IRONHOUSE SANITARY DISTRICT

THE IRONHOUSE INSIDER

www.ironhousesanitarydistrict.com | 24-hour emergency line: 925-625-2279 | Spring 2015

TOILET RUNNING?

HOW TO CATCH IT AND SAVE WATER

It may be one of the oldest jokes in the book, but in these days of severe drought, it really is true that when your toilet is running you'd better catch it before that sneaky leak runs off with hundreds of gallons of precious water and your hard-earned money.

The Governor's office has imposed California's first-ever mandatory water restrictions as the state's four-year drought continues. The new rules force cities and towns to reduce their water usage by 25 percent in the coming year. This leaves homeowners scrambling to save water without sacrificing their quality of life.

One of the first things you might want to look for is whether there are any leaks in your home. According to the EPA, an average of 200 gallons of water can be wasted every day by a running toilet. A small leak may waste about 30 gallons a day; however, because such leaks are more difficult to detect, they can last longer. Thirty gallons of water a day can certainly add up quickly when you are unaware there is a problem.

In a worst-case scenario you could be wasting more than 4,000 gallons of water a day. If you have a 1.5-gallon-per-flush toilet and it takes about 30 seconds for the tank to refill per flush, then if the fill valve is left open for a minute, your toilet could waste 3 gallons of water. If the fill valve is left open all

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STOP THAT LEAK!: The EPA offers tips on leak detection and saving water at its Water Sense site. Scan this QR code now for details.

Look whooooo's flying in for a visit

Join ISD, Diablo Water District and the Delta Science Center on Saturday, April 25, from 10 a.m. to 2 p.m. as we host the annual Oakley Science Week at our 450 Walnut Meadows Drive headquarters. The theme of this year's show is **"Extreme Delta: Celebrating the Earth and Clean Water."** The day's entertainment will include crafts, games, hayride tours of the award-winning Water Recycling Facility, and a live owl show presented by the Lindsay Wildlife Museum. See you there!

Save the date: ISD turns 70

On Aug. 21, 1945, voters approved the formation of the Oakley Sanitary District by a unanimous 112-0 vote. That district became what is today the Ironhouse Sanitary District.

In honor of Oakley's founding fathers who had the foresight to help create a healthier environment for the betterment of their community, ISD will be hosting a 70th Anniversary Celebration, Saturday, Aug. 22, 2015. The event will feature a history tour of sanitary services through the years, tours of the Water Recycling Facility, games, lunch and music. □

INNOVATION, CONSERVATION, AND A FOUNDATION FOR THE FUTURE

Williams retires, leaves legacy

You don't have to look too hard to see the changes, innovations and conservation techniques that Tom Williams has helped bring to ISD during his 15 years here, including the past 10 as general manager. It is those lasting contributions that Williams will leave behind when he retires at the end of May.

First hired as the district's engineer under the leadership of then GM David Bauer, Williams dove in on existing projects around the old treatment plant. When Bauer retired, Williams easily made the transition to overseeing the day-to-day operations of the district.

One of his first major projects was building a railroad undercrossing to safely bring workers and the public past what had been a non-signalized grade crossing near Rose Avenue. The project included working not only with railroad officials, but also with three separate districts, Caltrans and the county.

Williams secured an interest-free state loan and oversaw construction of ISD's award-winning Water Recycling Facility.

As ISD's GM, Williams has overseen wastewater collection and treatment for a 37-square-mile district that includes Oakley, Bethel Island, Hotchkiss Tract and Holland Tract in East Contra Costa County. He has emphasized conservation techniques for the health and welfare of all of the communities.

During his tenure he also served as president of Reclamation District 830, which is responsible for maintaining 15.5 miles of Delta levees on 3,500-acre Jersey Island.

ISD's board is currently seeking Williams' successor and working with a consultant to run the district between managers. □

General Manager Tom Williams retires in May after 15 years with ISD.

TOILETS

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day then your toilet could waste 4,320 gallons of water in a day.

How can you spot a toilet leak?

LOOK: When the toilet is finished filling after a flush the water in the bowl should be still. If you see movement, you could have a leak. If you think a little water is entering the bowl, try putting a couple drops of food coloring or dye-test tablets into the tank and seeing if the color appears in the bowl.

LISTEN: When the toilet is finished filling after a flush, it should not make any noise. If it continues to run loudly, you have a major leak. If it is quieter, the leak could be smaller, but it is still wasting water and money.

CHECK: Check your water meter and then wait two hours without using any water. If the reading on your water meter has changed, you probably have a leak somewhere in your home. Alternatively, you may be able to track your daily water usage through your water company.

While increased water usage does not necessarily mean your toilet is the culprit, it can be a good place to start checking.

If you determine you do have a leak, the flapper is the most common culprit. The flapper is the large rubber piece at the bottom of the tank that sits on top of the flush valve, creating a seal to prevent water from entering the bowl until the toilet is flushed.

