STORMWATER COALITION

The Stormwater Coalition is a committee of the Toledo Metropolitan Area Council of Governments (419.241.9155). The coalition is composed of the following members:

Lucas County
(419.213.4500)

Wood County
(419.354.9000)

City of Bowling Green
(419.354.6227)
City of Northwood
(419.693.9327)

City of Oregon
(419.698.7047)

City of Toledo
(419.245.1050)

Village of Haskins
(419.823.1911)

Village of Holland
(419.865.7104)

Village of Millbury
(419.836.9671)

Village of Ottawa Hills
(419.536.1111)

Village of Walbridge
(419.666.1830)

Village of Waterville
(419.878.8100)

Jerusalem Township
(419.836.8921)

Lake Township
(419.838.6536)

Middleton Township
(419.823.1480)

Monclova Township
(419.865.7862)

Perrysburg Township
(419.872.8861)

Spencer Township
(419.865.2883)

Springfield Township
(419.865.0239)

Sylvania Township
(419.882.0031)

Washington Township
(419.726.6621)

Waterville Township
(419.878.5176)

Association of General Contractors of Northwest Ohio
(419.241.3601)

Home Builders Association
(419.473.2507)

Ohio Department of Transportation
(419.373.4433)

Winter Snow and Ice Removal

With winter weather already here, many of us will be hauling out the boots, gloves, and snow shovels to remove snow and ice from our driveways. But not all approaches to snow removal are stormwater-friendly. Snow- and ice-melting products, known as deicers, can have negative environmental impacts, including fish and vegetation kills, if melted snow and ice carrying the chemicals end up in streams. Some de-icers can release cyanide (used as an anti-caking agent) after they enter streams.

Overuse of certain de-icing products, such as salts, can damage driveways and vehicles and can also be a hazard for pets. Lawns and landscape plants are also at risk for damage from overuse of salts that includes browning of leaves or needles and preventing trees, shrubs, and other plants from getting water. Limiting the use of salt-based de-icers on driveways and sidewalks will help reduce these negative effects.

What you can do to help protect stormwater in winter:

- Shovel or plow your driveway and sidewalks before spreading de-icer. De-icer will not work on deep piles of snow anyway, and shoveling does not require chemicals that could harm streams.
- Limit the use of de-icers, especially those with the most environmental impacts.
- Only use as much de-icer as you need. Large snow piles and thick ice will not melt faster with more de-icer. You can always reapply if you used too little.
- Do not use fertilizer for snow and ice removal. Fertilizers are very poor at snow removal and increase nitrogen in streams when the snow melts.
- Only use sand for traction. Kitty litter and ash become clumpy and are difficult to clean up after use.
- Pets can be harmed by some de-icers. Wipe your pet’s paws if they walk on any salts or chemicals. This helps prevent ingestion and damage to their paws.

Not all de-icing products are equal in terms of cost, environmental impact, or effectiveness.

De-icer	Lowest Temperature	Cost*	Environmental Impact
Calcium Chloride	-25 degrees F	3 times more than rock salt	Less salt required No cyanide Contains chlorine
Magnesium Chloride	5 degrees F	Comparable to other salts	Least toxic deicing salt May cause tracking or discoloration
Sodium Chloride ("rock salt")	15 degrees F	Around 5 dollars per 50 lb bag	May contain cyanide Contains chlorine
Urea (fertilizer)	20 to 25 degrees F	5 times more than rock salt	Contains excess nutrients Less Corrosive
Calcium Magnesium Acetate (CMA)	22 to 25 degrees F	20 times more than rock salt	Less toxic
Sand	Does not melt snow/ice	Around 3 dollars per 50lb bag	Accumulates in streets and streams Needs to be swept

*Source: *Snow, Road, Salt and the Chesapeake Bay* by Tom Shuler, Center for Watershed Protection

Advantages of Pervious Pavement for Winter

The three types of pervious pavement (pavement that allows water to pass through): permeable interlocking concrete (concrete pavers separated by joints), pervious concrete, and porous asphalt, have advantages in winter compared to conventional pavements. Snow melts faster on pervious pavements than on conventional pavements. Pervious pavements immediately drain the melted snow, reducing the risk of ice formation and hazards. Permeable interlocking concrete and porous asphalt are also highly resistant to freeze-thaw cycles and require less de-icing materials.