THE
HURON RIVER
WATERSHED
COUNCIL

PROTECTING THE RIVER
FOR OVER 30 YEARS

Dear Friends,

TALK OF THE YEAR! We have planned a program that I think you will find very interesting. On December 2nd Mike Wiley will tell us about the results of the study that you and other people have done on the health of the river. He has analyzed all of the data we collected over the past seven years and finds some interesting changes, both positive and negative, in parts of the Huron system.

PLEASE CALL ME NOW!. Mike will talk (and answer questions) on Dec. 2nd from 7 – 9 PM. I hope the fact that it is a Thursday evening will not be a problem for you. We have two possible locations in the Ann Arbor area and will choose one on the basis of the size of the audience. **If you can tell me very soon whether you *might* be able to attend, that would enable us to decide on the location.** You can reach me by phone, email, or regular mail (see below).

CREEK PROTECTION WORKSHOP, VERY SOON On Sunday afternoon, November 7th, we are having a workshop for people who want to Work WITH their Planning Commissions to improve plans for developed land use. I would be happy to send you information about that workshop if you are interested.

EMAIL ADDRESS Please let me know your email address if you have one.

Help needed!

FOCUS GROUPS I hope that you could be part of a group discussion on one of the following days to help us evaluate the Adopt-A-Stream Program. Beverly Black, a gifted facilitator, will lead the discussion. She will ask people to respond to a few questions about their experience in the Program in order to improve the Program. Your comments will be anonymous.
The dates are: Sunday afternoon, January 23rd, 30th, and February 6th, and Monday evening, January 31st. It would be a great help if you could participate on one of these days. At least one of the Sunday afternoon sessions will be held in a mill in Green Oak Township for those of you in Oakland or Livingston Counties. Please let me know if you would prefer that location.

CLIPPING SERVICE If you would like to help us help the river from the comfort of your home, we need someone in each community to send us articles that mention the Huron River Watershed Council in your local paper.

WHAT YOU NEED TO TELL ME:
[1] Whether you *might* be able to attend Mike's talk.
[2] On which dates you could be part of a focus group discussion.
[3] Your email address.
[4] If you want to learn about shaping community land use designs.
[5] If you want to clip articles for us.

Thank you so much,

Joan S. Martin

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Monitoring Results From September 18, 1999

Dear friends,

To all of you who took part in Adopt-A-Stream RoundUp and Bug ID days over the years-Thank you! We have a very impressive collection of data at sites that span much of the watershed. Thanks to you, the Huron River is considered the best-studied river in Michigan! This September 56 people sampled 32 (that's thirty-two!) sites at the Aquatic RoundUp and 40 people identified the 3200 creatures that were found.

How are the stream sites assessed?

The results are presented in three different measurements that reflect the current condition of the site:

Diversity is the number of aquatic invertebrate families present at the site. Greater diversity at a site means that the conditions are good for a variety of creatures, which indicates good creek quality.

EPT is the number of mayfly (Ephemeroptera), stonefly (Plecoptera) and caddisfly (Trichoptera) families present. Since many (but not all) of the EPT families require a high quality creek, when many different kinds (families) of EPT are present, the site probably has high quality.

Sensitive families are intolerant of organic pollution. We define extremely sensitive families based on a rating developed by William Hilsenhoff in Wisconsin. The presence of sensitive families is a strong indication of good creek quality.

Tallysheet

We have enclosed a tallysheet that is a summary of the collection this September and the previous September collection. Note that all of the past September collections were used to compile this report but we didn't want to bog you down with numbers.

The *total number found* is the number of creatures collected. It says very little about stream conditions, except for those locations where it was very difficult to find any creatures at all. A higher number is not necessarily good since we want to collect every group that is there but not every creature. As people become more familiar with the creatures, they get better at collecting only about 100 representatives of the population.

Boyden Creek at Delhi –(September sampling began in 1993.)

Hooray! You found a net-tubed caddisfly (Psychomyiidae) that has never been found at this site! In fact, Psychomiid caddisflies have been found at only two other locations in all our seven years of monitoring, in Mill Creek at Jackson Road and at the Golf Course, also in Boyden Creek. Net-tubed caddisflies are sensitive. Their presence at this site indicates good stream quality. Diversity at this site has decreased but because EPT and sensitive families have remained fairly stable since 1993 we don't feel the change in diversity is of concern.

Boyden Creek at the Golf Course – (September sampling began in 1995.)

Diversity at this high quality site continues to improve while the EPT and sensitive families remain fairly stable.

Chilson Creek: Brighton Road. – (September sampling began in 1997.)
Although the diversity at this site seems low, it is fairly stable. The EPT is slowly increasing although there are no sensitive families. This site is not home to a large variety of creatures and it has not appeared to change in the past couple of years.

