

BRIEFLY

Get pheasant passes now

For those still hoping to catch a pheasant for their Thanksgiving supper, don't forget that an ISD-issued pass is needed to hunt on Jersey Island. The pheasant season, which began Nov. 8, continues through Dec. 21. Those interested in hunting on Jersey Island, which is located between Oakley and Bethel Island, must obtain a Jersey Island Public Use Pass in addition to possessing a state-issued hunting license. Pass applications are available online, but must be submitted in person at the district's Oakley office on Walnut Meadows Drive. ISD offices will be closed Thanksgiving day. Anyone needing a pass beforehand must be at the office by 3 p.m. on Wednesday, Nov. 26, in order to get a pass on time.

SALT RULES TO CHANGE

'Salinity Pollution Prevention Plan' takes aim at harmful water softeners

Following the lead of Discovery Bay and dozens of California communities, ISD is working to develop an ordinance that would restrict the new installation of certain types of water softeners at homes and businesses to allow ISD to comply with regulatory permit requirements. The restriction may take effect in early 2015. A workshop and public hearing will be held prior to adoption of the ordinance.

This month, ISD's board adopted a new Salinity Pollution Prevention Plan, which outlined sources of salinity in Oakley and Bethel Island's wastewater. The plan addresses ways to reduce the levels of salinity that reach the sewer system and are ultimately released into the environment.

Because the water that leaves ISD's Water Recycling Facility presently is used either for irrigating hay fields on Jersey Island or released into the San Joaquin River,

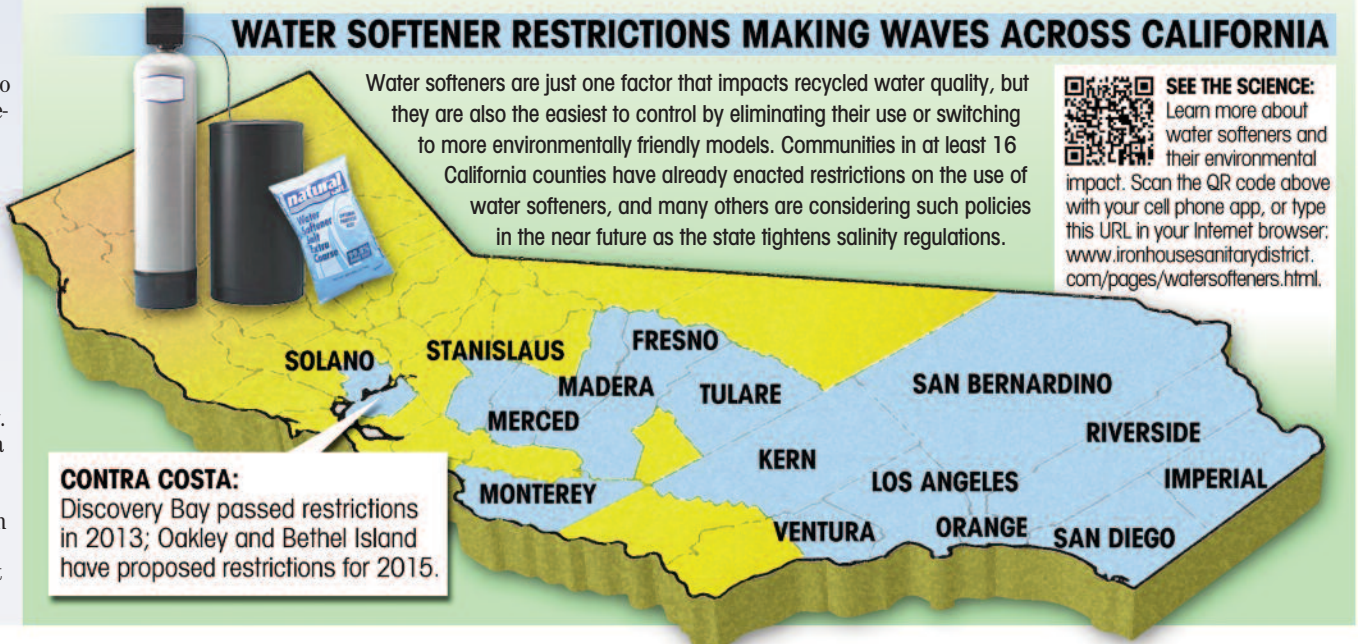
it is important to keep salinity levels low and within state restrictions.

