Pipelines

SUMMER 2024

GREENE COUNTY
Sanitary
Engineering

Water Treatment Plant Updates: Transitioning to Softened Water

Greene County Sanitary Engineering Department (GCSED) has made significant progress in its efforts to upgrade the water and sewer system across its service area. Improvements at the Northwest Regional Water Treatment Plant, in particular, will soften and enhance water quality and increase system reliability.

This work is part of our ongoing Greene Forward initiative to upgrade and add new facilities to keep delivering clean water and sewer services for the next generation. These investments allow GCSED to address long-standing issues such as aging infrastructure, hard water and a growing demand. Together, the improvements will:

- **Expand Capacity** from 9.5 million gallons per day to 12 million gallons per day with space for a future increase to 16 million gallons per day
- **Reinforce Reliability** by increasing the level of redundancy and operational flexibility in the system
- **Add Softening Technology** by installing a reverse osmosis (RO) membrane treatment system to improve water quality and extend the life of water-using appliances and plumbing fixtures

The public water supply in Greene County comes from underground sources. As the water is pumped to the surface, it passes through limestone, which results in hard water that has a high concentration of minerals, particularly calcium and magnesium. The RO membrane treatment works by forcing water through a semi-permeable membrane that removes these minerals. Unlike home ion exchange softeners, no sodium is used during RO treatment.

The new RO system will reduce the hardness level from the current 27 grains per gallon to about 8-9 grains per gallon. This added treatment process will improve overall water quality.

GCSED anticipates the transition to soft water to begin later this summer. This effort will be completed in phases, with softened water (at the 8-9 grains of hardness per gallon level) reaching customer taps in late fall. Water quality testing will continue to be conducted regularly to confirm the process is working as expected.

For more information, look for future communications and updates, or visit **greeneforward.com**.

Frequently Asked Questions

Can I remove my water softener?

Removing your water softener is a matter of preference. Water is currently supplied at 27 grains of hardness per gallon. Once upgrades are complete, water is anticipated to be approximately 8-9 grains of hardness per gallon. You can continue using your softener to treat further, but you may need to recalibrate your softener's regeneration cycle for the lower hardness level to realize the savings in lower salt consumption.

What are some of the benefits of softened water?

- Improved appearance and smell
- Requires less soap, making for more efficient cleaning and reduced wear and tear on clothing
- Reduces hard water stains on silverware and water fixtures
- Reduces hard water scale buildup in water heaters, which leads to more efficient heating processes
- Reduces cost for salt used in water softeners (if use continues)
- Decreases cost for replacement of fixtures and appliances that use water



Construction at the Northwest Regional Water Treatment Plant nears completion, allowing GCSED to expand system capacity and improve system reliability.



New reverse osmosis treatment system at the water treatment plant will deliver softer water and improve water quality.



Conserving Water During the Summer

The following tips will help you practice water conservation during times of dry weather or drought.

Fertilizing

- If possible, use fertilizers with lower nitrogen and higher phosphorus content (example: 20-10-10 instead of 33-2-2.)
- Phosphorus and Potassium promote deeper root development, which leads to a more drought-resistant lawn.
- Base your actual fertilization on the results of a soil test.
- Consider the best time to apply the type of fertilizer you choose.
- Aeration of the lawn allows fertilizer and water to sink into the ground.

Mowing

- Mowing grass three to four inches instead of one to two inches tall helps to establish a deeper root system. This deeper root system helps in dry times. You will notice when irrigation is turned off for week or more the lawn will turn brown. The grass will be considerably greener in non-irrigated areas that have been mowed higher.
- Raise the mowing height as summer progresses to encourage deep rooting.
- Sharpen pruning shears and mower blades as dull blades encourage plant water loss and the introduction of disease.
- Keep clippings on the lawn to create a thatch.

Irrigation

- Most lawns in this area will accept one-fourth to one-third inch of water per hour. Set sprinkler times per station so that they will apply approximately one-third of an inch of water per cycle.
- Let the condition of the grass determine when to apply water, usually just as the plants begin to wilt. (The lone exception is new sod or seed, which requires more water.)
- Frequent, shallow watering tends to keep the upper layers of soil near saturation, leading to shallow roots and a lawn that is susceptible to disease and insect attack.
- Water only in the early morning. (Watering in the afternoon increases loss to evaporation; late night watering increases chance of disease.)
- Comply with watering restrictions if issued by GCSED.

Employee Spotlight - Teresa Shinkle

Teresa Shinkle is retiring after 36 years as a Greene County employee. As a teen, she began working at the county pool. In 1990, the day after she graduated high school, she took a job with Adult Probation. By 1992, she had become a secretary at GSCED's former laboratory on Shakertown Road. In 1995, she was promoted to laboratory technician where she was responsible for testing wastewater and water samples. After 20 years, she moved to the utility maintenance group, but ultimately returned to the laboratory in 2020.

Teresa has seen a lot during her time with Greene County, including all the employees and construction projects that have come and gone. She was one of the first employees to move into the new laboratory in 1999.

Teresa has enjoyed working at GCSED, but the time has come to retire at a young age. She looks forward to making more memories with her family and enjoying all the things life has to offer.

Teresa states, "Don't take anything for granted. Money comes and goes, but your family is forever. Enjoy every bit you can with them."

Teresa and her husband, Steve, live in Xenia. They have four adult children, Danyel, Brooke, Abigail and Caden. Teresa has two grandchildren, Truett and Palmer, with two more grandchildren on the way this year.

Her positive attitude is infectious, and she will be sorely missed. She will miss her work family the most and has enjoyed her time working in the Lab. We wish her well in the next chapter of her life. Happy Retirement Teresa!



"Don't take anything for granted. Money comes and goes but your family is forever."

Greene County Environmental Services

Household Hazardous Waste

Accepted:

- acids & cleaners
- aerosol spray cans
- antifreeze
- <5 gallons of fuel - gasoline & kerosene
- herbicides & pesticides
- putty & adhesives
- stains, varnishes & paint thinner
- oil based paints

Not Accepted:

- motor oil
- electronics
- small household appliances
- computers & accessories
- televisions
- pharmaceuticals
- ammunition
- explosives

Drop-off Dates/Times:

Tuesdays 12:30pm - 2:30pm	Saturdays 9:00am - 12:00pm
July 23rd	July 13th
August 20th	August 10th
September 24th	September 14th
October 22nd	October 12th

Greene County residents only.
Materials accepted at staff's discretion.

Drop-off Location:

2145 Greene Way Blvd., Xenia, OH 45385
Call: 937.562.5925 or
Visit: greenecountyohio.gov/recycling

Ways to pay your bill

Online: greenecountyohio.gov/sanitary

By Phone: 855-925-1665 (24 Hr. Service)

By Mail:
Greene County Sanitary
Engineering Department
P.O. Box 340
Xenia, OH 45385-0340

Remember to update your GCSED online banking vendor address. Some banks send your payment via USPS rather than ACH transaction.

Greene County Sanitary Engineering

Administration Building
937-562-7450
Monday-Friday, 7:30 am to 4:30 pm
667 Dayton-Xenia Road
Xenia, OH 45385

After-Hours Emergencies
937-562-7450

Billing/Bill Payments
937-562-7457
greenecountyohio.gov