



PIPELINE

A newsletter about protecting public health and the environment

Handle With Care

Protecting Delta Smelt and Other Aquatic Life in the Bay

Page 2

INSIDE:

Pollution
Prevention
Honorees Page 3

New Feature: Kids Page

Page 11



Are Nutrients Impairing the Bay?

The San Francisco Bay is a complex ecosystem.

Even decades after increasingly stringent water quality requirements have reduced levels of many pollutants, the Bay continues to exhibit signs of impairment.

One of those signs is a reduction in the numbers of Delta smelt and the organisms that feed on them, such as salmon.

There are many theories about why this is happening. Foremost is that withdrawals of fresh water — for municipal, industrial and agricultural purposes — from rivers flowing into the Bay are the culprit. However, scientists caution that the cause is likely more complex.

A hypothesis that continues to gain support is that the food chain has been altered from the bottom up, resulting in a shortage of food for the smelt. Data shows reductions of small plant life (phytoplankton) and small animal life (zooplankton) that form the basis of the food chain on which smelt depend for survival.

If this hypothesis is correct, the next question is: What is causing the reduction of phytoplankton and zooplankton?

One theory blames the influx of invasive species, such as the Asiatic clam which feeds on small organisms by filtering them out of the water.

Another theory is that an excess of nutrients (such as nitrogen and phosphorus) is impairing Suisun Bay. Excess nutrients can affect the growth of phytoplankton, which in turn impacts the rest of the food chain. Although nutrients have not been considered a serious threat to Bay water quality in the past, recent analyses suggest nutrient compositions in the Bay may be changing.

Because the discharge from wastewater treatment facilities is a significant source of nutrients and they would be very costly to remove, we are understandably concerned about this potential threat to the Bay. Therefore, we and other Bay Area and Central Valley wastewater agencies are investing funds for collaborative research to better understand the impacts of nutrients we discharge to the Bay. Central San alone will spend well over a million dollars in fiscal year 2012-13 on collaborative as well as independent research on this topic. We will update you on our findings in future issues.



Businesses Lauded for Protecting the Environment

Congratulations to this year's recipients of Central Contra Costa Sanitary District's Annual Pollution Prevention Awards!









These businesses do more than just comply with water quality regulations, they promote recycling and waste minimization; use equipment, practices and procedures that prevent pollutants from entering the sewer or storm drains; educate employees and customers about water quality issues; and proactively protect the environment. Since initiating the Pollution Prevention Awards program in 1992, we've had the privilege of recognizing 97 businesses for their exceptional efforts to keep pollutants out of local waterways.

We applaud this year's award winners and all businesses that make protecting the environment a priority!



Converting From Septic to Sewer?

he Central Contra Costa Sanitary
District provides wastewater collection
and treatment for communities within
central Contra Costa County. While the
majority of homes in our service area are
connected to the public sewer system, some
still use private septic tanks.

One way to accomplish our mission of protecting public health and the environment is to assist property owners who plan to stop using their private septic tank and connect to the public sewer system. Reasons people give for converting from septic to sewer include: failure of their septic system to operate properly or a need for more capacity due to a planned expansion of the home. Some just want to extend a sewer to their property in case their aged septic system fails without warning.

Septic System Conversion Costs

Central San is prohibited by law from constructing main sewer extensions for private property. Property owners, therefore, are responsible for extending the nearest public sewer main to their property. The expense can be significant, but is comparable to the cost of replacing a failed septic system. The cost of a sewer extension can run from \$10,000 to \$40,000 or more per property, depending on various factors.

Other costs of converting from septic to sewer include: constructing a private lateral and side sewer from your home's plumbing to the public sewer main; abandoning the septic tank; and paying Central San's connection fees. These costs can total \$10,000 to \$20,000.

To help property owners manage these costs, Central San has two financing programs available: Contractual Assessment Districts (CADs) and the Septic Conversion Capacity Fee Installment Payment Program.

