



Helping you protect your home during heavy rains.



Manage water where it falls.

- ☐ A homeowner's guide to help evaluate your home, inside and out. Use our checklist to be sure your home is rain-ready.





Help keep water out of your home, reduce water pollution and save money.

Protecting your home and family from heavy rain starts with a home audit, inside and out. **rain check** can help you identify and correct potential problems that could lead to water damage and more.

By managing water where it falls, we all can help reduce the risk of basement backups and water pollution.



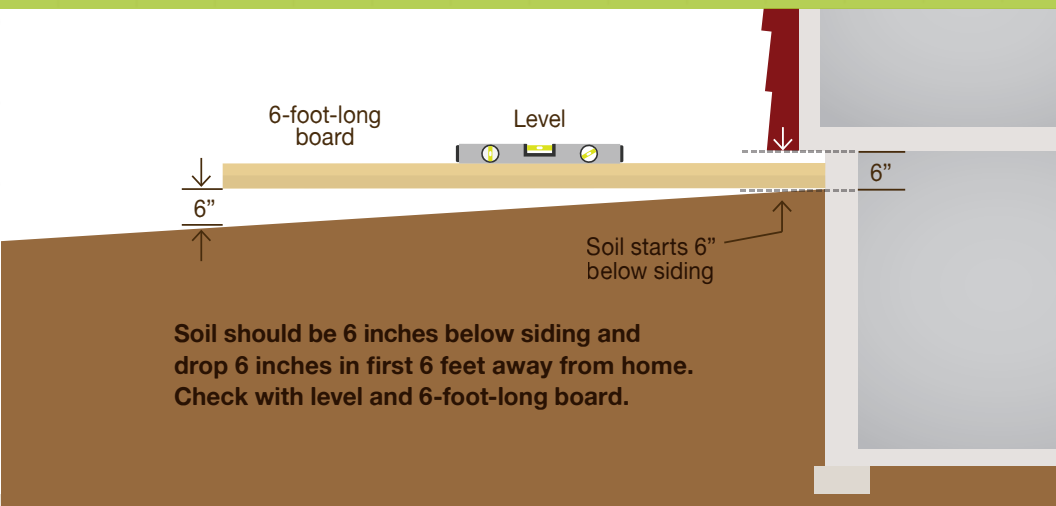


Things To Do **OUTSIDE** Your Home

Want to know what areas of your home's exterior might pose a problem during heavy storms? The items below are things you should check to make sure they're working properly when it rains. Consider adding the items mentioned on the list if you don't already have them.

CHECKLIST		Properly Grade Soil Around Your Home
		Check Your Basement Windows for Leaks
		Clean Gutters and Properly Direct Downspouts
		Install a Rain Garden
		Grow a Lush Lawn
		Install a Rain Barrel
		Plant More Trees

OUTSIDE Your Home



Properly Grade Soil Around Your Home

To reduce the risk of water pooling and seeping into your basement, make sure that soil and concrete are sloped away from the foundation. To check slope, place one end of a 6-foot-long board on the soil directly next to your foundation wall with the other end pointing away from the home. Place a level on top of the board. Lift the end of the board until the bubble on the level is centered. If the soil is pitched properly, there should be a 6 inch drop from the far end of the board and the ground.

Check for cracks in concrete and pavement near the house and fill with sealer where necessary.

Notes

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Check Your Basement Windows For Leaks

Soil pitched towards your basement windows can often lead to water leaking into your basement. Check for a shifting of your foundation, and rotted wood, poor caulking, or cracks that develop around the frame of your windows.

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Clean Gutters & Properly Direct Downspouts

Make sure your gutters and downspouts are clean (no clogs), not broken, bent, separated, or hanging loose. Go a step further and disconnect your downspouts from your foundation if possible. This will reduce the risk of basement backups by keeping water from your roof top out of your sewer. Be sure to run the line of your downspout 6 ft. to 10 ft. away from your foundation onto your lawn, into a rain garden or consider a rain barrel.

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Install a Rain Garden

Install a rain garden to help absorb water from your downspouts & sump pump. A rain garden is a great way to help capture and infiltrate stormwater into the ground. You can direct disconnected downspouts, sump pump discharge or driveway runoff to a rain garden, keeping water away from your home. Rain gardens also provide a great habitat for birds, butterflies, and bees with their beautiful blooms. Visit the Freshcoast740 section at www.mmsd.com for instructions on creating a rain garden.

