, fuel, and on-call crews—are ready and available in case they are needed.

How has Central San prepared?

Central San has backup power generators at our treatment plant and all of our major pumping stations in our service area. We also produce the majority of our treatment plant power through a large-scale cogeneration system that uses natural gas. For our treatment plant operations, the electricity used from PG&E is a backup and not the main source of power needed to clean wastewater on behalf of our customers.

Central San maintains on-call crews and a 24/7 contact phone number to respond to emergencies quickly. We continually train for the worst of scenarios, so that we can be confident in restoring sewer service quickly for our customers if/when the situation arises.

We will continue to work with PG&E and local water district partners to prepare for a possible PG&E PSPS during this and future wildfire seasons.

HOW YOU CAN PREPARE

For more information on how PG&E's Public Safety Power Shutoff may affect you, please visit: pge.com/wildfiresafety

FOLLOW OUR FLOW!









... ABOUT US **FUN FACTS...**

17 THINGS

YOU MAY NOT KNOW ABOUT CENTRAL SAN



We judge and award prizes for water/wastewater science projects as part of the Contra Costa County Science and Engineering Fair.

WE KNOW YOU WANT TO KNOW

Where does it go when you, um, go? Our behind-the-scenes tours answer that question and much more. Sign up at: centralsan.org/tours



WE APPRECIATE **POTTY HUMOR**

Many of our employees have something toiletrelated on their desks, from candy dishes to coffee mugs to pencil toppers and more.



OUR **PHONES!** Yep, a real live person answers





WE INVENTED THE MUSHROOM

WE

ADVOCATE

We work with

local, state, and

officials to prevent

the environment.

WE HAVE A

"SEWER SCHOOL"

Our annual academy

is open to any adult

interested in learning

of wastewater. Find more information

about the world

on page 6.

pollution and protect public health and

WE TEACH KIDS SEWER SCIENCE

kindergarteners through high schoolers.

We have education programs for

federal elected

Ever noticed a mushroom-shaped overflow protection device in your yard? Designed to help prevent sewer backups, it was invented by two Central San employees in the 1950s.



WE TAKE IT

For over 20 years we have operated one of the most successful Household Hazardous Waste facilities in the nation, which accepts your used paint, oil, batteries, and other household hazardous waste.



WE DON'T OWN IT-YOU DO

Our infrastructure, that is, including more than 1,500 miles of pipeline, 18 pumping stations, and our regional wastewater treatment plant.



WE MAKE PLANTS HAPPY

We have a fill station where you can get recycled water, perfect for handwatering your garden. On a larger scale, our recycled water distribution system is helping keep local parks, golf courses, and campuses green.



at: youtube.com/centralsandist

WE'RE SO HOLLYWOOD We produce our own educational videos and our employees are the actors. Check them out



WE'RE SUPER SCIENCEY

Every day and at every stage of the cleaning process, we're conducting tests in our onsite laboratory to ensure our wastewater meets all water quality regulations.



WE'RE POWER PRODUCERS

We generate 91.7% of the electricity needed to run our treatment plant.

disinfection.





BEDS We are a leader in the use of ultraviolet light technology for wastewater

WE HAVE WATER TANNING



WE'RE FLUSH WITH SUCCESS Central San is the proud recipient of

numerous state and national awards. In the past two years we've been recognized for our efforts in areas ranging from environmental compliance to engineering maintenance to procurement to student education. Check out our most recent accolades on page 10.





10 AWARDS

THE AWARD-WINNING PIPE PROTECTORS

A ROBUST LAUNCH

We successfully launched our new Pipe Protectors program in over 40 K-2 classrooms this past school year. he Pipe Protectors program is our newest education program designed especially for Kindergarten through second-grade students. The program teaches students about the complex path that wastewater travels from their homes, through our treatment plant, and back to local waterways. It also helps them understand the role they play in protecting the environment.

Central San has always known that reaching this audience early is essential to preventing pollution. We're proud to report that, in its first year, Pipe Protectors has already had a impact on the youngest segment of our local student community. And it has already been honored with awards from a variety of sectors, including education, the wastewater industry, and communications. This recognition confirms just how important this program is for helping to educate our youngest students (and customers).



