

POLLUTANTS: THEIR SOURCES AND IMPACTS

A pollutant is any substance that can harm living things. Pollutants commonly found in Mount Prospect waterways include:

SOIL/SEDIMENT

Source: Construction sites and other non-vegetated lands.



Impacts: Uncontrolled soil erosion can result in excess sediment that clogs catch basins, storm sewers and detention basins, leading to higher maintenance costs and flooding. As it settles, sediment can smother fish eggs and bottom-dwelling organisms, and destroy aquatic habitat. Suspended sediment can lower the transmission of light through water and can negatively affect aquatic animals.

Other pollutants can attach to soil particles. When sediments wash off the ground into waterways they carry these pollutants with them.

NUTRIENTS

Sources: Septic systems, lawn fertilizers, animal waste, cleaning products, plant debris and eroded soil.

Impacts: Phosphorous and nitrogen can over stimulate aquatic weed and algae growth. As they decay, excess weeds and algae use oxygen in the water, which is needed by fish and other aquatic life.



TOXIC COMPOUNDS

Sources: Toxic substances include, vehicle fluids, solvents, lawn herbicides and pesticides, paints and metals such as chromium, copper and mercury.

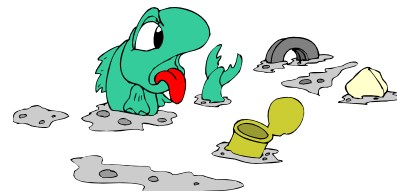


Impacts: Toxins can accumulate in the aquatic food chain, as one larger organism eats many smaller ones that have been contaminated. Even in very small concentrations, oil and other toxic substances can harm aquatic plants and animals.

LITTER AND DEBRIS

Sources: Grass clippings, leaves and litter generated by careless disposal practices.

Impacts: Litter and leaves that wash into storm, sewers can clog detention basin inlets and outlets, and eventually pollute streams and rivers. Excessive leaves and other organic materials decompose and lower the amount of oxygen available to aquatic life.





CATCH BASIN CARE

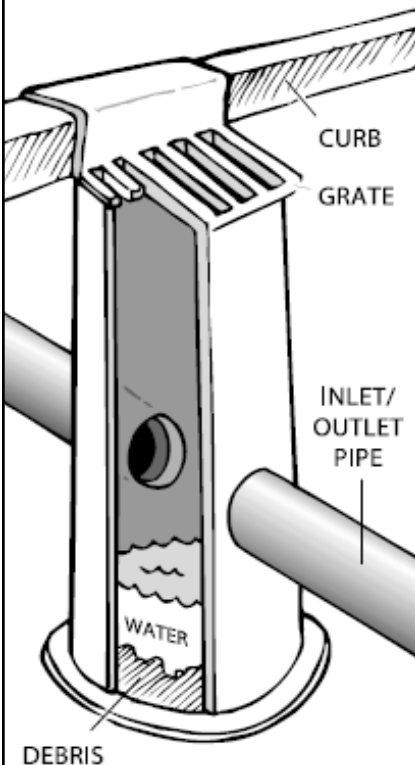
GUIDE No. 2

WHY BE CONCERNED?

Catch basins are storm sewer inlets that filter out debris such as leaves and litter. They are typically located next to street curbs or in the rear yards of residential areas.

It is important to maintain catch basins to prevent storm sewer blockages and minimize the amount of pollutants entering storm sewers. Storm sewers either discharge into detention basins or directly into streams.

Clogged catch basins can also cause water to pond along streets and in yards. This flooding can be a nuisance to motorists and homeowners.



Are You Responsible for Catch Basin Care?

Your homeowner's association is responsible for catch basin maintenance if you live in a subdivision, site condominium neighborhood with private roads. Catch basins in public roads are maintained by Mount Prospect Public Works, IDOT, or Cook County.

Stormwater drainage systems are typically designed to remove water a developed area as quickly as possible during a storm. While these systems are convenient for urban residents, they also carry pollutants to surface waters at a "rapid transit" pace. Contrary to popular belief, pet wastes, oil and other materials dumped into storm sewer grates do not go to the waste water treatment plant, but flow directly into streams and lakes. For example: dumping oil into a storm sewer grate has almost unthinkable consequences. When it reaches the water, five quarts of oil can create a slick as large as two football fields and persist on mud or plants for six months or more.

How are Catch Basins Maintained?

Remove Debris from Grates

The grates of catch basins can become clogged with litter or leaves, especially in the spring and fall. Regularly inspect the grate and remove debris. Encourage neighbors to adopt the catch basin in front of their homes, and keep them free of debris.

Remove Debris From Storage Area

Catch basins should be cleaned out before the storage area is half full. Once this level is reached, debris be-

gins to wash into sewer pipes. Cleaning should be done in the spring after the first large snow melt, in the fall after trees have shed their leaves, and additionally if needed.

To find out how much material has accumulated in the storage area of the catch basin, insert a long pipe on brook stick into the storm drain grate. Notice where the pipe or stick hits the debris and continue to the bottom to estimate the depth of accumulation. Cleaning these storage areas should be performed by a private contractor. For assistance identifying suitable contractors, contact one of the agencies listed under "Getting Help"

Stenciling Your Storm Drains



Stenciled or applied decals that read "Dump No Waste - Drains to Des Plaines River" are good reminder that nothing but water belongs down a storm drain. Contact the Public Works Office for more information about participating in storm drain stenciling.

GETTING HELP

Mount Prospect Public Works
(847) 870-5640

PROTECT OUR WATERWAYS AT LEAF COLLECTION TIME

In a way, we all live on a river. Water that enters our storm drains flows directly into a stream or river untreated, along with everything that rainwater carries away from our streets: trash, leaves, grass, fertilizers, pet wastes, etc. Reducing pollutants from rainstorm runoff is one of the biggest hurdles to keeping our river clean.

During the Fall, it is especially important to keep leaves out of the storm inlets. In addition to clogging drains and causing backups, leaves that enter the storm drains decay in the water and rob fish of vital oxygen. Follow these steps to give our waterways a hand; you'll also reduce the risk of flooding on your street.



1.) Compost yard waste. The next time you mow, mulch the leaves while cutting the grass. They're the best nutrients. You can also put leaves in compost containers for curbside collection.

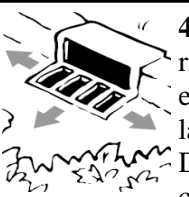


2.) Wait until the last minute. If you have your leaves picked up by a community leaf collection program, rake the leaves into the street just prior to your scheduled pick-up day.

Should it rain, leaves won't enter the storm drain inlets and waterways as easily if they are raked and stored on your lawn extension for as long as possible.



3.) Stay out of the gutter. If your community does allow you to sweep leaves to the street for collection, be sure to keep leaves out of the gutter. There should be at least a one-foot space between the curb and your leaves for the stormwater to run into the gutter. This will reduce the risk of flooding in your area.



4.) Keep inlets clear. Reduce the risk of flooding and help protect the environment by removing accumulated debris from catch basin grates. Don't deposit yard or pet wastes into catch basins.