

Huron River at Island Park

Adopt-a-Stream Site Report, updated January 2012

Overall Condition: **Good**

This site has been improving steadily since it ranked "Fair" in 2004. There are many kinds of bugs and several of them are sensitive. The water remains cool in the summer and is clean and clear. The stream banks, streambed, and streamside vegetation are healthy here, and the river supports a rich variety of aquatic life.

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.

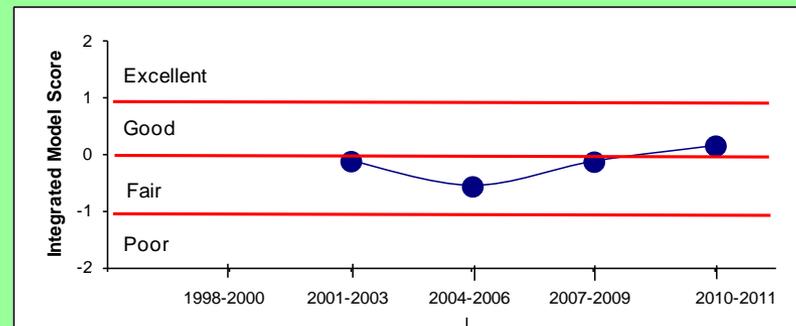
Monitoring Data

These data come from HRWC volunteers who have monitored this site 23 times, starting in 2000. This includes Stonefly Search, River Roundup, Habitat, and Temperature events.

This site on Huron River is 108 feet wide and shallow (about a foot) with some two-foot deep holes. In 2010 we found good habitat here with a stable bottom, clean rocks in the swift water (riffles) and the banks were stable. It has clean, cool water (seldom over 68°F).

There is a good diversity of bugs here. In the spring we typically find 15 different families and two or three are sensitive families that require a good quality stream. In the fall an average of 15 families are typically found, again with two or three sensitive ones.

Stoneflies are very sensitive insects that are only found in clean water. Two or three kinds of stoneflies are 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: Chatura Vaidya

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Background Information

Site History

Island Park is a river park containing two picnic shelters, a Greek Revival shelter, play area, picnic tables and grills, benches, paths through the Island, and a connection to Fuller Park via a foot bridge. The water that flows swiftly here comes from the upper three-quarters of the Huron watershed, a mix of rural, recreational and developed lands.

This site is one of HRWC's favorite training locations due to its close location to the NEW Center, the easy access, and the diversity of interesting stream habitat. If you ever come to this location in the summer, it is an excellent place to wade in the fast current and pull out rocks to look for bugs.

How is the River affected by land use here?

The area of land draining to this site is very large, receiving water from 743 square miles of land, mostly residential and urban but also farms and natural.

According to data from 2000, 33% of this watershed is developed while 25% is still used for agriculture. At that time, 11% of the land was already covered in impervious surface.

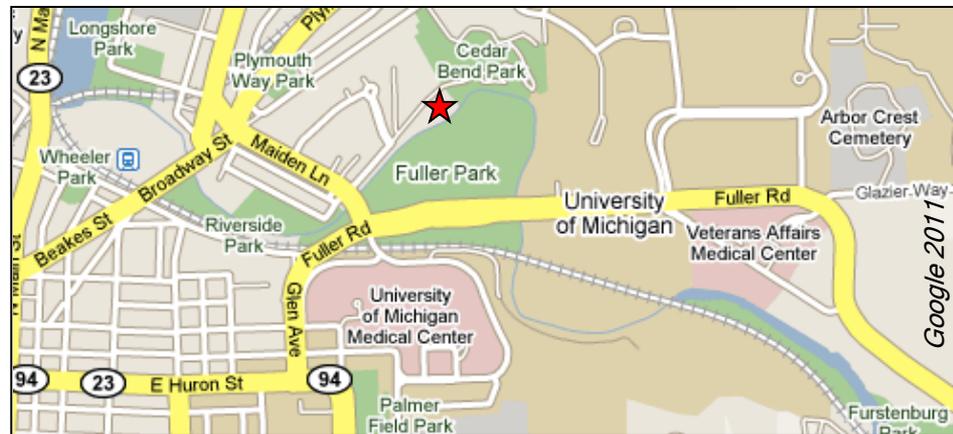
Impervious surface is hard on streams because it prevents rain from being filtered and cleaned through the soil and, instead, delivers it quickly to the stream, carrying pollutants and causing surging flows that damage the stream habitat and biotic community.

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: 25% Agriculture, 31% Urban, 11% Forest, 14% Open, 19% 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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| *Brachycentridae — humplless case maker caddisfly | Elmidae — riffle beetle |
| *Capniidae — slender winter stonefly | Heptageniidae — flathead mayfly |
| *Ephemereillidae — spiny crawler mayfly | Hydropsychidae — common net-spinner caddisfly |
| *Isonychiidae — brush-legged mayfly | Leptoceridae — long-horned case maker caddisfly |
| *Lepidostomatidae — Lepidostomatid caddisfly | Limnephilidae — northern caddisfly |
| *Taeniopterygidae — broad-back winter stonefly | Philopotamidae — finger-net caddisfly |
| Aeshnidae — darnert dragonfly | Polycentropodidae — spotted head caddisfly |
| Baetidae — small minnow mayfly | Psephenidae — water penny |
| Calopterygidae — broad-winged damselfly | Pyralidae — aquatic Pyralid moths |
| Chironomidae — midge | Simuliidae — black fly |
| Coenagrionidae — narrow-winged damselfly | Tricorythidae — stout crawler mayfly |
- *Sensitive Family*