

WHY COMMUNITY CLEAN-UPS FOR WATER QUALITY ARE IMPORTANT

Have you ever watched the rainwater running off your driveway or down your street after a summer thunderstorm or in the spring of the year when the rains wash away the dirt left after a long winter? Do you know where that water is going? You might be one of the approximately 50% of Minnesotans who understand that the stormwater running off our streets, driveways, and curbs drains into our creeks and lakes to larger streams and rivers. Storm drains carry runoff water from our yards and streets very efficiently and quickly. Most people have seen storm drains that water goes into, but few of us have seen the water flowing directly into our rivers immediately following a thunderstorm or spring rainfall. If we did observe the flow of that water, we would see paper, bottles, leaves, grass clippings, branches and dirt.



What we can't see, however, are all the different forms of dissolved organic matter (leaves, dirt, debris) flushed from our yards and streets. Organic material contains phosphorus and other plant nutrients that ultimately feed the growth of aquatic plants such as algae that degrade water quality. Even the visible leaves and grass clippings transported directly to water bodies will decompose eventually and release nutrients into the water, causing undesirable algae growth that diminishes oxygen for fish and native plants.

As leaves fall from the trees, they accumulate on impervious surface areas such as streets and



driveways where they begin to decompose, releasing phosphorus that can be carried in runoff water into nearby bodies of water. As cars travel over these leaves, they contribute to their decomposition. As rain falls, the leaves are carried directly into lakes and rivers.

In Minnesota, our landscapes and soils are frozen for a portion of the year. This freeze/thaw cycle helps to break down organic materials such as grass clippings and leaves into nutrients. However, they are not able to infiltrate into the frozen ground, so any late fall or early spring rains move these materials rapidly over the land, even over a lawn. In fact, research shows that phosphorus concentrations in runoff waters are highest when the ground is frozen.

Cleaning up our curbs and gutters will prevent the highly nutrient-rich leaves and debris from entering rivers, lakes and streams, reducing pollution at the source and improving water quality for local communities. Fight water pollution in the streets near your home today.

