

# Pipeline



## YOUR NEIGHBORHOOD AND BEYOND

We're proactively replacing aging neighborhood sewer pipes with new pipes that will last 10 decades or more. Hand-in-hand with improvements to our treatment plant, these investments will help ensure reliable, trouble-free service for our community.

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## IMPROVING RELIABILITY IN YOUR NEIGHBORHOOD

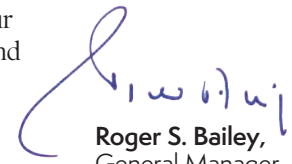
You might think Central San's wastewater treatment plant is our biggest asset. In fact, it's the collection pipes right outside of your home, running under your local streets and neighborhoods. Whether you're flushing a toilet in San Ramon, washing the dishes in Orinda, or doing laundry in Walnut Creek, this vast network of more than 1,500 miles of underground pipes is how your wastewater flows from your home to our treatment plant. Ensuring the reliability of our collection system is a top priority for Central San. After all, before we can clean a drop of the water that goes down your drain, it must arrive at our treatment plant safely.



General Manager Roger S. Bailey, left, works closely with Director of Engineering Jean-Marc Petit on all capital projects.

Our collection system was constructed over many decades, with more than 40% of our pipes installed over half a century ago. To improve reliability and reduce the risk of pipe failures, we're continually replacing neighborhood pipes that have reached the end of their useful lives. Within the next ten years, we plan to replace 80 miles of aging pipes in neighborhoods across our service area.

In addition to replacing pipes when needed, we have a proactive inspection and maintenance program to help us get the most use out of every mile. Every year we clean about 800 miles of pipe to ensure reliability and extend the life of our system. With care, the pipes we're installing today are expected to last 100 years or more, helping provide reliable service for you, our customers, now and into the future.

  
Roger S. Bailey,  
General Manager

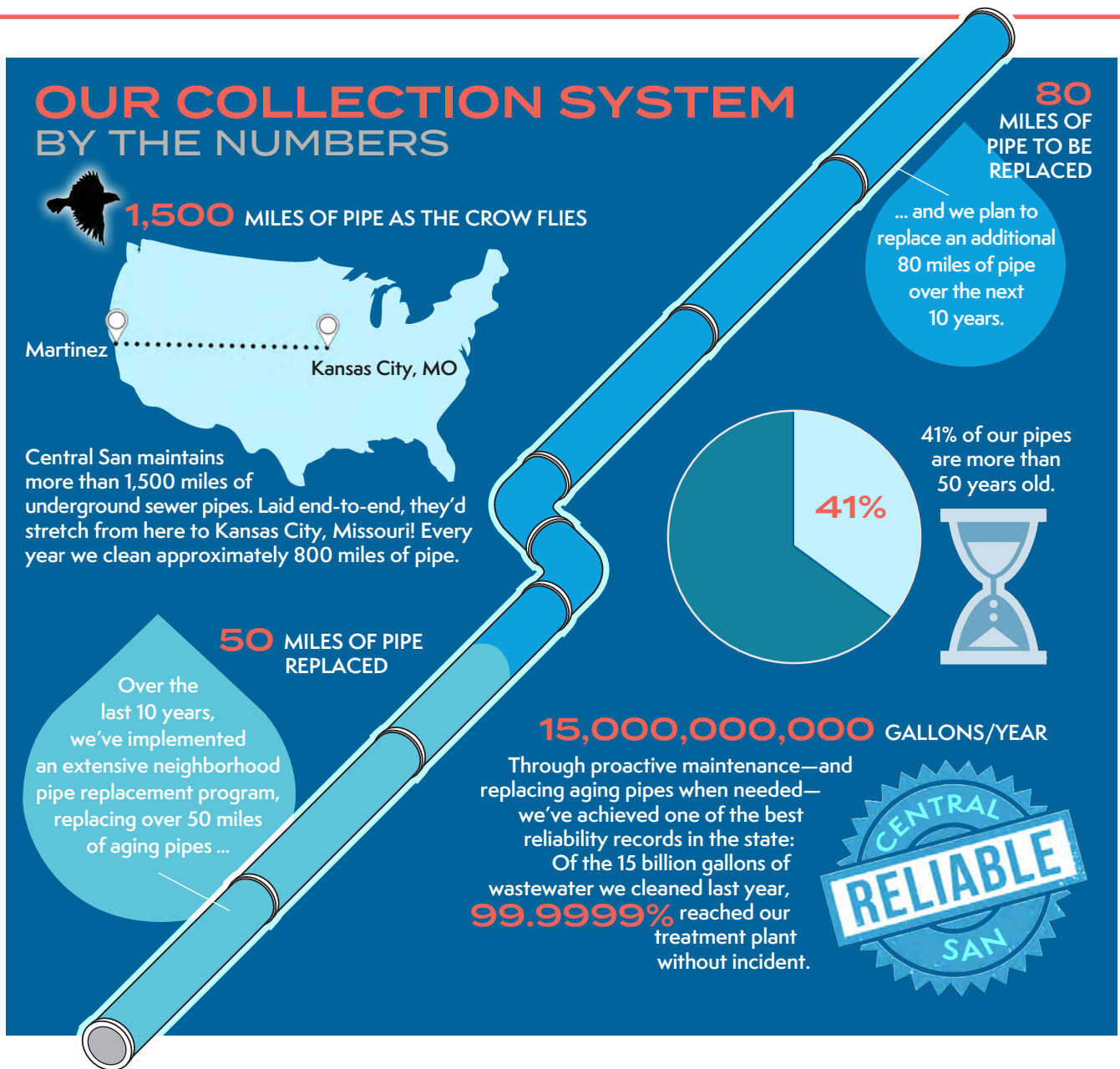
## NEIGHBORHOOD UPGRADES: CURRENT PROJECTS

