

Every day, more than 1.3 billion gallons of wastewater, from homes, businesses, and schools, flow through the sewer system to one of New York City’s 14 Wastewater Resource Recovery Facilities. Most sewer pipes carry a mixture of wastewater and stormwater runoff from streets, sidewalks, and rooftops.

During the wastewater treatment process, pollutants are removed from wastewater before clean water is released to local waterways. Today, the City’s wastewater resource recovery facilities also recover energy, nutrients, and other resources from the treatment process.

This graphic illustrates the five major processes of wastewater treatment: preliminary treatment (screening and pumping), primary treatment, secondary treatment (aeration and final settling), disinfection, and sludge treatment.

Key Terms

Biogas - The methane gas released during sludge digestion can be used to produce heat and electricity for a wastewater resource recovery facility. Once purified it can be distributed as natural gas for the community.

Bioslurry - A nutrient rich mixture of processed food scraps from stores, restaurants, schools, and businesses.

Biosolids - The solid by-products of the wastewater treatment process that can be composted, added to agricultural soils, or further processed for other beneficial uses.

Sludge - The organic solids, such as food, feces, and paper fibers, that are removed from wastewater during the treatment process.

Stormwater runoff - The precipitation that falls on streets, sidewalks, and rooftops and flows overland, rather than being absorbed naturally into the ground.

Wastewater - The used water mixed with solid waste that flows down the drains from homes, schools, and businesses.

Wastewater Resource Recovery Facility - A facility designed to treat wastewater and stormwater runoff before releasing clean water into a nearby waterway. These facilities recover energy, nutrients, clean water, and other resources from the treatment process.



Want to learn more?

Visit our website for additional information and to learn how you can help protect New York City’s wastewater treatment system and local waterways, at

nyc.gov/dep

Also, find out how you can see the wastewater treatment process come to life at the Visitor Center at the Newtown Creek Wastewater Resource Recovery Facility.

If you have questions, email DEP Education at

educationoffice@dep.nyc.gov



Wastewater Treatment in New York City