Awards won by our Pipe Protectors program ... so far:

California Association of Sanitation Agencies

2019 Public Outreach and Education Award

California Association of Public Information Officials

 2019 Excellence in Public Information and Communications (EPIC) Award for Video Production

Academy of Interactive & Visual Arts Communicator Awards

- 2019 Award of Excellence Best Animation
- 2019 Award of Distinction Educational Video

Interested in bringing Pipe Protectors to your school? Learn more at: centralsan.org/learn

21 YEARS OF FULL COMPLIANCE



Il wastewater agencies in the U.S. must meet stringent federal, state, and local water quality standards. Here at Central San, we work hard to ensure that the local waters into which we discharge cleaned wastewater (in our case, Suisun Bay) are protected. Recently we were honored with the 2018 Peak Performance Award - Platinum 21 from the National Association of Clean Water Agencies, recognizing our more than two decades without a single permit violation—the longest successful streak of any wastewater agency in California and among the top 20 in the nation.

We couldn't have achieved this milestone without your assistance. When you properly dispose of household hazardous wastes and pharmaceuticals, and take other actions to keep pollutants out of the sewer, you are helping us to protect Suisun Bay and the environment. Thank you for your continued support!

BRING US YOUR USED COOKING OIL

h, the holidays! A time for family, friends, festivities, and fatty foods. This is the time of year when people tend to prepare elaborate meals, deep fry turkeys, and invite more people into their homes. As a result, the amount of fats, oils, and grease going down kitchen sinks increases dramatically. No wonder it's also the busiest time of year for plumbers.

Fats, oils, and grease are a major cause of sewer clogs and overflows. They cling to the inside of pipes and build up over time, eventually causing complete blockages. Fortunately, there are a few simple steps you can take to prevent clogged pipes and sewage overflows from ruining your holidays:

- Keep all fats, oils, grease, and fatty foods out of the sink drain and garbage disposal.
- To dispose of fats, oils, and grease, put them into a lidded container, mix in an absorbent material, seal the container, and put it in the trash.
- Deep frying your turkey? You can bring large quantities of used cooking oil or grease to our Household Hazardous Waste Collection Facility (see location below).



HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY 4797 Imhoff Place, Martinez, CA 94553-4392 1-800-646-1431



HOURS:

Residents: Monday – Saturday, 9 a.m. - 4 p.m.

(Reuse Room closes at 3:30 p.m.)

Businesses: Monday – Saturday, by appointment only

Holiday Closures: Nov. 28, 29; Dec. 24 - Jan. 1; Jan. 20;

Feb. 12; Feb. 17



WE RECYCLE COOKING OIL

Every year we collect about 3,000 gallons of used cooking oil for recycling into biofuels.

NEW LAW

California Senate Bill 212 was signed into law in 2018 and established the first state-wide take-back program for medical needles and medications. The program will be fully implemented by 2022.

DON'T FLUSH YOUR DRUGS ...

lushing unwanted medications down a toilet or pouring them down a drain can pollute local waters. The best way to dispose of your unwanted medications is to bring them to a free drop-off site, like those listed below. Transfer pills to a sealable plastic bag before depositing them in the bin. Leave liquids in their bottles but seal them in a bag to prevent leaks.

Additional drop-off sites are available through Med-Project at select CVS stores and Kaiser facilities in our service area. Med-Project also offers a mail-back option for those who cannot make it to a collection site on their own. Learn more at: med-project.org

For more information, visit centralsan.org/hhw or call 1-800-646-1431.

CENTRAL SAN'S LOCAL PHARMACEUTICAL DROP-OFF SITES

Alamo Sheriff's Substation 150 Alamo Plaza, Suite C

Clayton Police Dept. 6000 Heritage Trail

Concord Police Dept. 1350 Galindo St.

Danville Police Dept. 510 La Gonda Way

Lafayette Police Dept. 3675 Mt. Diablo Blvd., Suite 130

Martinez:

- Sheriff's Field Ops Bldg. 1980 Muir Rd.
- Contra Costa Regional Medical Center 2500 Alhambra Ave.
- Police Dept. 525 Henrietta St.