As the rubber flapper ages, it can become defective, preventing it from providing a full seal with the flush valve and allowing the water to leak into the valve. If replacing the flapper does not work, try replacing the flush valve. □

Pilot project will demonstrate growing power of biosolids on ISD hay fields

ISD has been exploring alternative methods for the disposal of biosolids, a byproduct of the wastewater treatment process which are extracted from the Water Recycling Facility.

One such method is a pilot soil restoration project where biosolids would be used on hay fields on ISD's Oakley mainland property.

After a public workshop the board voted 4-1

to test the pilot program on four fields starting this June. Although currently permitted to do so, as part of the process ISD has filed a report with the Central Valley Regional Water Quality Control Board explaining the project and making sure it meets a stringent list of state environmental requirements.

Biosolids contain important nutrients for plant growth and soil fertility such as nitrogen, phosphorous and organic matter.

Science shows that the byproducts found in biosolids would make an excellent soil conditioner for some of ISD's hay fields that have become less productive over the past few years.

The slow-releasing nutrients contained in biosolids are more environmentally friendly than commercial fertilizers currently used by ISD because they add organic matter to enrich depleted soils and fiber that improves the soil's ability to hold water.

Studies have shown that application of biosolids greatly improves crop growth and yields.

Biosolids produced at ISD's Water Recycling Facility meet Class B criteria as defined in Federal Regulations 40 CRF Part 503.

For more information about the pilot project, see the biosolids information brochure on the district's website. □

Safer alternatives abound for replacing harmful water softening systems

In an effort to reduce the salinity that passes through ISD's Water Recycling Facility and eventually makes its way into the San Joaquin River and onto agricultural lands, the district's Board of Directors has placed restrictions on new installation of certain types of water conditioners.

Those specifically restricted are self-regenerating water softeners that discharge brine into the sewer system. Brine is a heavily concentrated solution containing sodium, potassium or chloride, which ISD's Water Recycling Facility does not remove during the treatment process.

There are many choices for self-regenerating water softener alternatives and several local retailers that can help you choose the best solution to deal with hard water problems.

Some of those options include:

■ **Portable Tank Exchange:** These systems operate on the same principal as self-regenerating water softeners except that when the unit needs to be recharged a service comes to replace the resin tank with a fresh one. The spent tank is then recharged at a central location. This service is performed monthly or weekly, depending on the household's needs.

■ **Magnetic, Electronic or Catalytic Water Conditioners:** These alter the formation of calcium carbonate crystals, or lime scale, so that they remain suspended and do not form hard deposits inside pipes, boilers and appliances. These conditioners are designed to gradually erode existing lime scale deposits, thereby increasing the efficiency of plumbing systems.

■ **Packaged Water Softener Chemicals:** These additives are used only in laundry, not for softening potable water, and may include washing soda or Borax. They do not interfere with cleaning efficiency. Other packaged water softeners may use complex phosphates to sequester calcium and magnesium ions. Many of these do not form deposits and alkalinity is not increased.

■ **Distillers:** These produce almost pure water. Tap water is run through a tank and heated to a boil. The steam rises, leaving most impurities behind. Steam enters condensing coils, where it returns to liquid form. The distilled water goes into a storage container or to a special faucet. Scale must be removed from the boiling tank.

■ **Filtration:** Suspended matter is removed from water by mechanical screening through porous beds of insoluble material. This process removes suspended silt, clay, colloids and some microorganisms. Simple cartridge filters may be effective for low levels of turbidity.

■ **Reverse Osmosis (RO):** Contaminants are removed by forcing water through a membrane of microscopic holes that allow water molecules, but not larger compounds, to pass through. Water flushes away the contaminants held by the membrane. Typically, RO is used to treat water for drinking and cooking rather than for all household uses. In addition to being expensive, RO units waste large amounts of water.

For more information on brine discharge water softening products, see www.ISDP2.org. □

'Flushable' wipes good only for wiping away your hard-earned tax dollars

Convenient "flushable" wipes – the kind used to clean a baby's bottom, take off the day's makeup or disinfect the bathroom sink – are costing ISD and its ratepayers thousands of dollars a year in labor and equipment maintenance to remove and dispose of them after being flushed down the toilet.

"Used wipes really only have one place, and that is in the trash," said ISD Maintenance Supervisor Dave Smith. "Nothing besides toilet paper and human waste should ever be flushed down the toilet."

Unfortunately, not even bathroom wipes advertised as flushable are safe enough to flush away. These wipes may go down the drain when you hit the flush lever, but once inside the sewer system they fail to decompose and contribute to clogs in homeowners' laterals, the main sewers, and at pump stations.

Because both Oakley and Bethel Island are on relatively flat terrain, pump stations are needed to move wastewater through the sewer system. In total, ISD operates 34 individual pumping stations, which means that even if the wipes do not get stuck in residential or business laterals or the main sewer, there is a good chance they will get stuck in the pumps at the pump stations.

