



# Huron River Report

The Newsletter of the Huron River Watershed Council

Fall 2004

Curbing Sprawl	p 6
Mill Creek Activities	p 10
Doing the COW	p 11
For more, see	p 2

## In the Wake of the Flood

Water levels and questions are on the rise after heavy spring rains

Following the torrential May rains that saturated much of southern Michigan, one might have expected to see nature's



The Livingston County Drain Office's recently purchased sandbagging machine was put to the test during spring flooding around Ore Lake. —photo: LCDO

creatures knowingly lining up in pairs and moving to higher ground... just in case things didn't calm down soon. While the flooding may not have been of biblical proportions, many residents of the Huron River Watershed whose backs still ache from sandbagging would be quick to note that it was the worst in recent memory. Among the hardest hit areas in the Huron River Watershed was Ore Lake, which straddles Green Oak and Hamburg townships in Livingston County.

Naturally, as soon as the residents around Ore Lake could catch their breath, the questions started bubbling to the surface:

How did this happen? Who is responsible? Who can help us? How can we prevent this from happening again? Unfortunately, these are complex questions, and the lack of clear-cut answers is frustrating, especially for someone whose living room furniture is stained with the high water mark of an adjacent lake. Certainly, these questions have been asked before, and the fact that the floods continue to occur is a strong indicator that no single issue is at fault and no simple solutions exist.

### THE BLAME GAME

A natural reaction is to point fingers at upstream factors, such as dam operation. However, while dams can be engineered for flood and storm water control, the major dams on the Huron River upstream of Ore

*continued on page 3*

## Subdividing Our Rivers

Dams and other structures impact the river system

Fish and other aquatic organisms have much more complicated life cycles than one might think. Most species of river fish migrate throughout a river's network of connected streams to use very specific habitats. Adult fish spawn in well-oxygenated gravel and find refuge in deep pools during the long Michigan winters. Some adults follow other spawning fish upstream to feed on eggs. Juvenile fish avoid predators and find food among the shallow river edges.

People, in fact, are a lot like fish. We tend to have our babies in safe places. We go to the supermarket where our food is delivered from other regions. We travel "up North" for the summer and retreat to the warm

confines of our homes in the winter, and may even head south for sunny Florida once we retire.

But humans alter the habitats of many aquatic organisms by cutting the river network into hundreds of fragments. By building our infrastructure network, we have created barriers that prevent fish from using and migrating to the places they need.

### COSTS OF AQUATIC SUBDIVISION

How have we subdivided our rivers and streams? Dams, bridges and culverts can create obstacles in various ways. Dams without fish ladders physically sever a river. Bridges with smoothed concrete bottoms designed to protect abutments from



Sea Lamprey (*Petromyzon marinus*) on a Lake Trout. —photo: U.S. Fish and Wildlife Service

erosion can make the water too shallow or too fast for fish to swim through; culverts or pipes can do the same. If culverts are perched above the stream, most fish cannot jump up into the culvert. The depth

*continued on page 4*

# Table of Contents

## Featured Articles

In the Wake of the Flood.....cover  
*Water levels and questions are on the rise after heavy spring rains.*

Subdiving Our Rivers.....cover  
*Dams and other structures impact the river system.*

State Acts to Curb Sprawl.....6  
*Governor and Legislature act on the Michigan Land Use Leadership Council Report.*

New Findings, Survey in EPA Lakes Study.....7  
*An update on the 3-year study at year 2.*

Celebrating the Huron.....8  
*River Day 2004 events focus on fun.*

Local Governments Take Action..10  
*Communities move forward to implement Mill Creek Plan.*

Doing the COW.....11  
*Communities across the watershed examine their codes and ordinances.*