Contractual Assessment District (CAD)

If a new public main sewer extension is needed to serve a group of at least five properties, a CAD may be an option worth investigating. The voluntary CAD program assists property owners who currently use septic tanks for wastewater disposal but would like to connect their homes to the public sewer system by financing the cost of extending new sewers to their properties through Central San. Each participating property owner's share of the sewer design and construction cost can be paid off over ten years at a fixed interest rate billed on their property tax bill.

The District's decision as to whether to form a CAD is determined on a case-by-case basis by the Board of Directors, who consider technical, economic, budgetary, environmental and other factors.

Septic Conversion Capacity Fee Installment Program

Owners abandoning their septic tank system to connect to the public sewer may choose to finance their capacity fees, the largest portion of the one-time connection fees paid by new connectors to the public sewer system. Just as with the CAD program, voluntary participants may choose to pay off the capacity fees (which currently range from \$5,797 to \$7,422) over ten years at a fixed interest rate, billed on their property tax bill.

For More Info

For additional information about connecting to the

public sewer system, and using one or both of these financing programs, please call Central San's Permit staff at (925) 229-7371.

NOTE: The Contra Costa Environmental Health Division – not Central San – is responsible for regulating septic systems throughout Contra Costa County. Information about the maintenance, expansion, enhancement, replacement or abandonment of septic systems is available at http://www.cchealth.org/eh or by calling (925) 646-5225.



A septic tank overflow



omeowners can face myriad expenses when adding an in-law unit or other form of second living unit.

A second living unit is defined by the Central Contra Costa Sanitary District code as: "An area designed for the purpose of separate habitation that (1) will be, or can be, physically separated by a wall or door from other residential units on the parcel, and (2) contains both a bathroom and kitchen, as well as a multipurpose or bedroom area, and an exterior entrance."

Expenses that homeowners sometimes overlook when adding a second living unit are sewer connection fees and sewer service charges.

Sewer connection fees fund the construction of our sewer collection system and wastewater treatment plant facilities. These one-time fees are your fair share of the cost of the assets needed to collect, treat and safely recycle or dispose of your wastewater. These fees are paid when any new home or second living unit is connected to the public sewer system.

Annual sewer service charges pay for the ongoing operation and maintenance of our collection system and treatment plant, and are collected as a line item on property tax bills.

These fees are based on the number of living units per parcel for residential customers. The addition of a second living unit, such as an in-law cottage, results in an additional connection fee and a second sewer service charge.

Occasionally, a second living unit is added on a property without proper permits being obtained or fees being paid. When this type of situation is discovered, homeowners may be responsible for penalty fees in addition to connection fees and sewer service charges.

If you have a second living unit on your property, you can verify that it was properly permitted by checking the "CCCSD sewer service charge" listed on your property tax bill. The current sewer service charge is \$371 per living unit. Parcels with a permitted second living unit are charged for two living units, so the charge would be \$742.

If you suspect that a permit was not obtained nor a connection fee paid when the plumbing of your second living unit was connected to the public sewer, please contact us to arrange an inspection. We'll confirm that the sewer connection complies with good plumbing standards, work with your plumber on any needed corrections, and help you to determine and pay the required fees.

Whether you are a homeowner, business owner, developer, or contractor who wants to connect to the public sewer system, Central San's Permit team is committed to

serving your needs and making the process as efficient as possible. Please contact them at (925) 229-7371 or visit our website at www.centralsan.org/ResidentialPermits if you have any questions about your fees.

This Newsletter is Online

ould you like to read past issues, or share *Pipeline* newsletters with family or friends who do not receive them through the mail? All that's needed is Internet access; every issue since Fall 2005 is freely available on our website. Please feel free to share this link:

www.centralsan.org/publications

ENGINEERING DEPARTMENT PROFILE

Engineering the Best Solutions for Pollution

rotecting public health and the environment, while fulfilling the needs of the 461,000 customers within our service area, requires a vast sewer system with 1,500 miles of pipe (ranging in size from 6 inches to 9 feet in diameter), 19 pumping stations, a state-of-the-art wastewater treatment plant, a recycled water plant, and household hazardous waste collection facility. This infrastructure is valued at more than \$1.6 billion.

