

# THE HERON

Las Gallinas Valley Sanitary District

Fall 2015

## Grants Received for Biogas Conversion to Energy

During 2015, the District was awarded two grants from the California Energy Commission for its Biogas Energy Recovery System (BERS) project. The first was for \$1 million for design and construction to replace existing co-generation equipment that is over 25 years old. The second award was for \$250,000 as part of the Alternative and Renewable Fuel and Technology "Natural Gas Fueling Infrastructure" program. This is great news, as these projects will develop and demonstrate affordable technologies and strategies to clean and use biogas generated at our wastewater treatment plant. The clean biogas, also known as renewable natural gas, will be used to fuel vehicles and generate clean power.

In other words, we'll be better able to recycle and reuse that biogas byproduct to help power operations — and that means less electricity and fuel that we have to buy.

Anaerobic digestion at the District's wastewater treatment plant produces biogas. Currently, a portion of the biogas is burned off. With these grants, the District will develop cost-effective and efficient processes to convert that biogas to biomethane and use that converted gas to generate clean, renewable power. A significant portion of the District's energy already comes from its two photovoltaic solar panel systems, and the aging biogas power generation engine. With a biogas energy recovery system in place, we'll be able to further boost the District's self-generated clean power, and also advance the District's goals toward energy independence. Less use of standard power grid energy and commercial fuel means less use of non-renewable fossil fuels — that's a great thing for the environment, and for all of us.



**Above:** Microturbines using conditioned digester gas.

**Left:** Some of the older co-generation equipment being replaced.

## Used Batteries? Fluorescent Bulbs? Old Thermometers? Free Recycling!

### Exchange your Old Mercury Thermometer for a New Digital One!

Did you know that old mercury thermometers, fluorescent and CFL bulbs, and batteries — all common household items — contain toxic chemicals that can be released into the environment if not disposed of properly? The District provides a safe way for its residential customers to dispose of those items (no commercial drop off).

- **Exchange your old mercury thermometer for a new digital one, free!** Bring your old, mercury thermometer to the District's main office and exchange them for new digital thermometers. An old mercury thermometer can contain up to 1.1 grams of this highly toxic substance — that's enough to pollute up to 2 million gallons of water.
- **Free drop off of fluorescent and CFL bulbs.** Fluorescent tubes and CFL bulbs contain small amounts of mercury vapor which can be released when dumped in the trash,



Turn to "Old Thermometers" on page 4

# Compost Giveaway!

## Available via Coupon for District Customers in Unincorporated County Areas Only

The District, in partnership with the Marin Sanitary Service, is ready to give away 15 tons of Marin's Own green can compost, which is great for your gardens and planter boxes. If you live in an unincorporated county area of the District (outside San Rafael city limits), then this Compost Giveaway is for you.

Visit the Las Gallinas Valley Sanitary District website ([www.lgvsd.org](http://www.lgvsd.org)) where you can download and print your coupon, entitling you to go to the Marin Sanitary Service facility and pick up a maximum of 64 gallons of free compost. The compost will be available on November 7 and 14 on a first come, first served basis, and you must show an ID along with your coupon. Compost availability cannot be guaranteed, depending on how many customers participate. Shovels will be available, but please bring your own bags or other containers.

Compost is an excellent soil amendment, a rich fertilizer for plants which increases soil stability, improves drainage, and helps retain moisture in your soil. The District encourages those of you in unincorporated areas to be sure and take advantage of this opportunity for free compost!



## Tips for Your Pool, Spa, or Fountain

### Help Protect Local Waterways and the Bay

Attention pool, spa, and fountain owners: to help ensure you're doing the right thing to protect our local streams and creeks, here are two quick reminders.

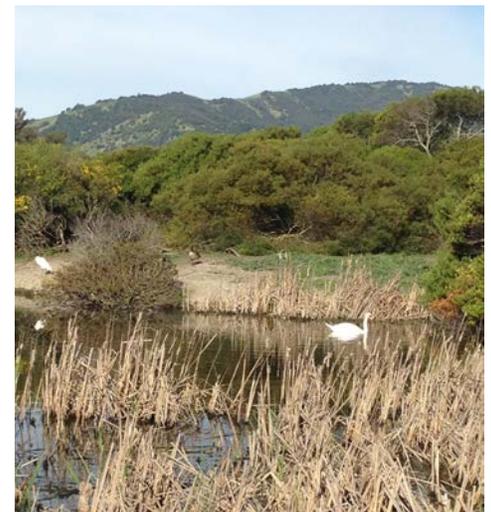
① Pools, spas and fountains should **never** be drained into a street gutter or storm drain! That water often contains harsh chemicals, and since gutters and storm drains empty directly into local waterways and eventually into the Bay, those chemicals can get into the ecosystem and seriously harm fish and other aquatic creatures.