We Will Miss "Our" Meroë .....11  
*An homage to a remarkable woman.*

## Other News

Passing the Baton: Staff Changes.....9

Fall Membership Events.....10

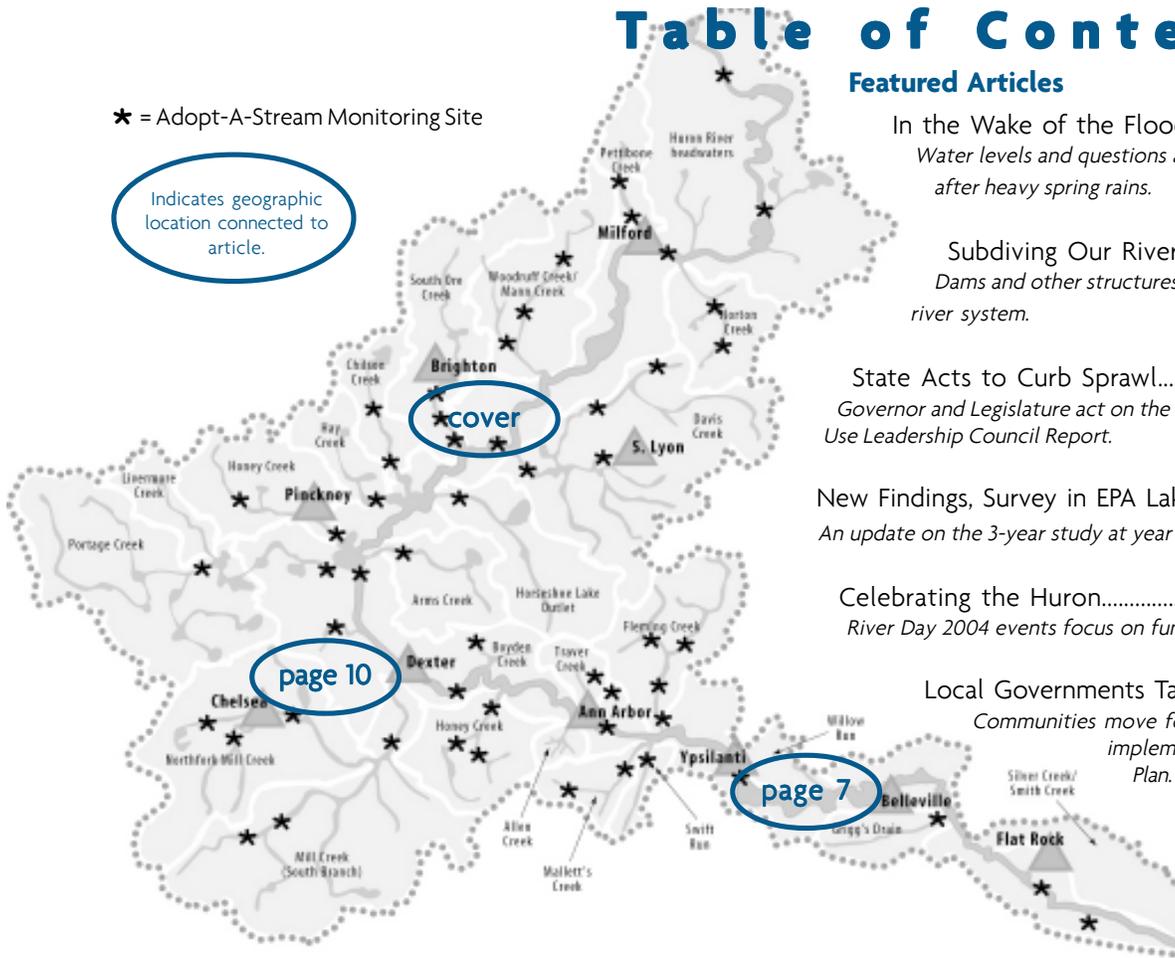
Thank You! .....back

*More events and updates on the web at: [www.hrwc.org](http://www.hrwc.org)*

The **NEW Center** is located at 1100 N. Main Street in Ann Arbor. Call (734) 769-5123 or visit the HRWC website for directions.

★ = Adopt-A-Stream Monitoring Site

Indicates geographic location connected to article.



## EVENTS

Saturday, Sept. 11, 9-5  
**River RoundUp**  
 Entire Watershed  
 Call Adopt at (734) 769-5971

Thursday, Sept. 23, 5:30PM  
**HRWC Executive Committee Meeting**  
 NEW Center  
 Call Laura at (734) 769-5123 x2

Sunday, Sept. 26, 9-3:30 or 10:30-4:30  
**Bug ID Day**  
 NEW Center  
 Call Adopt at (734) 769-5971

Tuesday, Oct. 5, 6:30 PM  
**Public Meeting: Study to Reduce Nuisance Algae in the Huron**  
 NEW Center, Ann Arbor  
 Call Elizabeth at (734) 769-5123 x4

Wednesday, Oct. 13, 7:00 PM  
**Public Meeting/Open House for Huron Chain of Lakes subwatershed management planning**  
 Genoa Township Hall, Brighton  
 Call Chris at (734) 769-5123 x5

Thursday, Oct. 28, 5:30 PM  
**HRWC Board Meeting**  
 NEW Center, Ann Arbor  
 Call Laura at (734) 769-5123 x2

Wednesday, Dec. 1, all day  
**Development Techniques to Protect Water Quality Seminar**  
 Focus on "Low Impact Development," "Smart Growth," and "Sustainable Development" in Michigan  
 Holiday Inn-West, Lansing  
 Call Laura at (734) 769-5123 x2 or MI Water Environment Association at (517) 641-7377

**FOOD, TOURS, WALKS - Terrific new Membership Events** on page 10!

# In the Wake of the Flood

*continued from cover*

Lake were not. These dams are operated as “run-of-the-river” so that the dam operators, by law, cannot hold or release more water than is flowing in the river. In essence, what comes in, goes out. Looking downstream may provide some clues as to how the flooding occurred in May.

Flow data gathered by the U.S. Geological Survey (USGS) at a stream gage station just downstream of Ore Lake indicate that an obstruction in the Huron River, such as aquatic plant growth or other debris, may have played a significant role in slowing down the flow of the river, thus contributing to the flooding around Ore Lake.

Preliminary analysis indicates that such a flood has a probability of occurring every two to five years. However, a backup of water in the river due to an obstruction offers one explanation of how a localized flood that should occur statistically every two to five years could cause damage not seen in a generation. Clearly, physical changes in the river channel need to be investigated further in order to understand the causes of flooding and explore options for mitigating future damage. If the river is obstructed

or overgrown with aquatic vegetation, then steps may be needed to restore the river and prevent future obstructions.

## CALL FOR CAUTION

However, one must be careful to distinguish between restoration efforts and physically controlling the river (through activities such as dredging) for the sole purpose of flood control. While such solutions may help alleviate flooding problems in the short run, one must consider their impacts on the long-term overall hydrologic and ecological health of the river system. The state of the river is a reflection of the health of the watershed as a whole, which, in turn, is largely determined by the actions of all its

inhabitants – upstream, downstream, and in our own back yards. If aquatic plant growth increases in the river (or sediment, or whatever else may be slowing down water flow) we should be asking ourselves what factors are contributing to the problem in the first place and what actions we can take to minimize human impacts to the natural flow of the river.

Rarely is there a simple and isolated solution to such flooding problems. Flooding is an unavoidable natural process that never will be completely controlled. As Livingston County Drain Commissioner

south from Hartland Township, feeds Ore Lake. Ore lake, in turn, feeds into the Huron River. As with much of the upper Huron River Watershed in Oakland and Livingston counties, the land area that drains into South Ore Creek (the creekshed) faces tremendous development pressures. The rapid urbanization of the South Ore creekshed has led to paving over land that used to soak up the rain water and gradually release it into the creek as groundwater. Impervious surfaces including roads, roofs and driveways, as well as lawns, all carry storm water (along with increased amounts of sediment and pollutants) directly and quickly to South Ore Creek and the Huron River, causing a more rapid and dramatic rise in water levels when it rains.

As the South Ore creekshed and portions of the Huron River Watershed upstream of South Ore Lake become more urbanized, pressure to build in the floodplain increases, as does subsequent runoff potential from a more developed landscape. Both of these factors portend intensified flooding problems. As devastating as the flooding was around Ore Lake, USGS data indicates that it probably was not a once-in-a-lifetime



*Flooding of residential property adjacent to Ore Lake in Hamburg Township.*

—photo: LCDO

Brian Jonckheere put it: “You are never going to prevent (flooding) unless you can stop the rain from falling.” However, the choices we make today in managing growth and development in our communities will have a significant impact on the severity of future floods and the damage they inflict. How we build, how much we build, and where we build affects the flow of water into the river after a rain event.

