



Monroe Metropolitan  
Wastewater System

# Footing Drain Disconnection Program

The Monroe Metropolitan Wastewater System (MMWS) offers a program to complete work and or financial subsidy for customers for:

- Disconnection of footing drains that are connected to the sanitary sewer system
- And optionally, install a backwater valve on the plumbing system of existing homes.

For further information about this program and how to apply, refer to the enclosed information.

Currently, many customers within in the designated areas of the MMWS Corrective Action Plan (CAP) or MMWS customers outside of CAP areas have underground footing drains in their residence used to collect excess groundwater and rainwater (known as inflow / infiltration or I&I). Footing drains are not visible from the surface, but are very important in the prevention of basement and crawl space flooding.

Many residences' footing drains are connected into the structures' sanitary sewer lead which then discharges into the MMWS. During heavy rain storms additional I&I captured by the footing drains may overwhelm the MMWS; causing sewage to back up into residents' basements and potentially overflow out of various locations into the River Raisin and Lake Erie. In affected homes, the installation of a sump pump and a new discharge outlet can properly remove the excess I&I captured by footing drains to a storm water system, onsite subsurface drainage system (French Drain), ditch, or other appropriate area.

Annually improvements to the MMWS are completed to reduce and remove I&I from the system's underground pipes and manholes. However, these improvements alone cannot completely reduce I&I that gets into the MMWS. With increasingly intense, frequent, and severe weather events, it is essential that customers take appropriate actions to protect themselves while reducing I&I from getting into the MMWS from their own property.

## **WHAT IS THE SUBSIDY?**

### **Footing Drain Disconnection Program**

The MMWS has approved a Footing Drain Disconnection (FDD) program. The FDD program includes the MMWS to perform a FDD at your property to disconnect footing drains from the system. The MMWS will fund 100% of the cost using their contractors to perform the FDD with available budget and schedule. The MMWS also approves the installation of a Backwater Valve (BV) as an option along with the FDD Program. The BV device can be installed on a location's existing internal\* or external\* plumbing system along with the FDD. Installation of a BV requires that a FDD must have already been completed, funding for BV only will be completed based on available budget and schedule.

Designated CAP areas will receive priority funding consideration based on MMWS CAP work done, however locations outside of CAP areas will also be eligible for the 100% funding based on available budget and schedule. Approval of a location must include an application to be submitted first to verify the location qualifies for the program and that adequate funding and schedule are available. The program is on a first-come, first-served basis, with priority given to CAP locations. For approved locations in which budget and schedule are not available, they will be put on a waiting list to be completed when funds become available. Program funds may be used for removal of prohibited I&I connections found tapped into the MMWS.

\*Note, applicable permits are required to complete the work from each respective jurisdictions to complete the work, final approvals are required for each location. Internal or external backwater valve devices are subject to approval of the jurisdiction's Building Department, a Plumbing Code waiver may be required for this work. Milestone inspections are required including but not limited to: verification of footing drain connection to the MMWS, documentation of FDD, discharge connection, final inspections.

**The FDD Program does NOT cover the following:**

- Replacement of a sump pump and or backwater valve when footing drains have already been separated from the MMWS.
- Work performed prior to September 15, 2023.

Disputes with respect to qualifying work will be resolved by the Director of Wastewater or their designee.

**WHO IS ELIGIBLE FOR THIS PROGRAM?**

This program is available to all customers / homeowners within the MMWS. Customers with delinquent accounts may not be eligible for the program.

**WHAT IS THE APPLICATION PROCESS?**

1. APPLICATION  
Complete the Online Footing Drain Disconnection Program Form.
2. APPLICATION REVIEW  
Your application will be screened initially to determine if:
  - a. The location requesting to be part of the program / subsidy is a customer of the MMWS, located within a CAP area or outside of a CAP area.
  - b. There are no delinquent account balances with the MMWS.
3. CONTACT / SITE VISIT  
Provided the aforementioned conditions 1 & 2 are met, a MMWS representative and / or contractor will contact you to schedule a site visit. The site visit will:
  - Survey the storm / clear water routing to determine if your footing drains are connected to the sanitary sewer system for eligibility under this program.
  - Suggest other storm / clear water routing mitigation opportunities.

If your site is eligible work under the program, all owners of the property will be required to sign the Acknowledgement Responsibility and Liability Waiver. Refer to Section C of the Application.