The salinity plan confirms what staff predicted: that water softeners are the largest controllable source of salinity in the district's jurisdiction.

Several factors were used to determine the sources of salinity in the wastewater system. One method included water-monitoring studies for electrical conductivity, a measure of salt in water, from 2006 to present.

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WATER SOFTENER RESTRICTIONS MAKING WAVES ACROSS CALIFORNIA



Water softeners are just one factor that impacts recycled water quality, but they are also the easiest to control by eliminating their use or switching to more environmentally friendly models. Communities in at least 16 California counties have already enacted restrictions on the use of water softeners, and many others are considering such policies in the near future as the state tightens salinity regulations.

CONTRA COSTA:
Discovery Bay passed restrictions in 2013; Oakley and Bethel Island have proposed restrictions for 2015.

SEE THE SCIENCE:
Learn more about water softeners and their environmental impact. Scan the QR code above with your cell phone app, or type this URL in your Internet browser: www.ironhousesanitarydistrict.com/pages/watersofteners.html.

Pilot project will use biosolids to improve soils on ISD's agricultural fields

Whether it is recycling wastewater, finding new ways to reuse household fats, oils and grease, or finding alternative uses for biosolids, ISD is constantly looking for innovative ways to repurpose, reuse and

recycle whenever possible.

When the Water Recycling Facility opened in 2011 the district found that the least costly way to dispose of biosolids, a byproduct of the wastewater treatment process, was to use

them as alternative daily cover in landfills. It was a win-win situation for the landfills and the district.

But ISD is always looking for better methods of pollution prevention, resource recovery and

sustainability. The question became what else could biosolids be used for? They are a valuable resource in that they contain important nutrients for plant growth and soil fertility

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FOLLOW THE FLOW: KNOW YOUR COLLECTION SYSTEM – PART 3

Getting to the root of pipe problems

Mature trees add beauty and shade to landscapes, but their roots can lead to an extensive – and expensive – pain in the drain. Roots can penetrate into sewer pipes where they receive water, nutrients and oxygen – all essential for trees to grow.

Aside from blockages and backups caused by fats, oils and grease, or FOG, tree roots growing inside sewer pipes are one of the most expensive sewer maintenance items experienced by homeowners. Roots from trees growing on private property are responsible for many sanitary sewer service backups and damage to sewer pipes.

OUT OF SIGHT, OUT OF MIND

Each homeowner is responsible for maintaining their sewer lateral – the pipe that connects the house plumbing to the main sewer line that flows to ISD for recycling. Because the pipes are buried underground, homeowners usually have few clues to problems in their laterals until it's too late.

Roots generally find their way into the lateral line through a loose joint or crack in the pipe. Roots can infiltrate even the slightest opening and over time can grow, enlarg-

Tree roots are responsible for many sewer lateral blockages.

ing the crack and leaving more room for roots and dirt to collect in the pipe, eventually filling it with hair-like root masses. These masses act as a net as they catch household fats, oils, grease, wipes, tissue paper and other debris discharged from the residence.

IS YOUR TOILET TALKING?

Slow-flowing drains are one sign that your sewer system may have a root problem. An early symptom can include gurgling noises from your toilet bowls. A complete blockage will occur if no actions are taken to remove the roots.

Homeowners should know the location of their laterals and sewer cleanout pipe, and refrain from planting certain types of trees and hedges near the sewer lines. Trees should be more than 10 feet from pipes to minimize root intrusion. Also favor small, slow-growing trees with less aggressive root systems and replace them before they get too large for their planting area.



What can you do if you have tree roots in your lateral? The common method of removing roots involves the use of augers, root saws and high-pressure flushers. It will probably be necessary to hire a sewer line maintenance company to clean out the root issue and fix the pipe. You may wish to hire a plumber to perform a video inspection of your sewer lateral to determine its condition and whether any repairs are needed. □

BIOSOLIDS

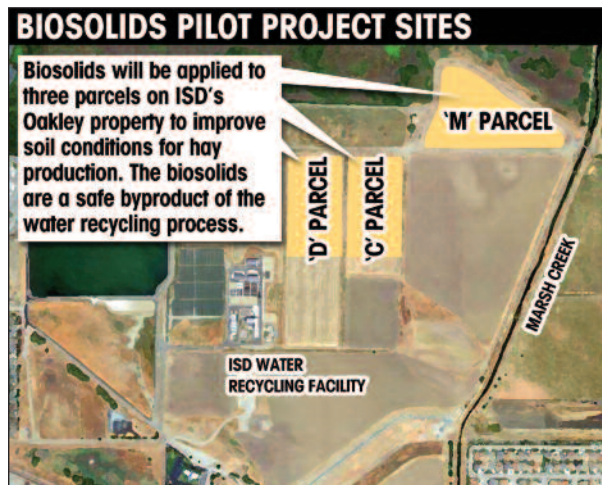
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such as nitrogen, phosphorous and organic matter.

