**Going with the flow: stormwater’s role in clean water**

Fifty years ago, Congress passed the Clean Water Act (CWA) establishing the framework for regulating pollution in waters and creating water quality standards to protect drinking water and maintain a healthy aquatic community for animal and recreational uses.

Through the CWA, the agency regulates municipal stormwater making it illegal to discharge pollution from a point source like a pipe, a man-made ditch, or a street drain without a permit. These permits guide communities through best practices to ensure pollution is reduced.

**What is stormwater?**

Land covered in cement or pavement is called an impervious surface. When it rains or snow melts, water cannot soak into the ground in these areas, so it must flow somewhere. This flow of water is stormwater and is routed into storm drains along roadways, typically draining into nearby lakes, rivers, stormwater ponds or other treatment practices. Most of these underground stormwater pipe systems are managed by individual towns.

Stormwater also comes from building rooftops and other hard surfaces, and even slopes in land where water runs off quickly, especially during extreme weather conditions. Heavy rains or snowmelt can cause sewer overflows that may contaminate water sources with untreated human and industrial waste, toxic pollutants, and other debris.

Stormwater runoff transports pollutants such as oil and grease, fertilizers, chemical, nutrients, yard waste, sediment, bacteria, and other pollutants as it travels across land and drains and into receiving waters.

Unlike wastewater, most stormwater is not treated before it empties into nearby receiving water. Not surprisingly, stormwater runoff is a leading source of water pollution.

**Impacts of stormwater**

Stormwater runoff can have many impacts.  As development and impervious covers increase, the natural soil capacity and vegetation to filter pollutants is reduced. Plus, heavy rain events magnify this problem and create more stormwater runoff.  Increased water flows can also cause erosion of land areas and stream banks. This has as ripple effect, reducing natural filtering and causing or increasing flooding that carries pollutants to our waters.  As a community grows, development increases.  When more houses, roads and businesses are constructed, water has nowhere to go and can cause serious issues with drainage, pollutants, and sanitation issues.

The MPCA issues [permits](https://www.pca.state.mn.us/business-with-us/construction-stormwater) for construction sites. Understand the rules before you dig to help preserve and protect water quality.

To celebrate of the 50th anniversary of the Clean Water Act, rethink some simple acts to reduce the negative impacts stormwater can have on our lakes, streams, and wetlands.

* **Adopt a Drain**. See if your community participates in the adopt-a-drain program and take it upon yourself to help keep a storm drain clear of debris. Learn more at [Adopt-a-Drain - Minnesota](https://mn.adopt-a-drain.org/). Even if you can’t officially “adopt” a drain, always pick up garage or debris around a drain. Pick it up to pitch in!
* **Reduce your home and driveway salt use**. It only takes a coffee mug of salt to effectively treat a 20-foot driveway or 10 sidewalk squares. Only apply it when it’s at least 15 degrees F since most salt stops working below this temperature. Watch [this video](https://www.youtube.com/watch?v=qc8Y-_Nmfmo) about tools, techniques, and products that you can use to keep your driveways and sidewalks safe while protecting our waters. Sweep up salt on dry surfaces to reuse. Read more about this [“less is more” approach](https://www.pca.state.mn.us/news-and-stories/in-de-icing-season-a-less-is-more-approach-best-protects-lakes-and-streams).
* **Maintain trees and other natural vegetation.** Roots help filter many pollutants so maintaining tree and grassy areas, especially on sloping landscapes, can help reduce the negative impacts of stormwater runoff.
* **Think ahead when building.** If you are planning a construction project, consider how you will contain soil and other pollutants before you start digging. You may also need a [permit](https://www.pca.state.mn.us/business-with-us/construction-stormwater) to ensure your site preserves and protects water quality.