

Huron River at Bell Road

Adopt-a-Stream Site Report, updated January 2012

Overall Condition: **Good**

At this site there is an above average diversity bugs that includes a couple of sensitive families. This site has good habitat and is a fun place to visit and take a dip- fast flowing water, cobble substrate, and deep holes to jump into. Finding one or two more sensitive families here would push the score firmly up into the excellent rating category.

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.

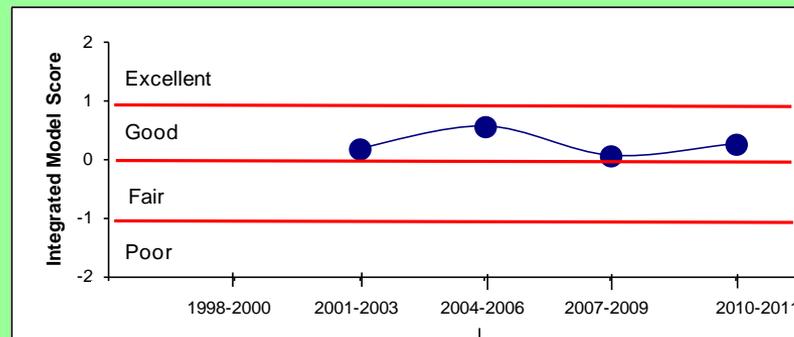
Monitoring Data

These data come from HRWC volunteers who have monitored this site 22 times, starting in 2000. This includes Stonefly Search, River Roundup, Habitat, and Temperature events.

This site on Huron River is 92 feet wide and moderately shallow (less than two feet) with some four-foot deep pools. In 2007 we found very good habitat here with a stable bottom and forested banks. It has clean water that stays warm in the summer (averaging between 73° and 80°F).

The overall diversity of bugs here is above average; but the number of sensitive bugs is below average. In the spring we typically find 15 different families and two are sensitive families that require a good quality stream. In the fall an average of 14 families are typically found, but only occasionally with a sensitive one.

Stoneflies are very sensitive insects that are only found in clean water. One or two kinds of stoneflies are consistently found at this site in January.



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: Max Bromley

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Background Information

Site History

It is fun to paddle, fish or walk along this beautiful free-flowing part Huron River. Water flows here from the upper half of the Huron watershed, a mix of rural, recreational and developed lands. Shortly downstream from here, the Huron River enters into Hudson Mills MetroPark.

The historic Bell Road Bridge is one of only about ten nineteenth-century metal through-truss highway bridges in Michigan. Constructed in 1891, the six-panel structure rests on fieldstone abutments. The Bridge has been moved off of the river and now sits on the banks. This is also the location of a nineteenth-century milling settlement known as Dover, of which little now survives.

How is the Creek affected by land use here?

The area of land draining to this site is large, receiving water from 524 square miles of land, one-third developed.

According to data from 2000, one-third of this part of the watershed is developed while one-sixth is used for agriculture. With so much development, 12% of this land is covered by impervious surface.

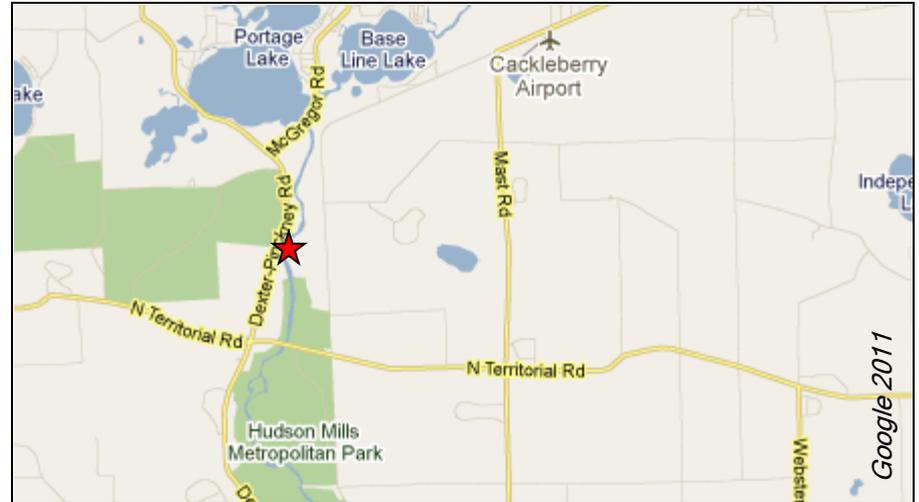
Impervious surface is hard on streams because it prevents rain from being filtered and cleaned through the soil and, instead, delivers it quickly to the stream, carrying pollutants and causing surging flows that damage the stream habitat and biotic community.

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: 17% Agriculture, 34% Urban, 12% Forest, 15% Open, 21% Wetland.

What You Can Do

Help us improve the Huron River! 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:

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| *Ephemereididae — spiny crawler mayfly | Hydropsychidae — common net-spinner caddisfly |
| *Taeniopterygidae — broad-back winter stonefly | Limnephilidae — northern caddisfly |
| Aeshnidae — damer dragonfly | Philopotamidae — finger-net caddisfly |
| Baetidae — small minnow mayfly | Polycentropodidae — spotted head caddisfly |
| Chironomidae — midge | Psephenidae — water penny |
| Coenagrionidae — narrow-winged damselfly | Pyralidae — aquatic Pyralid moths |
| Elmidae — riffle beetle | Uenoidae — Uenoid caddisfly |
| Gyrinidae — whirligig beetle | |
| Heptageniidae — flathead mayfly | |

**Sensitive Family*