## UNINTENDED CONSEQUENCES

The developed area upstream of Ore Lake provides a good example of how decisions concerning development and land use can impact the flow of water to and in the Huron River. South Ore Creek, which flows

experience. As development (with its impervious surfaces) increases, it takes less rainfall to create higher flows in the river. Essentially, the “100-year storm” or “once-in-a-lifetime” flood can happen much more frequently than every 100 years.

## TEAMWORK

Effective floodplain management requires resources and knowledge that are beyond any single group or agency. HRWC has spearheaded numerous collaborative efforts to shape a long-term and comprehensive approach to watershed issues, including flood control. In Livingston County, for example, HRWC’s Adopt-A-Stream Program has organized hundreds of

*continued on next page*

# Subdividing Our Rivers

*continued from cover*

of the pool below a perched culvert may be too shallow to allow fish to gain enough momentum to even attempt a jump. Besides, most fish in the Huron don't jump anyway.

These fish passage barriers do more than restrict migration of fish for spawning; they also can reduce movement of juvenile fish, force fish to congregate where they are vulnerable to disease or predators, limit the availability of different feeding areas, and isolate groups of fish and reduce gene flow between populations. Dr. Gerry Smith, director of the University of Michigan's Museum of Zoology and head curator of fishes, warns, "In general, fish barriers cause

extinction, and their net impacts are negative."

## IMPACTING MORE THAN JUST FISH

Scientists have determined that both fish and mussel diversity are related positively to a stream's drainage area, or upstream watershed area. In other words, the farther downstream, the greater the variety of fish and mussel species. Fish can migrate to smaller river reaches and streams in order to find the water temperatures to suit them. But a dam restricts access to other parts of a river, thus shrinking fish habitat.

A local example is the Mill Pond Dam at Dexter near the mouth of Mill Creek. The dam eliminates Mill Creek's connection with the Huron River. A study by University of Michigan's Dr. Mike Wiley and Paul Seelbach determined that the dam is the main reason why the observed fish diversity of Mill Creek is roughly half of what otherwise would be expected.

Barriers to fish movement limit mussel distribution because mussels use fish for transport. Many mussels have developed ingenious tricks to lure fish close to them so that their larvae, called glochidia, can attach to the gills

and fins of bottom-swimming fish such as sculpins and darters. The mussel larvae hitch a ride upstream and downstream, then drop off and form shells. As adults, mussels are largely immobile but may live for over 100 years. Thirteen native mussel species are found in the Huron River system, four of which are classified as endangered in the state.

## NOT DAMS ALONE

Are there any other potential fish passage barriers in the Huron watershed? The answer is a resounding "yes." Aside from the 96 dams that fragment the 908 square mile watershed, other less obvious, perhaps seasonal or species-specific barriers take the form of bridges, culverts and other man-made structures. These barriers need to be identified if we ever are to reconnect the river network of the Huron for the benefit of its diverse assemblage of fish and mussels.

## BARRIERS TO EXOTICS

But are all fish barriers bad? The most positive impact of artificial fish barriers is that they can halt or slow the spread of unwanted invasive species. Invasive animals, such as the zebra mussel and round goby, and invasive plants, such as Eurasian water milfoil and purple

*continued on next page*



*To aid fish migration, volunteers have installed these wooden deflectors on the right side of the bridge.*

—photo: Norman Turner

# In the Wake of the Flood

*continued from previous page*

volunteers to characterize aquatic life, measure water quality, and evaluate habitat at 21 sites on the Huron River and its tributaries. The Adopt-A-Stream Program also recently completed a detailed report on the water quality of Davis Creek in Green Oak Township, which feeds the Huron River upstream from Ore Lake. HRWC also worked with local governments, businesses, and residents to develop a watershed management plan for Brighton Lake and South Ore Creek. This plan sets forth a comprehensive, long-term approach to restore and protect water quality in the area through a combination of education, voluntary local regulatory tools, and physical improvements to degraded areas of the watershed. Through a recently awarded federal grant, HRWC will soon

begin working with local governments and residents to implement some of the key recommendations of this plan.

HRWC also is communicating with the Livingston County Drain Office, as well as the USGS and Army Corps of Engineers, to better understand potential resources for actively addressing the flooding, such as the need for a hydrologic model to explain the complex dynamics between the natural system and the impacts of development. HRWC will participate in future collaborative efforts in Hamburg Township to address issues such as finding money to fund such projects. Livingston County, as one of 23 Michigan counties declared a federal disaster area by FEMA this spring, will have greater access to federal resources and funding to address flood control.

A broad range of actions will be necessary to respond to the recent flooding given the inherent complexity of the issue. Fortunately, HRWC is one of many groups examining this issue. The challenge is to unite these groups under a coordinated effort, harness resources, make decisions based upon sound science, and have the wisdom and foresight to plan for the future. In times of crisis, such as the 2004 floods, people respond by tapping into an inner-strength and resolve to pull together for the greater good of their community. More than anything else, this same sense of urgency and unity of purpose must continue if we are to prevent a repeat of the recent floods.

**-Chris Riggs**

# Subdividing Our Rivers

*continued from previous page*

loosestrife, cost the state of Michigan millions of dollars annually in damages. The most notorious member of this unwelcome bunch is the Atlantic Sea Lamprey, a parasitic, primitive eel-like fish that latches onto larger fish like trout and salmon and drains their body fluids.

Native to the Atlantic Ocean, the Atlantic Sea Lamprey was first documented in Lake Ontario in 1835 and in Lake Erie in 1921, corresponding to the completion of the Erie Canal and the opening of the St. Lawrence Seaway to navigation, respectively. Free of natural predators, this invader flourished in thousands of miles of spawning rivers and played a major role in the collapse of native lake trout and whitefish populations. In order to protect Pacific salmon introduced to the Great Lakes in the 1960s, wildlife agencies employed a chemical called lampricide and built low-head dams, velocity barriers, and electric weirs to discourage upstream migration of lamprey. Today, inflatable barriers are also used, which can be removed after the lamprey spawning run. These barriers offer several advantages to lampricide, including reduced dependency on chemicals and savings in time, manpower and cost.

