LEUCADIA WASTEWATER DISTRICT | LEADERS IN ENVIRONMENTAL PROTECTION

**Downstream**
**2026 Fall Newsletter**



**LWD Leadership**
Matthew Brown, President
Robert Pacilio, Vice President
Chris Roesink, Director
Elaine Sullivan, Director
Rolando Saldana, Director
Paul J. Bushee, General Manager

# Exploring Careers in Water

## Educating the Next Generation of Environmental Stewards

Leucadia Wastewater District, in partnership with Olivenhain Municipal Water District and San Elijo Joint Powers Authority, recently hosted **the third annual Water Career Day at the San Elijo Water Campus,** giving local high school students a hands-on introduction to careers in the water and wastewater industry.

This year, the event expanded with **more interactive stations to accommodate a growing number of students and give them the opportunity to experience the work firsthand.** Rather than simply watching demonstrations, students rolled up their sleeves and tried many of the same tools and techniques used by water professionals every day.

Students collected wastewater samples and examined them under microscopes to identify microorganisms, drove a robotic camera through a section of pipe, and learned how different water-jetting nozzles are selected to clean the inside of sewer pipelines. At another station, students experienced the difference between manually cranking a valve and using a specialized valve-turning truck to do the same job.

These activities introduced students to the variety of skills and career paths that keep our water and wastewater systems operating. From biology and environmental science to technology, mechanics and skilled field work, **the industry offers meaningful careers that protect public health, our environment and the infrastructure our communities depend on.**

**And we are already seeing an impact.** Educators who participated in the first two Water Career Days have shared that students are pursuing water technology and engineering programs after attending, and one former student has already begun a career in the water industry as a Supervisory Control And Data Acquisition (SCADA) Technician.

By putting the equipment directly into students' hands - and introducing them to the professionals who use it every day - Water Career Day helps students see the water and wastewater industry as a potential career of their own.

To learn more about the work we do and our history, visit **www.lwwd.org** or follow us on social media **@LeucadiaWastewaterDistrict.**

# Using Cutting Edge Technology to Maintain Our Sewer System



Field Services Technicians open a check value to allow the Smartball into the sewer system.

## SEEING WHAT'S BELOW THE SURFACE

While most of Leucadia Wastewater District's (LWD) infrastructure is out of sight below our streets, advanced technology allows our team to see inside the sewer system. By proactively monitoring our underground pipe network, we can address potential issues long before they cause service disruptions or costly emergencies.

## ADVANCED TOOLS FOR A RELIABLE SYSTEM

Closed-circuit television (CCTV) inspection is a critical way we help maintain the sewer system. Robot-like cameras travel through pipelines to identify cracks, root intrusion, and other issues before they become larger problems. Housed in a specialized electric vehicle, this equipment allows crews to efficiently conduct inspections throughout the District.



Image of SmartBalls®

## A SMART SOLUTION FOR PRESSURIZED PIPELINES

For large, pressurized pipelines known as force mains, LWD uses a different innovation called the SmartBall®. This baseball-sized, free-swimming inspection tool is packed with a variety of sensors and travels directly through active pressurized pipelines. Once inserted, the SmartBall flows alongside wastewater to detect leaks, metal loss, and gas pockets, collecting valuable information without interrupting service.

Traditionally, force main condition assessments required excavating and cutting out pieces of pipe from a few high-risk locations, leaving the rest of the pipeline unexamined. The SmartBall®, however, evaluates the entire length of the force main, providing a more complete picture of pipeline conditions while saving the District more than $250,000 compared to conventional methods.

Together, CCTV, SmartBall and other innovative technologies give LWD a better understanding of what is happening beneath the surface. That information helps the District prioritize maintenance, plan future improvements, and address potential problems before they become emergencies - keeping our wastewater system reliable while making responsible use of customer funds.

## WANT TO LEARN MORE?

Scan the QR code to visit our website.

# Protecting Our System: Why Manholes Matter

## A CLOSER LOOK AT A VITAL PART OF OUR INFRASTRUCTURE

Manholes play a critical role in maintaining the wastewater system. They provide access points for inspection, cleaning, and emergency response - helping our crews keep pipelines functioning safely and efficiently.

With more than 5,000 manholes across the District, these structures are essential infrastructure assets. Our crews regularly open and inspect them as part of routine maintenance and system monitoring.

Occasionally, we have found manholes that were either tampered with or vandalized. This can create serious safety risks and interfere with the proper operation of the system.

A displaced, damaged, or improperly replaced manhole cover can create a dangerous opening or uneven surface for pedestrians, cyclists, pets, and vehicles. Even small actions - like placing debris into a manhole - can lead to blockages, equipment damage, or other problems with the pipeline system.

**Manholes should never be opened or tampered with.**

**If you notice an open or damaged manhole, please call us right away, so our team can respond quickly. (760) 753-0155**



Example of debris illegally dumped in a manhole.

## Did You Know?

**Manholes have been used since Roman times.**



Nearly 2,000 years ago, Romans used access openings to maintain their underground drainage systems. Today's manhole covers often weigh 100 to 300 pounds, and their round shape keeps them from falling through the openings they protect. Even the raised patterns serve a purpose: they help prevent slipping. These everyday features combine centuries of practical design to keep essential infrastructure accessible and our streets safe.

## Fiscal Year 2026 System Activity

Each year, our crews perform essential maintenance to keep the system running smoothly. In fiscal year 2026:

| 82 miles | 184 miles | 84 million | ~5000 manhole |
|---|---|---|---|
| of pipeline were video inspected. | of pipeline were cleaned | gallons of recycled water were produced. | were inspected /utilized. |

These efforts help prevent issues before they occur and ensure reliable service for the community.

