



What is storm water and why do we need to manage it?

Federal and State laws regulating water quality and the management of storm water necessitate that the City of Massillon re-evaluate the way it manages the water that runs off impervious surfaces such as concrete, asphalt, or rooftops.



Storm water runoff carries pollutants directly to the Tuscarawas River and creeks and has the potential to create not only drainage and flooding problems but water quality issues throughout the city.



Storm Water *focus*

ADDRESSING THE NEEDS OF STORMWATER MANAGEMENT IN THE CITY OF MASSILLON

EFFECTS OF SAND AND SALT

- Even in small quantities, salt can:
- Deplete the oxygen supply needed by aquatic animals and plants;
 - Leach into the ground and change soil composition, making it hard for plants to survive;
 - Contaminate groundwater and surface waters
 - Deteriorate paved surfaces and infrastructures

Similarly, sand can:

- Bury the aquatic floor life, fill in habitats, and cloud the water;
- Cause premature deterioration of floor surfaces as it is tracked into buildings;
- Lose its effectiveness after becoming embedded in snow and ice;
- Enter catch basins, storm drains, and surface waters if it is not swept up each spring; and,
- Contribute to clogged storm drains and pipes, which can cause flooding.

BEST MANAGEMENT PRACTICES

Snow & Ice Removal:

Attempt to remove snow by hand through shoveling or snow blowing. Apply salt only if necessary.

Salt Application:

Follow the instructions on the package and use only enough to break the ice/pavement bond. Do not throw down salt near waterways.

Sand Application:

Use only enough to provide traction on slippery areas. Sweep up excess sand after snow has melted.

Snow & Ice Disposal:

Do not dispose of snow & ice in wetlands, creeks, harbors, or other waterways or directly on top of storm drains

Winter is certainly coming, and with it comes road salts, piles of snow and uninvited house guests (the furry kind). These seasonal sights may impact water quality, and our goal is to keep winter wonderful by preventing pollution from reaching our waterways.



Just like rain, snow-melt can carry pollutants into storm drains and streams. Think of all the black snow that accumulates along roadways; once it melts, that dirty water, full of petroleum products and other contaminants, finds its way to a stream, where it can harm wildlife and pollute our drinking water resources.

By making smart decisions while battling the cold, ice and snow this season, we can prevent additional stormwater pollution. For example, salt used to prevent ice on driveways, roads and sidewalks can easily wash into freshwater streams and destroy aquatic ecosystems.

And we all know that pests like rodents and insects love to hide out in our homes for warmth over the winter, but using pesticides or insecticides can harm the watershed. If used outdoors or disposed of improperly, these chemicals can be washed into our streams by stormwater.

In our waterways, these chemicals have the same effects on aquatic organisms that they do on the pests in our homes. These pesticides and excess salts also reduce the quality of the water we use for drinking and recreation.

Why not do your part this winter season to protect our streams from unnecessary stormwater pollution? Following these tips can help keep our water clean and protect the environment:

Dispose of shoveled snow in vegetated areas; never dump it into streets or streams.

The more water can be absorbed by plants or sink into the ground, the less water will run off, carrying pollutants into streams. A rain garden or other planted area is the perfect place for shoveled snow.

Use safe and effective alternatives to salt for ice, and follow the application rate on the label.

Safety is of utmost importance, but salt is damaging to plants, animals, concrete and water quality. Instead of focusing on melting the snow on your driveway or sidewalks, use sand to help gain traction. Or, use a salt-free de-icer. Remember, the sooner you shovel, the better, as less ice will form and less de-icer can be used.

Use natural and non-toxic alternatives to chemical pesticides, and reduce indoor and outdoor chemical use.

Boric acid is a low-toxicity mineral that is highly effective over time, another great alternative. There are also many herbal pest deterrents; for example, mint deters mice.

Salt products should always be stored under a roof or in an enclosed area.

Never leave salt exposed to the weather elements.