**Please Note:**

- The program for eligible work locations are subject to available funding, schedule, and provided on a first-come, first served basis. Waiting lists will be maintained.
- The program is provided on a one-time only basis for each eligible installation, per property, and on a no-fault basis.
- The subsidy is available only to existing homes that have footing drains connected to the MMWS, not homes in the planning stages or currently under construction.
- The property must be in compliance with the Sewer Use Ordinance (or owner is in the process of correcting sewer use violation as part of the program), in order to qualify for the FDD program.

4. WORK PERFORMED

The MMWS will be using contractors to perform the FDD work for eligible sites. The contractor will be required to complete all MMWS required pre and post FDD work, coordinate access, inspections, verifications, and work through all permit requirements until finalized. Site restoration will be completed with the contractor's work or by the MMWS. The MMWS contractor will provide a one-year warranty for the work performed.

REMIT REQUIRED PAPERWORK TO:

Monroe Metropolitan Wastewater Treatment Plant  
2205 East Front Street  
Monroe, MI 48161  
RE: Footing Drain Disconnection Program

OR EMAIL TO: [wastewater@monroemi.gov](mailto:wastewater@monroemi.gov)

# Homeowner Mitigation Measures Guide

## **The following items should be connected to the storm sewer:**

1. Foundation drain – Perforated pipe along the foundation designed to keep water out of the basement
2. Sump Pump – The foundation drain of some homes is connected to the sump pump, which pumps water from the foundation to the higher elevation of the storm connection to provide drainage for the basement.
3. Downspout Leader – A shallow pipe that is plumbed around the exterior of the house, in which all the downspouts are connected to as well as the sump pump.
4. Storm Connection – The pipe that is plumbed from the house to the storm main or French drain that collects the downspout leader and miscellaneous yard drains.

## **The following items should be connected to the sanitary sewer:**

1. Sinks
2. Washing Machine
3. Showers
4. Toilets
5. Grinder Pumps – Waste water facilities in the basement that are pumped up to the sanitary sewer lead.

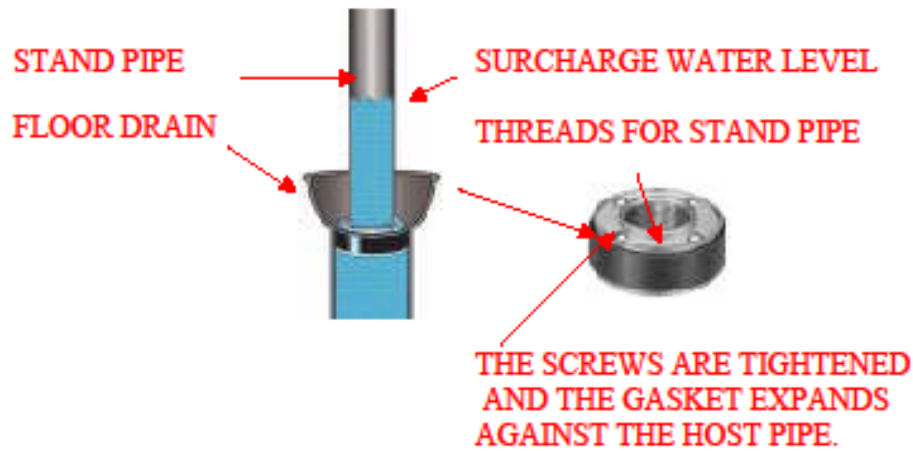
Houses without sump pumps on gravity connections are similar but have a deeper storm lateral which can drain the foundation by gravity. Please note that the downspouts should be connected to the storm connection and not splash blocked.

## **Protecting a House from Sanitary Sewer Back-up**

There are two techniques used in protecting the home. The first approach is to allow the water to back-up through the connection and contain the water as it seeks the surcharge elevation without covering the entire basement floor. A standpipe accomplishes this task. The key to this protection is elevation not volume. So it is not necessary to have the volume of water flooded in the basement equal the contained volume. It is NOT a good idea to plug the floor drain when the sewer surcharges. If the drain is plugged, pressure in the piping under the floor may build up sufficiently to break the pipe and heave the basement floor. Also since the floor drain is blocked, any water in the basement from a pipe break will not drain out. The modification to the drain will need to be temporarily removed to drain this nuisance water.