## Spot Our Crew in Your Neighborhood?

If you see our crews working in your neighborhood, scan QR codes located on District vehicles to learn more about what they are doing. These codes link directly to LWD's website, which explains the work they are performing, like CCTV inspections and pipeline cleaning.

SCAN TO LEARN MORE



# Customer Resources & Helpful Reminders

## The Teacher Grant Program is now accepting applications from local educators.

These grants support classroom projects that promote water and environmental education, helping students better understand how wastewater systems protect public health and the environment.

Teachers are encouraged to apply now, as **applications are due Friday, November 13, 2026.**

**LEARN MORE & APPLY**
Scan the QR code for program details.



## Holiday Reminder: No Place for FOG During the Holidays

Fats, oils, and grease (FOG) can build up in sewer lines and cause blockages - especially during the holiday season when cooking increases.

Instead of pouring grease down the drain, **allow it to cool, pour leftover FOG into a can, and dispose of it in the trash**. Before washing greasy pots and pans, wipe excess FOG with a paper towel. Small actions at home help prevent larger issues in the system.



## Summer Smoke Testing Helps Protect the System

We recently completed our annual smoke testing program to identify potential issues in the sewer system.

This process uses harmless, water-based vapor to locate leaks, cracks, and improper connections - such as yard drains connected to sewer lines. Most issues identified were minor and addressed quickly.

Smoke testing helps ensure the system remains efficient and prevents stormwater from entering wastewater pipelines. It is critical to keep stormwater out of the sewer system because excessive stormwater can overload the system and potentially cause a sewer backup or spill.

## Helping Homeowners Maintain Private Sewer Lines

LWD's **Lateral Reimbursement Program** helps homeowners offset the cost of repairing or replacing private sewer laterals.

Several residents have already participated in this program, and by making improvements to their sewer lateral, it helps protect both their property and the public sewer system.

## NEED HELP?

If you are experiencing issues with your sewer lateral, LWD may be able to help. Call or message us at **info@lwwd.org or 760.753.0155**

## Are You a Smart Flusher?

### TAKE THE QUIZ

**Test your knowledge of what belongs in the sewer system:**

**1** **Which of the following should *never* be flushed?**
A) Paper towels
B) Wipes labeled "flushable"
C) Cooking grease
D) All of the above

**2** **True or False: "Flushable wipes" break down the same as toilet paper.**
A) True
B) False

**3** **What happens when grease enters sewer pipes?**
A) It dissolves
B) It hardens and can cause blockages
C) It improves flow
D) All of the above

**4** **How many items does it take to start a blockage?**
A) Many
B) Just a few
C) Hundreds

**Find the answers at the bottom of Page 5**

# Project Updates and Standout Achievements

## Gravity Pipeline Relining – Proactive Pipeline Improvement

We are preparing for an annual project which focuses on rehabilitating pipeline segments identified through camera inspections. The project will consist of a trenchless and restoration repair method known as Cured-In-Place-Pipe (CIPP) lining because it is more cost-effective, less intrusive, and requires significantly less time to complete than the open trench/excavation repair method. The project includes relining nineteen sewer line segments totaling nearly a mile.

This proactive work helps extend the life of infrastructure and prevent future issues - ensuring continued reliable service for the community.

## Diana Pump Station Improvements

Construction continues in our effort to upgrade one of our pump stations located on a small easement just west of Hwy 101 on Diana Street, including the installation of a new emergency generator and electrical improvements.

These upgrades will improve system reliability, particularly during power outages, and help ensure continuous operation of this critical facility. This project is expected to be completed by the end of this year.

## Local Agencies Honored with CASA's Public Outreach Education Award

Leucadia Wastewater District, alongside partners Olivenhain Municipal Water District and San Elijo Joint Powers Authority, were awarded with the **2026 California Association of Sanitation Agencies (CASA) Award of Excellence** for our collaborative educational outreach efforts of Water Career Day.

The program brings together multiple agencies to promote careers in the water industry and educate the next generation with hands-on learning for high school, college, and transitioning military talent.



L-R: Michael T. Thornton, P.E., SEJPA General Manager, Trisha Hill, LWD Administrative Supervisor, Paul J. Bushee, LWD General Manager accept CASA's Public Outreach Award

## Excellence in Financial Reporting

We received the **Certificate of Achievement for Excellence in Financial Reporting**, recognizing the District's commitment to transparency and high-quality financial management.

## Safety Milestone - 7 Years Without a Lost-Time Injury

LWD has achieved seven consecutive years without a lost-time injury - a significant milestone reflecting the District's strong safety culture and commitment to its employees.

## Congratulations To:



**Field Services Supervisor**
**Mauricio Avalos**
15 Years of Service Award



**Field Services Supervisor**
**Gabriel Mendez**
15 Years of Service Award



**Administrative Supervisor**
**Trisha Hill**
25 Years of Service Award

**QUIZ ANSWERS**
**1: D 2: B 3: B 4: B**

LEUCADIA WASTEWATER DISTRICT
1960 La Costa Avenue
Carlsbad, CA 92009
(760) 753-0155

# Downstream

## 2026 Fall Newsletter

**Inside this newsletter, read about wastewater education, capital improvement projects, frequently asked questions, and helpful community resources.**

**Subscribe to our email newsletter for biannual updates from the District at:**

**Have a great photo of our community, coastline, or environment?
Submit your photos by emailing info@lwwd.org or posting them on Facebook or Instagram with the #DISTRICTPhoto.**