Moraga Police Dept. 329 Rheem Blvd.

Orinda Police Dept. 22 Orinda Way

Pleasant Hill Police Dept. 330 Civic Dr.

Pharmaceutical

San Ramon Police Dept. 2401 Crow Canyon Rd.

Walnut Creek City Hall 1666 North Main St.

... AND DON'T FLUSH YOUR WIPES!



Just because you can, doesn't mean you should. Check out our latest wipes video, along with many other award-winning videos, at: youtube.com/centralsandist ipes (even those labeled as "flushable") are designed to be durable when wet. There is no such thing as a flushable wipe. Many wipes are made from synthetic plastic-based materials. Unlike toilet paper, wipes don't disintegrate easily (if at all) when flushed; they remain intact as they pass through sewer pipes. They clog pipes in homes, and cause clogs, overflows, and equipment malfunctions in sewer systems, pumping stations, and wastewater treatment plants across the country, resulting in millions of dollars in damages.

Please dispose of all wipes in the trash, not the toilet!

NEIGHBORHOOD UPGRADES

THE DANVILLE SEWER RENOVATION PROJECT, PHASE 3:

This project will replace approximately 0.6 miles of sewers in the Camino Tassajara/Gil Blass neighborhood. *Estimated completion: January 2021*

THE LAFAYETTE SEWER RENOVATION PROJECT, PHASE 14:

This project will replace approximately 2.3 miles of sewers in Lafayette primarily south of Interstate 24 as well as various locations in Town of Moraga. *Estimated completion: December 2020*

THE MARTINEZ SEWER RENOVATION PROJECT, PHASE 6:

This project will replace approximately 1.5 miles of sewers primarily in the Forest Hills Estates neighborhood, along Center Avenue, and various other locations in Martinez. *Estimated completion: November 2020*

THE PUMP STATION UPGRADES PROJECT, PHASE 1: This project will renovate or replace major mechanical, electrical, and controls equipment at three pump stations in Orinda and Moraga. *Estimated completion: December 2021*

THE SOUTH ORINDA SEWER RENOVATION PROJECT, PHASE 8:

This project will replace approximately 1 mile of sewers primarily in the Lost Valley Estates and Del Rey neighborhoods and at various other locations south of Interstate 680 in Orinda. *Estimated completion: November* 2020

THE WALNUT CREEK SEWER RENOVATION PROJECT, PHASE 14:

This project will will replace approximately 1.6 miles of sewers primarily in the Sterlings Ridge, Meadow Creek, and Larkey Park neighborhoods of Walnut Creek. *Estimated completion: December 2020*

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



CENTRAL SAN INTERNSHIPS



re you a college student or recent grad considering a career in wastewater? Central San provides internship opportunities to students who are studying in related fields including administration, engineering, laboratory sciences, and communications.

Internships are limited-term, six-month positions. To qualify, applicants must currently be enrolled in an accredited school, college, or university and have completed two full years of study. Alternatively, they must have graduated from college or been previously enrolled within one year of the start of the internship.

If you or someone you know is interested in the Central San Internship Program, please visit: centralsan.org/careers

PREPARING OUR FUTURE WORKFORCE

Nearly 20% of our current employees began their tenures at Central San as interns.

DOES YOUR GROUP NEED A **SPEAKER?**

f your group or audience is interested in hearing about Central San and our water pollution prevention efforts, we may be able to help. Just call our Public Info Line at (925) 335-7702 and leave a message about your event or meeting along with your contact information.



A PEEK INSIDE THE EDUCATION LAB

A GROWING REACH

Central San's education programs reached over 6,000 students during the 2018-19 school year. ere in the Central San Education Lab, we're always busy thinking up new and engaging ways to bring the work we do every day into classrooms across our service area. This month, we have been working on something particularly exciting: *How to make the best fake pee.*

It might seem a little strange at first, but fake pee has all sorts of uses for our classroom programs. Our programs help kids learn how dirty water from flushing the toilet (or washing our hands or taking a shower) becomes clean water. By using our fake pee and test toilets, kids can experiment to see what happens when we flush, as well as what actions we can take to protect our environment. (Spoiler alert: This includes only flushing the three P's: Pee, Poop, and toilet Paper.)

