

NYC Department Of Environmental Protection



Agency Role

DEP manages New York City's water supply, providing approximately 1 billion gallons of high-quality drinking water each day to nearly 10 million residents, including 8.8 million in New York City. The water is delivered from a watershed that extends more than 125 miles from the city, comprising 19 reservoirs and three controlled lakes. Approximately 7,000 miles of water mains, tunnels and aqueducts bring water to homes and businesses throughout the five boroughs, and 7,500 miles of sewer lines and 96 pump stations take wastewater to 14 in-city treatment plants. DEP also protects the health and safety of New Yorkers by enforcing the Air and Noise Codes and asbestos rules.

Sewer System

About 60% of New York City has a combined sewer system. In a combined sewer system, there is a single pipe that carries both stormwater runoff and sewage from buildings. This mix of stormwater and sewage is usually sent to a wastewater treatment plant.

Catchbasins

A catchbasin is a type of storm drain located next to a curb that collects rainwater from the street. They are covered by a metal grate and connect to the sewer system by a pipe. To help prevent catch basins from clogging, DEP Field Ops make sure that they are inspected routinely. We also encourage property owners, before heavy rains, to sweep litter, leaves and other debris from the top of the catch basin. This allows water to drain and prevents street flooding. The most effective resource for immediate inspection and cleaning of catch basins in problematic locations is by calling 311 or using 311 online.



Residential Infrastructure

- Properties have two pipes that connect to the City's infrastructure.
- One is the water service line. This pipe brings fresh drinking water from the City's water main into the property for use.
- The other is the sanitary line. The sewer line takes wastewater out of the structure and connects it to the City's sewer main.
- The property owner is responsible for these two service lines. DEP is only responsible for the City's water and sewer mains in the street.
- Repairing a service line can be very costly. DEP offers a service line protection plan with American Water Resources. For more information, you can call AWR at 888-300-3570.



Sewer Backups

When wastewater cannot move freely through the sewer system due to a blockage or break, it can cause sewer backups into your home and flooding in local neighborhoods.

The most common cause of sewer backups in New York City is blocked pipes due to the improper disposal of a combination of debris and grease improperly disposed into the sewer system. Items such as cooking oil/grease, floss, Q-tips, sanitary products, paper towels and wet/baby wipes should be disposed in the trash and not down toilets or drains.

Other factors include:

- Many homes have older sewer service lines which decay and fail over time.
- Older DEP sewer mains can collapse or break over time, restrict the flow of sewage.
- Combined sewer systems can become surcharged with stormwater during heavy rains, causing back ups into the home that are not protected with their own backwater valve.



This guide provides an overview of some of the causes of water flooding in your home that are associated with rain events. If you have experienced flooding or want to reduce the likelihood it will happen to you, a licensed professional engineer or architect should be consulted to help determine what measures might be most beneficial for your home's unique conditions. Many of the tips below would require permits and approvals and a licensed professional should be consulted to ensure they are properly secured and that appropriate installation techniques are followed.

TIP 1 CONSIDER CHECK VALVES AND OTHER BACKWATER PROTECTION

Under heavy rain conditions where the flow in the sewer rises and meets or exceeds the sewer's capacity, basement plumbing fixtures such as toilets, sinks, and drains are vulnerable to sewer backups. A backwater valve, also known as a check valve, can prevent sewer water from rising up from the city sewer into your home through basement plumbing. During heavy rain, if water from the city sewer rises to the level of basement plumbing, the check valve closes and blocks sewer water from entering your home. It is important to note that any wastewater from your toilets, sinks, or showers will not be able to leave your home while the valve is closed. You should not use these fixtures while the valve is closed because you can risk flooding your own property. Drain plugs can be another option to prevent sewer backups into floor drains if they are present on the property.

TIP 2 REDUCE STORMWATER RUNOFF

Water runs off concrete and asphalt almost immediately and can reach and exceed the design limits of sewers quickly during heavy rains. Retaining and creating green and unpaved spaces around your home can help reduce flows into the sewer by reducing the amount of stormwater runoff your property sends to the sewers. There are alternatives to concrete, such as porous paving stones, which could allow for uses like patios while creating less stormwater runoff.

1 CONSIDER CHECK VALVES



2 REDUCE STORMWATER RUNOFF



4 KEEP GREASE OUT OF THE SEWERS



5 HELP KEEP CATCH BASIN GRATES CLEAR



6 INSTALL PROPER ROOF DRAINAGE

Consider a rain barrel!



