

Clear Water Disconnect Program

Introduction

The purpose of the Clear Water Disconnect Grant Program is to assist homeowners in complying with Section 50.026 of the Village Code, which prohibits certain types of clear water connections (such as downspouts and sump pumps) to sanitary and combined sewers. Grants will be offered to homeowners who have been notified by the Village to disconnect clear water sources from sanitary and combined sewers, residents wishing to make the disconnection due to historic flood events and residents obtaining a building permit for specific work further defined in this pamphlet.

If you should have any questions regarding this grant program, please call (630) 620-5740 or email publicworks@villageoflombard.org.

The Sewer System in a Nutshell

In many areas of town, the Village has separate systems to convey wastewater and storm water. Catch basins collect storm water from rainfall and snow melt from streets, yards and parking lots and then discharge it to local streams and rivers. Sanitary sewers collect wastewater from toilets, sinks, washing machines, etc and transport it to the wastewater treatment facility where it is treated. Rainwater and groundwater are considered clean water and do not need to be treated at the wastewater treatment facility.

How does this affect me?

A sump pump is an appliance in your basement that pumps ground water out from around your basement or crawlspace. Some homes have a sump pump and some do not. Often they are illegally connected to the sanitary sewer system when it should be directed to a garden, yard or storm sewer if available. In times past, it wasn't uncommon for homeowners to connect the sump pump to their plumbing in the basement or crawlspace, which is connected to the municipal sanitary sewer. The sump pump then captures rainwater that enters through the foundation of the home and pumps it into the sanitary system.

During severe storm events and heavy ground water saturation, excess clear water being pumped into the sewer can overwhelm the Village's sanitary systems and cause surcharging. Basically, surcharging occurs when the amount of flow trying to get through a pipe exceeds the maximum capacity of the pipe, thus building up pressure in the pipe. When pressure builds it seeks to relieve itself through any means possible, one of which is by backing up private sanitary services and filling basements and crawlspaces. You may not have basement flooding due to surcharged sewers, but if your sump pump or downspouts are connected to the sanitary sewer, it may well contribute to flooding in your neighbor's basement. Removal of illegal connections will significantly reduce the flow of extraneous storm-related water in the sanitary sewer system, thus reducing surcharging and sewer back-ups.

You may have heard the phrase "I and I" which stands for ***inflow and infiltration***. Inflow and infiltration are terms used to describe the ways extraneous water enters the sanitary sewer system. Infiltration occurs when groundwater seeps into the sewer pipes through cracks, leaky

joints or deteriorated manholes. Inflow occurs when water is directed from concentrated sources (sump pumps, perimeter drains and downspout drains) into the sanitary sewer. The clear water entering the sanitary sewer system creates two main problems: **First**, it consumes sewer system capacity. It is estimated that for every inch of rainfall the average house roof sheds about 650 to 1000 gallons of water. An 8-inch sanitary sewer can handle domestic wastewater flow from up to 200 homes, but only 8 sump pumps, operating at full capacity, or six homes with downspouts connected to the sewer, will overload this same 8-inch line. If extraneous clear water is directed into the sanitary sewer the capacity is overwhelmed, sewers back-up into houses, and the system will eventually overflow releasing raw sewage into the environment. This creates health and safety issues that could have significant costs associated with it. **Secondly**, extraneous clear water that reaches the waste water treatment plant requires treatment. The size of facilities and the cost of treatment is increased, it increases wear-and-tear of the equipment, and reduces equipment life span. The added cost of equipment upgrades and operations is then passed onto each customer through the sewer rate charged by the Village.

What can I do?

Find your sump pump. If the sump pump is connected to any other pipe in your home, it is most likely improperly connected. The drainage pipe from your sump pump should go from the pump directly outside your home at ground level. When a sump pump is re-plumbed to pump ground water to the yard or storm sewer, that water no longer takes up space in the sewer system. Before you disconnect make sure your sump pump is only draining clear water from your basement. Sump pumps used to drain a washing machine or sink drain should **NOT** be discharged into your yard or the storm sewer. Not only is it important to ensure the pumped water is draining properly away from your home, but once the sump pump is disconnected from the sanitary pipes, the pipes need to be properly sealed to prevent potentially dangerous sewer gases from escaping into your home. Disconnecting your own sump pump is possible if you are skilled at plumbing and electrical work. While it may appear relatively simple for the homeowner to perform the disconnection themselves, a licensed plumber will ensure the disconnection is done safely and done per the State of Illinois code.

