

NEWSLETTER

Fall/Winter 2022



Kitsap County Public Works | Sewer Utility



Construction is underway to replace the Bangor/Keyport sewer forcemain



Emergency digester repairs at CKTP improve safety and solids processing



Construction on Pump Stations 19 and 31 in Silverdale is nearing completion

CHANGES TO SEWER RATES

Washington State law, RCW 36.94.140 requires sewer rates to be set to produce revenues sufficient to cover the costs of maintenance and operations, bond obligations, repayment of loans, and other costs necessary to properly run all five of the county's sewer systems.

In the last two years, operations and maintenance costs have been impacted by inflation, and staff have monitored work closely to stay within the budget. However, the need to replace worn and outdated 40- to 50-year-old infrastructure places a higher priority on the Sewer Utility's capital construction projects to reduce sewer system failures, reduce maintenance costs, and meet regulation requirements.

The Sewer Utility tracks revenues closely and annually forecasts funds to cover operation and maintenance and current and upcoming debt to complete projects on the six-year capital improvement program. The 2022 revenue review has shown the need to increase monthly sewer rates for residential, multifamily, commercial, and restaurant customers by 4.5% in 2023.

The Utility has determined the 4.5% increase, which is considerably below 7% to 9% increase seen in inflation for 2021 and 2022, is sufficient at this time to maintain funds and reserves. Rates will be evaluated again in 2023 once the 20-year capital facilities plans are completed for Kitsap County's sewer service areas. More information can be found at kcowa.us/sewerrates.

Monthly Sewer Charges	2022 Rate	2023 Rate
Single Family Residential	\$88.27	\$92.24
Multi-Family Residential	\$70.35	\$73.52
Commercial or Industrial (per CF of water)	\$0.125	\$0.131
Restaurant (per CF of water)	\$0.200	\$0.209
Navy Yard City Monthly Sewer Charges		
Single Family Residential	\$75.03	\$83.02
Multi-Family Residential	\$59.80	\$66.17
Commercial or Industrial (per CF of water)	\$0.106	\$0.118
Restaurant (per CF of water)	\$0.170	\$0.188

5 MILES

The length of the sewer forcemain being replaced from the Keyport and Bangor Naval Bases to the Central Kitsap Treatment Plant in Brownsville.

Find information on Public Works projects near you at Kitsap.gov/pw.

OUTSTANDING TREATMENT PLANT AWARDS

Wastewater treatment plant operators play a critical role in keeping Washington's water clean. The facilities deal with everything homes and businesses dump in or flush down the drain. This includes items sewage systems were not made to deal with, like "flushable" wipes, face masks, oils, and cooking grease.

Each year, the Washington Department of Ecology honors the wastewater treatment plants in our state that achieve full compliance with their water quality permits with



Aerial view of Central Kitsap Treatment Plant

the agency's Outstanding Performance Award. Only about 40% of Washington's treatment systems earn the top-performing status each year, and only one facility in state – Kitsap County's Manchester Wastewater Treatment Plant – has won the honor each year since the award's inception in 1995.

For their work in 2021, Ecology is recognizing 124 facilities with the Outstanding Performance mark. Nine of those facilities are receiving the award for the first time. All three Kitsap County treatment plants permitted by the Department of Ecology (Kingston, Manchester, and Central Kitsap) received the award. For the full list of recipients, visit ecology.wa.gov.

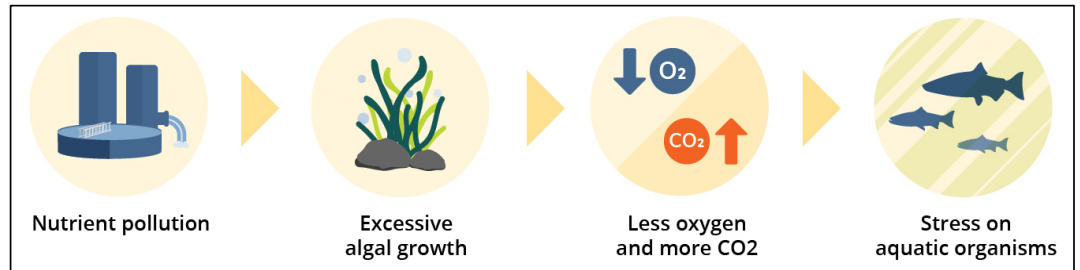
Ecology evaluated more than 300 wastewater treatment facilities operating in Washington to determine whether they were meeting state pollution limits, monitoring and reporting requirements, planning to prevent spills, performing pretreatment on wastewater, and operation demands outlined in their permits.

