

Sanitary District No. 5

Tiburon & Belvedere, California



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Spring News

2011

www.Sani5.org

Interim Board Member Appointed

Tiburon resident, William L. Teiser, was appointed January, 25, 2011, by the Board of Directors to serve the eleven months remaining on a term left open by V. William Brady's December 2010 resignation from the Sanitary District No. 5 Board.

We heartily welcome Bill Teiser, along with his many years' experience in project management and engineering, to Sanitary District No. 5's Board of Directors.

An election, whereby interested parties residing in the District's boundaries are encouraged to apply, will take place this fall for a new four year term commencing December 2011.

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State & Bay Area Awards for Pollution Prevention & Outreach

Sanitary District No. 5, in partnership with five other wastewater treatment agencies in Marin County, won the Dr. Teng-chung Wu Award in 2010. This annual award recognizes Dr. Teng-chung Wu's dedication to improving water quality throughout his career and, in particular, his leadership in pollution prevention.

After Bay Area utilities spent billions of dollars during the 1980s to implement traditional treatment technologies, Dr. Wu believed pollution prevention was the most cost-effective next step in improving water quality.

To advance pollution prevention in the Bay Area, Dr. Wu introduced a collaborative regional approach involving many public agencies and utilities in pollution prevention. His efforts lead to the formation of the Bay Area Pollution Prevention Group (www.bacwa.org). Because the public is ultimately the source of pollutants in wastewater, Dr. Wu believed strongly in the public outreach and awareness elements of pollution prevention programs.

The award reflects Dr. Wu's pollution prevention philosophy by encouraging submissions from agencies that have worked together on pollution prevention projects or have shared their ideas and experiences with others to foster new and expanded pollution prevention programs. Awards are based on leadership, innovation, commitment, measurable results, and benefit to the environment and community.



CALIFORNIA WATER ENVIRONMENT ASSOCIATION announced late in 2010 that the State Award honoring the achievements of exceptional members for 2009 would go to Marin County Wastewater Treatment Agencies. Sanitary District No. 5 is one of the six members.

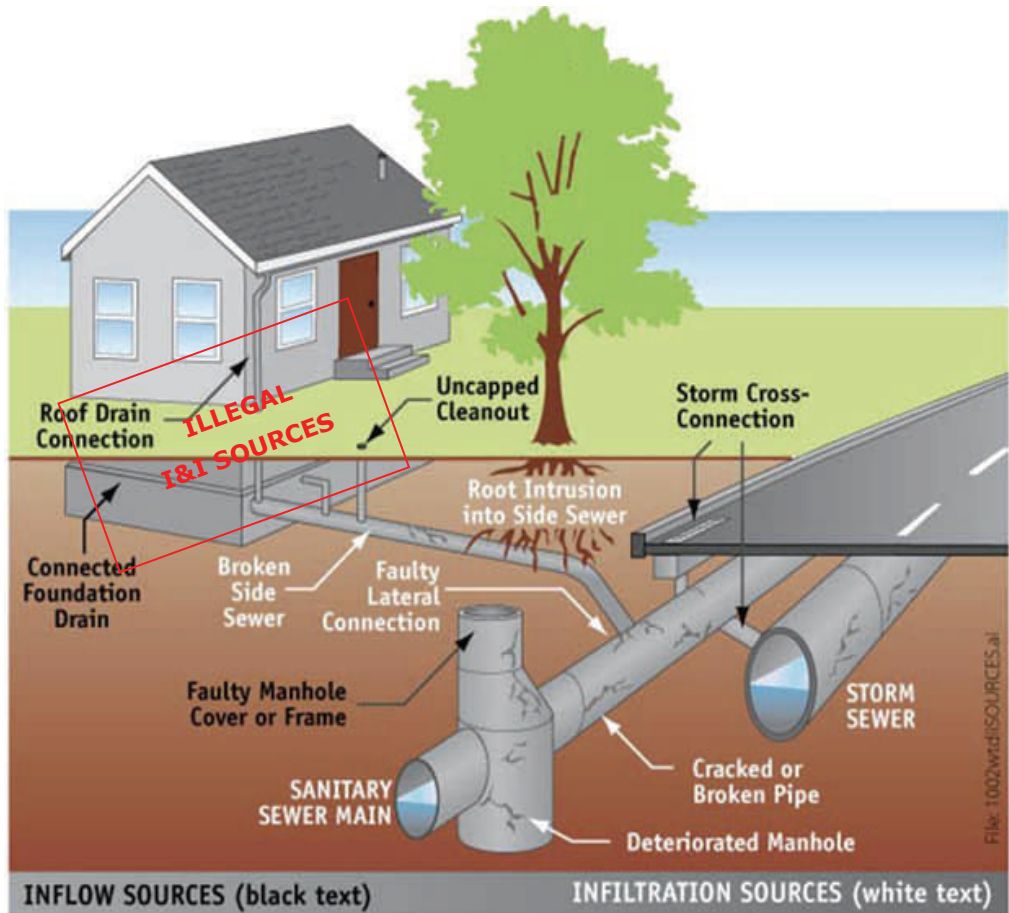
There are over 20 categories for CWEA awards. Each one has been designed to honor exceptional CWEA members and California wastewater professionals, facilities, and agencies. The program seeks to recognize outstanding achievements within the wastewater field, improve the professional status of all personnel working in the wastewater industry and related fields, and stimulate public awareness of the importance of wastewater treatment to public health and the water environment.