The second approach is to block the path of water at the sanitary connection with a backwater valve installed in the front yard or at the basement wall.

**Standpipe** – Standpipes are lengths of pipe open at the top and screwed into an expandable rubber gasketed escutcheon within the floor drain. The height of the standpipe should be higher than the deepest flooding elevation experienced within the basement. It will hold the sanitary surcharge until it recedes. Standpipes are generally inexpensive, easy to install and help relieve pressure caused by backups. However, using standpipes very tall or capping a standpipe may rupture sewer pipe joints under the basement floor. Also, the protruding pipes may be a trip hazard and basement floor drains cannot be used until standpipes are removed. Special fittings may need to be used to connect a condensate drain to a standpipe. If floor cracks are prevalent, water may seep through the floor where a sump pump may be required.



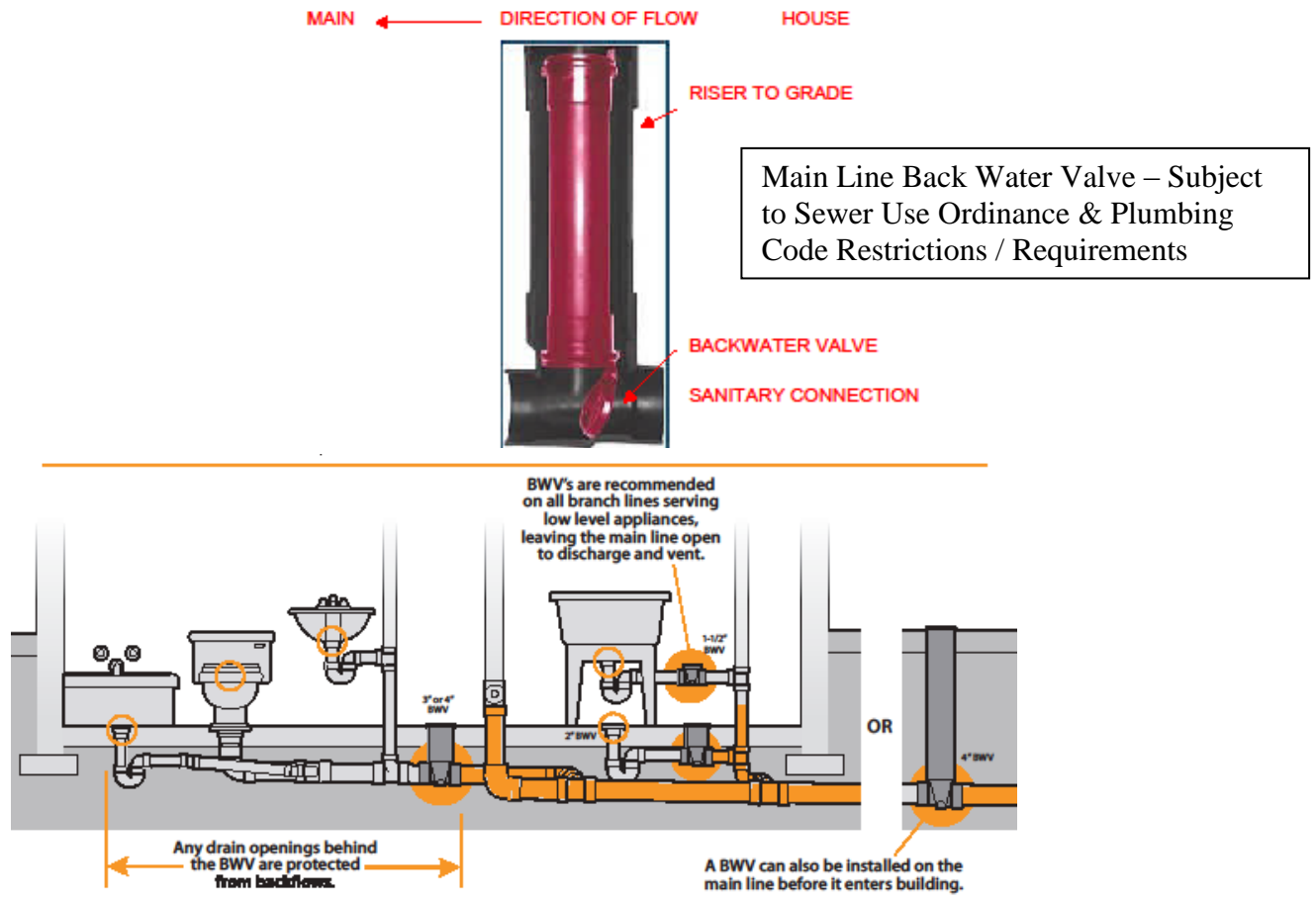
**Back Water Valve** – A backwater valve is a device that prevents sewage from backing up into your basement. A valve will automatically prevent water from the sanitary sewer from coming back into your home’s plumbing system, but need occasional maintenance. A properly installed backwater valve must be placed so that sewage backup will be stopped and not come out through plumbing fixtures or the floor drain in your basement. A licensed professional or plumber can look at your system and recommend the appropriate installation. If you are going to install a backwater valve, a licensed professional or plumbing contractor must install it properly and a plumbing permit will likely be required. These valves also require periodic inspection and maintenance to remove debris and reduce the risk of failure. Valves installed in sewer lines sometimes become clogged with debris and fail to close completely. When this happens, the valve will slow down the flow of sewage but will not stop it completely. Ask a licensed professional or plumbing contractor how to properly inspect and maintain the backwater valve that is installed for your home.

