



St. Clair County Health Department

Storm Water Program
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The Watershed Calendar



Rain Garden Workshop, October 2nd
East China Twp Hall, 6:00 pm
Contact Dee, 810-326-3713

Plant Swap, October 4th
St. Clair County Admin Bldg, 11am - 2pm
Contact Charlene Kidd, 810-985-8587

Fall Tree Sale, October 4th
Goodells County Park, 9am - 1pm
Contact Stacey Kautz, 810-984-3001

Fall Farm Tour, October 11th
St. Clair Twp area, 10am - 3pm
Contact Stacey Kautz, 810-984-3001

Adopt-A-Stream, October 11th
St. Clair County MSU Extension, 9:00 am
Contact Liane Allen, 810-989-6935

Native Plant Workshop, October 15th
Algonac Library, 6:30 pm
Contact Sue Kulhman, 810-794-4471

Bats of the World, October 25th
Pine River Nature Center, 7:00 pm, Minimal fee
Contact Carrie Kloka, 810-364-5477

Fall Star Party, November 22nd
Pine River Nature Center, 5:30 pm
Contact Carrie Kloka, 810-364-5477

Master Gardener Workshop, March 21, 2009
Cornerstone Church, Port Huron, \$70/ticket
Contact Barb Haman, 810-367-6667

Earth Fair & Spring Tree Sale, April 17-18, 2009
Goodells County Park
To order trees, contact Stacey Kautz, 810-984-3001

If you no longer wish to receive *The Blue Watershed News* by mail, or you are not yet on our mailing list and would like to receive the newsletter electronically or by mail, please call (810) 987-5306 and leave your name, address, phone number, email, and whether you wish to be added or removed from the mailing list.

This newsletter is distributed by the St. Clair County Storm Water Program for the Northeastern and Anchor Bay Watershed Groups.

Blue Watershed News

A publication of the St. Clair County Storm Water Program

Issue 9 • Fall 2008

What is a watershed?

A watershed is another word for a river basin. It's an area of land shaped like a bowl that drains streams and runoff to a larger body of water. We all live in a watershed! Find yours at www.stclaircountystormwater.org.

About us

The St. Clair County Storm Water Program began in 2003 because of federal requirements to improve water quality. We are currently taking action to make our water cleaner.

Mark Your Calendar...

Oct 2- Rain Garden Workshop
Oct 4- Fall Tree Sale
Oct 15- Native Plant Workshop
Nov 22- Fall Star Party

Visit us online

Visit our watershed website at www.stclaircountystormwater.org for information about:

- Watershed maps
- Septic system maintenance
- Hazardous waste disposal
- Beach closures

Help save trees

Please send us your e-mail address so we can send you an electronic copy of the *Blue Watershed News*. E-mail your request to stormwater@stclaircounty.org. Find current and past newsletter editions on our website.

A Summer Full of Activities

Fish shocking, digging for bugs and more

What do you get when you mix electricity and water? Fish shocking on the Belle and Pine rivers, of course!

In August, our Storm Water team was invited by a team of Fisheries Biologists from the Michigan Department of Natural Resources (MDNR) to lend a hand in their fish survey. The only data that existed on the Belle was from 1974 and none existed for the Pine.



A team of fisheries biologists electroshock fish as they walk upstream in the Belle River.

Upper reaches of the Belle in Berlin and Riley townships, influenced by dredging and agriculture, revealed creek chubs, white suckers, and johnny darters. The middle section from Riley Center to Indian Trail roads had beautiful habitat dominated by cobble and gravel and as a result there was a big increase in darters, rock bass, hog suckers, and shiners. The two most downstream sites showed evidence of Great Lakes influence with species like shad, emerald shiners and yellow perch.

The biologists were most excited to find the Eastern sand darter, a Michigan Threatened species, living in both rivers.

Brindled madtoms, a Special Concern species, were also found in the Pine. Finding these species are indicators of good water quality!



The most fish found at one site was on the Pine at Newman Road. In a 390-ft stretch of river over 1,300 fish were caught representing 32 different species! At the Kroner Road site on the Belle over 1,000 fish were caught representing 28 different species.

This data will go a long way in documenting the habitat and fisheries in the Belle and Pine rivers, and guide future protection efforts.

Tracking Down Phosphorus

This summer we started monitoring for phosphorous at seven sites in the Black River Watershed. Previous monitoring indicated that many of



Melissa Keener, summer intern with the Storm Water Program, collects a water sample to be tested for phosphorus.

View a map of your watershed on our website at www.stclaircountystormwater.org

Can't Beat the Beach!

If success of our beach monitoring program is measured in how few days our beaches are closed, than this was our most successful year on record since monitoring began in 1974!

Our beach water monitoring program is designed to protect beach-goers from unhealthy water conditions. From Memorial Day to Labor Day we monitor nineteen beaches from Jeddo to Algonac, most of which are Great Lake shorelines or campground ponds.



Beach goers enjoy a beautiful summer day at Lakeside Beach in Port Huron.

During weekly testing, water samples are collected and tested for *E. coli* bacteria, a common microbe found in the digestive systems of all warm-blooded animals, including us. The presence of *E. coli* in water can indicate possible sewage contamination. When the water reaches unsafe levels the beach is temporarily closed.

Over the last five years beach closures have been on a steady decline. This year we had only one beach closed for one day! We attribute this to the success of our Illicit Discharge Elimination Program, which identifies sewage problems from failing septic systems. Fixing failing septic systems has reduced the amount of sewage entering our waterways every year by 32-million gallons. Swim on, swimmers!