To make our classroom-safe pee, we first collected everything that we thought might make a good, reliable yellow color. We tested mustard powder, lemonade mix, sports drink drops, yellow curry paste, turmeric, dehydrated cheese, and more.

Once we had all our supplies in hand, we had to come up with a way to judge which substance made the best fake pee. We settled on three main criteria:



- COLOR: We wanted something that would make a believable yellow color, just like the real stuff.
- EASE OF USE: We wanted something easy to get ahold of, easy to make, and easy to find again when we ran out.
- SHELF LIFE: We wanted to make sure our fake pee would keep fresh over time and that it wouldn't start to spoil or change color.

Once we had our testing supplies and judging criteria, we needed judges. We asked any and every Central San employee who came by the Education Lab to vote. After tallying all the responses, we had a winner!

The unanimous choice was (drum roll): yellow food dye. It excelled in all three areas: It has superb color that does not change over time, it's easy to find at any number of local stores, and it won't spoil as it has no perishable ingredients.

Our fake pee is easy to make if you want to try it at home: Just add 1 drop of yellow food coloring for every 8 ounces of water. Hopefully, you will see our fake pee as part of our education programs at your classroom soon! See the link at left to find out how.

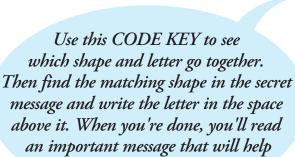


Want to see our programs in your school? Ask your favorite teacher to sign up today. Learn more at: centralsan.org/learn





Hey Kids!
Secret Agent Piper here.
Agent Kelvin and I need your help decoding this message. Send us the answer to win a prize!





protect the environment!

A B C D E F G H I $\bigcirc \Diamond \triangle \bigcirc \bigcirc$ J K L M N O P Q R $\bigcirc \bigcirc \bigcirc$ S T U V W X Y Z $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$



DECODE THIS SECRET MESSAGE TO WIN A PRIZE!

ONLY FLUSH THE THREE P'S:

▽ ▽ ▽ ▽ □ □ ▽ □ □ □ □

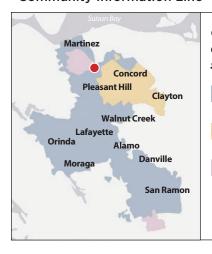
Cut out this yellow box on the dotted lines and mail your answer to:

Agents Piper and Kelvin Central Contra Costa Sanitary District 5019 Imhoff Place, Martinez, CA 94553 When you include your name and address, we'll send you a *cool notebook* where you can write your own secret messages! Thanks for being a Pipe Protector!





We Are Here To Help		
General Information	(925) 228-9500 or centralsan.org	Board meetings are open to the public and are usually held on the 1st and 3rd Thursday of each month at 1:30 p.m. in the Central San Board Room, 5019 Imhoff Place, Martinez.
Sewer Overflows	(925) 933-0955 or 933-0990	
Recycled Water Fill Station InfoLine	(925) 335-7717	
Treatment Plant InfoLine (Report Odors)	(925) 335-7703	
Household Hazardous Waste InfoLine	(800) 646-1431 or centralsan.org/hhw	
Sewer connection permits/Permit Counter	(925) 229-7371	
To report illegal discharges into sewer system	(925) 229-7288 (during business hours); (925) 229-7214 (after hours)	
Environmental Compliance	(925) 229-7288	
Employment Opportunities	centralsan.org	
Student Education Programs	(925) 335-7723 or centralsan.org/learn	
Community Information Line	(925) 335-7702	



Central San serves nearly half a million customers within its 145-square-mile service area.

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

Wastewater treatment & HHW disposal in Concord & Clayton by contract.

HHW disposal only.

 Central San headquarters, treatment plant, HHW Facility & Residential Recycled Water Fill Station.

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 Vallee, Editor, Writer
Charles Waltmire, Graphic Designer

View archived issues online at CentralSan.org



PIPELINE is printed with soy-based inks on recycled paper

Please **share or recycle** this newsletter.