

How Watersheds Work



Learn how watersheds affect water quality



It is important to know how your watershed works in order to help protect water quality. You can contribute to the solution, not the pollution!

A **watershed**, also referred to as a drainage basin, is the land area that delivers rain and snow/ice melt to a stream or lake. Every home, business and farm in Michigan is in a watershed!

Stormwater, or runoff, is when rain and snow/ice melt travel across the land (watershed) picking up trash, animal waste, chemicals, sediments and dissolved substances along the way until it discharges into the nearest waterbody and causes pollution. Even if your house, business or farm is not “next to the river,” your actions still have an impact on the watershed.



Impervious surfaces, pavement or other hard surfaces, speed up the flow of runoff from the landscape and prevent water from soaking into the ground where it can be naturally cleaned by microorganisms that live in the soil. Many pollutants also reach our waterways from soil erosion because many chemicals attach themselves to soil particles.

Groundwater is water that is stored underground in the spaces between soil particles and fractured rocks and is a source of drinking water for many suburban and rural households. Groundwater resources can be impacted if pollutants in runoff leach through the soil. Pollutants can impact water quality by harming fish and wildlife, impairing recreation (fishing, boating and swimming) and contaminating drinking water supplies.

The **Rouge River watershed** is home to more than one million people and encompasses 466 square miles and runs through the most densely populated and urbanized land area in southeast Michigan. The Rouge River, a tributary to the Detroit River, is approximately 126 miles of waterways and includes over 400 lakes, impoundments and ponds. More than 50 miles of the river flows through public parklands making the Rouge River one of the most publicly accessible rivers in the country.



Understanding the watershed concept allows us to comprehend that we can have an impact on water quality far beyond our own back door. As land becomes altered or developed, the amount of stormwater runoff in the watershed increases, as well as the potential amount of pollutants that are contained in that runoff.

Stormwater pollution plays a large role in water quality. This contaminated runoff comes from many different sources and is difficult to trace back to one source on the landscape. Contaminated runoff flows without treatment into the nearest stormwater drainage system. This may consist of simple drainage ditches or infrastructure such as enclosed pipes, outfalls, catch basins and detention ponds.

Because of this infrastructure, we all have a direct effect on the water quality in the Rouge River watershed. This impacts our quality of life, home values, and the environment.

For more information on your watershed, visit:

www.allianceofrougecommunities.com

