



King County Wastewater Treatment Division (WTD) Overview

January 7, 2026



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

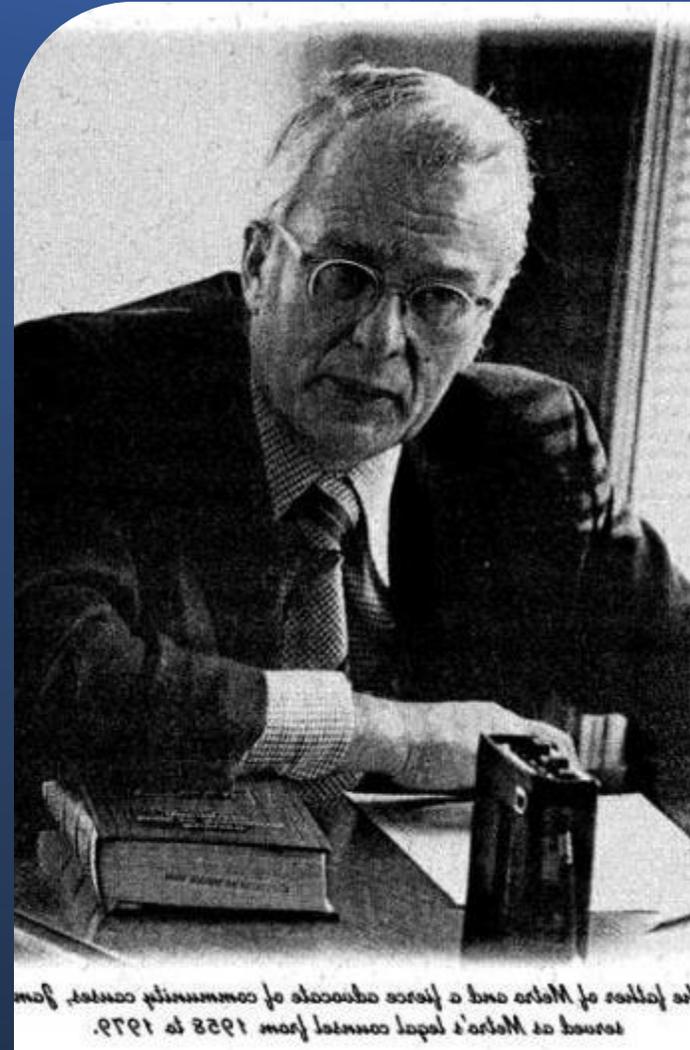
WTD's Mission

We protect public health and the environment by collecting and cleaning wastewater while recovering valuable resources for a thriving Puget Sound region.





In 1958, voters approved formation of Metro to improve water quality and protect public health. James Ellis, the father of Metro, worked to bring communities together to improve water quality through a regional wastewater treatment system.



James Ellis, the father of Metro and a fierce advocate of community control, served as Metro's legal counsel from 1958 to 1979.



Early days of Metro

- Metro Council adopts comprehensive water pollution abatement plan.
- Initial sewage disposal agreement with Seattle in 1961.
- Closed 10 sewage plants discharging into Lake Washington; ended raw sewage discharges to Elliott Bay and Duwamish.
- Construction begins on 110-mile regional conveyance system.
- South Treatment Plant opens in 1965 and West Point Treatment Plant in 1966.





Regional Wastewater Services Plan

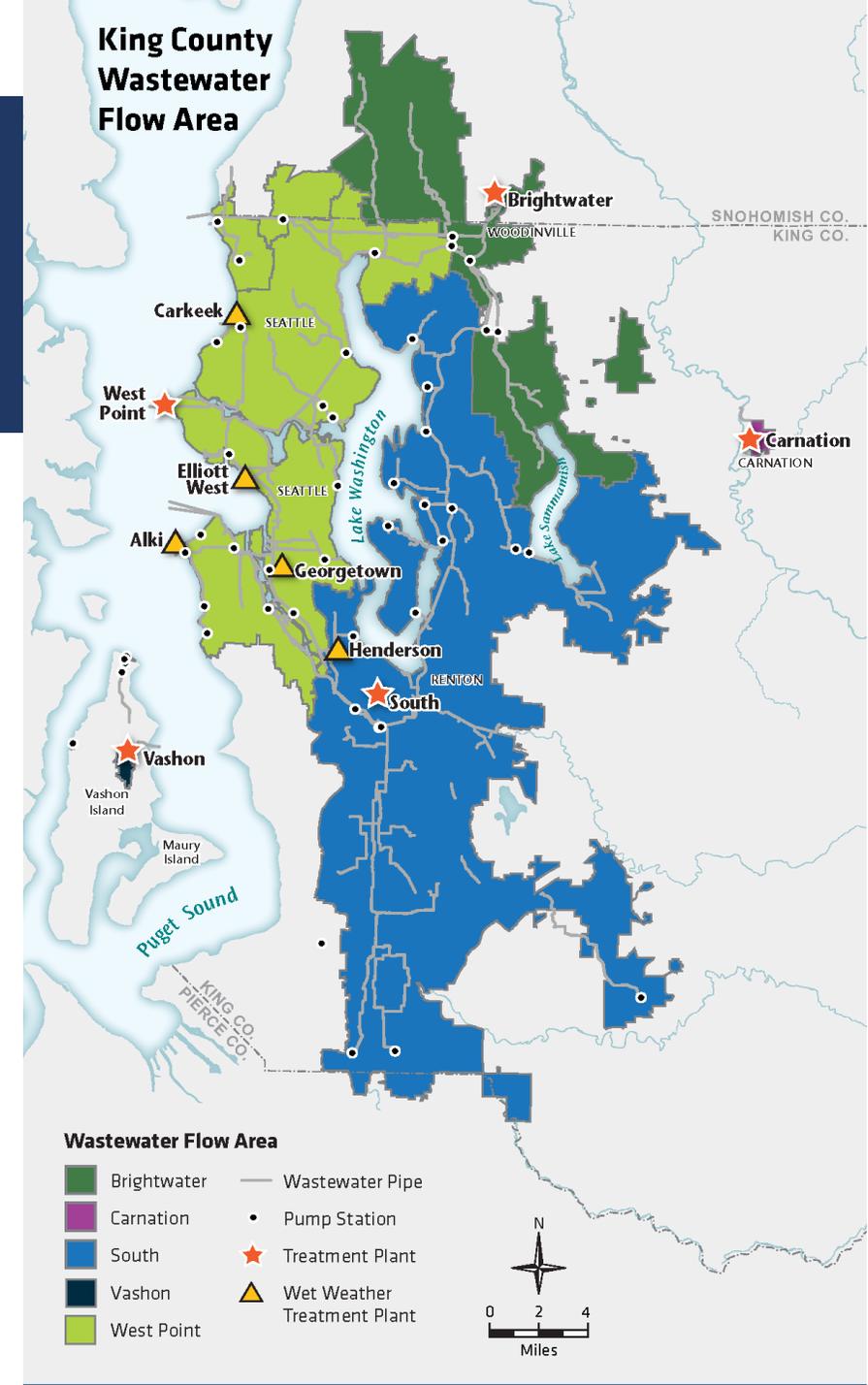
- Robinswood Agreement, executed in 1998, to guide funding of future capital projects.