The responsibility for planning, designing, constructing, surveying, inspecting, preserving, and enhancing the pipelines, buildings, facilities and equipment which comprise that vital infrastructure lies with the men and women of the Central Contra Costa Sanitary District Engineering Department.

This department is responsible for our extensive Capital Improvement Program. Capital improvements are construction, acquisition or renovation activities which add value to the District's fixed assets (buildings, pipelines, facilities, equipment) or significantly increase their useful life. In fiscal year 2012-13, the District is devoting approximately \$32 million to the planning, design, and construction of capital improvement projects that will preserve, maintain, and enhance the District's assets, accommodate community needs, and protect the environment.

While much of what the Engineering Department produces is underground or off limits to the general public, Central San's new environmentally friendly Collection System Operations headquarters in Walnut Creek and the award-winning Household



Hazardous Waste Collection Facility in Martinez are two of the most visible examples of this group's work.

But there is much more to this team's duties than managing infrastructure improvements, including:

- Managing our Recycled Water and Pollution Prevention Programs.
- Serving more than 29,000 visitors and safely recycling or disposing of more than 2 million pounds of hazardous wastes each year at the Household Hazardous Waste Collection Facility.
- Reviewing plans, issuing permits, and inspecting all developer and private sewer installations and repairs within our service area to ensure they are done safely and in accordance with our standards and specifications.
- Helping businesses to comply with federal, state and local requirements for wastewater and stormwater discharge.
- Helping customers to connect to the public sewer system, and collecting associated fees.
- Providing cost-effective and user-friendly technical solutions for engineering-related maintenance issues.
- Evaluating the requirements of developing regulations for potential impacts on our operations.

Engineering Department Work Groups

Collection System Planning

Collection System Design & Construction

Development Inspection

Engineering Support

Environmental Compliance

Household Hazardous Waste Collection

Plan Review, Permits & Sewer Service Charges

Recycled Water

Right-of-Way & Special Projects

Survey

Treatment Plant Planning

Treatment
Plant Design &
Construction









Protect Your Property from Overflows

sewage overflows are rare, but it's prudent to protect your property from the damage they can cause. Having an Overflow Protection Device allows sewage backing up in the pipe from the direction of the street to overflow into your yard, rather than through drains inside your home.

Note: It will not help if your pipe is clogged between the drain and the device, so keep disposable wipes, grease, and anything else that might cause clogs out of your pipes!

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

DO NOT Flush Your Drugs!

If you have unwanted medications, please bring them to one of these free drop-off sites for safe disposal:

City of Clayton Police Dept. 6000 Heritage Trail, Clayton

City of Concord PD 1350 Galindo St., Concord

Sheriff's Field Ops. Bldg. 980 Muir Rd., Martinez

Contra Costa Medical Center Sheriff's Substation 2500 Alhambra Ave., Martinez

Town of Danville PD 510 La Gonda Way, Danville

City of Martinez PD 525 Henrietta St., Martinez

Town of Moraga PD 329 Rheem Blvd., Moraga City of Orinda PD
22 Orinda Way, Orinda
City of Pleasant Hill PD
330 Civic Dr., Pleasant Hill
City of San Ramon PD
2401 Crow Canyon Rd., San

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

Ramon

For more information

visit www.centralsan.org/hhw or call 1-800-646-1431



15-Year Anniversary Marks the Safe Disposal of 26 Million Pounds of Household Hazardous Waste

Household Hazardous Waste Collection Facility

4797 Imhoff Place, Martinez, CA 94553-4392

HOURS

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

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

Businesses: Monday – Saturday, by appointment only

Holidays: Nov.22-23; Dec.24-Jan.1; Jan.21; Feb. 12;

Feb. 18

1-800-646-1431 ARNOLD INDUSTRIAL WY. Household Hazardous Waste **Collection Facility** reatment Plant **Eligible Communities** Alamo, Blackhawk, Clayton, Concord, Clyde, Danville, Lafayette, Martinez, Moraga, Orinda, Pacheco, Pleasant Hill, San Ramon, Walnut Creek and unincorporated Central • From Hwy. 4 take the Solano Way exit. County areas. • From I-680 take Hwy. 4 East to

hen our Household Hazardous Waste Collection Facility opened its doors to the public in October 1997, it was the first permanent facility in the county to provide a safe and convenient method

for residents and small businesses to dispose of their leftover paint, pesticides, used motor oil, batteries and other hazardous materials.

