

EchoWater Resource Recovery Facility

WaterReuse Meeting: June 5, 2026
Central Valley/Sierra Foothills Chapter

PRESENTED BY: Sonny Lunde, Director of EchoWater Operations

SACSEWER.COM



Presentation Agenda

- History
- Our System. Our Responsibility.
- Serving you 24/7
- About the Collection System
- About the EchoWater Facility
- Understanding the Treatment Process



History of Sacramento's Sewage Management

1970s



1973



1976



2023/24

- 22 separate sewage collection and treatment systems in the Sacramento region
- Many discharged into local waterways, many into the American River
- Clean Water Act passed in 1972

- Sacramento County, the City of Sacramento and, the City of Folsom form Regional San
- A \$460 million regional program is developed

- With one of the largest single federal grants in the nation, construction begins on the Sacramento Regional Wastewater Treatment Plant
- Construction completed and becomes operational in 1982

- Completion of the EchoWater Project
- EchoWater Resource Recovery Facility
- Legal merger of Regional San and SacSewer

A Homeowner/ Business Upper Lateral

The portion of the sewer pipe that runs from just outside the exterior of the structure or building to the property line.

C Sewer Cleanout

A sewer cleanout is a small access pipe that our crews use to inspect and maintain the underground sewer system. Cleanouts are typically located at the connection between the customer-owned sewer pipes (upper lateral) and the SacSewer-owned sewer pipes (lower lateral).

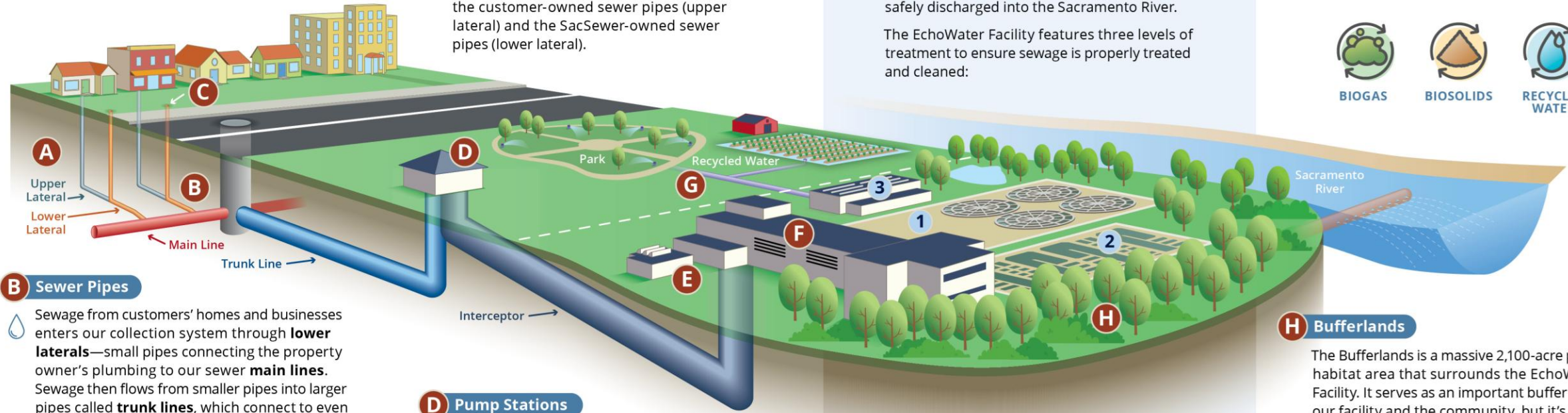
F EchoWater Facility

Sewage from four contributing agencies arrives at the EchoWater Facility. Here, we clean and treat the sewage before recycling a portion of it for non-potable uses. What's not recycled is safely discharged into the Sacramento River.

The EchoWater Facility features three levels of treatment to ensure sewage is properly treated and cleaned:

G Resource Recovery

Through our sustainable efforts in resource recovery, we are maximizing the reuse of treatment process by-products, such as energy, fertilizer, and water.



B Sewer Pipes

Sewage from customers' homes and businesses enters our collection system through **lower laterals**—small pipes connecting the property owner's plumbing to our sewer **main lines**. Sewage then flows from smaller pipes into larger pipes called **trunk lines**, which connect to even larger pipes (up to 12 feet in diameter) called **interceptors**. Interceptors then convey all the sewage to the EchoWater Resource Recovery Facility near Elk Grove.

D Pump Stations

Pump stations pump sewage from low-lying areas through force mains to higher points, where the sewage can again travel by gravity.

E Environmental Laboratory

Provides critical analytical data for various environmental studies and monitoring programs. Our expert chemists, biologists, and laboratory analysts conduct about 90,000 tests annually.

- 1 The first step, called primary treatment, removes large material from the water.
- 2 The second step, called secondary treatment, removes nutrients—about 99% of the ammonia and 89% of the nitrogen.
- 3 The third step, called tertiary treatment, filters and disinfects the water.