We have a number of projects underway to replace aging neighborhood sewer pipes and improve the reliability of our system (estimated completion dates in parentheses).

**DANVILLE, PHASE 3** will replace approximately 1.0 miles of sewers in the Camino Tassajara/Gil Blass neighborhood. (January 2021)

**LAFAYETTE, PHASE 14** will replace approximately 2.0 miles of sewers in Lafayette primarily south of Interstate 24 as well as various locations in Moraga. (December 2020)





**MARTINEZ, PHASE 6** will replace approximately **1.5** miles of sewers primarily in the Forest Hills Estates neighborhood, along Center Avenue, and various other locations in Martinez. (November 2020)

**PUMP STATION UPGRADES PROJECT, PHASE 1** will renovate or replace major mechanical, electrical, and controls equipment at three pump stations in Orinda and Moraga. (December 2021)

**SOUTH ORINDA, PHASE 8** will replace approximately **1.0** miles of sewers primarily in the Lost Valley Estates and Del Rey neighborhoods and at various other locations south of Interstate 680 in Orinda. (November 2020)

**WALNUT CREEK, PHASE 14** will replace approximately **1.6** miles of sewers primarily in the Sterlings Ridge, Meadow Creek, and Larkey Park neighborhoods of Walnut Creek. (December 2020)

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

## INVESTING IN THE FUTURE: EDUCATION PROGRAMS IN ACTION

*Small groups of 4th- and 5th-grade students huddle around a magnetic stirring machine. On top is a beaker filled halfway with water plus either sugar, salt, or baking soda. The students gaze intently at the beaker as they turn on the machine. A tiny whirlwind of water forms inside the glass as the contents spin around. “We spun it for a long time. Is the stuff supposed to disappear?”*

These are the sights and sounds at Gregory Gardens Elementary in Pleasant Hill. For a week in January, we set up shop there to teach every class at the school about our sewer system and how it functions. Central San has been offering programs to schools in our service area for over 20 years. We’re now piloting a whole series of new programs for elementary students, which the kids at Gregory Gardens got to try out.

“The activity was perfect for first graders. Hands-on activities are fantastic and kept their attention all while learning.”

– Teacher, Gregory Gardens Elementary, Pleasant Hill

Meanwhile, 1st and 2nd graders made their own kitchen wastewater to foster a closer examination of how solids behave when submerged. The youngest students explored our classroom-ready toilets. These small toilets have clear pipes, enabling students to see what happens after they flush.

By exploring what happens to their dirty water after it goes down the drain, students in every grade came away with a greater appreciation for the system they—and all of us—use every day.

