What is a sewershed?

A sewershed is the area of land where all the sewers flow to a single end point. As with watersheds, sewersheds can be large or small. Many smaller sewersheds lead to larger conveyance pipes, eventually leading to the ALCOSAN wastewater treatment plant. In Pittsburgh, there are many places where sewage can overflow into rivers or streams when stormwater fills up the pipes. We define the area that drains to each of these diversion points as a sewershed.

How do sewers affect water quality in the region?

Stormwater that does not infiltrate into the soil can run into sewer systems and into rivers and streams, carrying pollutants from lawns, roads, sidewalks, roofs, and parking lots. If not properly managed, stormwater can flood roadways and basements.

During rain storms, the sewer system can become overloaded, leading to an excess of water in the sewers and at the ALCOSAN Treatment Plant. It only takes 0.1 inches of rain to push the treatment plant to its capacity. This excess stormwater leads to combined sewer overflow (CSO), which contaminates local waterways with waste and pollution, making them unsafe for recreational activities. Overloaded sewers can also cause basement flooding and localized street flooding in some areas in the city.

Where are sewersheds located in Pittsburgh?

Wherever you live or work in the city, you are within a sewershed. You can search your address on PWSA's interactive map to identify your sewershed. There, you can see if you live in a combined or separated sewer area, how much sewage overflows from the discharge point in a typical year, how your sewershed ranks relative to other sewersheds, and more.
What can I do to improve water quality when the sewers fill up because of rain?

Conserve water! There are a number of easy ways you can limit the volume of water in our sewer system. Remember – less is more. If you have to do water-intensive chores like dishes or laundry, or you have to take a shower, try to wait until after the rain has stopped. Washers can use up to 45 gallons of water per load and a 10 minute shower can use over 20 gallons. Avoiding high water usage during rain events reduces the volume of sewage in the pipe, which leaves more room for the stormwater, so there is less combined overflow.

Another way you can help is by managing the stormwater that falls on your property. Check out PWSA’s website for more everyday tips for water conservation and stormwater management.

How does PWSA address sewershed issues?

The City of Pittsburgh and PWSA have released a draft of the City-Wide Green First Plan, which outlines how Pittsburgh intends to use innovative, cost-effective, and green infrastructure approaches to manage stormwater. Implementing the plan will mitigate local street flooding and sewer backups caused by large rainstorms. The stormwater management practices outlined in the plan will help the City and the region comply with U.S. Environmental Protection Agency (EPA) combined sewer overflow mandates and improve the quality of local waterways.

Green infrastructure practices like rain gardens, tree plantings, water detention basins, stream restorations, and pervious pavement mimic natural processes to slow and capture rainwater. This approach reduces the frequency and volume of combined sewer overflows and reduces the likelihood of neighborhood flooding and backups.

You can read about the City-Wide Green First plan here and PWSA’s green infrastructure projects here.

If you would like additional information, please contact us at greeninfrastructure@pgh2o.com or visit www.pgh2o.com/going-green.