

# STORMWATER COALITION

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Information provided by the Stormwater Coalition, a committee of the Toledo Metropolitan Area Council of Governments (TMACOG)

The Stormwater Coalition is a committee of the Toledo Metropolitan Area Council of Governments (419.241.9155). The coalition is composed of the following members:

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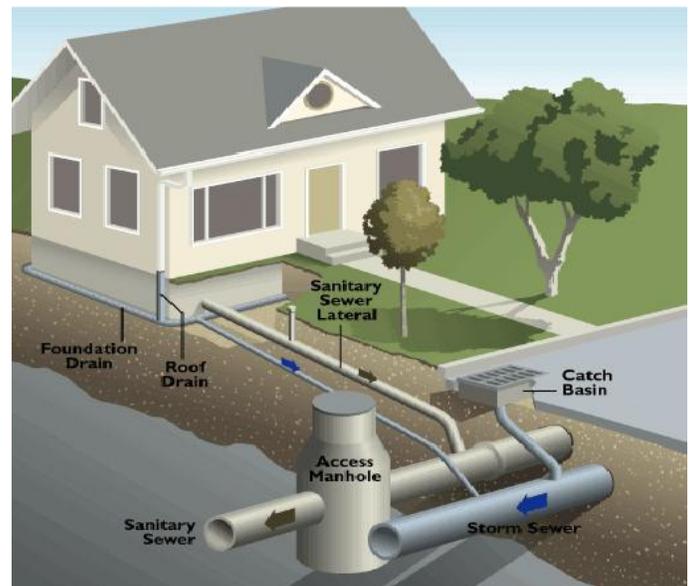
## Flooding FAQs Provided by TMACOG's Stormwater Coalition

**Q** Sewer water is backing up into my basement floor drain. What should I do?

**A** Cut the electric to your water heater and furnace and put your washer and dryer up on cement blocks. Move valuables to higher ground. Let the water drain down on its own or attempt to keep rising water at bay with a sump pump. Scrub and hose everything down as soon as the water drains and run a dehumidifier for several days. A wet/dry vacuum may help to remove some water. Disinfect items that were exposed to water. Because floor drain flood water can appear relatively clear, homeowners often believe that they are only dealing with rain water. It is important that homeowners realize that the flooding is a mix of rain water and raw sewage and take proper precautions to avoid spread of diseases associated with human waste. The City of Toledo provides a useful guidance document: [http://toledo.oh.gov/media/181741/1\\_basement-flooding-guide.pdf](http://toledo.oh.gov/media/181741/1_basement-flooding-guide.pdf)

**Q** What does the sanitary and storm drainage system for my house and neighborhood look like?

**A** The illustration to the right shows the general layout of separate stormwater and sanitary sewer system in a typical residential neighborhood. Sanitary sewers convey wastewater from toilets, sinks, and other indoor drains including basement floor drains through the sanitary sewer system to the wastewater treatment plant. They are not designed to manage rain water. Storm systems are separate from sanitary sewers and manage rainwater runoff.



**Q** If storm sewers convey only rainwater, why do sanitary sewers backup into basements when it rains?

**A** Any flow of rainwater into the sanitary system can exceed the capacity of the sanitary sewer network, causing it to back up into neighboring homes. During intense rain events rainwater can enter into the sewer system through leaks, illegally connected or failing sump pumps, or by illegal removal of sanitary manhole covers. Any rainwater leaking into basements through walls and window wells is also sent to the sanitary system via basement drains and also contributes a sanitary system overload. However, basement backups during dry weather are usually caused by a problem with the sanitary system. A private sewer lateral can be obstructed by roots, grease or other blockage (e.g. diapers, so-called "flushable wipes", etc) and water cannot leave the

house. Backups can also occur if the public sewer is clogged or collapsed affecting homes upstream.

**Q** How can I prevent sanitary water from backing up into my home during intense rain events?

**A** There are many steps you can take to prevent basement backups and minimize damage from basement flooding including backwater check valves and other devices. See this guide prepared by the City of Toledo Department of Public Utilities. [http://toledo.oh.gov/media/181742/2\\_steps-you-can-take.pdf](http://toledo.oh.gov/media/181742/2_steps-you-can-take.pdf). Check with your local department of public utilities to ensure that these devices are permitted in your community.

**Q** Why do I see water ponding in my streets/parking lot?

**A** During heavy rains storm sewer systems may exceed their capacity to drain water. Some streets and parking lots are designed to temporarily hold excess water during large rain events. This prevents large surges of water from overwhelming the stormsewer system. Streets are also designed move flood water in the event that the storm sewers cannot manage all of the water.

Storm drains can also become clogged with leaves and debris, causing street flooding even during small rain events. Use a rake to safely remove obstructions from the surface and properly dispose of debris. Never attempt to remove an object from inside the drain. Call your City's sewer and drainage department to alert them to the maintenance issue.

**Q** How much rain can a storm sewer typically handle?

**A** Storm sewers are designed according to specific standards to effectively drain rain water from most typical rain events. However, because the intensity and duration of rain events varies over the season, the storm systems cannot manage all runoff from every event. In cases where the designed capacity of the storm sewer is exceeded, water may begin to back up onto streets and parking lots until the system drains down.

**Q** Can I remove a sanitary manhole cover to allow my flooded street or yard to drain down faster?

**A** No. Sanitary systems are not designed to manage the large quantity of water generated by a rain event. This will cause sanitary backups in neighboring homes.

**Q** How can I manage stormwater on my property?

**A** Grading and landscape changes that direct rainwater away from your basement and into specially designed ponding areas or rain gardens can alleviate pressure on the storm sewer system and reduce foundation flooding. You can also capture some roof runoff in a rain barrel or cistern connected to your downspouts. See the Rain Garden Initiative website for resources and guidance <http://www.raingardeninitiative.org/>.

Downspouts that tie into the underground storm sewer system do not allow roof runoff to naturally infiltrate back into your soils. They also overwhelm the storm sewer system and contribute street and yard flooding during heavy rains. Disconnecting downspouts from the sewer system so that they direct flow over your yard will help keep your landscaping watered and prevents many flooding issues. See the City of Toledo's website for more guidance on managing stormwater on your property [http://toledo.oh.gov/media/181749/9\\_residential-stormwater-management.pdf](http://toledo.oh.gov/media/181749/9_residential-stormwater-management.pdf)