*Central San is focused on the future. Every person in our service area is our customer, regardless of age. Our youngest students of today will be the stewards of tomorrow. By reaching them early and often throughout their educational career, we are helping them learn that the stuff we put in our water (and down our drains) does not disappear. Knowing this, they can help us protect the reliability of our system and the health of our local waterways for generations to come.*

“You should NOT put butter down the drain. Look at it. It will definitely get stuck!” – 2nd-grade student





“ Watching students engage with peers around science and experiments was a true highlight for me. Science can often be intimidating for children and adults but our amazing Central San teachers made it fun and easy for everyone. I especially loved the critical thinking, deep conversations, and giggles that happened in every session.”

– Katie Koontz, Principal of Gregory Gardens Elementary, Pleasant Hill



If you would like to bring our education programs to your elementary school, please contact Ben Lavender: (925) 335-7723 or [blavender@centralsan.org](mailto:blavender@centralsan.org), or visit: [centralsan.org/learn](http://centralsan.org/learn)



## AN OVERFLOW PROTECTION DEVICE PROVIDES COST-EFFECTIVE PEACE OF MIND



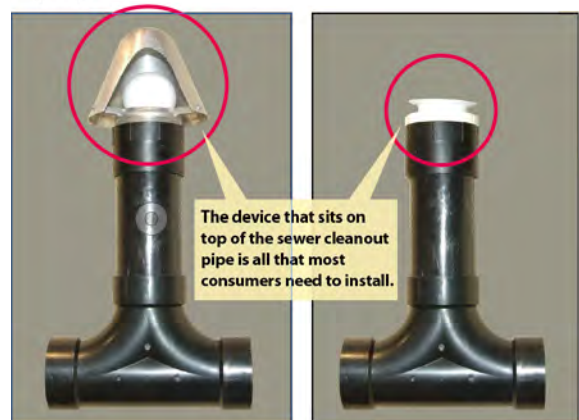
We maintain more than 1,500 miles of sewers and work very hard to prevent failures, clogs, and overflows. Our efforts have resulted in one of the lowest overflow rates in California. But no matter what we do, we can never totally eliminate the possibility of an overflow. There are just too many things beyond our control. Stuff happens.

But it needn't happen to you. Installing an Overflow Protection Device (OPD) on the cleanout of your home's private side-sewer/lateral provides cost-effective protection against the mess and expense of a sewer backup. An OPD works by providing an emergency escape hatch for sewage, allowing the overflow to occur *outside* your home rather than *inside*.

You can find these inexpensive devices at plumbing supply stores.

We recommend that you have a licensed plumber install your OPD since elevation and location are critical for proper function. Once it is installed, be sure to keep the device clear of obstructions that might interfere with its operation, such as dirt or vegetation. Finally, note that an OPD will not help if a clog occurs between it and the house drains, so keep your pipes free of grease, disposable wipes, and anything else that might cause a clog.

For more information about OPDs, please call our friendly Permit Counter staff at (925) 229-7371.



## LET US KNOW IF YOU SEE AN OVERFLOW!



If you see, smell, or suspect a sewage overflow or spill, please call us at (925) 933-0955 or (925) 933-0990. We will dispatch a crew to investigate and take appropriate action as quickly as possible.

◀ **What to watch for:** File photo (not Central San service area) showing an example of a sewer overflow.

