



LEUCADIA
WASTEWATER
DISTRICT

LEADERS IN
ENVIRONMENTAL
PROTECTION

LWD Leadership

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Downstream

Winter 2019 Newsletter



SMOKE TESTING REVEALS POINTS OF STORM WATER INFLOW

Smoke Testing is a Cost-Effective Way to Shore up the Sewer System

Smoke testing offers a way for our Field Service Technicians to identify areas where storm water may be entering our sewer system. During the testing, a harmless smoke vapor is blown through the sewer system. If there are defects in the pipes, missing clean out caps, damage to laterals in yards or homes, or improper connections, the smoke will be visible at those specific areas. As a result, our Field Service Technicians are able to identify which pipes need repair, we can let homeowners know if their plumbing is not properly vented, and we can potentially uncover any plumbing defects. Homeowners will receive a letter if any defects are found.

Research has shown that over 65% of stormwater that enters the sewer system actually comes from sewer defects and broken or missing clean out caps. A sewage collection system is designed to collect and transport only wastewater. When storm water is introduced into the system – also called inflow – the additional water can cause the collection system to

exceed its capacity. This can lead to a range of problems including sewer gasses leaking out of the system and causing the “rotten egg” smell, a sewage spill, or a sewage back up into a home.

As we continue with our smoke testing you will receive a notification from us prior to the actual tests in your area with dates, specific information about testing, and our contact information. In the future, you might even see a drone or two buzzing overhead to help identify system discrepancies. This is a cost-effective way to maintain the system.



Smoke drifting from cracked pipes

Be on the cover! Submit your high-res photos to info@lwwd.org

Learning with Leucadia

Educational Opportunities, the "Living Lab" at LWD & Tours



La Costa Canyon High Students break ground for a drought tolerant garden

Grants awarded through our Teacher Grant Program have been increased to up to \$2,000 per grant. In total this year, we awarded \$5,900 for four schools projects in our service area. We had some excellent submissions this Fall and are pleased to announce the winners of the 2018 Teacher Grant Program!

Nancy Jois from Capri Elementary will produce her "Where does your Water Come From" video project

June Honsberger from La Costa Canyon High School and her students will be designing and building a "Drought Tolerant Garden"

Carrie Lancon from Capri Elementary will create her "Capri Wave Plastic Free Under the Sea" project

Jennifer Smith from El Camino Creek Elementary will design and build a Hydroponic Garden



Students taking samples of storm water for testing

Schedule a Tour!

Our staff led 5 tours of our main facility and the Gafner Treatment Plant over the past 6 months. This included students from local elementary schools, community members and other public agencies. As part of her "Where Does your Water Come From" project, Ms. Nancy Jois from Capri Elementary will be leading a group of students who will interview our staff about the work they do for their grant funded video project.

Tours offer an opportunity for the community to meet the people who protect our coastline day in and day out, and learn about the mechanical, electrical, and biological aspects of protecting our environment! The Gafner Treatment Plant is a living lab and we love hosting community groups, teachers and curious young minds who want to see what they learn in school in action. Tour information available at info@lwwd.org



Students get familiar with our VACTOR truck, which is used to quickly remove clogs from our pipes

Learning by Doing - Elementary School Internships

Students are never too young to learn by doing, that is why we support the Stormwater Pollution Prevention Plan's stormwater internships program! A Stormwater Pollution Prevention Plan is a plan for preventing pollutants from entering storm drains and contaminating our waterways and ocean.

Elementary school students who join this program participate in weekly staff meetings, safety training, stormwater sampling and testing, learn about best practices for reducing pollutants, take field trips including to our facility, and learn to present their work to community leaders! It's an engaging way for students to learn what it takes to protect our waterways and coastline! You can learn more and bring it to your school at this link <http://bit.ly/SWPPPinternship>

**Pollution
Prevention
Starts
at Home**

BE PART OF THE SOLUTION

Maintaining the health of our community and protecting the coastline is a big job and one that we all need to work on together. While our staff and contractors clean, inspect, maintain and repair the sewer system, there are things you can do to help prevent sewer spills and conserve water as well!

Cleaning Sewers

What We Do

Our Field Service Technicians clean, inspect, and maintain the sewer mains, manholes, and the pump stations to ensure the sewer flows free of roots, debris or grease, so that it can be properly treated or recycled.