Davis Creek: Rushton Road. – (September sampling began in 1996.)
The diversity has dropped quite sharply since last year, from 14 to 9 families. The EPT has dropped from a steady 2 since 1996 to only 1 family in this collection. We've never found sensitive families here in our September samples. This poor site seems to be decreasing in quality. What is changing upstream?

Davis Creek: Silver Lake Road. – (September sampling began in 1997.)
Hooray! You found a clubtail dragonfly (family Gomphidae) for the first time at this site! Clubtails are sensitive and indicate good creek quality.
The diversity appears stable. EPT is on the decline but sensitive families have increased from 2 in past samples to 3 this September. The increase in sensitive families (the clubtail) is reassuring. If there were a decline in creek quality here, we would expect the sensitive families to respond before the EPT. What we're seeing in the EPT numbers is likely due to natural variation.

Fleming Creek: Geddes Road. – (September sampling began in 1992.)
This site is interesting because it has been studied such a long time, giving a clear picture of changes in the biology over time. The diversity this year was about the same as in prior years, although diversity of only the insect families was a little higher than in the past. EPT has always been a steady 4 families and the sensitive families has varied from 0 to 1 with this September showing 1 sensitive family.

Fleming Creek: Warren Road – (September sampling began in 1993.)
Diversity is similar to prior September samples. EPT and sensitive families decreased since September 1998 but the numbers are not unusual when compared to other years. This site appears to have a large natural variation especially in sensitive families.

Honey Creek: Jackson Road – (September sampling began in 1993.)
The diversity at this little site remains low with only 7 families. The EPT has declined and no sensitive families were found in September of 1995 or 1999. Interestingly enough the April collections appear to be improving, which is reassuring. This site is peculiar because the April population is improving while the September populations appear depressed. This observation might be explained by the different conditions at these collection times. The April population has just had the luxury of winter when plenty of oxygen is available, while the September population has fought through the high temperatures and low oxygen levels of summer.

Honey Creek: Pratt Road – (September sampling began in 1993.)
Hooray! Both the diversity and the EPT increased considerably. This site appears to be recovering back to the diversity of 1995. It is interesting that the only sensitive families here are found in April which might have a similar seasonal explanation as the Honey Creek at Jackson Road site.

Chilson Creek: Brighton Road. – (September sampling began in 1997.)
Although the diversity at this site seems low, it is fairly stable. The EPT is slowly increasing although there are no sensitive families. This site is not home to a large variety of creatures and it has not appeared to change in the past couple of years.

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Malletts Creek: Scheffler– (September sampling began in 1992.)
This remains a poor site for benthic (bottom-dwelling) creatures. The diversity dropped from 16 to 12 from the last September sampling in 1995, but the current diversity is not uncharacteristic of this site. EPT remains low and there are no sensitive families living here.

Mann: VanAmburg Road – (September sampling began in 1995.)
This site is doing well with an increase in diversity, in spite of having high conductivity. Conductivity is a measure of the dissolved ions in the water. A normal conductivity reading is about 600µS and over 800µS is considered poor. The conductivity this September was almost 1700µS! EPT remains high and there were 3 sensitive families compared to 2 in past Septembers.

Mill Creek: Fletcher Road. – (September sampling began in 1993.)
This site had not been sampled since 1995. The diversity at this site increased, but remains in the range of previous years. The September EPT has been declining from 6 in 1993 to 3 in 1999. However, it is reassuring that the EPT in our April samples has not followed this trend. (See Honey at Jackson for a discussion of the difference between April and September populations.) There were no sensitive families found either in 1995 or in 1999. We will watch to see if the September EPT continues to go down.

Mill Creek: Ivey Road. – (September sampling began in 1994.)
Hooray! You found a prong-gill mayfly (family Leptophlebiidae) for the first time in our September collections! Prong-gill mayflies are sensitive and indicate a good quality stream. Diversity at this site seems fairly similar to past samples. EPT and sensitive families are higher than ever before with 8 EPT families and 2 sensitive families!

Mill Creek: Jackson Road. – (September sampling began in 1996.)
Wow! Diversity at this site increased sharply from an average of 12 insect families and 15 total taxa in past Septembers to 20 insect families and 25 total taxa! While EPT increased by one family, the groups responsible for the increase in diversity are mainly beetles, dipterans (flies) and hemipterans (true bugs). Sensitive families have not been found at this site since 1997. Let's hope the sensitive families return.

Mill Creek: Klinger Road – New Site
The diversity at this small site is similar to other sites on Mill Creek. The EPT seems a little low with 3 families but it was nice to find a sensitive family, the clubtail dragonfly (family Gomphidae).

Mill Creek: Letts at M-52 – (September sampling began in 1993.)
This site, unfortunately, has not improved. In about 1995 this site started declining in diversity, EPT and sensitive families. Sensitive families were not found last September or in this September's sample. Diversity and EPT continue to be low. It looks like this site continues to show the impacts of the oil that leaked into the creek for some length of time until we alerted the DEQ in 1997.