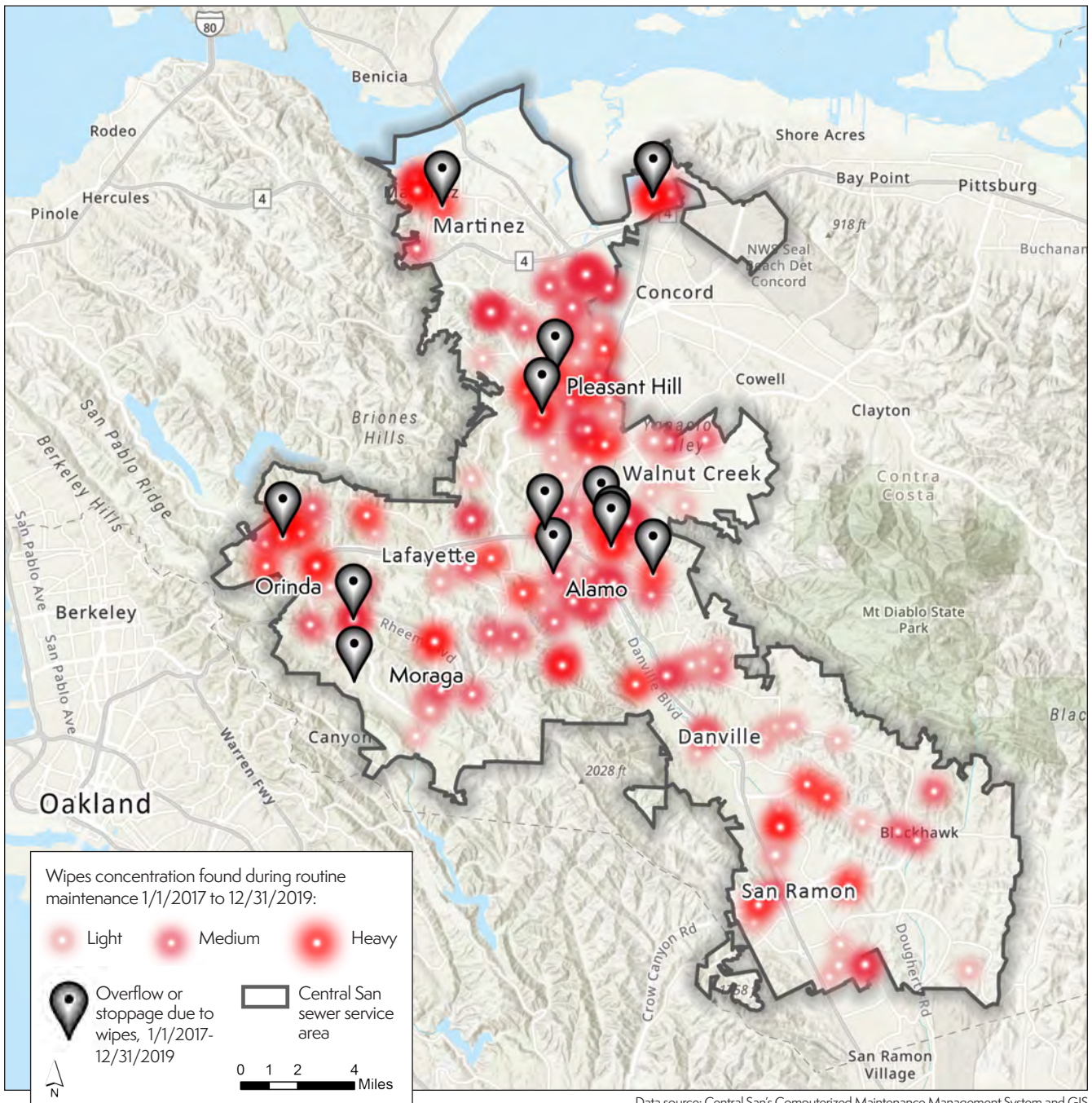
## WIPES CAUSE COSTLY PROBLEMS

Wipes are not flushable—no matter what the labels may say. Most wipes are made from synthetic materials. Unlike toilet paper, they don't disintegrate easily (if at all) when flushed. They remain intact as they pass through sewer pipes, causing costly clogs, overflows, and equipment malfunctions.

The red shading in this map shows concentrations of labeled “flushable” wipes found in our wastewater collection system during routine maintenance between

January 1, 2017, and December 31, 2019. Each gray marker represents a sewer overflow or complete pipe blockage caused by wipes during the same timeframe. In those two years alone, wipes caused 14 sewage overflows or stoppages in our service area and were identified as the primary issue 276 times during routine maintenance.

*Please help us protect our pipes and the environment by flushing only human waste and toilet paper.*



# WIPES FAIL “FLUSHABLE” TEST

What happens when so-called “flushable” wipes meet a real-world sewer main? We field-tested a dozen popular products, and the results weren’t pretty.

In collaboration with the California Association of Sanitation Agencies, we chose ten popular North American brands, two imported natural fiber wipes (not available in North America), and one toilet paper sample to spend 30 to 40 minutes traveling through 3,000 feet of active sewer line. We tagged each wipe, released them into the pipe, and retrieved the remains downstream.

## THE RESULTS

Nine of the ten popular brands were still fully or mostly intact after the test, while one wipe (made of natural fibers) mostly dispersed. In contrast, the toilet paper and both imported wipe products completely broke down. All but one of the tested products were labeled as “flushable” or “dispersible.”

*This test proves that more than nine out of ten times, so-called flushable wipes aren’t.*

Like other sanitary districts, Central San has had to respond to wipes-related problems in numerous ways, including increasing maintenance schedules and installing additional expensive equipment—all funded by your rate dollars.