- King County Council adopts the Regional Wastewater Services Plan in 1999
- Plan provides policies that govern the regional wastewater system thru 2030.

About the Wastewater Treatment Division

- Largest clean water utility in Washington
- 3 regional plants
- 2 community plants
- 48 pump stations
- 26 regulator stations
- 400 miles of conveyance pipe
- Service area of 2M residents across 424 sq. miles
- About 1000 employees
- \$350-400M annual capital program
- \$220M annual operational expenses
- Funded by ratepayers





Sewage Disposal Agreements and Rate

- 34 Local Sewer Agencies contract with King County for sewage treatment and disposal.
- Agencies include 18 cities, 15 sewer districts, and the Muckleshoot Tribe.
- Sewer Rate passed annually. Per contract must be approved by July 1 of every year.
- Capacity Charge is a separate charge assessed on development that results in new connections to the sewer system.



Examples of Current WTD Capital Projects

- West Point Treatment Plant Grit Classifiers
- Coal Creek Sewer Upgrade
- Lake Hills and NW Lake Sammamish Sewer Upgrade Project
- M Street Trunk Rehabilitation Project



Asset Management and Aging Infrastructure

- Manage over 60,000 Assets, including treatment plants, pumps, pipelines, storage tanks, and regulator stations.
- Address the backlog of work and fund the highest priority items.
- Operate and maintain assets to meet Level of Service targets.





Resource Recovery

Recover valuable resources from waste streams that can be reused and meet region's climate and sustainability goals

- Biosolids (Loop[®] product)
 - Over 120 farmers/landowners using biosolids to improve crop yields
- Biogas
 - Fuel to heat and operate plants
 - Scrub and sell back to the grid
 - Generate electricity
- Recycled water
 - Eight current recycled water customers, including Willows Run and Foster Golf Courses
- Sewer heat recovery pilot
 - One of largest commercial projects in nation is using County sewer heat in South Lake Union, Seattle



Combined Sewer Overflows (CSOs)

- Built into the system design 80+ years ago
- Overflows occur during heavy rainstorms
- Control remaining CSO outfalls and follow up on supplemental compliance
- Multi-decade **process** and a driver of costs
- Recent examples include Joint Ship Canal Water Quality Project and Georgetown Wet Weather Treatment Station
- Design examples: storage tanks, CSO treatment station, and/or green infrastructure
- Modification of CSO Federal Consent Decree approved in 2025





Changing Regulations

- Regulated by U.S. Environmental Protection Agency and Washington State Department of Ecology
- Clean Water Act and other laws govern pollution discharges through facility permits (NPDES)
- Regulatory requirements a primary driver of costs and projects in capital program
- Ecology's Puget Sound Nutrient General Permit (nitrogen removal)
- PFAS and other contaminants of concern



Climate Resiliency

- Climate changing bringing about weather extremes
 - More frequent severe storms, heat waves and droughts
- Larger, more resilient facilities
 - CSO projects designed to be climate-resilient
- Wastewater system must adapt
 - Sea level rise
 - Saltwater intrusion
 - Power supply

Affordability Challenge

- The ‘Big 3’ in WTD's capital program are:
 - Regulatory requirements for water and air quality
 - Asset management to maintain system in good repair
 - Capacity projects to serve growth and comply with contracts

- Continued forecasted rate increases, with significant impacts to low-income ratepayers
- Federal and state funding, especially grants, is crucial to meet this growing and vital capital program





Working 24/7/365 to fulfill our mission and provide value to King County



Questions