TIP 3 PROTECT AREAS BELOW STREET LEVEL

Water will flow to and pool in low areas. Below street level spaces such as underground garages, basement doors, and other low lying areas are the most vulnerable to flooding. Direct stormwater from your roof and porch away from low-lying areas. Reduce the risk of flooding by sealing cracks in foundation walls and considering the use of appropriate barriers. Sandbags can be a cost effective option to block water from entering some of the spaces in your home. Other barrier options may include window wells, flood walls around doors, and flood gates at driveway entrances. Be sure that any barriers or modifications do not interfere with appropriate exits from your home.

TIP 4 KEEP GREASE OUT OF THE SEWERS

As a homeowner, you are responsible for the sewer connection from your home to the city sewer. A clogged or cracked sewer connection can prevent wastewater from flowing out of your home properly. Improper disposal of grease and cooking oil can clog your home's internal pipes as well as city sewers. This can cause sewer backups in your neighborhood and home.

TIP 5 HELP KEEP CATCH BASIN GRATES CLEAR

Keeping litter off the street helps stormwater drain and helps protect the city's water bodies. The City is constantly working to maintain our 7,500 miles of sewers and 148,000 catch basins. Street litter is captured in special catch basin collection areas which help keep it from entering into sewers and waterways. DEP cleans and maintains these collection areas on a regular cycle. When debris covers and mats the street level gratings, stormwater cannot enter the catch basin and can pool around the area causing street flooding, even before the sewer is full. You and your neighbors can help reduce this type of flooding by disposing of litter properly and by carefully removing leaves or trash from catch basin grates before or during a rain event.

TIP 6 INSTALL PROPER ROOF DRAINAGE

Directing stormwater from your roof away from the foundation walls of your home is critical in keeping your basement dry. Clean your gutters regularly to prevent stormwater from overflowing onto walls, and connect downspouts to appropriate drains. Consider installing a rain barrel as an alternative method to capturing stormwater. You can then use this stored water for activities such as watering the lawn or washing your car. Please note that rain barrels alone are not sufficient to reduce flooding during a heavy rain event but when used as a tool in a comprehensive strategy can improve the overall performance of a property.

Customer Programs

New York City homeowners may be eligible for financial assistance to help pay overdue water bills, thanks to a new NYS program. The New York State Low Income Household Water Assistance Program (LIHWAP) is offering eligible homeowners a one-time payment of up to \$5,000 to resolve overdue water bills. For more information, please call 718-595-7000 or 800-342-3009.

Leak Forgiveness Program: If you notice there is an increase in the cost of your water bill this may be the result of an internal leak in your home. High water bills are often caused by leaking toilets and running faucets. If you find a toilet leak or notice a significant increase in your water and sewer bill, don't wait to have it repaired. If you cannot make the necessary repairs yourself, call a licensed master plumber. We recommend that you test each toilet in your home for leaks once a year. If a leak is detected, homeowners can apply for DEP's Leak Forgiveness Program. To apply for this program, you need to mail a written request to DEP at: BCS Correspondence—Leak Program, 59-17 Junction Blvd., 7th Floor, Flushing, NY 11373.

Homeowners Water Assistance Program (HWAP)

- Customers that receive exemptions from DOF or HRA
- Customers can receive an annual credit of \$115.89

Water Debt Assistance Program (WDAP)

- Only lien-eligible customers
- Mortgage delinquency (at least 1 month)
- Must reside at the property

If you have not done so already, we encourage you to register for a [My DEP Account](#). Through your My DEP Account, you will be able to track your water usage and sign up for leak notifications.



Resources for Homeowners

Amnesty Program



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**SAVE NOW ON YOUR WATER BILL,
GET AMNESTY TODAY!**

DEP IS OFFERING A
LIMITED ONE-TIME AMNESTY

With up to 100% of interest forgiveness.

DON'T MISS YOUR CHANCE, THIS ONE-TIME AMNESTY ENDS SOON!



[Guidelines and Frequently Asked Questions](#)



Amnesty Look Up Tool

Simply insert your account number below, view your options and click any option to make a payment.

Enter Your Account Number:

Search



Questions?

- * For more information, go to DEP's homepage at:
- www.nyc.gov/dep
- * For help with water/sewer bills, water meter issues, please call DEP's Customer Services at: 718-595-7000. There is also a Bronx Office at 1932 Arthur Ave, 6th Floor. You may set up an appointment by calling 718-466-8481.
- * For assistance with issues pertaining to: flooding, clogged catchbasins, sewer back ups, asbestos, noise, defective hydrants, water quality, etc. please call 311 and file a complaint.
- * By calling 311, or going online, you can also: request a free lead test kit, and/or request a free home water conservation kit.