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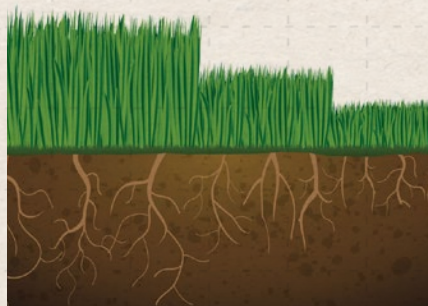


Grow a Lush Lawn

Maintain a Healthy, Beautiful Lawn That Also Acts Like a Sponge

There are 5 simple steps you can take to make the neighbors jealous of your lawn, and also helps absorb more water into the ground naturally.

Cut Your Grass High. Proper mowing height creates a low-maintenance, drought tolerant lawn. During the summer mow at the highest setting on your mower (never cut away more than one-third of your lawn's height in one cutting). Lush lawns build a healthier root system that chokes out weeds, holds moisture, and keeps the soil cool.



Fertilize Properly. Your lawn needs to eat as well. The use of a slow release fertilizer, like Milorganite, naturally feeds your lawn and is healthier for the environment. We recommend three feedings, but if you only fertilize once a year, choose fall. A fall feeding promotes strong roots going into winter, and your lawn will be better prepared to green up quickly in the spring.

Aerate Your Lawn Once a Year. Air is essential in creating a healthy root system. Aeration helps alleviate soil compaction and encourages the uptake of nutrients. Aeration is best done in the fall.

OUTSIDE Your Home



Add Soil Amendments. Adding a light layer of compost, peat or top soil (also called top dressing) increases organic matter and improves overall soil health. This will improve the health of your turf and increase its water holding capacity. Amending your soil is best done after aeration.

Over Seed. Have a thin lawn? Thicken it up by over seeding. It's an easy way to fill in spots that weeds would otherwise take over. Just gently remove dead grass, add some topsoil, fill in any holes with grass seed (add some Milorganite fertilizer), gently rake the seed into the soil, and water.

For more details on the 5 simple steps, see our lawn care pamphlet in the Freshcoast740 section at www.mmsd.com and www.milorganite.com.

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Install a Rain Barrel

Hook up a rain barrel to your downspout. A rain barrel is simply a container used to capture large quantities of water from your downspout and is a great way to help manage water where it falls. Rain barrels provide FREE water for your gardens and plants love natural rainwater. Our rain barrels can capture 52 gallons of rainwater each time it rains. They are easy to install and maintain. Visit the Freshcoast740 section at www.mmsd.com for instructions on installing a rain barrel.

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Plant More Trees

Tired of a yard dominated by lawn? Consider adding trees and native landscaping. Trees and native plantings improves groundwater discharge and promotes healthier living and air quality. This is particularly important in our urban landscapes. Visit the Freshcoast740 section at www.mmsd.com for more information on how trees and native plantings can improve the environment.

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Things To Do **INSIDE** Your Home

Look for signs of wet basement problems. An initial inspection of your basement may indicate issues that need to be addressed by professionals (plumber or foundation repair specialist). The following are items that should be inspected for proper working conditions, consider as a best practice, or add as a useful tool to help keep unwanted water out of your basement.

CHECKLIST		Check for Foundation Cracks
		Install a Sump Pump
		Install a Backflow Preventer
		Have Your Lateral Inspected
		Elevate Items Stored in Your Basement



Check for Foundation Cracks

Cracks can form in the foundation of your home from normal wear over time, after enduring many storms and ground shifts. When groundwater levels rise above the basement, gravity will pull the water down helping it to find cracks in the foundation to seep through and lead to a wet basement. It is smart to stay on top of this issue by frequently walking around your basement and checking the floor and walls for cracks. Be sure to seal any cracks that you find. The sooner you spot them, the more likely you are to prevent a large basement flooding issue.

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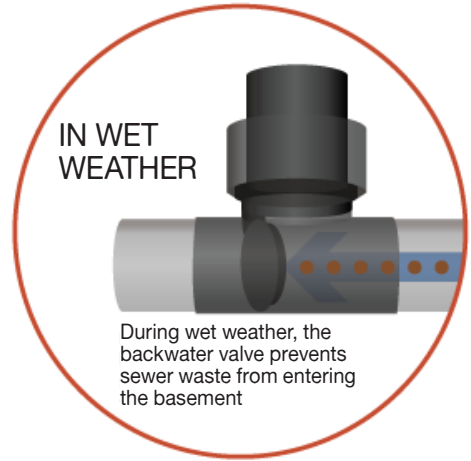
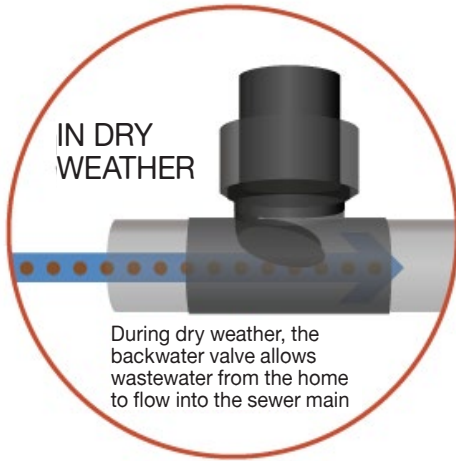
Install a Sump Pump

If you have water seeping into your basement walls or floors, and you don't have a sump pump, consider having one installed. It reduces basement flooding by pumping pooled water from the basement floor and the foundation drain, and pumps it outside or the storm sewer.