UPSTREAM: The Central San team releases the wipes into the sewer main.



That’s why we advocate for better labeling and performance standards for wipes. The good news is California is considering new state legislation (Assembly Bill 1672) that would improve labeling and help consumers make more informed decisions about wipes.

*Please dispose of wipes where they belong: in the trash.*







**DOWNSTREAM:** 3,000 feet away, the team retrieves, rinses, and catalogs the wipes.



**G** Kirkland Signature Moist FW



**H** Charmin Flush Mates FW



**I** Equate FW (Wal-Mart)



**J** Scrubbing Bubbles Bathroom FW



**K** Imported natural fiber FW 1



**L** Imported natural fiber FW 2





## GARDENS & LAWNS LOVE **RECYCLED WATER**

**C**entral San offers recycled water at no extra charge for our residential customers. This water is ideal for hand-watering your trees, gardens, and lawns. Here's how to get some:



### Did You Know?

*Central San produces more than 500 million gallons of recycled water every year. Beyond our self-service fill station, this water is used for industrial processes as well as irrigation for golf courses, parks, college campuses, street medians, and more, saving precious drinking water.*

▶ **Visit our residential fill station**, located behind our Household Hazardous Waste Collection Facility at 4797 Imhoff Place, Martinez. The station is typically open Monday through Saturday, 9 a.m. to 4 p.m. Hours may fluctuate during rainy weather, however, so please call ahead to confirm we're open: (925) 335-7717.

▶ Before filling up for the first time, you'll need to read and **complete the Residential Recycled Water Fill Station Use Application/Agreement** and receive a brief training on the use of recycled water. You can download the form at [centralsan.org/recycledwater](https://centralsan.org/recycledwater) or obtain one at the station.

▶ **Bring your own containers.** They must be made specifically to hold liquids, be a minimum size of one gallon, have water-tight lids, and be secured for safe transport.

▶ **The maximum fill per trip is 300 gallons.** There is no limit on the number of trips. Keep in mind that water is heavy! Ten gallons weigh more than 80 pounds; 100 gallons weigh more than 800 pounds. When driving vehicles with such heavy loads, expect less stability and be sure to allow for additional stopping distance.

▶ Finally, please note that recycled water should not be consumed or allowed to run off into storm drains.

For more information, visit [centralsan.org/recycledwater](https://centralsan.org/recycledwater) or call (925) 335-7717.

## SPRING CLEANING? WE CAN HELP!

If your spring cleaning includes clearing the clutter from the garage, under the sinks, or even your medicine cabinet, we can help you safely dispose of potential pollutants. By keeping these materials out of sewers and landfills, you can help us protect the health of our local waterways.



### DISPOSE OF MEDS SAFELY

If you're like most people, you have accumulated quite a collection of prescription and over-the-counter medications. Proper disposal of these items helps prevent water pollution as well as accidental poisonings and drug abuse. Dispose of expired and unwanted medications safely by bringing them to one of our free 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.

**Walnut Creek City Hall**, 1666 North Main St.

Additional drop-off sites are available through Med-Project at 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](http://med-project.org)

## BRING US YOUR HOUSEHOLD HAZARDOUS WASTE

You've Marie Kondo\*-ed your collection of household chemicals. Now what? Bring your unwanted paint, cleaners, pesticides, and other products to our Household Hazardous Waste Collection Facility in Martinez. Every year we collect about 2.2 million pounds of hazardous waste, and we reuse or recycle about 90% of these materials—how's that for sparking joy! For a list of what's accepted, visit: [centralsan.org/hhw](http://centralsan.org/hhw)

*\*Best-selling author, Netflix star, and decluttering guru.*

### HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY

4797 Imhoff Place, Martinez, CA 94553-4392  
1-800-646-1431

#### HOURS:

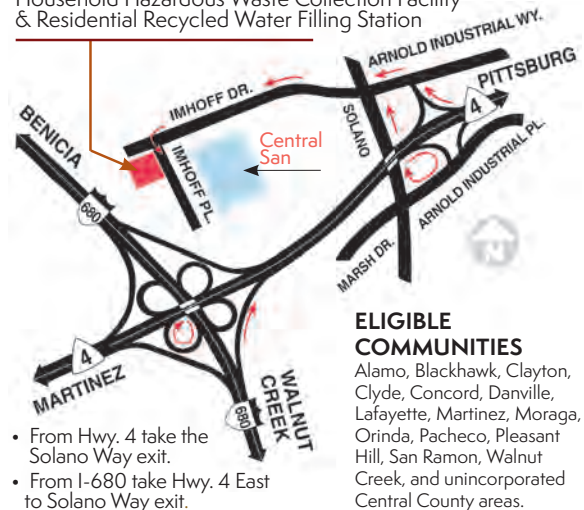
**Residents:** Monday–Saturday, 9 a.m. - 4 p.m.  
(Reuse Room closes at 3:30 p.m.)

