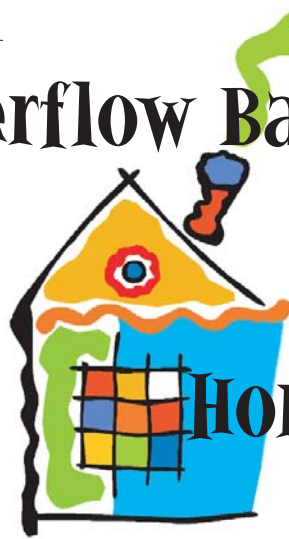


Sewage Overflow Basics and the

Role of the Homeowner



Sewage 101

Everyday, we flush the toilet, drain dirty bath water or perhaps pour old cooking oil down the sink drain without thinking about where it goes next.

The wastewater or sewage we generate in our homes travels through a pipe, called a house lateral, that connects your home to the public sewage system.

During dry weather, the sewage is adequately transported to the treatment plant. However, during rainy weather, much of the sewage overflows into our streams and rivers *before* it reaches the treatment plant. These overflows contaminate our local waterways where families swim, boat and fish.

With an average annual rainfall of 45 inches in Allegheny County, the sewage overflow problem has become a critical issue.

What causes the sewage to overflow?

During wet weather (rain or snow melt), too much stormwater gets

into the separate sanitary sewer system, which is the set of pipes designed to carry only wastewater. The pipes are not able to handle the extra volume of stormwater during rainy weather, so raw sewage overflows into our waterways before reaching the treatment plant. Most newer communities have these separate sanitary sewer systems; the stormwater is carried in a separate system and is discharged directly into our rivers and streams. However, some older communities have combined sewer systems, which carry both waste and stormwater in the same set of pipes. Check with your municipality to find out which type of system your community uses.

How does the stormwater get into a sanitary sewer system?

A significant part of the overflow problem is linked to improperly connected roof and driveway drains and deteriorating house laterals, which allow stormwater to get into a separate sanitary sewer system.

This inflow results in overloading and overflows. Many communities now test for improper or poor connections with a dye that traces the path of stormwater from your home's drains and rain spouts. Homeowners are responsible for removing improper connections and repairing deteriorated laterals. New technologies can make parts of the repair possible without digging up a homeowner's property.

Stormwater can also enter the sanitary system through cracked or broken pipes. This is called infiltration. Allegheny County suffers from a deteriorated and aging sewer system, which increases the likelihood of infiltration during wet weather.

Why is the sewage overflow issue important?

These overflows not only violate the federal Clean Water Act, but they cause a host of other problems for communities and the region as a whole.

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- Raw sewage in our waterways causes a public health risk.
- Families in downstream communities may experience chronic basement backups.
- Water quality may be unacceptable for boating, swimming or fishing for many days after it stops raining.
- Children can be exposed to raw sewage from overflowing manholes in the street or by playing in streams and creeks.
- 90% of Allegheny County residents get their drinking water from the three rivers.
- Overflows can kill fish and other river and plant life.
- It impedes economic development because communities can be restricted from tapping into sewers to build new houses or businesses until the problem is corrected.

What is being done about the problem?

Municipal officials from communities in the ALCOSAN (Allegheny County Sanitary Authority) service area have been meeting for more than a year to work on cooperative strategies to solve the problem. (ALCOSAN is the sewage treatment plant for 83 Allegheny County communities.)

The 3 Rivers Wet Weather Demonstration Program is a non-profit organization committed to helping these municipalities find the most cost-

effective, long-term solution to the sewage overflow crisis. The organization provides federal grant money, explores the latest technologies and encourages inter-municipal cooperation to help solve the problem.

In early 2004, the Environmental Protection Agency distributed an administrative consent order requiring the ALCOSAN communities to complete specific activities, such as mapping, cleaning and televising the sewer system and making critical repairs. Then communities must complete flow monitoring, which indicates how much wastewater (and in some cases, stormwater) the sewage system is carrying during both dry and wet weather. This information will help communities develop a long-term wet weather control plan, in cooperation with ALCOSAN to sustain rehabilitation efforts into the future.

What is my role as a homeowner?

As a homeowner, you can check with your municipality to find out if your community uses a separate sanitary sewer system. If your community has a separate sanitary system, ask the municipality how you can have your stormwater drains tested to ensure they are not improperly connected to the sewer system. If your storm drains are connected to the sewer system, you may want to consult a professional to correct the problem.

Consider installing a rain barrel in your yard or garden. During wet weather, the barrel collects

stormwater through your home's downspout. During dry weather, a hose connected to the barrel allows water to seep out to water your yard or garden. This helps to control stormwater, which contributes to sewage overflows polluting our waterways.

In addition, homeowners can support their municipality's efforts to repair or replace the public sewage system in order to comply with the EPA order. Fixing the problem in Allegheny County will require a substantial financial investment and while municipalities are seeking the most cost-effective methods for a solution, homeowners can expect higher sewage rates over the coming years. It will take the cooperation and support of many individuals and communities to ensure a solution that will protect our region's water resources.

For more information

Contact your municipality for more specific information about the sewer system in your community or if you are interested in purchasing a rain barrel, call 3 Rivers Wet Weather at 412-578-8375 or visit our web site at www.3riverswetweather.org

