



## **When it rains, the Pittsburgh region overflows with problems**

When storm clouds above us finally break loose with pouring rain, we might think about finding an umbrella to keep from getting wet, but how often during a rain shower do we think about raw, untreated sewage flowing into our rivers and streams? Probably not often. Unfortunately, it's a reality in the Pittsburgh region and many other areas throughout the country.

During wet weather—rain or snow melt—too much additional water gets into the sewage collection system through deteriorated pipes and illegal downspout connections from homes. This additional water exceeds the amount the pipes in the sewage system can carry to the ALCOSAN (Allegheny County Sanitary Authority) treatment plant and as a result, raw sewage overflows into the rivers and streams.

Annually, these overflows affect Pittsburgh's rivers up to 70 days during the boating season, making the water quality unacceptable for recreational contact. In addition, these overflows cause health and environmental risks for our families, including basement backups and contamination of the region's rivers, which provide 90 percent of Allegheny County's drinking water.

According to the Environmental Protection Agency's (EPA) Clean Water Act, communities must eliminate and/or control these wet weather sewer overflows.

### **SECTION A:**

In XX Township/Borough, the sewage collection system is called a sanitary sewer system, which is designed to carry only wastewater to the treatment plant. Stormwater is carried in a separate system.

In the 1940s and 50s when the region's sewer systems were constructed and before the Clean Water Act became law, structures called sanitary sewer overflows (SSOs) were built into sanitary sewer collection systems. If the collection system becomes overwhelmed with too much flow, it activates sewage overflows from these structures into area waterways before it reaches the treatment plant or it may overflow from manholes or back up in homeowners' basements. The problem has worsened over the years because the sewer systems were built primarily with terra cotta pipes, which have cracked and deteriorated allowing groundwater and stormwater to infiltrate the system designed only to carry wastewater.

The Clean Water Act, enforced by the EPA, deems these SSOs unlawful. Communities are required to eliminate any SSOs from the system or the EPA will force the community to correct the problem in a short time frame and impose very large penalties and fines.

## **SECTION B:**

In XX Township/Borough, the sewage collection system is called a combined sewer system designed to carry both stormwater and wastewater. Prior to the 1950s, the region did not have regional sewage collection and treatment, and these pipes discharged directly to the creeks and rivers.

When the region's sewage treatment plant was constructed in the 1950s before the Clean Water Act became law, structures called combined sewer overflows (CSOs) were built into the sewer collection systems. Now during periods of peak flow, such as during a rainstorm, the additional sewage and stormwater in the system overflow from these structures into area waterways before reaching the treatment plant. The problem has worsened over the years because the sewer systems were built primarily with terra cotta pipes, which have cracked and deteriorated allowing additional stormwater to infiltrate the system.

The Clean Water Act, enforced by the EPA, indicates that CSOs must be significantly reduced over the next decade. Communities are required to reduce CSOs in the system from 50-60 annually down to 4-5 per year or the EPA will force the community to correct the problem in a very short time frame and may impose very large penalties and fines for noncompliance.

## **BACK TO GENERAL STORY**

All 83 communities in the ALCOSAN service area face the similar task of addressing the sewage overflow problem. To help address the problem, ALCOSAN, which serves 879,000 people, is embarking on a \$1 billion expansion of its treatment plant capacity and rehabilitation of its interceptor system, the pipes that connect the 83 municipal collection systems to the treatment plant. However the municipalities still face a potential price tag of \$2 billion in order to comply with federal regulations.

“We can't ignore the fact that correcting the wet weather sewage overflow problem will cost a great deal of money over the next decade,” said John Schombert, executive director of the 3 Rivers Wet Weather Demonstration Program (3RWWDP), a non-profit organization created specifically to assist ALCOSAN communities in complying with the Clean Water Act. 3 Rivers Wet Weather has been awarded federal funds to help support municipal sewer demonstration projects, but communities still must provide 45 percent of the project cost.

The most cost-effective approach to sewer rehabilitation is on a multi-municipal basis, noted Schombert. That's why earlier this year (2001), the organization created basin groups of elected officials from communities sharing the same watershed and/or sewershed. XX Borough/Township is a member of the Eastern Communities Basin Group. The borough/township representatives who serve on the basin group are: XXXXXX and XXXXXXXX.

The Eastern Communities Basin Group meets monthly to learn more about sewage overflow issues, share information and explore collaborative, regional approaches to sewage rehabilitation that are more efficient and cost-effective.

“Our goal, as a group of elected officials environmental organizations and COGs, is to find the best way to tackle this problem together,” said Pat Schaefer, chair of the Eastern Communities Basin Group. “Although it’s likely in the near future that sewage rates will increase for all ratepayers in ALCOSAN municipalities, as leaders, we are seeking the best possible solution for the least cost to the families in our communities.”