**Businesses:** Monday–Saturday, by appointment

**Holiday Closures:** May 25; July 4; Sept. 7; Nov. 11



Household Hazardous Waste Collection Facility  
& Residential Recycled Water Filling Station



#### ELIGIBLE COMMUNITIES

Alamo, Blackhawk, Clayton, Clyde, Concord, Danville, Lafayette, Martinez, Moraga, Orinda, Pacheco, Pleasant Hill, San Ramon, Walnut Creek, and unincorporated Central County areas.

- From Hwy. 4 take the Solano Way exit.
- From I-680 take Hwy. 4 East to Solano Way exit.

# CUTTING-EDGE COMPUTER MODELS IMPROVE PROJECTS AND PLANNING

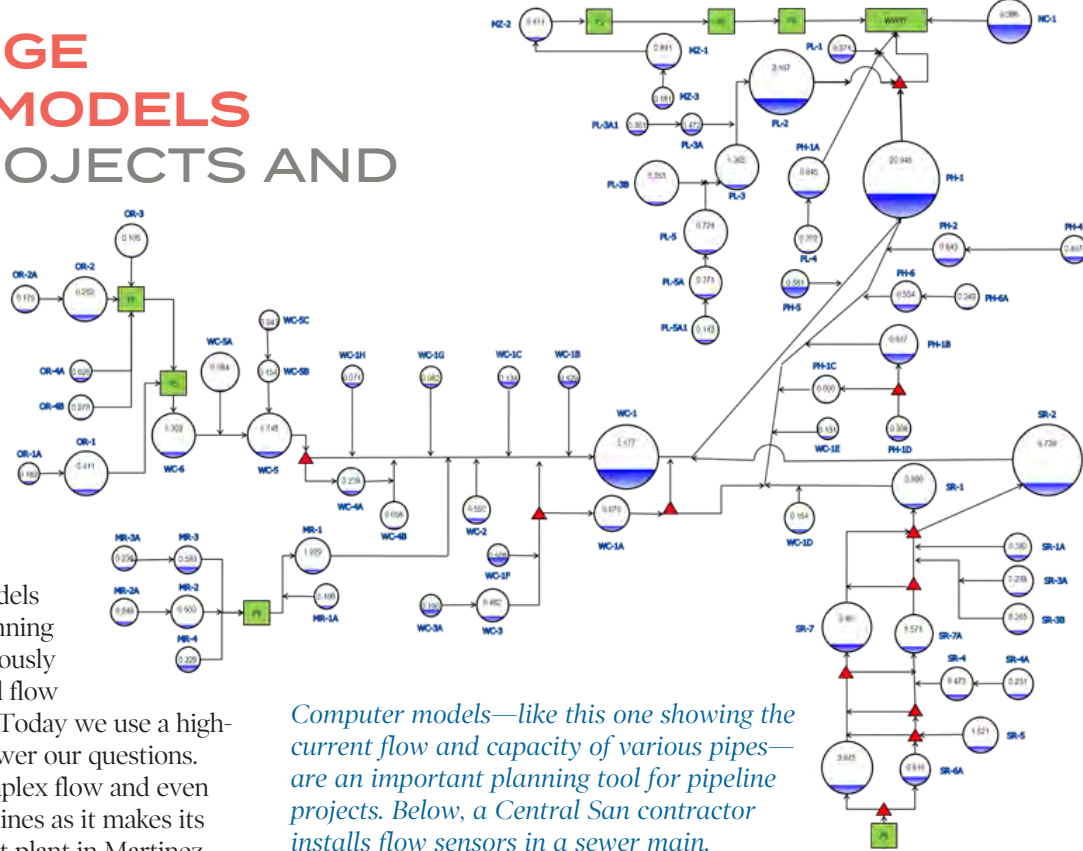
With more than 1,500 miles of neighborhood sewer pipes to maintain, Central San is continually replacing aging pipes to improve the reliability of our system. But how do we know if the pipes are correctly sized to carry the flow?