ISD's maintenance crew clears wipes from an average of 15 to 20 pump stations a month.

"This is not only costly to ratepayers, but any spills or overflows throughout the system caused by these wipes can be a health hazard," Smith said.

In addition, more recently homeowners are finding these wipes are clogging their sewer laterals which the homeowner is responsible for cleaning. ISD is asking residents and businesses not to flush any wipes. □

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ECRWSS

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IMPORTANT UPCOMING EVENTS

- **April 25:** Oakley Science Week. Owl show at ISD headquarters, 10 a.m.-2 p.m.
- **May 5:** ISD Board of Directors meets; Trunkline Capacity Fee increase hearing, 7 p.m.
- **May 19:** Budget workshop, 1 p.m.
- **May 25:** District holiday. Offices closed.
- **June 2:** Public Hearing: Sewer Service Charge adjustments, 7 p.m. (See details below)

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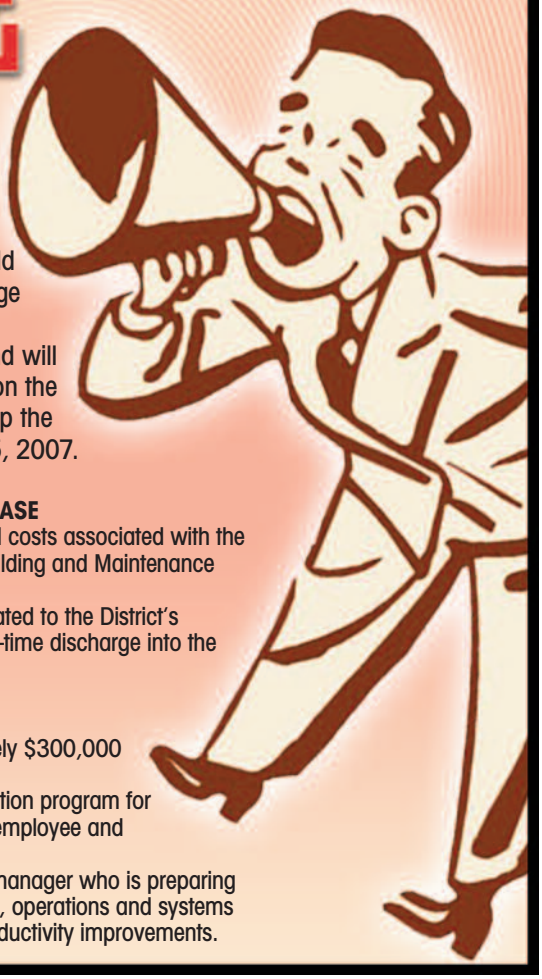
NOTICE OF PUBLIC HEARING

ON SETTING THE SEWER SERVICE CHARGE FOR 2015-16

Tuesday, June 2, 2015 at 7:00 p.m.

Ironhouse Sanitary District Office, 450 Walnut Meadows Drive, Oakley



On Tuesday, June 2, 2015, the Ironhouse Sanitary District (ISD) Board of Directors will hold a public hearing at its offices to consider setting the rate for the district's sewer service charge for fiscal year 2015-16. The proposed new annual sewer service charge of $658 per ESU (Equivalent Service Unit) will be a 3.3 percent increase above the current rate of $637, and will take effect on July 1, 2015. If adopted, the new rate will appear as a special assessment on the property tax bill for each property ISD serves. The board continues to work diligently to keep the rate below the established maximum of $680 per ESU, adopted by the ISD board on June 5, 2007.

REASONS FOR THE INCREASE

ISD's budget is focused on meeting its mission of protecting the public health, safety and the environment through responsible wastewater collection, treatment and water reuse, while also planning and preparing for the future. To meet this mission a sewer service charge increase is necessary to cover the following:

- Rising operating costs to collect, treat and dispose of wastewater.
- Loan payments for the Water Recycling Facility.
- Repair and upgrade of aging sewer infrastructure.
- Increased costs to meet regulatory requirements.
- Fund reserve policies to insure adequate funds are available for future infrastructure maintenance, replacement costs, and to slowly fund a rate stabilization reserve.

HOW ISD IS MINIMIZING THE RATE INCREASE

- Installed solar panels to reduce electrical costs associated with the Water Recycling Facility, Administration Building and Maintenance Shop.
- Reduced regulatory monitoring costs related to the District's irrigation of fields on Jersey Island and part-time discharge into the San Joaquin River.
- Continues to reorganize staffing when appropriate to operate more efficiently.
- Increased cattle revenue by approximately $300,000 (28%) from fiscal year 2013-14.
- Continues to implement retirement reduction program for new hires and freezing the annual cap for employee and director medical premiums.
- The board has hired an interim general manager who is preparing an assessment of the district's organization, operations and systems in order to identify cost efficiencies and productivity improvements.