That inaugural year, the facility collected nearly 745,000 pounds of household hazardous waste. By fiscal year 2011-2012, the annual amount grew to nearly 2 million pounds — an increase of more than 168%! On average, 15% of Central San customers use the facility each year.

During its 15 years of operation, this award-winning facility has collected – and kept out of the environment – more than 26 million pounds of household hazardous waste!

Approximately 90% (23 million pounds) of collected items are recycled or reused; the rest are disposed of safely.

The total collected waste during the past 15 years includes:

- More than 2,000 pounds of mercury
- Nearly 343 miles of fluorescent lamps
- More than 1,260,000 guarts of used motor oil
- More than 703,700 gallons of latex paint
- More than 36,750 car batteries and 219 tons of household batteries

Please join those who are keeping tons of pollution from contaminating our environment by bringing your household hazardous waste to the facility.

Solano Way exit.



Five Ways to Have Greener Holidays

he holiday season (from Thanksgiving to New Year's Day) is the most wasteful and least environmentally friendly time of year. Americans throw away 25% more trash (which equates to an extra 25 million tons of garbage) during this period, and our energy use climbs nearly as quickly as our credit card bills!

Here are five ways you can make the holidays a bit easier on the environment:

- **1.** Do not burn wrapping paper in the fireplace. Because wrapping paper is often printed with heavy inks or made from metallic materials, burning it can release dioxins and other toxic pollutants into the environment.
- 2. When cooking, be sure to prevent all fats, cooking oil and grease from going down the drain. Grease buildup in pipes is a major cause of clogs and overflows, which can result in sewage spilling into storm drains and creeks. Put fats, oil and grease in a sealable container and in the trash. If you use large amounts, such as to deepfry a turkey, bring the used oil to the Household Hazardous Waste Collection Facility for disposal.
- **3.** Send e-cards or recycled-content greeting cards to conserve resources and reduce waste. Do not send cards that have sound or flashing lights, because the small batteries they contain just like all batteries will need to be disposed of as household hazardous waste.
- **4.** Include rechargeable batteries and a battery charger with electronic gifts. Also, remind recipients to dispose of all dead batteries as household hazardous waste.
- **5.** Use energy-saving LED holiday lights. Limit holiday light displays to six hours per evening to conserve even more energy.

Burning Wood Pollutes Air and Water

id you know that burning wood in your fireplace creates smoke full of toxic contaminants such as carbon monoxide, benzene, formaldehyde, and dioxin? According to the EPA, dioxin is a likely human carcinogen that increases the risk of cancer.

As much as 28% of particulate matter in the air comes from wood-burning fireplaces on cold winter days. These contaminants not only pollute the air we breathe, they pollute local waters when the particles settle back down to earth.

To reduce air and water pollution:

- Don't use your wood-burning fireplace.
- Never burn on Spare the Air days.
- Burn manufactured logs instead of wood.
 They burn cleaner, with lower emissions.
 [Note: Follow instructions on the logs; they may not be suitable for wood stoves or fireplace inserts.]
- Switch from a traditional fireplace to a natural gas device, an EPA-certified wood stove or pellet stove, which can reduce emissions by up to 70%.
- Never burn painted wood, particle board, plastics, Styrofoam, wrapping paper or other garbage in your fireplace.





entral Contra Costa Sanitary District regularly maintains, repairs or replaces sewer lines and other elements of its 1,500-mile wastewater collection system to ensure continuous, trouble-free service for our 461,000 customers. We do our best to minimize the inconveniences our projects cause and appreciate your understanding.

Here's a brief summary of our major ongoing construction projects:

Orinda

The North Orinda Sewer Renovations Project, Phase 4, is renovating sewers in the El Toyonal and Claremont Avenue areas of North Orinda. Expected completion: January 2013.