Science shows that these byproducts would make a great soil conditioner for some of ISD's hay fields, especially at its Oakley mainland property where the soil has become less productive over the past few years.

The slow-releasing nutrients contained in biosolids are more eco-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 CFR Part 503.

Three fields comprising about 31 acres on the

district's mainland property used for dry farming are proposed for this biosolids pilot program. These fields were chosen as they have become less productive over the past several years and incorporating biosolids into the soil is anticipated to improve crop production.



SEE THE SCIENCE: To learn more about biosolids and for updates on the ISD pilot project, scan this QR code with your cell phone app or visit: www.ironhousesanitarydistrict.com/pages/biosolids.html.

Over the next few months the district will be gathering information and setting up a pilot program for the three fields. Before any decisions are made concerning the use of biosolids on ISD property, the district will host a public information workshop on the topic.

More detailed information about the ISD biosolids project can be found online. To see the science, visit www.ironhousesanitarydistrict.com, or scan the QR code above. □

IN MEMORIAM

SCOTT B. LEE

FEB. 5, 1957 - SEPT. 16, 2014

It is with fondness that we remember Scott Lee at Ironhouse Sanitary District. Scott worked



on Jersey Island for eight years as a vehicle and heavy equipment mechanic. He had a light-hearted personality and great sense of humor.

"We always had a good time with Scott. He was always good for a joke," said Mike McGormley, ISD's reclamation, levee and ranch supervisor. "He made the workplace that much more enjoyable for all of us. His levity is greatly missed." □

New career opportunity beckons for former ranch operator

Brian Pearce has turned in his cowboy boots for a hard hat as he makes the move from Jersey Island hay fields to ISD's maintenance and collections team.

When a retirement recently opened up a spot on the maintenance and collections team, the Jersey Island ranch operator seized the opportunity for a new career direction and applied for the new district position of Maintenance Worker I.

The position represented a bit of a culture shock for Pearce, who for six-and-a-half years

STAFF PROFILE

worked on the peaceful ranch cutting ISD's hay fields and maintaining the needs of its cattle operation. Immediately after securing the job in the maintenance department he began studying for the required Grade I Wastewater Treatment and Collections System Operator classification, a certification from the California Water Environment Association (CWEA). He passed the test in August.

Now instead of running a tractor through



Brian Pearce performs sewer cleaning work in his new role as ISD Maintenance Worker.

the fields, Pearce is cleaning sewer lines, inspecting manhole covers and keeping up with lift station maintenance.

On the weekends and after work Pearce coaches his sons and daughter on their East County Little League team. One of his sons participates with the Brentwood-Oakley Falcon Cheer football team, and another son is on the St. Anthony CYO basketball team.

"Sometimes all at the same time," he said.

Pearce said he is happy to have made the transition and enjoys the opportunity to work with the maintenance team and learning the new routine. □

SALT

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During the housing boom a large percentage of newly built homes were outfitted with self-regenerating water softeners. Monitoring tests for those years showed an increase in wastewater salinity.

Since the housing market crash, ISD has seen a steady decrease in salinity, due most likely to the decrease in the use of self-regenerating water softeners. However, those levels are likely to rebound as the economy improves and more new construction occurs.

ISD's Salinity Pollution Prevention Plan outlines several alternatives for dealing with hard water instead of using self-regenerating water softeners. These alternatives include using a salt-free exchange system that replaces used canister units with fresh units every few weeks or every month.

Alternatives for pipe corrosion or scale build up are also discussed in the plan, along with drinking and water filtration systems. The Salinity Pollution Prevention Plan can be found on the district's website at www.ironhousesanitarydistrict.com. □

What can you do with recycled water? Study lets ISD count the ways

ISD recently reviewed details for a recycled water feasibility study that outlines potential uses for the high-quality water produced at the district's Water Recycling Facility. The study identifies 10 potential recycled water projects the Board of Directors will evaluate.

