



Protecting the river since 1965

Honey Creek @ Wagner Rd.

Water Quality Factsheet (Draft)

Factsheet Development in Progress



Photo credit: Dick Chase

Google 2010

Watershed STATS:

Drainage Area: 23 sq miles

Area Land Use:

38 % Urban

31% Agriculture

30% Open space

10% Impervious

May-September Measures:

Water Temperature (°F): 2002-09 Mean: XX.X, 2009 Mean: XX.X

Minimum: XX.X (YEAR), Maximum: XX.X (YEAR)

Dissolved Oxygen (mg/l): 2002-09 Mean: 9.37, 2009 Mean: 9.57

Minimum: 6.79 (Jun '04), Maximum: 12.8 (May '08)

pH: 2002-09 Mean: 8.0, 2009 Mean: 8.0

Minimum: **6.2 (Sep '05)**, Maximum: 8.6 (Aug '04)

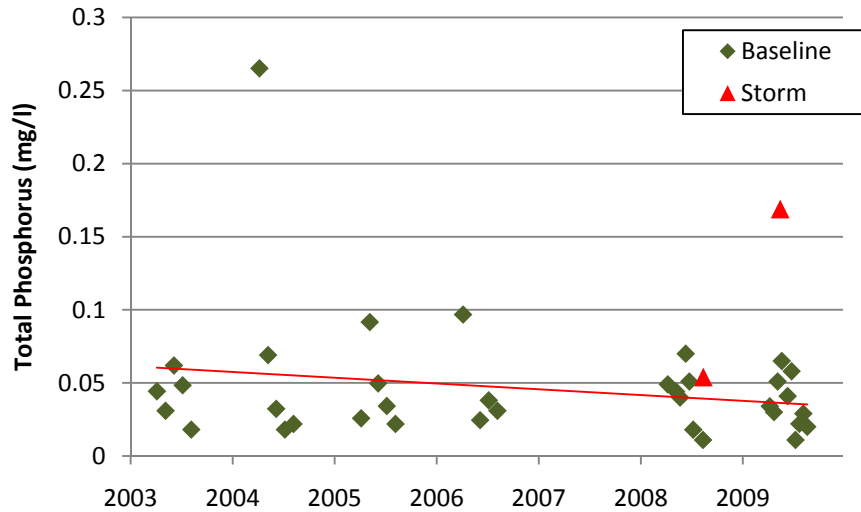
Conductivity (µS): 2002-09 Mean: **1083**, 2009 Mean: **1016**

Minimum: 550 (May '06), Maximum: **1540** (Aug '02)

Watershed Summary: Increased development is increasing the area impervious to water beyond the 10% threshold, preventing infiltration into the water table and altering hydrology.

Nutrients have decreased to acceptable levels, but storm loading remains high. Contaminants in the form of bacteria and charged particles (metals, salts, etc.) are present in high amounts.

TP @ Honey Creek



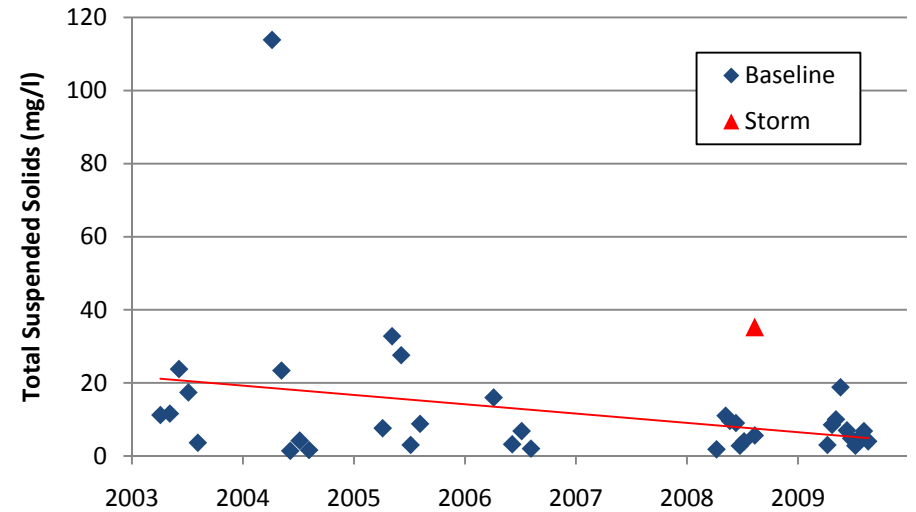
Total Phosphorus (mg/l): 2003-09 mean: 0.052, 2009 mean: 0.036
 Concentrations in the creek have significantly declined below the target level of 0.05 mg/l. Storm samples are still high, however.

Site Rating: Good, Improving

E. Coli (Count/100 ml): 2003-09 mean: 405, 2009 mean: 508
 A measure of bacterial contamination affecting human health, E. coli counts are periodically above the 300 standard (red line).

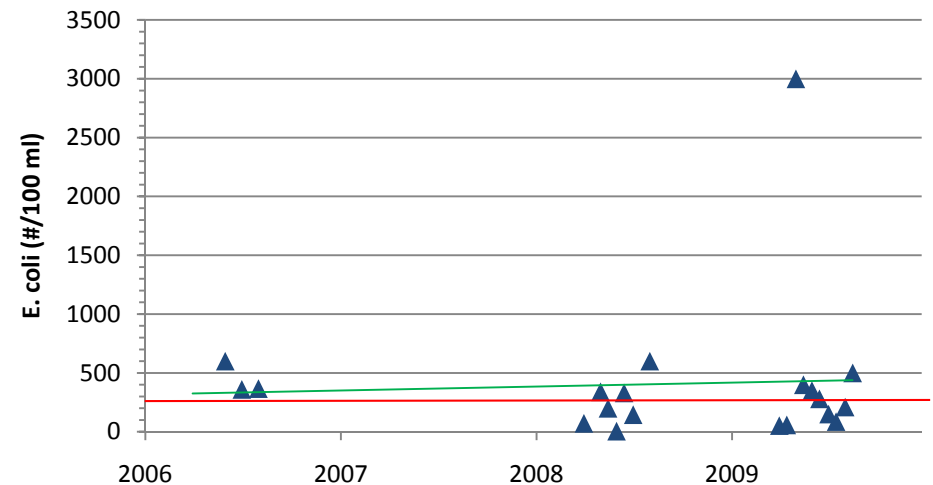
Site Rating: Impaired, not changing

TSS @ Honey Creek



Total Suspended Solids (mg/l): 2003-09 mean: 12.06, 2009 mean: 7.07
 Sediments have also declined indicating stabilizing creek channels and less erosion. Sediments can also carry phosphorus.

E. coli @ Honey Creek



Hydrology. Mean discharge est. (cfs): 12.2, Max: 74.5, Min: 4.4, 2009 mean: 10.6

A flow gage was maintained at the site during 2008-09 field seasons. Peak flow was 474.4 cfs in response to a 3.6 in rain event, a 1-2 year event. Low (or base) flow was 6.0 cfs. The “Flashiness Index” for the 2008-09 period is 0.367, close to the mean for Michigan streams of this size.

Site Rating: Fair

Nutrient Loading: The overall amounts of nutrients being “loaded” into the Huron River is important for understanding nutrient sources. As flows increase following rain events, phosphorus runs off in stormwater in higher concentrations. Loads, therefore, increase significantly following storms.

Mean instantaneous TP load (lbs/day): 6.2, Maximum: 60.2

Low N:P ratios in lakes can result in harmful algae growth.

Mean N-N:P ratio: 8.7 (Low)

Honey Creek Storm Hydrograph June 19-20, 2009