## REOPENING THE RIVERS FOR RESTORATION

While certain barriers are beneficial in controlling some invasive species, the removal of barriers represents a growing international trend in fisheries restoration. Obstructions like dams were recognized long ago to affect fish populations. France developed fishway laws during the 1660s requiring that new dam structures include fish passages. Removal of migration barriers forms the cornerstone of efforts to protect and restore many fish stocks, including Pacific salmon and steelhead in the Columbia and Snake rivers, Atlantic salmon in Maine, pallid and shortnose sturgeon in the Mississippi, striped bass, shad, and eels in the Chesapeake Bay, as well as numerous endangered and threatened mussel species in the southeast.

In 1999, the U.S. Fish and Wildlife Service initiated the National Fish Passage Program, a voluntary, non-regulatory approach to remove and bypass barriers on a national level, partnering with local communities and

agencies. Its objective is to restore native fish and other aquatic species populations by reconnecting river sections fragmented by artificial barriers. The photo on page 4 shows simple flow deflectors funded under this program and installed by volunteers beneath a road crossing. Note the original box culvert on the left is wide and shallow. The right culvert now has a deeper, narrower channel due to the wooden deflectors that allows fish to swim upstream but does not measurably reduce the capacity of the crossing during high flows.

Another project, located in the Manistee River system, replaced a hanging culvert with a span bridge to allow for a natural stream bottom (Figures 1 and 2). These projects are often fairly inexpensive but require coordination among local and county road commissions, citizen groups and state wildlife agencies.

## FISH PASSAGE ON FLEMING CREEK

One barrier in the Huron River Watershed is located underneath the Geddes Road Bridge on Fleming Creek in Washtenaw County. The old Parker Mill Dam washed out in a flood in the early 1980s, but the concrete spillway remained. The Michigan DNR sought to remove the spillway, but ultimately decided against it under the notion that the shallow, fast water prevented carp, other nonnative fish, and zebra mussels from moving upstream into the middle and upper reaches of this healthy coolwater stream. However, Dr. Smith deems that this velocity barrier also most likely prevents native warmwater fish and mussels from accessing those upper reaches.



Figure 1. Before: undersized culvert. —photo: MDNR Fisheries



Figure 2. After: span bridge with natural bottom.

—photo: MDNR Fisheries

Next time you look at a map of the Huron River watershed, notice the web of roads that cross the landscape. Remember that the Huron is one of the most heavily dammed rivers in Michigan, with 96 known dams built for recreation, industry, and hydropower. Clearly, as we have settled and developed the landscape, the available real estate for the fish and mussels in the Huron River and its tributaries has decreased to ever smaller and disconnected lots. The fragmentation of southeast Michigan's only "Country Scenic" designated river, whether premeditated or inadvertent, certainly has been severe.

**- Nathaniel Gillespie**  
*HRWC summer intern*

# State Acts to Curb Sprawl

## *The Governor and Legislature act on the Michigan Land Use Leadership Council Report*

Since August 2003, the Governor's Office and the Michigan Legislature have made significant progress in enacting the recommendations of the Michigan Land Use Leadership Council. The Democratic governor and the Republican-dominated legislature have shown uncommon cooperation in moving forward on many of the recommendations. At this point, three land use-related executive orders/directives have been released, and 18 bills have been signed into law.

As of July 2004, the following significant events<sup>1</sup> have occurred:

- ◆ October 2, 2003—Governor Granholm issues an executive order to create the Department of Labor and Economic Growth (DLEG). This order consolidates several major state departments<sup>2</sup>, and will streamline and harmonize current economic expansion and redevelopment projects in the state. DLEG is headed by David Hollister, a strong proponent of urban investment and smart growth.
- ◆ November 18, 2003—Governor Granholm issues an executive directive that requires state facilities, if at all possible, to be located in urban areas with existing and appropriate infrastructure and services.
- ◆ December 18, 2003—Governor Granholm signs four bills that allow cities, villages, and townships to establish joint planning commissions if they so desire, and to allow cities, villages, townships, and counties to promote mixed-use development and preserve existing open spaces.
- ◆ December 23, 2003—Governor Granholm issues an executive directive requiring the Michigan Department of Transportation to begin using "context sensitive design" principles for new road development projects. The governor also signs a bill that significantly increases funding for grants and loans to local governments and brownfield development authorities.
- ◆ December 29, 2003—Governor Granholm signs a six-bill package that creates a Land Bank Fast Track Authority, which allows for expedited private redevelopment projects on abandoned, tax-reverted and brownfield properties.
- ◆ February 17, 2004—The Michigan Economic Development Corporation awards \$30 million in tax credits almost exclusively to urban site cleanups, as a result of Governor Granholm shifting the brownfield redevelopment program away from suburban bedroom communities to city cores, and its administration from the Treasury Department to the Michigan Economic Development Corporation.
- ◆ January 12, 2004—Governor Granholm signs a six-bill "anti-blight" package that allows cities of 7,500 or more to develop an administrative board to hear cases on blight, illegal dumping, abandoned vehicles, etc., to expedite the resolution of these cases by removing them from overburdened court systems.
- ◆ June 2, 2004—Governor Granholm announces that 20 "Cool Cities" pilot projects will receive catalyst grants of up to \$100,000 each and will have access to more than \$100 million in state grants, loans, and other resources. The initiative, which officially began in June 2003, is designed to help foster the development of vibrant, attractive cities and urban centers that are appealing to the "creative class." The projects receiving grants are located in Alpena, Bay City, Detroit, Ferndale, Flint, Grand Rapids, Jackson, Kalamazoo, Marquette, Port Huron, Portland, Saginaw, Saugatuck, Sault Ste. Marie, Traverse City, Warren, and Ypsilanti.
- ◆ June 30, 2004—Michigan Timely Application and Permit Service (MiTAPS) is created to provide a one-stop shop for businesses to be able to determine what permits are needed to do business in Michigan - regardless of the department or agency.
- ◆ July 14, 2004—Governor Granholm signs a bill that supports the council's recommendation regarding "Safe Routes to Schools" programs, which encourage children to walk and bike to school. The bill would amend the Michigan Vehicle Code to require that a school crossing be established "within a safe distance" from a school that is located on a street or highway on which the speed limit is 25 miles per hour or more.