It is important to note that a backwater valve is designed to be closed during sewer surcharge conditions to keep water from the sanitary sewer system from flowing into your home. When the backwater valve closes, water from the inside of your home also drains out. **When there is a risk of sewer surcharge, such as during a heavy rain storm, you should avoid using the toilet, sink, shower, washer, dishwasher or any other appliance that releases water to the sanitary sewer system.** The water will not be able to get past your backflow prevention device(s) and will have nowhere to go except back into your home. This is referred to as “self-flooding” as the basement will be flooded with wastewater that originated within your home.

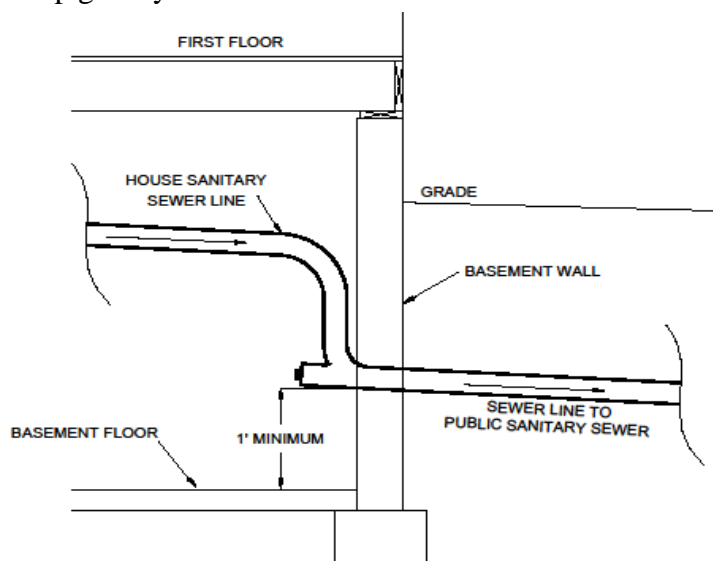
Regardless of whether or not you install a backwater valve, if ground or rain water from your property still enters the sanitary sewer system you are increasing the risk that your property and the properties around you may flood. If you redirect drainage from your property to the storm sewer system, you will reduce the risk of flooding for yourself and for your neighbors.



Back Water Valve for Fixtures – Subject to Sewer Use Ordinance & Plumbing Code Restrictions / Requirements



A **permanent approach** is to retrofit the existing plumbing to meet the current Sewer Use Ordinance which does not allow gravity sewer service from the basements. This task is done by physically terminating the sanitary sewer pipe (below the basement floor) at the interior basement wall before it leaves your home. Then connecting all sanitary sewer plumbing from the floors above via a new sanitary sewer pipe through the basement wall at least 1 foot above the basement floor. Lastly, route and connect the new sewer pipe to the existing sanitary sewer lead on the outside of the home. This will stop sewer surcharges from entering the home, but will also stop gravity sewer service from the basement.



**SEWER USE ORDINANCE 570-98  
NO BASEMENT GRAVITY SEWER SERVICE**