Summer Around Our 'Sheds

Continued from Page 1

our waterways were high in phosphorus (P). The sites we monitored were on the Black River, Stocks Creek, the Howe-Brandymore Drain and Mill Creek.

Our results showed that every site contained levels of P that are too high. P enters our waterways through soil erosion or fertilizer runoff. High P levels are a concern because this leads to a drop in oxygen levels, a vital element necessary for fish and aquatic wildlife.

Restoring St. Clair River Habitat

The St. Clair River is designated an Area of Concern because of what are known as Beneficial Use Impairments (BUIs). The goal is to get rid of the BUIs so it is no longer an area of concern, but to do that the quality of the river must improve.



Over 60% of the St. Clair River's "soft" natural shoreline has been "hardened" by the construction of seawalls.

Currently, the Bi-National Public Advisory Committee is drafting a report focusing on the loss of habitat for fish and aquatic wildlife, which is just one of the fourteen impaired BUIs listed for the St. Clair River.

In order for the impairment to be removed, existing habitat needs to be restored, protected and enhanced. Such a project may be to install shallow water nursery and spawning habitats for Lake Whitefish

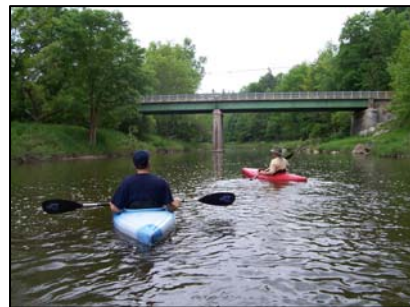
and Lake Herring or to restore the shoreline back to its natural state with vegetation.

This report will provide the necessary tools to move toward implementation of the habitat goals and make the St. Clair River a viable place for fish and wildlife populations to thrive.

A Black River Report Card

This summer the MDNR wrapped up a 3-year study of the Black River. The study compiled information on the entire 710 mi² watershed, including its headwaters in Minden Bog, west to Mill Creek's headwaters and south to Port Huron. The report will serve as an information base for managing the river's future.

The Black River and most of its tributaries suffer from high sediment loading due to widespread channelization (1,000 miles of streams are designated drains) and extensive agriculture practices. The healthiest stretch of river was found to be the 16-mile stretch in the Port Huron State Game Area.



Canoeists take advantage of the Black River.

The report summarizes that water quality has improved over the last 40 years and that it's reasonable to think more restoration can occur.

The report is available online at www.michigan.gov/dnrfishing.

Macroinvertebrate What?

Bug searchers take to local streams



Have you been called a Bugga? Do you dream of being a Shuttla or Kicka? Then Stream Leaders is for you!

Stream Leaders is a volunteer based water monitoring program designed to help us assess a stream's health. In the spring and fall each year teams of volunteers, led by a trained leader, are let loose into St. Clair County streams to sample for macroinvertebrates.

Benthic Macroinvertebrates
Tiny bugs that live on a stream bottom whose presence indicates of the health of a waterway.

Streams being monitored are Burtch Creek, Silver Creek, Stocks Creek, Bunce Creek, Cuttle Creek, Meldrum Creek and Beaubien Creek.

"Volunteers with the Stream Leaders program are important for helping us gather long-term data on our rivers."



Stream Leader volunteers sort and identify macroinvertebrates collected from Meldrum Creek in Ira Township.

"Macroinvertebrates are sensitive to environmental conditions and can tell us a lot about what's going on in our waterways," said Kristen O. Jurs, Storm Water Coordinator.

Monitoring kicked off this year on Saturday, September 27th with more than twenty Bugga, Shuttla and Kicka volunteers eager to learn about the conditions and quality of their assigned stream.

So, what are a Kicka, a Shuttla, and a Bugga? A Kicka (or "Kicker") volunteer is the name given to the person responsible for finding the bugs. This person wades in the stream, working from bank to bank, kicking up sediment from the stream bed, where aquatic bugs like to hide, and scoops them into a net.



Cuttle Creek in Marysville is a monitoring site.

A Shuttla (or "Shuttler") is assigned the job of shuttling the bugs from the volunteer in the water to the volunteers on dry land.

From there the Bugga (or "Bug") volunteers use tweezers to carefully sort through the tray searching for the macroinvertebrates. The bugs are then further sorted into ice cube trays based on their Order classification.



The Storm Water Program is helping to organize this stream monitoring program for Friends of the St. Clair River Watershed organization which received a \$13,297 grant in March 2008 from MI Corp.

We need Stream Leader volunteers! Please call us to sign up!

SC4 Installs a Green Roof

What's out of sight is not always out of mind. This past June, the St. Clair County Community College (SC4) installed a 5,000 ft² green roof atop their Fine Arts Building. Although we might not be able to see it from the ground, SC4 has their mind on all the benefits the green roof will bring.

Environmentally speaking it'll help control run-off to the Black River and absorb CO² in the air. It'll also lower heating and cooling costs and provide a sound barrier, great for the performing arts theater. The life of the roof will also be doubled thanks to the sedum material.

SC4 will also be installing a 4,800 ft² green roof on their North Building and also one on the Clara E. Mackenzie Building which will serve as a hands-on "living lab" for students.



Workers install vegetated mats of sedum on the Fine Arts Building roof of SC4.

Green roofs are gaining attention and popularity. The cost to install a green roof is slightly higher, but the savings and durability over time far outweigh a traditional roof.

Not planning to install a green roof? Instead, try installing a rain barrel at your home. Connect your rooftop downspouts to a barrel which will collect and store rain water until you need it for lawn and garden irrigation. Rain barrels are earth-friendly and economical!