Additionally, more than 40 land use reform bills are currently at various stages of progress in the state legislature, with other possible bills in the works. These bills cover a wide range of issues including agricultural land ownership, urban redevelopment, and transportation facilities.

Three notable bill packages that are moving through the legislature<sup>3</sup> include:

- ◆ Agricultural security areas (HBs 5030–32)—These bills would allow owners of farmland who place their property in special agricultural districts to claim a credit against either the single business tax or the income tax. The credit would be equal to the amount that property taxes on farmland and structures devoted to agricultural use exceed \$5 per acre. The program would only be available in local units that chose to participate. A local unit could only participate if it met certain criteria, including being located in a county that had implemented or updated a comprehensive land use plan in

*continued on next page*



*The state legislature is considering an "agricultural security areas" bill that would help preserve farmland.—photo: Landon Bartley, What Michigan Wants Visual Preference Survey (whatmichiganwants.com)*

# State Acts to Curb Sprawl

continued from previous page

the previous five years, and if the local unit was in compliance with the plan. Participating property owners would have to enter into 20-year agricultural district contracts (renewable for 10 years) with the Department of Agriculture. The credits would apply for tax years after December 31, 2005. The bill contains provisions allowing for the early withdrawal of farmland, with assessments to be levied against property owners, and for the relinquishment of land from contracts, with credits to be repaid with interest. Status: Passed in House on June 30, 2004

◆ **Commerce Centers (SB 1199)**—This bill is part of the core package introduced by a bipartisan group of senators. The bill would create the “Commerce Center Act” to do all of the following:

- Require the DLEG to identify annually each city, village, or township that qualified as a “commerce center” under the Act.
- Require DLEG to recommend to the legislature funding and program development options that would assist commerce centers in encouraging commercial growth and development.
- Require DLEG to report annually to the legislature regarding the

activities and success of each commerce center in Michigan.

“Commerce center” would mean a city, a village, or a township that meets both of the following conditions:

- it is located in a county with a population over 400,000, as established by the latest federal decennial census.
- If it has a population of 20,000 or less, the county board of commissioners must adopt a resolution approving its recognition as a commerce center.

The bill also states: “The legislature finds that it is in the public interest to recognize certain communities as commerce centers because of their urban and commercial character and that to improve commercial growth and development in this state it is necessary to provide these target areas with certain funding and assistance programs.” Status: In Senate Committee on Commerce and Labor

- **Public Sector Consultants**



Many actions being considered will encourage the creation of walkable, livable, “cool” cities.—photo: Anton Nelessen, What Michigan Wants Visual Preference Survey (whatmichiganwants.com)

<sup>1</sup> Sources: Gongwer News Service and Michigan.gov and Michiganlegislature.org websites.

<sup>2</sup> Including the MEDC, major sections of Consumer and Industry Services, the Michigan Department of Career Development, and the Michigan Brownfield Redevelopment Board.

<sup>3</sup> Sources: Michiganlegislature.org and <http://www.senate.michigan.gov/gop/senator/allen/news/may2004/51204.pdf> websites.

If you would like more information on this topic, contact Laura Rubin at [lrubin@hrwc.org](mailto:lrubin@hrwc.org).

## New Findings, Survey in EPA Lakes Study

A U.S. EPA-sponsored study of the middle Huron River completed its first year of data collection and researchers plan a series of informational meetings as well as a survey questionnaire to watershed residents. The project is documenting chemical and biological conditions of the river and its man-made lakes through weekly sampling and continuous automated measurements at some sites. Researchers have documented a strong influence by weather conditions on nuisance algal bloom development.

The researchers will present their newest findings at a meeting open to the public on October 5 at 6:30 PM at the offices of the Huron River Watershed Council. They are also scheduling meetings with citizen

advisory groups for lake and environmental issues at both Ypsilanti and Van Buren townships.

In early October the researchers plan to conduct a scientific survey of watershed residents. The survey will assess public perceptions about water quality and public health issues. Researchers hope to learn if nuisance conditions caused by algal blooms are significantly disrupting opportunities for swimming, boating, or fishing, and whether people have experienced any physical symptoms or discomfort following exposure to the water. They would also like to learn residents’ opinions about remediation options and possible management efforts.

- **Donna Lehman**

## Allens Creek Update

In the Spring 2004 *Huron River Report*, HRWC reported on flooding and water quality concerns plaguing Allens Creek and our proposal for initial steps to restoration. These recommendations were the result of a two-year stakeholder process. The City of Ann Arbor has tabled the proposal indefinitely because some public input indicated a desire for a more extensive monitoring program. While Allens Creek needs considerable attention and resources, HRWC feels that the proposal is realistic, given government budget constraints, and a good first step in developing solutions for creek restoration and protection, and stewardship among creek residents.

# Celebrating the Huron

*River Day 2004 events focus on fun.*

The weather was ideal for River Day 2004, June 5, allowing many watershed residents to participate in a variety of activities that highlighted the importance of the Huron to their local communities.

## BUSINESSES ENJOY HELPING WITH RIVER DAY

Huron River Watershed Council business partners' employees worked on their days off to help the health of the Huron by cleaning up trash, doing storm drain stenciling, and building a new walking path in Argo Park to help stop erosion. One business partner, Visteon, had 70 volunteers from its Visteon Powertrain Control Systems and Air /Fuel Management product development group. All of the employees were wearing bright orange T-shirts as they picked up trash around Belleville Lake and diligently glued stencils on storm drains. Their work was special to them because they were helping protect the Huron as it flows through Van Buren

Township, Visteon, Inc.'s future home.

## CHEAP THRILLS

Many watershed residents took advantage of the beautiful weather by receiving a discount from Heavner Canoe Rentals and Gallup Canoe Livery to canoe the Huron and enjoy the serenity of the river. Others took time to stop by the Buhr Park Wet Meadow Festival to help plant native vegetation, hear music, or enjoy games. Still other participants visited a Huron Clinton Metropark to learn about fishing or take a naturalist-led walk.