H Bufferlands

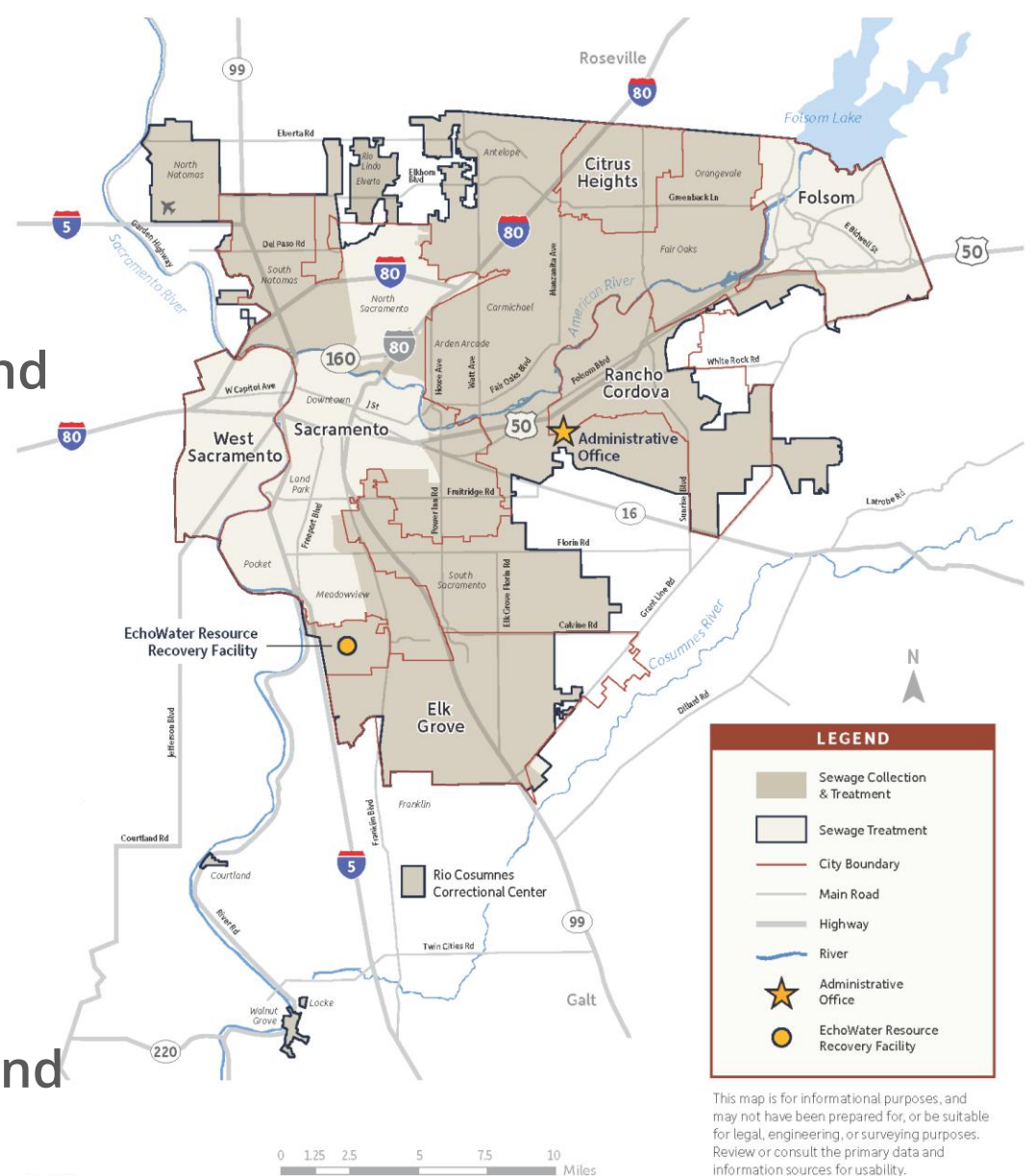
The Bufferlands is a massive 2,100-acre protected habitat area that surrounds the EchoWater Facility. It serves as an important buffer between our facility and the community, but it's also an actively managed, thriving ecosystem that's home to a varied mix of flora and fauna.

KEY

- Responsibility of the property owner to maintain
- Maintained and operated by SacSewer
- EchoWater Facility Property Line

Serving You 24/7

- SacSewer provides residential, commercial, and industrial sewer service throughout these areas:
 - Citrus Heights
 - Elk Grove
 - Folsom
 - Rancho Cordova
 - Sacramento
 - West Sacramento
 - Unincorporated Sacramento County, including the communities of Courtland, Locke, Walnut Grove, Freeport, Franklin, and Hood



About the Collection System

- Second-largest sewage collection utility in California
- 24/7 operation—Call SacSewer first
- More than 300 highly qualified staff

FAST FACTS



70,200
Manholes



6,200 Customer
Calls Per Year



117
Pumps Stations



Serving 386
Square Miles



182,000
Completed
Work Orders



5,000 Miles
of Sewer Pipe



278,900
Customers Reached Through
Community Outreach Events



About the EchoWater Facility

- EchoWater Project
- Second-largest facility of its kind in the nation
- 24/7 operation
- More than 350 highly qualified staff
- Committed to delivering on our mission



FAST FACTS



84,700

Lab Tests Completed



99%

of Ammonia Removed



1.6 Million

Population
Served



553 Million

Gallons of Water Recycled
Distributed



1,050 Acres
of Process Area



2,100 Acres
of Bufferlands



181 Million / 118 Million

Gallons Per Day Gallons Per Day

Permitted
Capacity

Treated on
Average Dry
Weather Flow



Treatment Process Video



Biological Nutrient Removal Video



Tertiary Treatment Process Video



Environmental Stewardship Goes Beyond Sewage Treatment Video

