

CURRENTS

Understanding Our Combined and Separated Sewer Systems



The Pittsburgh Water and Sewer Authority (PWSA) maintains two different types of sewer systems that carry stormwater: a [combined sewer system](#) and a [separated sewer system](#).

The first public sewers in Pittsburgh were built starting in the middle of the 1800s. It was common at the time to discharge sewage and stormwater into rivers using one large pipe, called a combined sewer, since stormwater naturally helped flush the sewage solids away from homes and businesses.

When the Allegheny County Sanitary Authority (ALCOSAN) wastewater treatment plant

became fully operational in 1959, miles of huge interceptor pipes were installed along rivers and streams to redirect wastewater to ALCOSAN. To protect the plant, dams were installed within the interceptors that allowed overflows of combined stormwater and sewage to the rivers and streams during wet weather.

With wastewater treatment available, separate pipes for sanitary sewage and for stormwater began to be constructed in areas of development in Pittsburgh. Today, these separated sewer system areas are located across approximately 25 percent of our city, primarily in the Saw Mill Run

neighborhoods, while the combined sewer system serves approximately 75 percent of Pittsburgh.

The Combined Sewer System

During dry weather in combined sewer system areas, the sewage from buildings flows into underground combined sewer pipes and is carried to the wastewater treatment plant to be cleaned then discharged into the river.

When it rains, the storm drains direct the stormwater into the sewer pipes that are already carrying sewage. Excess stormwater can overwhelm the capacity of those pipes, causing some of the combined stormwater and sewage to overflow into the rivers at the sewer outfall.

These combined sewer overflows, also known as CSOs, make it dangerous to come in contact with river and stream water during overflow events. Combined sewage and stormwater can also back up into basements and surcharge up through manholes when the pipes are overwhelmed, causing public health issues.

The Separated Sewer System

During dry weather in separated sewer system areas, the sewage from buildings flows into underground sanitary

Next Board Meeting: November 18

For a complete list of PWSA's board and community meetings, please visit Pgh2o.com/events-meetings.

Following COVID-19 restrictions, meetings are held virtually and may be tentative or postponed.

sewer pipes. The sewage is piped to the wastewater treatment plant for cleaning.

When it rains, the sewage continues to be carried to the wastewater treatment plant. The stormwater flows into storm drains in the street, and is directed into underground storm sewer pipes, as part of our Municipal Separate Storm Sewer System (MS4). These pipes carry the stormwater directly to streams and rivers.

Unfortunately, that stormwater can also carry pollutants left on the ground, such as litter, oil, road salt, pet waste, fertilizers, and pesticides, into our streams and rivers without a chance for treatment. This pollution can harm local water quality, fish and wildlife, and recreation.

Solutions

Stormwater management is a challenge across both combined sewer systems and separated sewer systems. PWSA is continuing to enhance our stormwater program, using solutions such as sewer improvements and green stormwater infrastructure that mimics nature to capture and filter rainwater before it enters sewer pipes. Learn more at pgh2o.com/stormwater.

Join our email list to get the latest news and updates.

Signing up is simple at pgh2o.com/subscribe.





Additional Stormwater Resources

Explore the resources below for additional information about the stormwater fee, including the stormwater credit program, customer assistance and a web map where you can search your property.

STORMWATER CREDIT PROGRAM: Our Stormwater Credit Program offers a discount on the monthly stormwater fee. Property owners choosing to manage stormwater on site may reduce their monthly stormwater charge. Installing stormwater management systems such as a rain garden or an underground stormwater system on private property are examples of how a private property owner may earn a credit. Find out more information and apply at pgh2o.com/stormwater-fee.

FEE FINDER WEBSITE: Use our searchable map to view the amount of impervious surface on your property and understand your stormwater fee. To use the site:

- Launch the [Fee Finder Website](#)
- Enter your address in the search bar and press enter
- Click inside the boundaries of your property to view details about its impervious surface and the number of Equivalent Residential Units (ERU's)
- To determine your fee amount, multiply the number of ERU's by the stormwater rate of \$5.96 and subtract any credits that may apply

DISPUTING STORMWATER FEE: If you have questions about the amount of impervious surface calculated for your property or believe there is a discrepancy, please contact our Customer Service department by calling 412-255-2423 (Press 5), to start the process.

Visit pgh2ostormwater.com for more information about our plans to manage stormwater.

Please call PWSA Customer Service at **412-255-2423 (Press 5)** or email info@pgh2o.com for questions about the stormwater fee or general questions about the credit program.

Neighbors Helping Neighbors

Donate to the Hardship Grant Program online at Pgh2o.com/give.

Enroll in eBilling

Convenient and easy to use, our online billing and payment portal ensures timely delivery of bills and payments. Visit Pgh2o.com/ebilling to enroll.

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Customer Service*
T 412.255.2423 (Press 5)
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**translation services available*

Emergency Dispatch*
412.255.2423 (Press 5)
Available 24/7

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WATER WISE

Protect Green Stormwater Infrastructure This Winter



Our Centre and Herron stormwater project in the Hill District with a hint of frost in December 2021.

Green stormwater infrastructure such as rain gardens, permeable pavement, and rain barrels mimic nature to capture, store, and filter stormwater. Even when plants are dormant during winter, green infrastructure can continue to function, helping to reduce flooding and river pollution. However, improper handling of snow and ice can damage public and private green infrastructure.

Follow these winter tips to keep green infrastructure functioning properly:

- Do not overapply de-icing salt or sand on sidewalks or streets, especially next to green infrastructure. De-icing salts can harm plants and water quality, while sand can clog rain gardens and permeable pavement.
- Do not plow or shovel snow piles next to or on top of green infrastructure, since piles can block stormwater flow and crush plants and soil.
- Make sure rain barrels are completely drained and spigots are left open to prevent freeze damage. Switch downspout diverters to bypass the barrels so that stormwater drains through the downspout. If storing barrels outside, cover with a tarp.