*Sarah Kurz and Becca Ritter-Charles hold the first of 6,000 plants to go into the new Buhr Park Wet Meadow. —photo: Dale Petty*

River Day was a great success and many of the folks who came made a promise to protect the Huron every day of the year—because one day in June is not enough

- Ellen Offen

## HRWC BOARD OF DIRECTORS

### CITY OF ANN ARBOR

Shirley Axon  
Dave Borneman  
Eunice Burns (Exec. Comm.)  
Craig Hupy  
Joan Lowenstein  
Sumedh Bahl (alternate)  
John Hieftje (alternate)

### ANN ARBOR TOWNSHIP

Diane O'Connell

### VILLAGE OF BARTON HILLS

James Wilkes

### CITY OF BELLEVILLE

Steven Walters

### CITY OF BRIGHTON

Eric Piehl (Exec. Comm.)

### BRIGHTON TOWNSHIP

Bud Prine

### BROWNSTOWN TOWNSHIP

Leonard Mannausa

### VILLAGE OF CHELSEA

Brad Roberts

### COMMERCE TOWNSHIP

Connie Guest  
Tom Zoner (alternate)

### DEXTER TOWNSHIP

Richard Grannis

### VILLAGE OF DEXTER

Paul Cousins (Chair)

### CITY OF FLAT ROCK

Ricky Tefend

### GENOA TOWNSHIP

Kelly Kolakowski  
Paul Edwards (alternate)

### GREEN OAK TOWNSHIP

Fred Hanert

### HAMBURG TOWNSHIP

Rudy Feldt

### HURON TOWNSHIP

Deeda Stanczak  
Robert Stanczak (alternate)

### LIVINGSTON COUNTY

Jill Thatcher (Vice-Chair)

### VILLAGE OF MILFORD

Vacant

### MILFORD TOWNSHIP

Mary Bajcz

### NORTHFIELD TOWNSHIP

Ray Fullerton

### OAKLAND COUNTY

Lev Wood (Exec. Comm.)  
Al Drenchen

### VILLAGE OF PINCKNEY

Michael Powell

### PITTSFIELD TOWNSHIP

Jan BenDor

### SALEM TOWNSHIP

Debbie Lee (alternate)

### SCIO TOWNSHIP

Chuck Ream

### VILLAGE OF SOUTH

### ROCKWOOD

Vacant

### SPRINGFIELD TOWNSHIP

Vacant

### SUPERIOR TOWNSHIP

John Langs

### VAN BUREN TOWNSHIP

Dan Swallow

### WALLED LAKE

Carol Woodruff  
Lloyd Cureton (alternate)

### WASHTENAW COUNTY

Janis Bobrin (Exec. Comm.)  
Richard Norton (alternate)  
Evan Pratt (Treasurer)  
John Russell (alternate)

### WAYNE COUNTY

Kurt Heise

### WEBSTER TOWNSHIP

Eric Petrovskis (Exec. Comm.)

### W. BLOOMFIELD TOWNSHIP

Vacant

### WHITE LAKE TOWNSHIP

Mike McAdams

### CITY OF WIXOM

Michael Howell

### VILLAGE OF WOLVERINE LAKE

James L. Donahue

### CITY OF YPSILANTI

Edward Kluitenber

### YPSILANTI TOWNSHIP

Bob Neely (Exec. Comm.)  
Carolyn McKeever (alternate)

## HRWC STAFF

### Jo Latimore

Adopt-A-Stream Co-Director  
jlatimore@hrwc.org

### Joan Martin

Adopt-A-Stream Co-Director  
jmartin@hrwc.org

### Suzu Morse

Planning Workshops Coordinator  
suzymo@earthlink.net

### Ellen Offen

Director of Development  
eoffen@hrwc.org

### Kris Olsson

Watershed Ecologist  
kolsson@hrwc.org

### Cynthia Radcliffe

Webmaster  
webmaster@hrwc.org

### Chris Riggs

Upper Huron Watershed  
Coordinator  
cmriggs@hrwc.org

### Elizabeth Riggs

Middle & Lower Huron  
Watershed Coordinator  
eriggs@hrwc.org

### Laura Rubin

Executive Director  
lrubin@hrwc.org

### Debi Weiker

Watershed Program Associate  
dweiker@hrwc.org

### Jennifer Wolf

Marketing Specialist  
jwolf@hrwc.org

### Susan Wooley

Office Manager  
swooley@hrwc.org

# Passing the Baton

*Best of Luck, Theresa and Nat! Welcome, Jo!*

June was a busy month for HRWC's Theresa Dakin. She married (congratulations Theresa!) and began graduate classes in architecture at the University of Michigan. She also left HRWC after five years as Co-director of the Adopt-a-Stream Program to concentrate on her new career. We are sorry to see her go but glad that she is pursuing her dreams.

HRWC is excited to welcome Dr. Jo Latimore as Theresa's successor. Recently, she moved from East Lansing to Grass Lake with her husband, Ralph, and their two dogs. Jo has studied fish at MSU, macroinvertebrates at Notre Dame and wolf spiders at Albion College. We are

delighted to have her on staff. She looks forward to meeting you.

U-M Master of Science candidate Nat Gillespie also joined our staff as an intern during June and July. Nat, who authored this issue's cover article, "Subdividing Our Rivers," developed road crossing inventories for the lower and upper Huron among other tasks. Thanks, Nat!



*Past and present Adopt-A-Stream Co-directors Theresa Dakin and Jo Latimore. —photo: HRWC*



Pumpkinseed fish © 2000 Steve Giltzow

## Thank You to Our Business Members

The Huron River Watershed Council would like to thank the following businesses for their business membership this quarter.

### Supporters

Hobbs + Black Architects  
Orchard, Hiltz & McCliment, Inc.  
Wade-Trim

### Members

Magellan Properties LLC  
Bowers & Rein Associates, Inc.  
Fishbeck, Thompson, Carr, & Huber, Inc.

### Contributors

Charles Reinhart Company, Realtors

## The Huron River Watershed Council

**The Huron River Watershed Council** is a coalition of Huron Valley individuals, businesses and local governments established in 1965 under Michigan's Local River Management Act to inspire attitudes, behaviors, and economies that protect, rehabilitate, and sustain the Huron River system. The Watershed Council is a non-profit organization under section 501(c)(3) of the federal tax code.

**If you enjoy this newsletter, please consider membership.** Services of the Council include hands-on citizen education, technical assistance in policy development and direct river protection projects. You will find a membership form below. All contributions are tax deductible.

