

Overall Condition: **Good**

There are a slightly greater than average diversity of bugs here for a stream of this size located in the Huron River Watershed. The water is clean and cool. The stream banks and streambed are healthy, although some areas of erosion certainly are prominent (see picture below).

Measuring Stream Quality

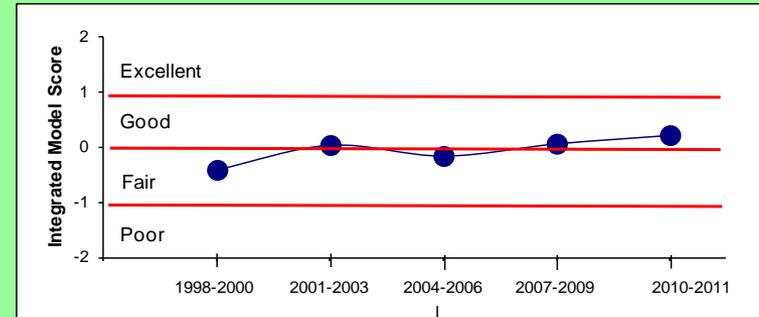
We use the bugs living in the creek to measure stream quality for two reasons. When the stream is rich in habitat variety it will have many diverse kinds of bugs (called families). Also, some bugs (called sensitive) can live only in good quality streams; they die in a poor quality stream. Any stream with sensitive families has the clean water and good habitat required by those bugs to survive.

Monitoring Data

These data come from HRWC volunteers who have monitored this site 34 times, starting in 1996. This includes Stonefly Search, River Roundup, Habitat, and Temperature events.

This site on Woods Creek is only 13 feet wide and shallow (less than a foot), with an occasional pool almost 2 feet deep. In 2007 we found good habitat here with a sturdy bottom and the rocks in the riffles were free of silt, although one-third of the banks lacked stabilizing vegetation. It has clean, cool water (seldom over 74°F). However, with 10% watershed impervious surface, runoff could be affecting the stream quality.

In the spring we typically find an average of 13 different families with one or two sensitive families that require a good quality stream. In the fall an average of 11 families are typically found, with only one sensitive one. In the winter, we usually find one or two of the kinds of the sensitive winter stoneflies that grow only in winter and are dormant the rest of the year. The presence of sensitive families in all seasons indicates a healthy stream.



To determine the overall condition rating, HRWC uses an integrative model that compares this site to all of HRWC's other monitoring sites in the Huron watershed. The model uses insect, habitat, temperature, and stream size data.



Photo credit: HRWC

Wood Creek at L.H. Metropark

Background Information

Site History

This lovely site is near the mouth of Woods Creek in Van Buren Township (Wayne Co.) The area around this site in Lower Huron Metropark is largely forested. Steelhead trout have been recently seen in this stream. They travel upstream from Lake Erie to spawn.

This stream was originally named after a family of early settlers. The first township meeting was held near Woods Creek at the home of Matthew Wood in 1827. In more recent times, the name was changed to Griggs Drain to reflect its designation as a County Drain. Members of Woods Creek Friends, a local citizens' watershed advocacy group, worked with the Wayne Co. Dept. of Environment to return the original name, Woods Creek, to project an image of the clean, pleasant, pastoral stream that it is along much of its length. This was officially done in 2008 at a celebration in Lower Huron Metropark that was attended by many local dignitaries.

How is the Creek affected by land use here?

This site is small, receiving water from only 10 square miles of land, mostly farms.

According to data from 2000, 28% of the Woods Creek watershed is developed while 38% of the land is used for agriculture. At that time, 10% of the land was covered by impervious surface.

Impervious surface is hard on streams because it prevents rain from being filtered and cleaned through the soil and, instead, delivers it quickly to the stream, carrying pollutants and causing surging flows that damage the stream habitat and biotic community.

Creeks tend to start degrading once the watershed is more than 8% impervious and become badly degraded by 25%. [The most urbanized Huron River watershed that we study (draining into Millers Creek at Baxter Road) is 51% impervious.]

Watershed land use in 2000: 38% Agriculture, 28% Urban, 3% Forest, 15% Open, 16% Wetland.

What You Can Do

Help us improve Woods Creek! Plant trees and deep-rooted plants in low areas on your property to help the rain infiltrate into the earth so it can be cleansed and cooled. Go to www.hrwc.org/take-action for ways to keep the rain at home so that it doesn't wash pollutants into the stream and cause flooding from the sudden increase in flow volume.



Insects found in at least two sampling events from 2009-2011:

*Leptophlebiidae — pronggill mayfly

*Perlodidae — Perlodid stonefly

Caenidae — square-gilled mayfly

Calopterygidae — broad-winged damselfly

Chironomidae — midge

Coenagrionidae — narrow-winged damselfly

Dytiscidae — predacious diving beetle

Elmidae — riffle beetle

Gerridae — water strider

Heptageniidae — flathead mayfly

Hydropsychidae — common net-spinner

Philopotamidae — finger-net caddisfly

Simuliidae — black fly

Tipulidae — crane fly

Veliidae — short-legged striders

**Sensitive Family*