

**CITY OF WARREN  
WATER POLLUTION CONTROL  
STORM WATER PUBLIC EDUCATION PROGRAM**

The City of Warren has recognized the need and importance of taking a proactive approach toward storm Water management. To accomplish this, the Water Pollution Control Department (WPC) developed a comprehensive Storm Water management program to address water quantity (flooding) and improving water quality, as well as revenue generation needs of the City. This comprehensive program was submitted to the EPA as the City's Stormwater Phase II Management Program in March of 2003.

**What did the WPC Department do in 2007 to manage stormwater?**

- 16,713 linear feet of storm sewer was flushed.
- 146 inlet tops cleaned
- 455 storm inlets were cleaned out.
- 64 storm inlets were rebuilt or installed.
- 10,879 linear feet of ditchline was excavated.
- 1522 linear feet of storm pipe installed.
- 128 dye tests were performed.

**What has WPC done to begin to eliminate illicit connections?**

In 2003 storm water discharges into the Mahoning River were mapped. Storm sewer lines that are tributary to these points will be mapped to enable WPC to trace and locate any illicit discharges that are detected within the storm sewers or river.

**What is the correlation between storm water and basement?**

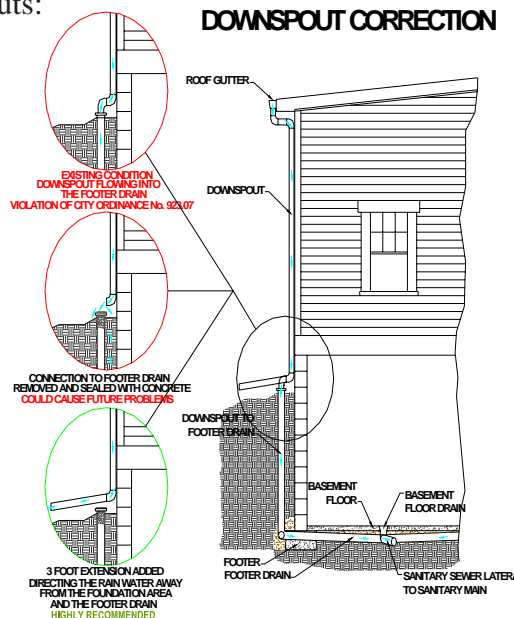
There are two major ways that storm water can find its way into your basement. Storm water can find its way into the sanitary sewer and then into your basement and also through your basement wall.

**Sanitary Sewer Backup:**

During rain events, storm water can find its way into the sanitary sewer through cracks in the pipe and manholes and from homeowners' footer drains and illegally connected storm drains and downspouts (*this is called Infiltration & Inflow, or I & I*). This can create conditions where the sanitary main surcharges, or exceeds the capacity of the main, and sewage begins to backup into basements through floor drains. **Call WPC 24 hours a day at 330-841-2591** to report sewage backup.

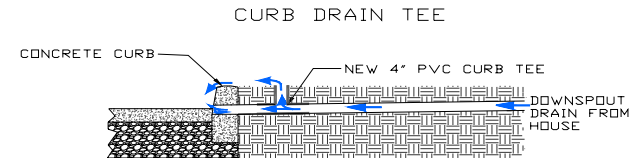
**Leaky Walls:**

Some homeowners get water in their basement through the wall and floor. This can occur when downspouts are not directed away from the house or the ground is not properly sloped away from the house. Downspouts that connect to the sanitary lateral are illegal and need to be properly redirected into a storm sewer or into the yard. Either way, improperly constructed downspouts discharge water into the footer drains, which in the city often discharge into the sanitary sewer. The following diagram details corrective measures for downspouts:



**Does your downspout have a line that discharges to the road? When is the last time you checked this line?**

Many homes in the city have a downspout line that discharges through the back of the curb and into the street. Over time, this line can become clogged and rain water will backup along the foundation and into the footer drain. It is recommended that this line be periodically cleaned. This can be accomplished by contracting to have this line snaked or cleaned with high pressure water. Also, some streets have asphalt that covers part of the curb opening, preventing water from reaching the street. The following is a detailed correction for this situation:



This modification to the downspout leader, along with regular maintenance, will enable water to get to the road and not back up along the foundation.

**What programs are going to be implemented to manage stormwater and decrease sewer backup into basements?**

- 1) WPC will continue the *Downspout Inspection Program* throughout the city this year to ensure that gutters and downspouts are properly discharging.
- 2) Curb Drain Markers will continue to be installed on all storm inlets this year. These markers will remind residents to not dump pollutants into the city's storm sewer.
- 3) *Sanitary Sewer Drainage Studies* will continue this year. These studies will pinpoint sources of in flow and Infiltration into the sanitary sewer (I & I) system.

## What can I do to HELP?

The following are things that residents can do to help stormwater get into the stormwater system and increase the quality of stormwater discharging to the Mahoning River.

- **Residents should rake leaves, grass clippings, and yard waste to prevent debris from clogging storm inlets.**
- Do not discard household or hazardous waste into storm inlets, for example: paint, oils, non-biodegradable cleaners, etc.
- Keep ditches and yard drains clear of debris. Call WPC if drive culverts or street inlets need cleaned.

For further information or to report illegal dumping into the sewers, contact the following WPC staff:

Greg Lubert at 330-841-2591, ext. 111

or

Gary Shaffer, P.E. at 330-841-2591, ext. 115

Properly dispose of household hazardous waste and other household trash and debris. Please contact the following agencies with any questions regarding disposal of any such waste:

City of Warren Environmental Services  
613 Main Ave. SW, Warren  
330-841-2561

Geauga-Trumbull Solid Waste Management  
5138 Enterprise Blvd., Northwest Business Park,  
Warren  
1-800-707-2673



City Hall  
391 Mahoning Ave. N.W.  
Warren, Ohio 44481

Honorable Michael J. O'Brien, Mayor

William D. Franklin, Director of Service-Safety



City of Warren  
Water Pollution Control

2323 Main Street  
Warren, Ohio 44481  
330-841-2591

Thomas A. Angelo, Director

### **OTHER BROCHURES AVAILABLE:**

DOWNSPOUT INSPECTION PROGRAM

MANAGING HOUSEHOLD HAZARDOUS  
WASTE, Including Pesticides, Herbicides &  
Fertilizers

ILLICIT DISCHARGE & DETECTION  
PROGRAM

## CITY OF WARREN WATER POLLUTION CONTROL

### STORM SEWER PROGRAMS BROCHURE



DEBRIS FROM INLET ON ADELAIDE S.E.



INLET BLOCKED WITH LAWN WASTE

As part of the City of Warren's:

### STORMWATER PHASE II MANAGEMENT PROGRAM