Yes, I want to help the Huron River Watershed Council protect and restore the Huron River.  
Here are my 2004 member dues:

<input type="checkbox"/> \$5,000 Mink	<input type="checkbox"/> \$500 Blue Heron	<input type="checkbox"/> \$50 Friend
<input type="checkbox"/> \$2,500 Small Mouth Bass	<input type="checkbox"/> \$250 Mayfly	<input type="checkbox"/> \$30 Supporting
<input type="checkbox"/> \$1,000 Green Heron	<input type="checkbox"/> \$100 Steward	<input type="checkbox"/> \$___ Other

Name \_\_\_\_\_

Address \_\_\_\_\_ City, State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

# Local Governments Take Action

## Communities move forward to implement Mill Creek Plan

Last fall, HRWC and 13 government, business and citizen representatives from the Mill Creek watershed completed a 2-year process to create the Mill Creek Subwatershed Management Plan. The plan, approved by the MDEQ, describes current conditions in the watershed and identifies future threats and opportunities for restoration. The centerpiece of the plan is a five-year action plan to address these threats and opportunities.

### PHOSPHORUS - A MAJOR ISSUE

The plan found that excessive phosphorus is a major threat to the creek's health, along with stormwater runoff and soil

erosion (both of which result in increased phosphorus entering the creek). The Mill Creek watershed contributes an estimated one-fourth of all phosphorus in the middle Huron (the river from Dexter to Belleville), helping to cause nuisance algal blooms in Ford and Belleville lakes. As a result, communities of the Mill Creek watershed are required by federal statute to reduce phosphorus pollution by 50 percent to meet standards established by the Clean Water Act.

As more stringent regulations have resulted in facilities such as wastewater treatment plants using technology to reduce their phosphorus discharges, stormwater runoff from lawns, paved surfaces, and construction sites has become the major source of phosphorus. In fact, these unregulated nonpoint sources of pollution contribute approximately 9-10 times more phosphorus to the watershed than do regulated point sources.

### FUNDING FOR PLAN IMPLEMENTATION

HRWC has received funding to work with communities, businesses, and citizens to begin to implement the plan this year. The first step will be obtaining resolutions from plan partners. The resolutions acknowledge the problem of nonpoint source pollution

and express intent to implement the recommendations presented in the Plan.

HRWC is offering the following services for partners who choose to move forward with Plan implementation:

- ◆ Technical assistance in ordinance changes described in the Plan
- ◆ Presentations regarding the plan and how it can help communities improve water quality
- ◆ Development of site plans for one to two stormwater control projects
- ◆ Formation of one or more citizen "creek groups" that would advocate for implementation of the plan
- ◆ Skill-training workshops on issues related to the plan (for example, lakeshore management or stream habitat assessment)
- ◆ Roundtables for local officials to discuss ordinance and policy changes they can make to meet the goals of the plan

If your community is in the Mill Creek watershed, then urge your representatives to take advantage of these services.

If you have any questions, please contact Kris or Elizabeth.

**-Kris Olsson and Elizabeth Riggs**



The Mill Creek Subwatershed.—map: HRWC

## HRWC Membership has its Privileges

### GUIDED TOUR OF THE MALLETT'S CREEK LIBRARY

Join us on **Friday, October 8** for a guided tour of the new Malletts Creek Library, the environmentally sustainable showcase of the Ann Arbor District Library system, by Library Director Josie Parker.

A green roof, native plantings, pervious parking surfaces, and more are some of the innovations employed to educate patrons and help protect Malletts Creek.

The tour will begin at 5:30 PM and last until 7:00 PM. The library is located at 3090 Eisenhower Parkway in Ann Arbor.

### SNEAK PEEK AT INDIAN SPRINGS

On **Wednesday, October 20**, from 5:30 PM to 7:00 PM, HRWC and the Huron-Clinton Metroparks Association (HCMA) are teaming up to offer HRWC members a tour of the new nature center at Indian Springs Metropark.

Come get a sneak peek of the center and learn more about the educational activities at the center.

Indian Springs Metropark is located at 5200 Indian Trail in White Lake.

### FABULOUS FOOD ON THE HURON

**Save Monday, November 8** for enjoying a beautiful view of the Huron while savoring gourmet food at the Huron River Watershed Council's fall fundraiser.

Local chefs Craig Common, Paul Cousins, and Ricky Agranoff will be preparing delicious dishes for you to sample while overlooking the Huron in Linda and Richard Green's home on Delhi Road.

Invitations to HRWC members will be sent out soon.



If you need more information for any of these events, then please contact Ellen at 734-769-5123 x1 or eoffen@hrwc.org.

# Doing the COW

Communities across the watershed examine their codes and ordinances



Stormwater runoff.  
... streambank erosion... flooding  
... loss of native fish species ...  
"no swimming" signs. This is a *partial* list of impacts to our watershed due to impervious cover

such as rooftops, roads, and parking lots.

More than 30 different scientific studies have documented that stream, lake and wetland quality declines sharply when impervious cover in upstream watersheds exceeds 10 percent. In the Huron River Watershed, research shows that the impervious cover need exceed only 8 percent for water quality to decline. Yet, a typical subdivision with approximately 1-acre lots is made up of about 20 percent impervious cover. Shopping malls are usually about 80 percent impervious cover. Many communities are discovering that their own development rules create

needless impervious cover by creating wide streets, expansive parking lots, and large-lot subdivisions that crowd out natural areas and open space.

As part of the many watershed planning activities underway at HRWC, communities are filling out a Code and Ordinance Worksheet (COW) to gauge the impact of their current policies and ordinances on watershed health. HRWC reviews the completed worksheets to compare them to a set of Model Development Principles. These Principles, taken together, reduce impervious cover, conserve natural areas and prevent stormwater pollution from new development. HRWC then prepares a report with recommendations for each community.

COWs have been completed in the following communities, as part of the Mill Creek Watershed Management Plan:

- ◆ Chelsea
- ◆ Dexter Village
- ◆ Lima Township
- ◆ Lodi Township
- ◆ Lyndon Township

- ◆ Scio Township (in process)
- ◆ Sylvan Township (in process)
- ◆ Webster Township

The following communities are currently working on their COWs as part of the Lower Huron Watershed Management Plan:

- ◆ Berlin Township
- ◆ Brownstown Township
- ◆ Flat Rock
- ◆ Gibraltar
- ◆ Huron Township
- ◆ Rockwood
- ◆ Romulus
- ◆ South Rockwood
- ◆ Sumpter Township
- ◆ Van Buren Township
- ◆ Woodhaven

Plans are underway to help communities in the upper Huron (Livingston and Oakland counties) take advantage of the COW starting this fall. For more information about the COW, contact Debi Weiker at [dweiker@hrwc.org](mailto:dweiker@hrwc.org).

