

2024 Stormwater Theme: Pollution Prevention

For 2024 we looked at how to “**Prevent Pollution**” for the year's MS4 Theme. But first, what is MS4? In addition to requirements Richland County landowners follow for earthmoving activities through the Richland County Stormwater and Erosion Control Program, communities with 1,000 or more people per square mile must follow the Stormwater Non Point Discharge System (National Pollutant Discharge Elimination System) (NPDES) General Permit for Small Municipal Separate Storm Sewer Systems (MS4) to further effectively manage water pollution. The Richland County Commissioners are mandated by Ohio Environmental Protection Agency (OEPA) to create and manage this added accountability for stormwater runoff. The NPDES (MS4) communities in Richland County are: City of Mansfield, City of Ontario, Village of Lexington, Madison Township, Mifflin Township, Springfield Township and Washington Township.

The EPA defines pollution prevention as “any practice that reduces, eliminates, or prevents pollution at its source before it is created.” It is important to prioritize doing this because pollution has many negative effects on human health and the environment.

It is important to prioritize doing this because pollution has many negative effects on human health and the environment. The good news is, preventing pollution is something anyone can do. Taking actions like utilizing rain gardens can be helpful because it allows for water to be absorbed instead of it running off and picking up pollutants. Also, using rain barrels gives water a place to be stored until you are ready to use it so that harmful pollutants do not surface flow into our waterways. If you are interested in getting a rain barrel or rain garden, we can help you accomplish this.

We all know that road salt is good, right? Road salt helps melt the snow and ice on the roads we drive on, so they are not as slippery during winter storms, but... is there a negative side to road salt? Unfortunately, there is, and the effects can be substantial.

Road salt can cause damage to your vehicles, health, and ecosystems. Have you ever noticed how vehicles primarily driven in states that use road salt rust out a lot quicker than vehicles in states that do not use road salt? Road salt contributes to cars rusting. Americans spread more than 20 million tons of salt on our roadways each winter.

So, the question is, how does all this salt affect us and the environment? First, it causes our roadways and bridges to break down. Then the salt goes into our waterways. If water pipes are in poor shape, lead may flake off and enter our drinking water potentially causing health problems.

We need to start utilizing more feasible alternatives that keep the roads safe while not damaging our health and environment. Placing sand on top of ice and snow provides traction for shoes and tires, but also absorbs sunlight to melt ice faster. Another alternative to salt as a deicer is to use beet juice. Beet juice allows for ice to melt at lower temperatures, and it is gentle on roads, plants, grass, cars, and concrete.

If salt must be used on roads, sidewalks, and parking lots, please apply it sparingly, so that you can help with **Pollution Prevention**.

Good water quality is important for everyone. We are especially mindful of it at Richland SWCD because it's one of our areas of expertise. Did you know in Richland County, three watersheds above the Continental Divide flow to Lake Erie and five watersheds below the Continental Divide flow to the Ohio River and ultimately, the Gulf of Mexico? We don't want to be a bad neighbor and pass along contaminated water to our neighbors. Find out more about watersheds and the Continental Divide in Richland County on our [website](#).

An example of poor water quality was the added nutrients in water that contributed to the harmful algal blooms in Lake Erie and the oxygen dead zone in the Gulf.

Clean and Green: How to Prevent Plastic Pollution

Alongside regulatory efforts, reducing the usage of single-use plastics emerges as a pivotal strategy in combating pollution. These plastics significantly contribute to stormwater pollution often ending up in waterways, where they harm wildlife and degrade ecosystems.

Examples of single-use plastics include take-out containers, straws, cups/bottles, and grocery bags. When aquatic organisms encounter these items, studies show they frequently ingest them, mistaking them for food, or become ensnared. The EPA notes, "Scientists have observed ingestion or entanglement in plastic waste by at least 558 species" (EPA), with this number expected to rise as more waste enters water bodies.

Most plastics are non-biodegradable, breaking down into smaller pieces known as microplastics that persist indefinitely. National Geographic reports, "Microplastics have been found in marine life ranging from plankton to whales, in commercial seafood, and even in drinking water" (NatGeo). The impacts of microplastics are still being studied, but both aquatic animals and humans inadvertently consume them, posing a significant environmental and health concern.

How can individuals help prevent plastic pollution? Simple actions like recycling plastics and reducing your reliance on single-use plastics can make a profound difference. Opt for reusable grocery totes instead of plastic bags, switch to reusable water bottles instead of disposable ones, and explore alternatives like reusable sandwich bags, wraps, and straws. Going further, consider picking up plastic litter in your surroundings with gloves to prevent it from reaching waterways.

Together, these efforts can significantly decrease plastic pollution in our waters and contribute to safeguarding aquatic environments for future generations.