What You Can Do

- ✓ Inspect your Lateral with a licensed plumber and call us if work is performed.
- ✓ Apply for a Grant of up to \$3,000 to reduce repair costs on your sewer lateral.
- ✓ For more information and to apply for a grant please visit <http://bit.ly/latgrant>

FOG (Fats, Oils, and Grease)

What We Do

Our Field Services Specialist conducts inspections at local restaurants to ensure grease traps are working properly.

Our Field Service Technicians inspect and clean the sewer mains and pump stations daily to remove blockages.

What You Can Do

- ✓ Don't pour Fats, Oils, and Grease down your sink.
- ✓ Come by our office at 1960 La Costa Avenue in Carlsbad and **pick up a free can topper.**
- ✓ Pour FOG into a tin can, cover it with a can topper, let it harden, then dispose of the grease in your trash.

Recycling Water

What We Do

We recycle and reuse an average of 7.6 million gallons per month of wastewater.

This irrigates the Omni La Costa South Golf Course. We also use the recycled water to water the native plant landscaping at our facility.

What You Can Do

- ✓ Add rainwater barrels to your home to collect and store fresh rainwater!
- ✓ Plant water smart landscaping at your home.
- ✓ See <http://bit.ly/LWDBeWaterSmart> for ideas and rebates.

GROUND WORK

Updates on Local Wastewater Construction and Infrastructure Projects

1.3 miles of pipe lined

\$1.4M saved

Cured-In-Place Pipe (CIPP) Lining of pipes has proven to be a highly effective way for us to rehabilitate existing pipes without having to dig up the road or property. In previous newsletters, we have covered CIPP lining, which helped rehabilitate 1.3 miles of pipe in 2018 alone.

However, CIPP is not the only way to restore an aging pipe. To improve the structural integrity of pipes while minimizing traffic delays, we recently integrated an innovative method called spiral lining. Spiral lining or Spiral Wound Polyvinyl Chloride (PVC) can be easily inserted into round, misshapen, or deformed pipe. Unlike CIPP which requires heat to connect pipes, Spiral lining can be installed when groundwater or wastewater is flowing through old pipes. This method is less disruptive and can be used in all types of sewer pipes - from concrete to ductile iron to PVC.

Old pipe being relined with Spiral Wound PVC

FIELD MAINTENANCE

Closed Circuit TV Inspection & Line Cleaning

During most days, our Field Service Technicians are out inspecting our collection systems pipes with a remotely operated video camera. This process helps them find root growth, other obstructions and pipe defects. The pipes are cleaned and obstructions are cleared using a combination hydro-cleaning and vacuum truck. This is a professional grade pressure washer with special nozzles that uses pressurized water to blow through roots and other blockages.

Over the past 6 months, Field Service Technicians have inspected approximately 35 miles of pipeline and cleaned 94 miles of pipeline. This proactive approach to our daily maintenance routine helps to eliminate sewer spills and prioritize future repairs to our collection system.

FINANCIAL REPORT

The Fiscal Year 2018 Financial Audit has been completed and we are pleased to report very positive results! Our finance team assembled a Comprehensive Annual Financial Report (or CAFR). This document summarizes our financial condition for the year. Our independent auditors issued a 'clean opinion' - meaning the CAFR fairly represents the financial condition of the District and no adjustments were needed. For the 11th time, we received the Excellence in Financial Reporting Award from the California Society of Municipal Finance Officers (CSMFO).

By the Numbers - Financial Highlights FY 2018

- **LWD has one of the lowest sewer service rates in San Diego County**
- **FY 2018 Expenses came in under budget by 4%**
- **Reserves increased by \$1.1 million**
- **Capital Expenditures of \$5 million**
- **Net Investment in infrastructure increased by \$1.6 million**
- **Revenues exceeded Expenses by \$1.5 million**

This was all accomplished without an increase in sewer fees!

Staff Awards

Our people are the most important part of protecting our coastline! We're fortunate to have a dedicated staff that has chosen to make a lifelong career out of protecting our community.

We'd like to honor 4 staff members who have achieved significant employment milestones this year. Join us in congratulating:



Marvin Gonzalez
received his Associate's Degree in Wastewater Technology



Hugo Gonzalez
5 Years of Service Award



Ian Riffel
10 Years of Service Award



Rick Easton
5 Years of Service Award



Robin Morishita
15 Years of Service Award

District Awards

We are honored to receive ongoing commendations and distinctions for the work LWD does to protect our coastline and run an efficient operation. We'd like to honor our staff and Board of Directors as a whole for helping to achieve:



7 years without an injury resulting in lost work time!