- Kris Olsson and Elizabeth Riggs

## We Will Miss "Our" Meroë

HRWC mourns the loss of Meroë Kaericher to intestinal cancer on August 2, 2004. Meroë was a unique individual who combined beauty, thoughtfulness, devotion, expertise and high standards to the great variety of interests she furthered. She spent many years working with HRWC on education and protection, and she was the Co-Chair of the Fleming Creek Advisory Council (FCAC) and the Salem Township Board Representative to HRWC. Each project she worked on was raised to a level of excellence characteristic of her commitment to do the best she could regardless of the effort it took.

Meroë was an outstanding colleague in the campaign to ensure that our grandchildren will have excellent fresh water. It was a treat to work with her and we were always learning from her. We admired her faith in the capacity for people to learn. She provided her elected officials with videos and written materials and attended township meetings where she reported on the progress of HRWC and FCAC. She was a primary resource for our classes in

teaching people to become valued advisors to their Planning Commissions.

For several years, Meroë generously purchased hundreds of tree seedlings and wrapped them with care-instructions that she wrote; then gave them to all the people who attended our Creek Festivals, because she wanted people to learn and plant trees.

She walked the sites of proposed developments, wrote comments to improve the plans, and, in the case of permit requests to fill wetlands, she drove to Jackson to discuss the issues with the MDEQ permit staff.

Meroë graciously elevated our meetings to a lovely degree of elegance by providing delicious refreshments (coffee that she ground, lemonade made of real lemons, etc.) served on china with cloth napkins provided. When I protested that we should at least help to pay the expenses, she replied that when a person has a gift, she must share it. Meroë was wise, inspirational and very gifted. We are so thankful



Meroë Kaericher. —photo: Michael Kaericher

that we got to know her.

As a colleague who works for the MDEQ said, "[Her passing] is extraordinarily sad. Every watershed and community needs a Meroë, and we just lost ours." Our hearts go out to her husband Michael, their four sons and their families.

In lieu of flowers she asked that friends consider a gift in her memory to the Washtenaw Land Trust (for the Creekshead Woods Preserve) or the Huron River Watershed Council Endowment Fund.

- Joan Martin

**The Huron River Watershed Council**  
1100 N. Main St., Suite 210  
Ann Arbor, MI 48104  
(734) 769-5123  
www.hrwc.org

**NONPROFIT**  
**U.S. POSTAGE**  
**PAID**  
**Ann Arbor, MI**  
**Permit #435**

*Please examine your mailing label for your HRWC membership expiration date and use that as a reminder to renew. If there is no date, then you may not be a current member of the Watershed Council. Please consider HRWC membership. We need your support. Thanks.*

*The Huron River Watershed Council receives contributions via payroll deduction through EARTH SHARE of Michigan.*



## Thanks to All of Our Supporters!

Protecting the Huron River is a big job and we would be lost without the donations of time, talents, and resources from our dedicated volunteers and supporters. **We extend Special Thanks to:**

**All the HRWC members** who took the time to fill out their membership surveys.

**Marilyn and Edward Couture** for their expert help in organizing and mailing membership surveys.

**Arbor Farms**, an HRWC business partner, for inviting us to participate in their grand opening celebration and donating 5% of their receipts that day to our programs.

**Jim Buschmann** of Bodman, Longley, and Dahling, Attorneys, for his valuable help with a complicated legal question regarding the HRWC retirement plan.

**Ron Sell** for enabling the HRWC staff to experience the mouth of the river by paddling from Rockwood to Lake Erie in his gorgeous canoes.

**Dave Brooks** for help with many tasks, including mapping the hidden geomorphic pins and improving our printing technique for the Gazette. Also **Jim Haven** for helping Dave find the pins.

The 2004 Stream Monitoring Crew: **Nate Bosch, Janice Brummond, Cheryl DeGuzman, Sharon Gourdji, Rakhi Kasat, David Katz, Lori Kumler, Ron Oldfield, Ramona Rubin, Randy Schneider, and Debi Weiker** who conducted monthly water quality monitoring of the middle Huron tributaries.

**Lori Beyer** for training the Geomorphic Team and the Team (**Dave Brooks, Ken Gottschlich, Gary Hochgraf, Ric Lawson, John Lillie, John Stahly, and Nancy Stokes**) for surveying the channel of Fleming and Millers creeks.

**John and Tui Minderhout** for attending to the transducers for many, many months and for training their replacements.

**Noemi Barabas, Michael Benham, Carole Dubritsky, Gary Hochgraf, Tom Jenkins, Richard Manczak, John & Tui Minderhout, Don Rottiers, Margaret Steiner, Erin Trame, and Carrie Turner** for measuring flow despite the weather.

**Keith McDade** and **Trevor McCauley** for their generous help as interns this summer.

**Deb & Chris Bobowski, Rochelle Breitenbach, Linda Cody, Charlotte Cowles, Margaret Doub, Joyce Dunkin, Michele Eickholt, Jim Fackert, Ron Fadoir, Aaron Girard, Carolyn Grapentine, Willi Gutmann, Stephen Heinz, Nick Hinrichsen, Karen Hoffman, Rachael Leduc, Laurel Malvitz, Mac McCauley, Cullen O'Brien, Carolyn O'Neill, Dan Peters, Peter Pronko, Ellen Rambo, Jim Reed, David Reichhardt, Ian Scott, Candace Shelly, Rebecca Turner, Molly Wade, Wally Williams, Larry Wolicki, and Mara Zimmerman** for assessing the habitat in our study sites with their Measuring and Mapping skills.

**Martha Carlson, Kirk Davis, Dirk Fishbach, Neal Foster, Michael George, Dana Infante, Michael Martin, John & Tui Minderhout, Dan Minock, Hannah Northey, and Ellen Rambo** for writing newspaper articles to interest people in the Huron River.