Wastewater Sanitation Primer

Inflow and Infiltration 101—

Excess water, essentially clean water, also termed “clear water,” that flows into dedicated wastewater or sanitary sewer systems from stormwater and groundwater is called inflow and infiltration, or I&I, explained below.

- INFLOW:** Stormwater rapidly flows into sewers via roof drain downspouts, footing or foundation drains, storm drain cross-connections, and holes in manhole covers. These sources are typically improper or illegal connections. Inflow also occurs as a result of storm events such as rainfall, snowfall, springs, or snow melt that contribute to excessive sewer flows. Peak inflow can occur during heavy storm events when sewer systems are surcharged, resulting in hydraulic backups and local ponding.



Graphical view of the sources of infiltration and inflow.

Credit given to King County, WA, Dept. of Natural Resources and Parks, Wastewater Division

- INFILTRATION:** Infiltration is groundwater, or groundwater that is influenced by surface or sea water, that enters sewer pipes (interceptors, collectors, manholes (MH), or side sewers) through holes, breaks, joint failures, connection failures, and other openings. Infiltration quantities often exhibit seasonal variation in response to groundwater levels. Storm events can trigger a rise in groundwater levels and increase infiltration flows.

Inflow and infiltration costs water treatment facilities and consumers large amounts of money in water treatment operating expenses. All water entering a water treatment facility must be treated as wastewater causing an increase in operating costs proportional to the amount of clean water entering the system.

To find out what you can do, to prevent inflow and infiltration to protect our system, see sidebar on page 3.

Informational source: Global Water, www.globalw.com

Main Plant Rehabilitation Project

The District recently conducted a condition assessment that found the District's main wastewater treatment plant well maintained, although considerable signs of aging were apparent. Mechanical and electrical equipment is at or beyond its expected useful life and below efficient energy, environmental, and safety standards. In addition, the close proximity to the ocean and the San Francisco Bay, which is not typical for wastewater treatment plants, creates a very harsh and corrosive environment.

The current main plant was constructed in the early 1980s, with some structures dating to the 1960s. It is anticipated that routine maintenance costs will rise to significant annual expenditures. Therefore, the Board of Directors of Sanitary District No. 5 has authorized a report for the Preliminary Design of the Main Plant Capital Rehabilitation and Replacement Project to be completed in 2011. If the main plant rehabilitation project is deemed appropriate for the District's needs, construction would begin in 2012 and be completed by 2014.

