

# Section VI: Areas of Special Concern

## THE MIDDLE HURON RIVER PHOSPHORUS TOTAL MAXIMUM DAILY LOAD (TMDL)

Excessive phosphorus in the waters of the Huron River is responsible for excess weed growth and algal blooms that have interfered with recreational uses of the River's impoundments and are undermining aesthetic as well as ecological health values. In 1996, the Huron River Watershed Council working on behalf and in partnership with 21 communities in the watershed – most within Washtenaw County, and the MDEQ agreed upon a strategy to meet significant goals of reduction of phosphorus loading to the Huron River. Much of the reductions, necessary to meet MDEQ imposed Total Maximum Daily Load (TMDL) requirements must be achieved through improving the quality of stormwater runoff.

Many BMPs, such as wet extended retention/detention facilities and wetland systems, have demonstrated superior phosphorus reduction ability. These as well as other mentioned in the rules should be used in the Middle Huron River watershed as the BMPs of choice whenever feasible.

## THE PAINT CREEK AND JOHNSON CREEKS – THERMALLY SENSITIVE STREAMS

The Paint Creek and Johnson Creek are cold-water streams that support aquatic life sensitive to increases in water temperature. Until 1995, both creeks were stocked each spring by the Michigan Department of Natural Resources with over 7,000 brown trout. Angler license fees and federal excise taxes that are paid on fishing tackle pay for stocking. At this time, the MDNR has discontinued the trout stocking of Paint Creek. It is hoped that this stocking will be resumed.

The Paint Creek and the Johnson Creek are also inhabited by naturally occurring, thermally sensitive fish populations. In addition to the fish that have been stocked in the past, the Paint Creek has its own brown trout population, and it also supports a small population of steelhead that occasionally run up the stream from Lake Erie. The Johnson Creek is home to native populations of red side dace (a threatened species), black side dace and mottled sculpin. All these species are negatively impacted by increases in water temperature.

Some of the most effective stormwater site controls involve storage facilities such as retention and detention facilities. Where thermal impact is not a major concern, wet retention/detention facilities are generally preferable to dry retention/detention facilities, and retention/detention facilities that detain stormwater for an extended period of time are required where wet retention/detention facilities are not feasible. However, wet and extended detention retention/detention facilities tend to increase the exposure of runoff to solar warming before releasing it. Therefore, where thermal impacts are a concern, such as in the Paint Creek and Johnson Creek watersheds, extended detention requirements may be reduced. Shade plantings on the west and south sides of facilities to provide additional protection against solar warming are also strongly encouraged. Retention facilities provide another option. Infiltration approaches to stormwater management are encouraged where soils and site conditions allow.

## TOTAL MAXIMUM DAILY LOADS (TMDLS) IN WASHTENAW COUNTY

A TMDL is a document that describes the process used to determine how much pollutant load a lake or stream can assimilate. TMDLs are required by the federal Clean Water Act for water bodies that do not meet Water Quality Standards.

Water Body	Parameter
Johnson Creek	Dissolved Oxygen
Paint Creek	Dissolved Oxygen
Detroit River	E. coli
Geddes Pond (Huron River)	E. coli
Honey Creek	E. coli
Paint Creek	E. coli
Saline River	E. coli
Ford Lake and Belleville Lake	Phosphorus
Malletts Creek	Sediment
Paint Creek	Sediment