Central San has used computer models to help with long-term pipeline planning since the 1980s. However, we previously relied on models that only provided flow information for a snapshot in time. Today we use a high-tech modeling platform to help answer our questions. This platform can simulate the complex flow and even the level of water through our pipelines as it makes its journey all the way to our treatment plant in Martinez.

Why is this important? The flow of water through our pipelines varies significantly over the course of a day or a year. For example, sewer flows generally peak in the morning, when many people in our service area are waking up and getting ready for work. Flows also can increase in the winter months.

With more confidence in understanding the behavior of the water in Central San’s pipelines, we can better evaluate our ability to accommodate future flows. We can even help prepare for sewer shutdowns and bypasses—for example, if we must take a pipeline out of service for repair. And as part of a growing trend of utilities across the country linking infrastructure to the internet, this new platform positions us to capitalize upon emerging developments in smart sewer technology.

Implementing the modeling platform has been a big job, as the model had to be fine-tuned with real-world data collected through flow meters, rainfall gauges, engineering surveys, and other means. Having the ability to simulate



Computer models—like this one showing the current flow and capacity of various pipes—are an important planning tool for pipeline projects. Below, a Central San contractor installs flow sensors in a sewer main.



V&A Consulting Engineers

and predict how water behaves in Central San’s vast network of pipes allows us to make informed decisions about how to manage and improve our infrastructure. We strive to be wise stewards, and high-tech modeling helps ensure we’re making the best investments for our customers.

## FOLLOW OUR FLOW!

 **YOUTUBE:**  
[youtube.com/centralsandist](https://youtube.com/centralsandist)

 **TWITTER:**  
[twitter.com/centralsan](https://twitter.com/centralsan)

 **FACEBOOK:**  
[facebook.com/centralsandist](https://facebook.com/centralsandist)

 **INSTAGRAM:**  
[instagram.com/centralsandist](https://instagram.com/centralsandist)

## WONDERING HOW WE DO **WHAT WE DO?**



### COME VISIT US!

**W**hat happens after your water goes down the drain? Find out at a behind-the-scenes tour of Central San's wastewater treatment plant in Martinez. We offer free public tours each quarter. Join us for an inside look at how we make dirty water clean again through engineering and science.

In addition to public tours, we can arrange a custom tour for you and your group. To learn more about the tours and to sign up for one of our quarterly tours, visit us online at [centralsan.org/tours](https://centralsan.org/tours). Questions? Contact Ben Lavender at (925) 335-7723 or [blavender@centralsan.org](mailto:blavender@centralsan.org).



### OR, WE CAN COME VISIT YOU!

**L**ooking for a speaker for your group or event? We may be able to help! Central San offers presentations on pollution prevention and the world of wastewater. Talks can be tailored to the group's interests. Call our Public Info Line at (925) 335-7702 and leave a message about your event or meeting along with your contact information.



# CREATE FRUIT/VEGGIE STICKER ART!

**HI, KIDS!** Fruits and veggies are good for you, but those little stickers you find on them are not good for our sewer system (read more about this on previous page). You can help protect our pipes and the environment by keeping produce stickers out of the drain and turning them into art instead!



