MSD strives to keep rainwater out of the sewer system through costeffective methods like downspout disconnection. Keeping rainwater
out of the sewer system helps prevent sewer overflows into our local
waterways, and helps avoid sewer backups into homes. MSD is
improving the sanitary sewers in your neighborhood. We need your
help disconnecting downspouts in order to fully complete the project.

The sewers in your area are part of a separate sewer system.

A two-pipe system runs under your neighborhood streets;

one pipe for the rainwater and one pipe for the sanitary sewer.

Downspouts that are connected to the sanitary-sewer pipe let rainwater from gutters and downspouts flow directly into the sanitary system.

A typical 8-inch neighborhood sanitary-sewer pipe can handle wastewater from approximately 200 homes. This pipe can become overwhelmed when as few as six homes have downspouts that are connected to the sanitary system.

This Downspout Disconnection Project will also help eliminate the need for a sewer overflow storage basin in the area.

MSD offers residential customers
a one-time incentive of
\$100 per downspout
for disconnection from the sewer system.

Safety Considerations

Slope: Add or remove soil so that water will flow away from structures. Do not disconnect downspouts on slopes with a grade of more than 10 percent.

Drainage: Avoid disconnecting downspouts in an area that is too small for proper drainage.

Extensions: Downspout extensions and surrounding landscape surface should drain water away from structures. Disconnected downspouts should extend at least 6 feet from a structure with a basement and 2 feet from a crawl space or slab foundation.

Property Lines: The end of your downspout extension should be at least 5 feet from your neighbor's property line and 3 feet from the public sidewalk. You may need more space, if your yard slopes toward your neighbor's house or the sidewalk.

Access: Avoid disconnecting downspouts or adding downspout extensions across a walkway, patio, driveway or in front of a gate—this can be a tripping hazard.

Other Hazards: Do not direct water flow over a septic system, drain-field, or underground oil tank unless they have been decommissioned.

Do not disconnect within 10 feet of a retaining wall.

Other Suggestions

- Install a rain barrel to store rainwater for use on your lawn and garden.
- Create a space to extend a downspout by removing paved surfaces, such as concrete pathways, patios or unused driveway area.
- Replace pavement with pavers or gravel to allow for infiltration.
- Extend downspouts under a deck and direct rainwater to a landscaped area.
- To control erosion, help direct runoff and add visual interest—use splash blocks, rocks, flagstones or boulders at the end of downspouts.
- Incorporate rainwater management systems into your downspout disconnections—a garden, soaking trench or rainwater harvesting system.
 See the Project WIN website (msdlouky.org/projectwin) for more information.



700 West Liberty Street Louisville, KY 40203-1911 msdlouky.org

For general information: CustomerRelations@LouisvilleMSD.org 502-587-0603



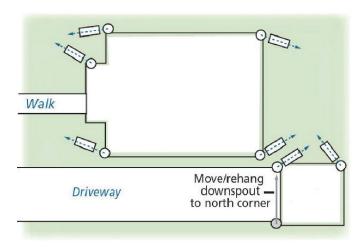
The following is a step-by-step guide to assist with disconnecting downspouts from the sanitary sewer system.

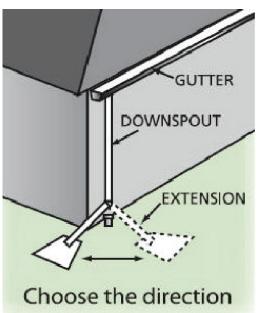
This is a suggested guide.

Your situation may vary from what is shown.

STEP 1. Draw a simple plan

Sketch a site plan of your home. Mark the locations of downspouts and the direction of flow.





STEP 2. Select the direction for flow of rainwater

You may have more than one option for directing each downspout. Consider any obstacles that may impede the flow of water away from house.

STEP 3. Materials and measurements needed

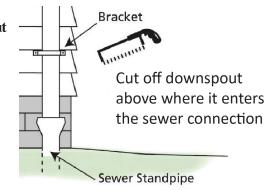
- Crimpers
- Drill
- Elbow pipe
- Extension pipe (6-foot pipe for a home with a basement, 2-foot pipe for a home with concrete slab or crawl space)
- Hacksaw
- Needle-nose pliers

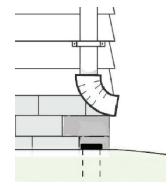
- Newspaper
- Screw driver or nut driver
- Sheet metal screws/nuts
- Tape measure
- Concrete
- Bracket or strap (optional)
- Splash block (optional)

Measure the cross-section (width and depth) of the existing downspout. There are two standard sizes 3-inch x 2-inch and 4-inch x 3-inch. Some downspouts are attached only to the gutter and sewer standpipe. If this is the case, you may need a bracket or strap to secure the gutter after you disconnect it.

STEP 4. Cut off the downspout

Cut off and remove a portion of the downspout above ground at a height to allow adding an elbow pipe to the downspout.





STEP 5. Cut off and plug the standpipe

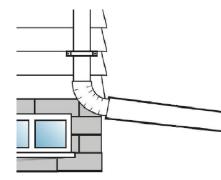
Cut off the standpipe at ground level or below. The best tool to use for this will depend on the material of the standpipe. Fill the remaining portion of the standpipe with crumbled newspaper and top with concrete to seal the opening.

STEP 6. Attach the elbow pipe

Be sure to attach the elbow pipe *over* the downspout pipe.

Do not insert the elbow inside the downspout or it will leak. If the elbow does not fit over the downspout, use crimpers or needle-nose pliers to crimp the end of the downspout so that it slides inside the elbow.





STEP 7. Measure and cut downspout extension pipe

Be sure to attach the extension *over* the elbow pipe or it will leak.

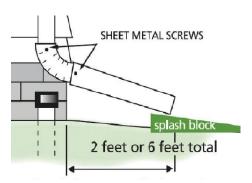
- Downspouts should drain at least 6 feet from basement walls, and at least 2 feet from crawl spaces and concrete slabs.
- The end of the downspout should be at least 5 feet from your property line, and possibly more if your yard slopes toward your neighbor's house.

STEP 8. Secure connections and install splash block

Secure pipe connections with screws at each joint where the downspout, elbow and extension connect.

It helps to pre-drill holes for screws.

Using a splash block at the end of an extension is optional, but it will help prevent soil erosion.



STEP 9. Complete and return the Downspout Disconnection Agreement to MSD

Upon receipt of your agreement, an agent from MSD will contact you to schedule a post-disconnection inspection. Your reimbursement payment will be processed after the agent approves the downspout disconnection.

