

Glossary of Watershed Terms

Aquifer: A geological formation or structure that stores and/or transmits water, such as to wells and springs. The term is usually applied to underground areas where enough groundwater is accessible to be pumped out and used economically.

Baseflow: The amount of water that continues flowing through a stream even during dry periods. Baseflow is composed largely of groundwater that feeds into streams throughout the year. In general, rivers with a large watershed and abundant groundwater have higher base flows.

Catchment: An area where water is collected by the natural landscape.

Designated Use: Recognized uses of water established by state and federal water quality programs (Table 1).

Discharge: The volume of water that passes a given location within a given period of time. Usually expressed in cubic feet per second.

Drainage Basin: Another name for a watershed.

Evaporation: The process of liquid water becoming water vapor, including vaporization from water surfaces, land surfaces and snow fields.

Erosion: Detachment and movement of rocks and soil particles by gravity, wind or water.

Groundwater: The sub-surface water supply in the saturated zone below the water table.

Headwaters: The upper reaches of a river where creeks originate.

Hydrologic Unit Code (HUC): A nested system for classifying all of the drainage basins in the U.S. Drainage basins have been divided and subdivided at four different levels and each assigned a unique hydrologic unit code (HUC) consisting of eight digits based on the four levels. The smallest of the four levels, called cataloging units or 8-digit HUCs are often referred to as watersheds. There are 64 cataloging units within Michigan. The Michigan Watershed Map shows smaller watershed divisions than the standard hydrologic cataloging units.

Hydrology: The study of how water is naturally distributed and circulated around the earth.

Impervious: A surface that little or no water can filter through. Paved parking lots and rooftops, for example.

Infiltration: The penetration of water through the ground surface and into soil sediments.

Non-point Source Pollution: Pollution caused when rain, snowmelt, or wind carries pollutants off the land and into water bodies.

Nutrient: A chemical that plants and animals need for normal growth, such as nitrogen or phosphorus.

Pathogen: Usually refers to a microorganism that causes disease, such as certain viruses, fungi or bacteria.

Precipitation: Water falling from the atmosphere onto earth as rain, snow, hail, sleet, dew or frost.

Riparian: Areas bordering streams, lakes, rivers and other waterways.

Runoff: That portion of the precipitation or irrigation water that travels over the land surface, rather soaking in, and ends up in streams or water bodies.

Sediment: This term is usually applied to material, like soil, sand and minerals, suspended in water or recently transported and deposited by water.

Stream Gage: A site on a stream, lake, reservoir or other body of water where observations and hydrologic data are obtained. The USGS measures stream discharge at gaging stations.

Stream Flow: The water discharge, or the volume of water that passes through a particular location in a natural channel.

Surface Water: All water on the Earth's surface, including water in streams, rivers, lakes or reservoirs.

Stormwater Runoff: The runoff that results when rainwater or snowmelt flows over land or impervious surfaces and does not filter into the ground.

Storm Drain: A slotted opening leading to an underground pipe or an open ditch that carries surface runoff, street wash and snowmelt from the land.

Transpiration: The loss of water vapor from plants, such as through leaf pores.

Tributary: A river or stream that flows into a larger river.

Water Quality: The biological, chemical and physical characteristics of water, usually in respect to its suitability for a particular purpose, such as drinking and fishing.

Watershed: The land area that drains surface water to a particular river, stream or body of water. The boundaries can be identified by tracing a line along the highest elevations between two areas on a map, often a ridge. Large watersheds include many smaller watersheds.