If you have a sump pump, ensure its proper operation by:

- ☐ Pouring a bucket of water into the crock occasionally to make sure the pump works properly.
- ☐ Installing a battery backup system in case the power goes out in your neighborhood.
- ☐ Making sure water from the pump drains outside at least 10 ft. away from your basement. It is illegal to drain sump pumps into floor drains or a sink in the basement.

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Install a Backflow Preventer

If basement backups are a regular occurrence for you and your neighbors, have a professional plumber evaluate to see if a backflow preventer is a solution for you. Think of it as a one-way swing door. Water can flow out, but it cannot flow back in.

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Have Your Lateral Inspected

If you have frequent sewer backups, or if your house was built before 1960, it's a good idea to have a Closed Circuit TV (CCTV) inspection of your sewer lateral. If your lateral is clogged or has looming problems, the plumber can point out the issue and discuss repair options. If you have work done on your lateral, ask for a post-work video.

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Elevate Items Stored in Your Basement

If your basement is prone to flooding, it's better to be safe than sorry. Elevate any important paperwork or keepsakes to avoid an unexpected loss due to flooding.

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Tips for WATER CONSERVATION

We have access to an abundance of water much of the time, so the importance of clean water is often overlooked. For most of us, water use is a habit. We are accustomed to having water available at the twist of a faucet. We usually do not think about how much water we use.

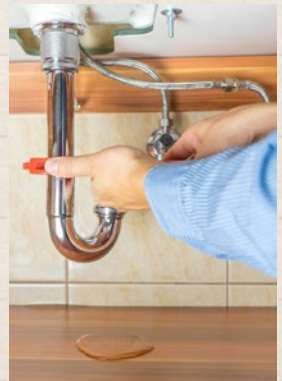
Reduce waste, load on sewer and water reclamation systems by making improvements in the home or by modifying behavior.

☐ Fix Leaks

A dripping faucet is more than annoying...it is expensive. Even small leaks can waste significant amounts of water. Hot water leaks are a waste of water and of the energy used to heat the water.

A faucet leaking 60 drops per minute will waste 192 gallons (726.8 liters) per month. That is equal to 2,304 gallons (8.7 m³) per year.

If you have a leaking faucet, stop pouring money down the drain and repair it.





☐ **Replace Older Toilets**

Leaks inside the toilet can waste up to 200 gallons of water a day. Toilet leaks can be detected by adding a few drops of food coloring to water in the toilet tank. If the colored water appears in the bowl, the toilet is leaking.

Older, less water efficient toilets should be replaced, saving thousands of gallons of water and money each year for an average family.

☐ **Install Low Flow Faucets and Shower Heads**

The U.S. EPA WaterSense program labels efficient faucets and aerators that use a maximum of 1.5 gallons (5.7 liters) per minute.



Look for the WaterSense label when selecting new faucets or aerators.

FINAL TIP

Use less water when the forecast calls for heavy rain. Doing so can help reduce the risk of basement backups and sewer overflows.





Manage Water Where it Falls

WITH GREEN INFRASTRUCTURE

- Help protect your home from water damage
- Reduce water pollution in Lake Michigan
- Decrease the risk of basement backups & sewer overflows



There are many things you can do at home, work, school, or church to help keep rain and melting snow from becoming a headache and pollution.

WE CAN HELP YOU

In order to reach Milwaukee Metropolitan Sewerage District's (MMSD) lofty goal of adding 740 million gallons of storage, the **Green Infrastructure Center of Excellence** is now open to help with your projects that manage water where it falls.

Services offered include:

- Green Infrastructure Design Services Through Tools, Preliminary Plans and Specifications
- Workshops
- Grant Funding Opportunities
- Grant Writing Support
- Training for Workforce Development and Certification
- Other Services and Advice, As Needed

**All Services Are
FREE and Open To
The Public!**

Green Infrastructure Center of Excellence

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Hours of Operation:

Monday-Thursday 9am-4pm
Friday Appointment Only



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