Here's an idea, especially for when there's no rain: your spa, fountain, and pool waters can easily be dechlorinated by exposure to the sun, then used to irrigate your landscape. As a general rule, you can irrigate landscaped areas if the chlorine concentration is at or below 0.1 parts per million (ppm) and within a pH of 6.5 to 7.8.

If you must drain your pool into the sanitary sewer system, you can only do so after obtaining a low cost permit from the District. Please call (415) 472-1734 for more information and to get the permit.

② While it can be a challenge to keep your swimming pool, spa, or fountain free of algae, there are ways to accomplish this AND protect local waterways from harm. Never use copper algaecides to

control algae. These are highly toxic to aquatic life and can enter creeks and marshes when uncovered pools and spas overflow into storm drains during the rainy season. Maintaining proper chlorine levels and regular cleaning are better ways to control algae, while reducing or eliminating use of algaecides. And, a high quality "safety" pool cover not only protects children from accidental drowning, but also keeps out leaves, saves water and chemicals from evaporation, and protects the environment by preventing rain-water from getting into the pool and overflowing — thus keeping chemically treated pool water from spilling into the storm drains when it rains. Water collected on the pool cover can be captured for reuse in your landscape. Your pool should not be plumbed to drain rain water/pool water to your sewer lateral.



# Protect Your Sewer Lateral — and Prepare for a Wet Winter

## With El Niño Pattern Predicted, it's Even More Important to Maintain Laterals, and Watch What you Flush

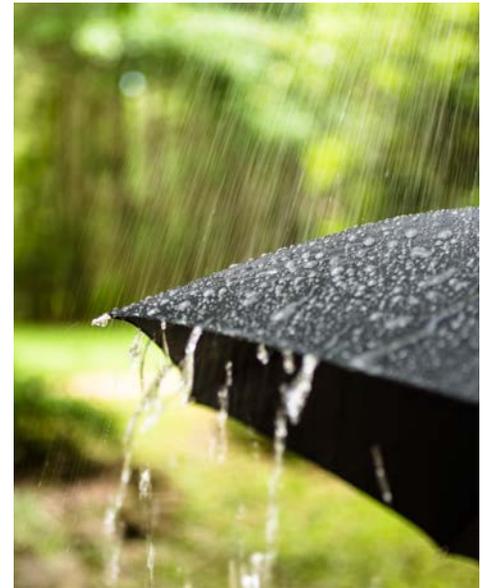
A sewer lateral is the private sewer line that runs from your home to the sewer main, and when it backs up and overflows it's frequently due to tree and large shrub roots growing into the line. Those sewer laterals are filled with water and nutrients, and so of course tree and shrub roots are attracted to them. Unfortunately, once roots enter sewer pipes through cracks or loose joints they'll continue to grow and eventually completely block or even break that lateral line.

It's the property owner's responsibility to keep the sewer lateral in good condition, and repairing damage to a lateral can be very expensive for homeowners. So it's a good idea to avoid planting any new trees or shrubs near sewer laterals or lines, or be sure to plant appropriate species that are less likely to cause problems for your sewer lateral and for the sewer lines maintained by the District.

Watch for these signs that a sewer lateral or line is becoming blocked: multiple slow flowing drains in sinks or showers, gurgling sounds from a toilet bowl, and wet spots around floor drains. In addition to private laterals, some of the District's 105 miles of sewer lines are on private property in District "easements." If you know there's such an easement on your property, please contact the District before planting near that easement. The Association of Bay Area Governments offers a Sewer Smart Planting Guide ([sewersmart.org/plantguide.html](http://sewersmart.org/plantguide.html)) that will help you avoid sewer problems caused by roots. The Society of Arboriculture also offers helpful resources at [www.treesaregood.org](http://www.treesaregood.org) (click on Tree Owner Information and Avoiding Tree/Utility Conflicts).