REDUCING NITROGEN IN PUGET SOUND

To reduce nitrogen pollution and improve the health of Puget Sound, the Washington State Department of Ecology is requiring wastewater treatment plants to monitor discharges, optimize operations, and plan for infrastructure investments. Nitrogen is a nutrient that encourages plant growth in Puget Sound, causing areas of low, unhealthy oxygen levels which cascade into problems for fish and other marine life.

The Puget Sound Nutrient General Permit puts 58 wastewater treatment plants on a multi-year path to control and significantly reduce nitrogen discharges. For Kitsap County Sewer Utility, this includes facilities in Manchester, Suquamish, Kingston, and the Central Kitsap Treatment Plant (CKTP) in Brownsville.

The first five years of the permit (2022-2026) focus on preventing the nutrient problem from getting worse while facilities identify long-term technology upgrades and other investments to better control nutrients. Fortunately, Kitsap County's wastewater treatment plants perform well, and nitrogen discharges are below the permit requirements. The Kingston Treatment Plant, built in 2005, was designed for nitrogen removal and was already one of the top performing plants in the state.



Nutrient pollution comes from a variety of human sources. Wastewater treatment plants handle concentrated areas of population and adding nutrient removal technology is the first major step by Ecology in reducing nitrogen discharges to Puget Sound.

Upgrades to CKTP in 2015 decreased the amount of nitrogen released from this plant by two-thirds. Additional aeration basins were added for longer retention of microorganisms that complete nitrification and denitrification – this process releases nitrogen as a gas to the atmosphere and not into Puget Sound. The Nutrient General Permit limits CKTP as a medium discharger to 306,000 pounds of TIN (total inorganic nitrogen) in a year, an average of 25,500 pounds per month. In the first six months of the permit, CKTP discharged a total of 42,234 pounds of nitrogen, well below the permit limit.

Kitsap County's investments in wastewater treatment over the past decade are directly related to the Water as a Resource policy, passed by the Board of County Commissioners in 2009 and reaffirmed in 2016. The policy includes a directive to invest in additional wastewater treatment to reduce pollution in Puget Sound and allow for future use of recycled water. This forward thinking has allowed Kitsap to stay ahead of regulation requirements.

Many Washington wastewater facilities do not currently have nutrient control technologies in place. This means the nitrogen in human waste is flowing from homes and businesses, through the facilities, directly into Puget Sound. Ecology anticipates nutrient control technologies will be online at most facilities in the next 15-20 years. For more information on Ecology's efforts to reduce nutrients in Puget Sound, visit ecology.wa.gov/ReducingNutrients.

CONSTRUCTION PROJECT UPDATE

Upgrades to sewer and stormwater infrastructure, road resurfacing and sidewalk construction on Bay Shore Drive, Washington Avenue, and Byron Street were completed in 2022.

Upgrades to Pump Stations 19 and replacement of PS 31 are nearing completion. This is part of a larger project to replace and upgrade outdated sewer infrastructure in Silverdale. See the project page at kcowa.us/ps3 for more details.

Construction on the Bangor/Keyport Forcemain Replacement project began this fall and is expected to continue through December 2023.

This project will replace five miles of forcemain from USN Bangor base to the CKTP in Brownsville. A portion of this forcemain from State Hwy 308 to CKTP includes Poulsbo and USN Keyport base sewage flows. This project is funded in part by a \$10M grant from the Defense Community Infrastructure Pilot Program. Sign up for updates on this project at kcowa.us/bkfm.

Learn more about sewer projects and other Public Works projects near you at Kitsap.gov/pw.

