

**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 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 is the correlation between downspouts and basement flooding?

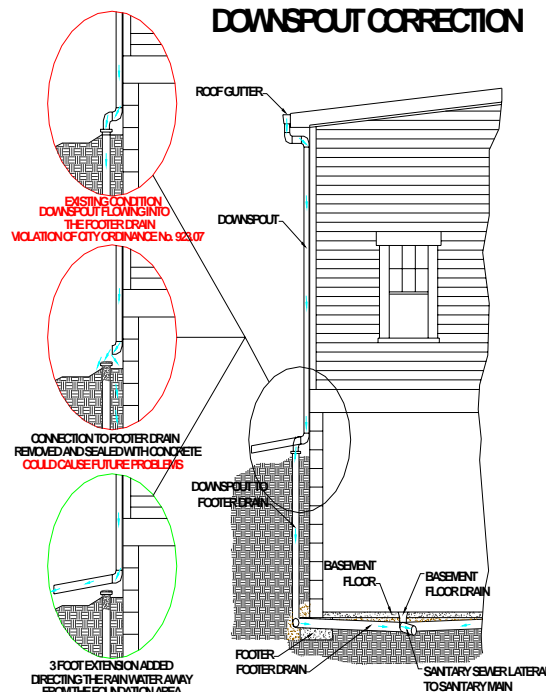
Water from downspouts can enter the sanitary sewer system by either being directly connected to the sanitary sewer lateral or by an improperly constructed downspout discharge.

What can be done to correct these problems?

A downspout which is connected directly to the sanitary sewer lateral is **illegal** and must be corrected. It only takes a few houses with an illegal connection to overload the sanitary sewer. Downspouts which discharge *into the ground* must be checked to ensure that they are not discharging into the sanitary sewer. If they are, they must be pulled out and properly discharged away from the house and the old line into the ground must be plugged with concrete (see Downspout Correction illustration).

Downspouts which **do not** properly discharge away from the house can also be a problem and can also overload the sanitary sewer system. Downspouts must discharge a minimum of 3 feet from the house and must discharge to an area that slopes away from the house. Most houses in the City of Warren have

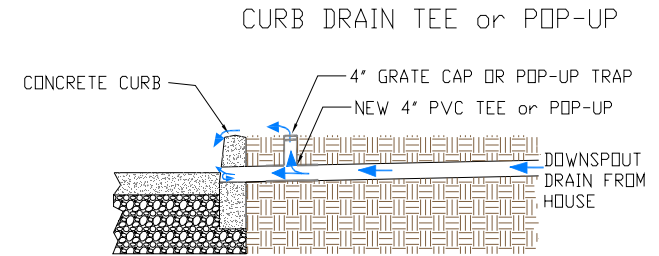
a backfill zone which extends 2 to 3 feet from the house. If water from the downspouts discharges within this zone, the water will find its way into the footer drains which discharge into the sanitary sewer. Homeowners should also make sure that the ground around the house does not have any depressions and that it properly slopes away from the house.



What if my downspouts discharge to the curb in the street?

A lot of houses within the City have downspout lines that discharge to knock-outs in the curb. These lines often become blocked and require maintenance. Homeowners with downspout lines to the road should check to make sure this line is clear. If this line becomes plugged, water can back up along the foundation and get into the sanitary lateral. If a downspout line to the road has never been flushed, it is recommended that the homeowner contract with

a private company to have the line cleaned. In some instances, the curb knock-out has been partially covered at the road by layers of asphalt. A tee or pop-up as shown in the following illustration can be a simple solution to this problem.



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 is the City doing to alleviate basement flooding due to poorly functioning gutters & downspouts?

WPC has implemented the Downspout Inspection Program, in which structures are inspected to ensure that gutters and downspouts are functioning and properly discharging away from the structure. Through this program, notices outlining necessary repairs are issued to property owners. This program began late summer 2004 and has been completed in the following areas: Palmyra Hts. SW, Highland Ave. SW, Bonnie Brae NE, Hollywood NE, Idylwild NE, Atlantic NW, Forest NW, Belmont NW, and Hall Ave. NW. **WPC may be contacted during normal working hours** in order to work with residents on solutions to any drainage issues by calling 330-841-2591.

Please call **WPC at 330-841-2591 24-hours a day** to report Basement Backups or Street Flooding.

What can I do to HELP?

The following are things that residents can do to help keep stormwater from downspouts getting into the sanitary sewer system:

- Slope ground away from house foundation.
- Keep gutters free of leaves and debris to prevent gutters from overflowing along the foundation.
- Extend downspouts at least 3 feet away from foundation.
- If your downspouts run to the street, make sure the downspout line is working properly and is not blocked at the street.

For further information or to schedule a site visit by the WPC staff please contact the following:

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

or

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

IMPROPER DOWNSPOUT



City Hall
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Honorable Michael J. O'Brien, Mayor

William D. Franklin, Director of Service-Safety



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Water Pollution Control

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Warren, Ohio 44481
330-841-2591

Thomas A. Angelo, Director

PROPER DOWNSPOUT



Spring 2008

CITY OF WARREN WATER POLLUTION CONTROL

DOWNSPOUT INSPECTION PROGRAM

**FOR PROPER
DOWNSPOUT INSTALLATION
& MAINTENANCE**

As part of the City of Warren's:

**STORMWATER PHASE II
MANAGEMENT PROGRAM**