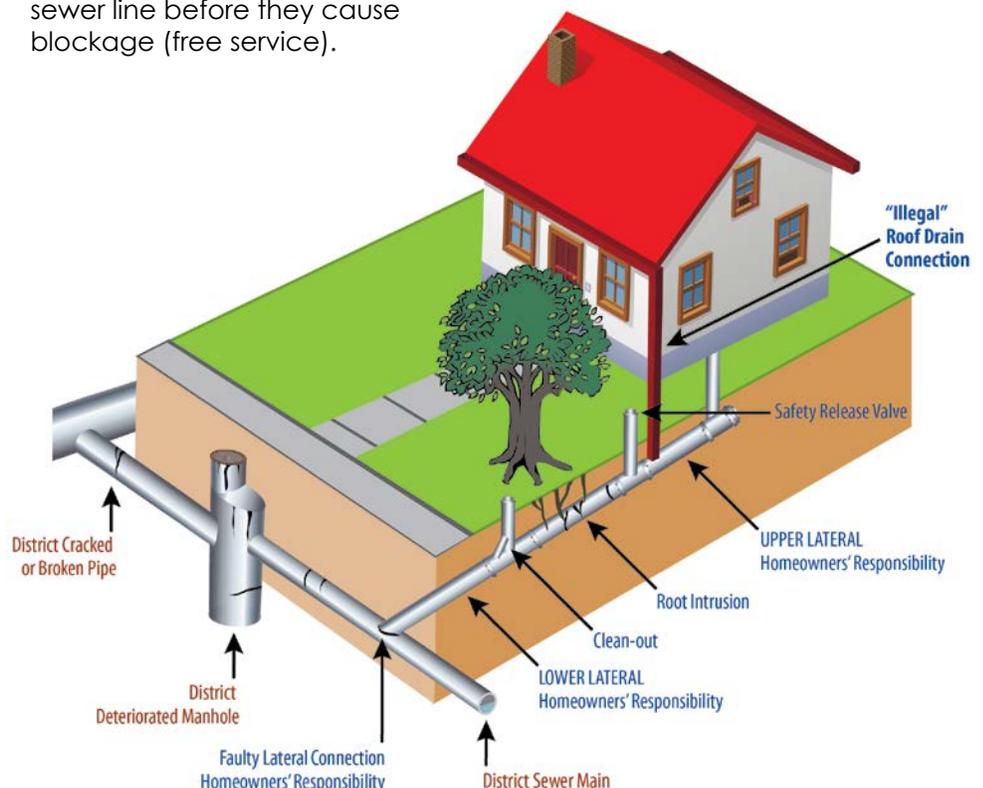
Avoiding sewer backups is especially important with the high probability of a wet winter due to the predicted El Niño weather pattern. So please remember these tips:

- Take advantage of the District's Sewer Lateral Rehabilitation Assistance Program providing low interest funds for inspecting and repairing your sewer lateral ([www.lgvsd.org](http://www.lgvsd.org) – click on Sewer Lateral Assistance).
- Never connect outside drains of any kind — including rainwater or flood runoff from your property — to your sewer lateral or sewer cleanout. It's harmful to the system, contributes to overflows, and is illegal.
- Do not plant trees or shrubs directly over or near sewer lateral lines — roots can severely block and damage pipelines.
- If you have roots cleaned from your lateral, let the District know so we can remove any roots that are pushed into the public main sewer line before they cause blockage (free service).



- Never dump grease, kitty litter, cleaning wipes, personal wipes (even those designated as "flushable"), or other such items down drains or into the toilet. These can cause blockages and sewer overflows in your home and wreak havoc at the treatment plant.

If you have any questions about sewer laterals or a sewer easement, contact the District at 415-472-1734.



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**Board Meetings are**

held at 4:30 PM on  
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Printed on recycled paper using soy-based inks.

*"Old Thermometers" continued from page 1...*

leading to air and water pollution. Drop off your old unbroken fluorescent tubes and CFLs to the District's treatment plant.



- **Free battery drop off.** Household batteries contain at least 22 toxic elements including mercury, lead, cadmium, and others. Recycle your old household batteries by dropping them off at the District's main office.

The District's office/treatment plant is located at 300 Smith Ranch Road, San Rafael.

This is an easy way to do your part to safely and properly dispose of these everyday items, and help protect the environment from toxic chemicals. If you have questions about the free drop-off program, please call (415) 472-1734.



## Parking at Reclamation Area

### Other Projects Also Planned for the Future

The District's treatment plant includes a 383-acre Reclamation Area comprised of two treated wastewater storage ponds and a freshwater pond with three islands and four miles of trails for walkers and bicyclists. It's a wonderful destination where people can enjoy wildflowers, a wide variety of birds and other wildlife, and the serenity of unobstructed views of San Pablo Bay, Mt. Tamalpais, and wetlands. Near the trailhead there's a small parking lot and additional parking on the road — both of which have been subject to flooding during storm events in the past. To address this issue, the District will be raising the lot and the road to the Reclamation Area, so that visitors

can more conveniently park to enjoy this beautiful spot.

The District is also planning improvements to address sea level rise and protect the treatment plant from possible flood damage, as well as a large plant upgrade project beginning construction in 2016. Those improvements are expected to take three years to complete, and during this time there may be impacts to public access to the Reclamation Area. The District will let the community know about access issues when possible — but motorists should always drive slowly on the road and watch for oncoming traffic, pedestrians, equipment, and bicyclists.