In the event the District moves forward with this project, Tiburon and Belvedere residents will be informed as to its progress at regular intervals during monthly Board meetings and through the District's quarterly newsletter.

PREVENTING INFLOW & INFILTRATION

What We Are Doing:

- A group of nine local wastewater agencies, members of the **North Bay Watershed Association**, is working together to help homeowners and businesses inspect and fix their privately owned sewer laterals.
- District staff will inspect and make recommendations.

What You Can Do:

- Televiser your sewer lateral.
- Call for an appointment (435-1501) with District staff to meet with you on your property to suggest measures you can take to prevent inflow and infiltration.
- Make sure your roof drains are not connected to your private sewer lateral line or to public sewer lines.

Sani 5 Appreciates Service Area Dentists

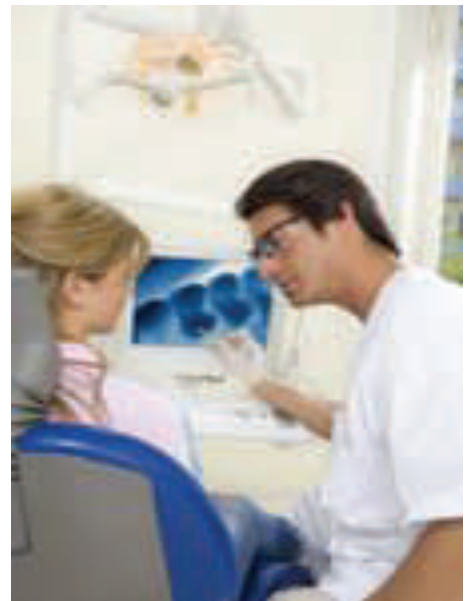
Sani 5 is pleased to announce that all dentists in our service area are following Best Management Practices and are now using amalgam separators in their dental offices.

Preventing Pollution From Dental Offices: Dental office vacuum lines, sinks, and toilets all lead to local sewer lines. Anything poured down the drain goes to a wastewater treatment plant before being discharged into the San Francisco Bay.

Wastewater treatment facilities are not designed to remove metals, like mercury and silver; therefore, Sanitary District No. 5 requested community support to comply with regulatory permits and to protect the Bay.

Because of mercury pollution issues in the San Francisco Bay, all Bay Area agencies, at a minimum, encourage amalgam Best Management Practices (BMPs) and installation of amalgam separators in dental offices. Many

agencies are moving toward mandatory use of amalgam BMPs and installation of amalgam separators. Sanitary District No. 5 has done both.



Oops→ Happiness is your dentist telling you it won't hurt and then having him catch his hand in the drill. ~**Johnny Carson**



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Bay Area FOG Forecast: FOGgy patches persist, but clearing anticipated



*Disposing of **F**ats, **O**ils, and **G**rease down the drain can quickly lead to clogs like this! Do your part to keep FOG out of the sewer system.*

Here in the Bay Area, we know and love fog in our atmosphere, but not in our sewer pipes. To that extent, Sanitary District No. 5 is diligently working to educate all residents so that pipes and lines will be free from **FOG (Fats, Oils, & Grease)**. This will save the taxpayers money, free property owners from costly repairs, and keep our precious Bay healthy and beautiful.

When FOG cools, it can and will form blockages. Sewer pipes clogged with **Fats, Oils, and Grease (FOG)** are one of the leading causes of sanitary system overflows. Beyond the cost of cleaning up the overflow itself, sewer system overflows (SSOs) create the potential for costly litigation by environmental groups under provisions of the Clean Water Act.

Never pour grease down the drain — this includes keeping FOG out of the garbage disposal! Yes, really.

SSOs—Sewer System Overflows

Overflows occur when raw or partially diluted sewage is discharged from a sewer collection system before it reaches the sewage treatment plant. SSOs threaten public health because they can cause people to be directly exposed to disease causing germs called “pathogens”, such as E. coli, which are present in sewage.

Report SSOs immediately: 435-1501 • After hours/emergency: 945-4080.



This photo of a sewer system overflow was not taken in our District.