Walnut Creek

The Walnut Creek Sewer Renovation Project, Phase 9, is renovating sewers in the Rudgear Road, Hawthorne Drive, and Mountain View Boulevard areas. Expected completion: February 2013.

For more info...

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

More info:

Detailed project maps are posted on our website, www.centralsan.org (check the "Construction Zone" in the lower right of the home page).



...on Pet Poop (disposal)

here are hundreds of thousands of dogs and cats in the Bay Area. Many people consider them to be an important part of their family. But did you know pet waste can be a significant source of water pollution? Dog and cat wastes contain parasites, bacteria and other pathogens that can be harmful to humans, animals, and the environment.

These pollutants reach local waters in two ways:

- **1.When left on the ground.** Pet waste and other contaminants on the ground get washed into gutters and storm drains when it rains. Storm drains carry untreated water and everything that is washed into it directly into creeks, streams and the bay.
- **2.When flushed down toilets.** Some pathogens such as toxoplasma gondii, a parasite sometimes found in cat feces that can be deadly to sea otters and other aquatic mammals can survive wastewater treatment and remain in effluent discharged to the bay.

How to Prevent "Poo-Ilution"

- Always pick up your pet's waste.
- Put pet waste in the garbage.
- Never wash pet waste into the street, gutter, or storm drain.
- Avoid flushing pet waste down a toilet.
- Let friends and neighbors know the effects of animal waste on the environment.

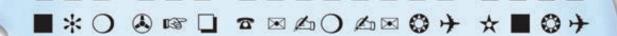
Pollution Solution

KIDS PAGE

Can you crack the code?

Solve this puzzle using the secret code to learn how you can help protect our water.





++□ ○□ * □ * □□ * + * □□ ○

►■♣■□○❷☞☆ ☎■☆◆→☆

Secret Code:

E н 1 + 0 1 M N 0 P R * (3) S Z

About CCCSD

ur mission as a Special District is to protect public health and the environment. We do this by collecting and treating wastewater, providing recycled water, and promoting pollution prevention. Our treatment plant in Martinez collects, treats, and disinfects an average of 45 million gallons of wastewater every day. Some treated wastewater is recycled (treated further) for irrigation use on golf courses and parks; the rest is released into Suisun Bay. We also operate a Household Hazardous Waste Collection Facility and sponsor 11 pharmaceutical disposal collection sites.

Where to Call...

General information	(925) 228-9500 or www.centralsan.org
Sewer overflows	(925) 933-0955 or 933-0990
Treatment Plant InfoLine (Report Odors)	(925) 335-7703
Household Hazardous Waste InfoLine	(800) 646-1431
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)
Source Control	(925) 229-7288
Job Hotline	(925) 229-7109 or www.centralsan.org
Student Education Programs	(925) 229-7310 or www.centralsan.org
Public InfoLine	(925) 335-7702 or www.centralsan.org

Board of Directors

James A. Nejedly, President

- David R. Williams, President Pro Tem Barbara D. Hockett, Director
 - Mario M. Menesini. Director
 Michael R. McGill. Director

Board meetings are open to the public and are held on the 1st and 3rd Thursday of each month at 2 p.m. in the CCCSD Board Room, 5019 Imhoff Place, Martinez.

Ann E. Farrell, General Manager



CCCSD serves 461,100 customers within its 140-square-mile service area.

Sewage collection and wastewater treatment (and HHW service) for 326,900 people

Wastewater treatment for 134,200 residents in Concord and Clayton by contract and HHW service

HHW disposal only

CCCSD's Headquarters, treatment plant, and HHW Collection Facility are located in Martinez

The Central Contra Costa Sanitary District PIPELINE

Written and designed by CCCSD to communicate pollution prevention messages to the people and communities we serve

Michael Scahill, Editor • Bonnie Lowe, Writer Charles Waltmire, Graphic Designer

View archived issues online at www.centralsan.org

PIPELINE is printed with soy-based inks on Recycled Paper