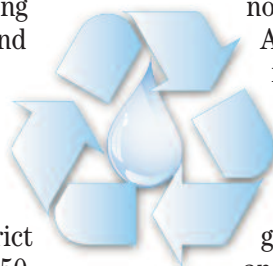
One of the first projects the board would like to see implemented is extending a recycled pipe from the Water Recycling Facility to allow construction of a fill station on ISD's mainland property. The fill station will provide recycled water for sewer cleaning as well as dust control. The recycled pipe will also be tapped to provide irrigation water for landscaping around the district's main office.

"We're hoping that once this is implemented we can then look

further into modifying our permits to expand into off-site uses for our recycled water," said Tom Williams, ISD's general manager.

Already the district uses approximately 50 percent of its recycled water on Jersey Island to irrigate hay fields. Since the arrival of the new Water Recycling Facility and the higher quality water it produces, ISD has considered using that water to grow other crops. The board is looking at using 42 acres of the island to grow a higher value crop, possibly grapes.

In the near term the board is also exploring using recycled water for industry along the Wilbur Avenue corridor and the



northern waterfront area.

Another idea is to include in the Mainland Property Management Plan the idea of implementing a sustainable farming project that could include a greenhouse, hydroponics and aquaponics.

"Of course our ultimate goal would be in the long term to produce advanced treated water suitable for direct potable reuse," Williams said. "That is in the future, but before then there is no reason not to explore all our options."

ISD staff will implement the board's direction for changes and continue to prepare the feasibility study. Once the study is complete, staff will begin to pursue the suggestions and possible grant funding for future projects. □



THE BOARD

David Huerta/President
David Contreras/Vice President
Chris Lauritzen/Director
Michael Painter/Director
Doug Scheer/Director

ISD board meetings

Public meetings are held the first Tuesday of each month at 7 p.m.

IRONHOUSE SANITARY DISTRICT ADMINISTRATION

Thomas Williams/General Manager
Sue Walde/District Secretary
Jenny Skrel/District Engineer
Marc Haefke/Operations Superintendent
Dave Smith/Maintenance Superintendent
David Dal Porto/Ranches & Levees
Joe Mueller/Environmental & Process Compliance Manager

450 Walnut Meadows Drive, Oakley, California 94561

Phone: 925-625-2279 • Fax: 925-625-0169
 e-mail: ironhousesd@isd.us.com

www.ironhousesanitarydistrict.com



District Transparency
 Certificate of Excellence Recipient





Ironhouse Sanitary District
450 Walnut Meadows Drive
Oakley, CA 94561

Emergency 24/7 contact
number: 925-625-2279

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IMPORTANT UPCOMING EVENTS

- **Nov. 27-28:** District holiday. Offices closed.
- **Dec. 2:** ISD Board of Directors meets, 7 p.m.
- **Dec. 6:** FOG and thermometer recycling day, 9 a.m. to noon. (See ad below)
- **Dec. 25:** District holiday. Offices closed.
- **Jan. 1:** District holiday. Offices closed.



This newsletter is printed using recycled paper. Every ton of recycled paper saves 7,000 gallons of water.

Toxic mercury lurks in places you don't expect

Many people are aware that dental offices are one of the largest sources of mercury in the environment, but did you know that mercury is also found in many household products you use every day?

Mercury – a chemical that is poisonous to people and the environment – can be found in traditional glass thermometers, thermostats, compact fluorescent light bulbs, batteries, switches and even some contact lens solutions. It is important to make sure these items are disposed of correctly and safely so they do not harm the environment.

ISD is concerned about mercury levels in the wastewater system. The district is currently able to meet mercury requirements of its state-mandated discharge permits; however, those requirements could change in the future.

Here are several ways you can help keep mercury out of the environment:

- Do not throw any mercury-based products in the garbage.
- Take advantage of ISD's Mercury Thermometer Exchange Day on Dec. 6 (see information at right.)
- Bring old batteries and fluorescent bulbs to ACE Hardware in Oakley for recycling.

FATS, OILS & GREASE (FOG) RECYCLING DAY



SATURDAY, DEC. 6

9 A.M. - 12 P.M.

& THERMOMETER EXCHANGE

Bring in one of these...



...Receive one of these!



FREE!

Mercury-free digital thermometer. Quantities limited, so arrive early!

DROP-OFF LOCATED AT THE FOG HOUSE, BEHIND OUR OFFICE AT 450 WALNUT MEADOWS DRIVE, OAKLEY

Rain or shine