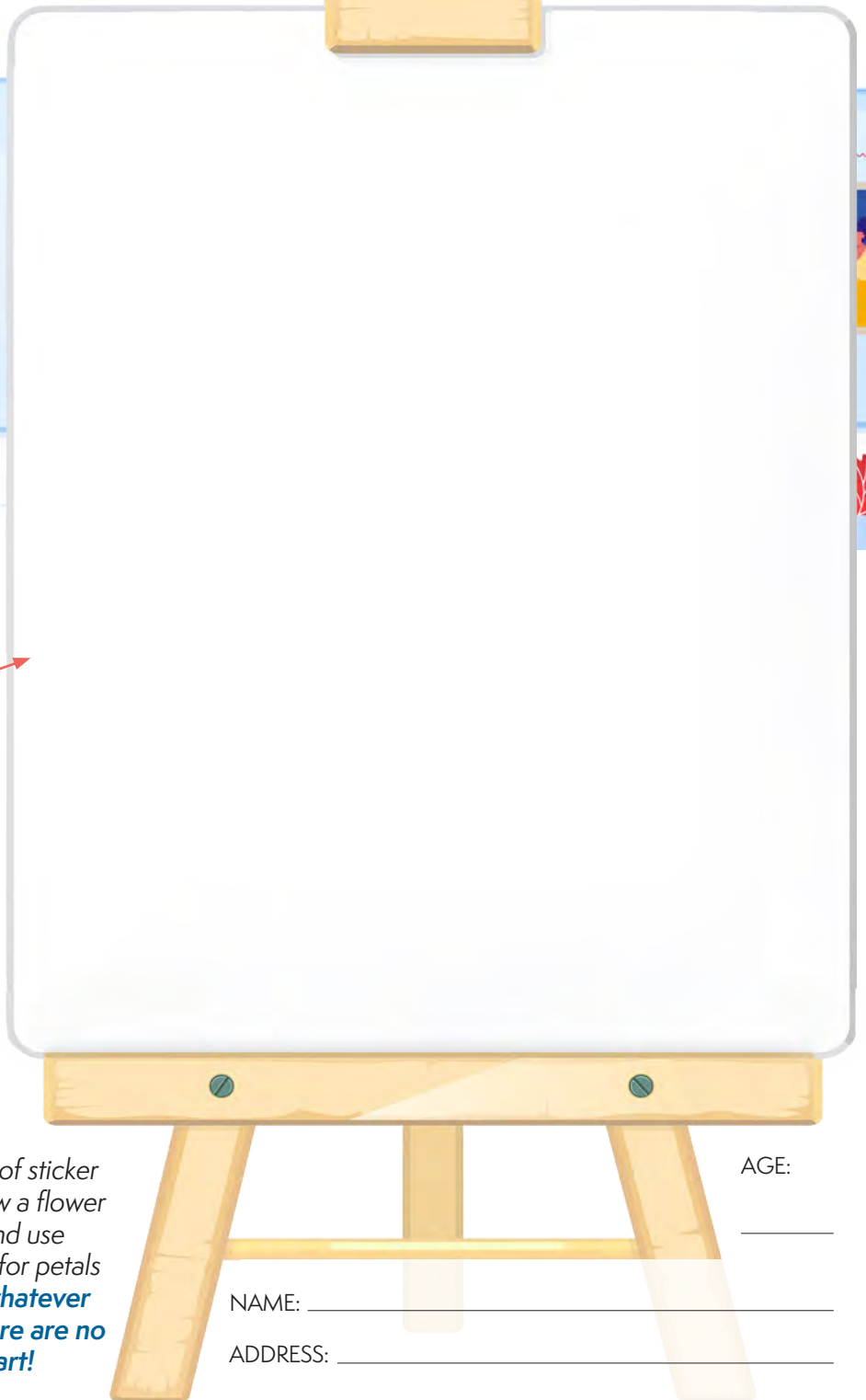
## YOUR ART = A PRIZE!

**FIRST**, collect a bunch of stickers from fruits and veggies. Then, use them to create a picture in the frame. You can use pencils, crayons, paint, or anything else you want, too.

**SEND** us your finished picture, and we'll send you a PRIZE! Your picture may even be published in our next issue of Pipeline!



This is an example of sticker art. Draw a flower stem and use stickers for petals and leaves. **But do whatever you want to do—there are no mistakes! It's YOUR art!**



AGE: \_\_\_\_\_

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Cut out this page and send your picture to:  
**Sticker Art**  
Central Contra Costa Sanitary District  
5019 Imhoff Place, Martinez, CA 94553







## WE ARE HERE TO HELP

General Information	(925) 228-9500 or <a href="http://CentralSan.org">CentralSan.org</a>
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 <a href="http://CentralSan.org/HHW">CentralSan.org/HHW</a>
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	<a href="http://CentralSan.org/Careers">CentralSan.org/Careers</a>
Student Education Programs	(925) 335-7723 or <a href="http://CentralSan.org/Learn">CentralSan.org/Learn</a>
Community Information Line	(925) 335-7702

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.



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

-  Wastewater collection & treatment; Household Hazardous Waste (HHW) disposal.
-  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 Vallée**, Editor, Writer

**Charles Waltmire**, Graphic Designer

View archived issues at [CentralSan.org](http://CentralSan.org)



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