What do I do with the water?

- The sump pipe could be run overland to a ditch or swale to drain to another location. Or it can discharge into a flexible tube that can be moved around the yard to avoid discharging in only one spot.
- Make sure you have positive drainage away from the house for sump pumps and downspouts. The sump pump can be run underground through a 4" or 6" diameter perforated PVC pipe, with holes at the bottom and backfilled with washed gravel. An overflow tube should be placed at the opposite end to allow the water to escape in the event that the volume of the pipe is exceeded. This pipe tube is located at a convenient area of the yard such as a garden.
- If available, route the sump pump to a Village **storm** sewer via a 1 ½ " or 2" pipe and tie into the back of an inlet or the crown of the mainline pipe by way of a core hole. No breaking out of the concrete pipe is allowed. Whether the homeowner or a hired contractor will be making the tap, a permit will be required with proper inspections made by Village staff.
- Sump pump pipes should discharge water at a maximum distance of 15' from the

foundation wall and must discharge on grass or a landscaped surface.

- If your sump pump discharges on the ground, place a splash pad below where the sump pump discharge pipe comes through the foundation wall to prevent recycling the water.
- Never turn off your sump pump. If you can, have a spare pump in the house, just in case.
- It is dangerous to drain sump water onto the sidewalk. The resulting algae and ice build-up create a slippery surface that can create a liability issue. However, when directing your discharge, remember that it also cannot be directed onto an adjacent property or Village property. If your sump pump drains to the Village right-of-way and creates an icing condition in the winter, you could be responsible for the costs associated with removal of the ice.
- Consider a backup battery system for your sump pump in case of power outages.

I applied for a permit for other work and was told I have to disconnect, why?

Per Village Board Policy 4.E property owners are required to disconnect under certain circumstances. The following applications would “trigger” the need to disconnect your sump pump:

- When a permit is issued by the Village for plumbing modifications within a structure.
- When a permit is issued by the Village for an addition to the primary structure in excess of 250 sq. feet where a foundation is poured or plumbing work is conducted under the permit.
- When a permit is issued by the Village for a tenant finish of a basement or sub-basement.

What will this cost me?

The maximum reimbursement from the Village for completed work is \$5,000.00 per property. (Reimbursement amount is determined by the type of work done.) The required permit for disconnecting a sump pump and installing a pit is approximately \$100.00 (if more work is required, the permit fee could be higher). A building permit is not required to disconnect downspouts. It is permissible to include the cost of the building permit in the total project cost when seeking reimbursement.

So how does the grant program work?

Following is a step-by-step of the process for disconnecting your clear water sources. If at any point in this process you have questions, please contact the Public Works Department at (630) 620-5740 or via email at publicworks@villageoflombard.org

1. Village does property inspection and notifies property owner of corrections needed.
2. Property owner applies for grant through the Public Works Department.
3. Once the grant application is approved, the property owner contracts with a plumber if

not doing own repairs.

4. The property owner or plumber obtains the necessary permit(s) from the Building Division, (630) 620-5750.
5. Work is completed.
6. Final inspection is made and approved by the Building Division.
7. The property owner returns the completed grant application with attached documentation (invoice, permit documentation) to Public Works for reimbursement.
8. The Village mails a check to the property owner.

Lot Drainage Tips

- Install an effective drainage system and keep downspouts clean.
- Keep your drainage system clear so that water can move freely down and away from the side of your house.
- Attach extensions so that water is delivered at least 10 feet from the foundation.
- Disconnect any downspouts or 'clear' water connections that drain directly into the sanitary sewer system.
- Grade and landscape your lot to move water away from the house.
- Ensure a positive slope away from the wall for at least the first 10 feet. The ground should drop a minimum of 6 inches in this area.
- Use landscaping to disperse the water more evenly.
- Seal the cracks between your house and your driveway or sidewalk.