District of Distinction, Platinum Level by the California Special District Leadership Foundation



2018 Community Engagement and Outreach Best Use of Social Media Award by the California Water Environment Association

Community Award

Congratulations to local La Costa Canyon High Schooler **Heath Dunbar** for winning first prize in the State and Local level District Makes The Difference Video Competition by the California Special Districts Association.

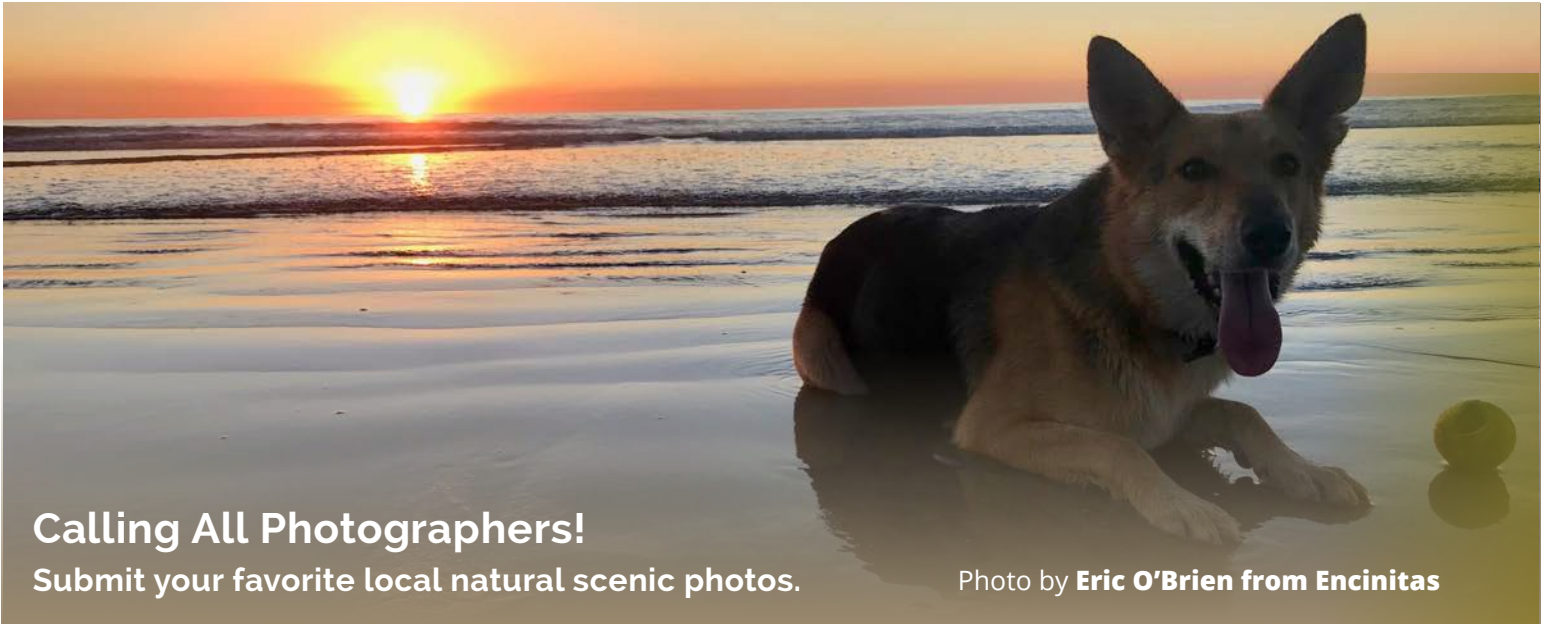
See Heath's winning video at bit.ly/CSDAHeath



Semi-Annual Newsletter - Winter 2019

We hope you enjoyed our semi-annual newsletter! Please follow us on our Facebook page [@LeucadiaWastewaterDistrict](#) for construction and traffic updates and other local wastewater information, or email us at info@lwwd.org

To receive this newsletter digitally, please go to bit.ly/LWDdigital



Calling All Photographers!
Submit your favorite local natural scenic photos.

Photo by **Eric O'Brien from Encinitas**

We loved the photos the community submitted in response to our last Downstream newsletter so we are asking for more! Please submit your favorite pictures from Encinitas, Leucadia, and South Carlsbad by tagging a photo on

Facebook with #LWDPhoto or by email to info@lwwd.org and we may feature your photo(s) in an upcoming social post or newsletter. We will give recognition to any photo we use in any of our postings or newsletters.