November 2000 Volume 35 No. 4



DEVOTED TO THE MANAGEMENT AND WISE USE OF MICHIGAN'S LAKES AND STREAMS
Published Quarterly – February, May, August and November





MUSKEGON RIVER BIG RAPIDS, MICHIGAN

(See pages 8 & 9 for More Information)



"THE MICHIGAN RIPARIAN (ISSN 0279-2524) is published quarterly for \$2.00 per issue by the Michigan Riparian Inc., P.O. Box 249, Three Rivers, Michigan 49093. Periodicals postage paid at Three Rivers, Michigan and additional mailing offices."

PÖSTMASTER: Send address changes to: The Michigan Riparian P.O. Box 249 Three Rivers, MI 49093

The Michigan RIPARIAN is the only magazine devoted exclusively to protection, preservation and improvement of Michigan waters and to the rights of riparian owners to enjoy their waterfront property.

The Michigan RIPARIAN is published quarterly and is mailed to subscribers during February, May, August and November.

**THE MICHIGAN RIPARIAN** magazine is owned and published by the Michigan Riparian Inc., a Michigan non-profit corporation.

**EDITORIAL and BUSINESS OFFICE:** 124½ N. Main Street, P.O. Box 249, Three Rivers, MI 49093.

**TELEPHONE:** 616-273-8200 **FAX:** 616-273-2919

**ADVERTISING DEADLINE:** No later than 10th of the month preceding month of publication.

ADVERTISING RATES: Sent upon request.

#### SUBSCRIPTION RATES:

Individual Subscription	\$8.00
Group Rates: 10 to 49 Subscriptions	\$7.00
50 or more, or all members of a Lake Association	\$6.00

**EDITOR and PUBLISHER:** Donald E. Winne Printed by J.B. Printing, Kalamazoo, MI 49007.

# OFFICERS AND DIRECTORS OF THE MICHIGAN RIPARIAN, INC.

David Maturen, President

1125 E. Milham Road, Portage, MI 49002

Phone: (616) 342-4800

Merrill Petoskey, *Vice President* 2830 Cobb Road, Lewiston, MI 49756

Phone: (517) 786-2147

Donald E. Winne, *Chief Executive Officer* 124<sup>1</sup>/<sub>2</sub> North Main Street, Three Rivers, MI 49093

Phone: (616) 273-8200

Dr. Robert King, *Director* 2640 W. Wing Road, Mt. Pleasant, MI 48858

Phone: (517) 866-2592

William Hokanson, Director

11242 Oak Avenue, Three Rivers, MI 49093

Phone: (616) 244-5477

Tom Edison, *Director* 23800 Caughlan Road, Hillman, MI 49746

Phone: (517) 742-3368

The Michigan Riparian, Inc. is not responsible for views expressed by our advertisers or writers in this magazine. While The Michigan Riparian, Inc. has not intentionally printed incorrect material or omissions, the contents are nevertheless the responsibility of the parties furnishing material for this magazine. Accuracy of information is subject to information known to us at printing deadline. We apologize for any errors.

Copyright ©1998 by The Michigan Riparian, Inc.

No maps, illustrations or other portions of this magazine may be reproduced in any form without written permission from the publisher.

#### **EDITORIAL**



Don Winne

## WETLANDS CONTIGUOUS TO LAKES AND STREAMS ARE PROTECTED BY STATE LAW.

The Michigan Legislature passed Act #203, WETLANDS PROTECTION ACT, Public Acts of 1979. The Governor approved the Act on January 3, 1980, and was ordered to take effect on October 1, 1980.

Act #203 was amended by Act #451, Public Acts of 1994, and by Act #59, Public Acts of 1995. The purposes of wetland protection has not been changed by these amendments. The Act provides:

"A loss of a wetland may deprive the people of the state of some or all of the following benefits:

- a. Flood & storm control
- b. Wildlife habitat
- c. Protection of subsurface water resources
- d. Pollution treatment
- e. Erosion control, etc."

The DEQ continues to receive applications from individuals who want to fill or drain wetlands to provide waterfront parcels for residences. The law requires a permit from the DEQ to dredge or fill wetlands contiguous to lakes and streams. The DEQ is alleged to be the "bad guy" when they deny the permit.

Wetlands along the shoreline of many lakes have been dredged or filled to the extent that there are little or no wetlands left around some lakes.

Wetlands serve as spawing areas and habitat for fish and wildlife, and are important sources of food in the form of invertebrates and insects. Future fishing success in our inland lakes dictates that we leave wetlands undisturbed.

Donald & Winne

The Michigan Riparian welcomes letters to the editor, articles for publication, comments, suggestions, and article ideas. If you wish to write an article or just have an idea for one, it would be best to write us a short note or give us a call to discuss it.

In This Issue:	—The Editor
Restoring the big rapids in Big Rapids	8
Attorney Writes	11
Feds Give State 30 Days To Fix Manure Pollution On Farms	
Better Water Quality In Your Own Backyard	
Loons Need Help	
DEQ Decision Irks Antrim Officials	
Lake Association News	

#### THE MICHIGAN RIPARIAN SUBSCRIPTION COUPON

(Mail to: The Michigan Riparian, P.O. Box 249, Three Rivers, Michigan 49093.)

Office address: 124½ N. Main St.

Please enter my subscription to *The Michigan Riparian* magazine.

One year rate: \$8.00

First Name	Initial	Last Nam
Street Address		
City	State	Zip Cod

### Restoring the big rapids in Big Rapids

Dam removal project on Muskegon River delights river enthusiasts

By James R. Hegarty, P.E.

It's not often that the MDEQ, MDNR and a municipal government decide to splash around in a sensitive river with heavy construction equipment. But such is the story of the Big Rapids Dam removal project on the Muskegon River—one of Michigan's most significant environmental restoration projects, which is nearing completion.

This landmark project evolved over six years of cooperation among City of Big Rapids officials, MDNR Fisheries Division, state regulators and a number of environmental groups. For Big Rapids, it is an important undertaking because it restores a safe, navigable river to local citizens and visitors.

The Big Rapids Dam removal project is also predicted to have a powerful effect on the character of the Muskegon River. In his poignant 1854 letter to the United States government<sup>1</sup>, often hailed as the most eloquent environmental treatise ever written, Chief Seattle says "The earth does not belong to man; man belongs to the earth." For fish, wildlife and the river's ecosystem this project heralds a release of the river back to the 'earth'—and away from man's many attempts to harness the river for his own needs.

#### The Dam's History

Until 1834 Big Rapids was the Village of Leonard. The name change recognized the active Village's most prominent natural feature—the big rapids in the Muskegon River.

The area was home to many sawmills and, with the Muskegon River's help, Big Rapids soon became a bustling lumber town. A dam constructed of wooden cribs filled with large field stones was built across the Muskegon River in 1866 to raise the water level so logs could float directly to the sawmills. It was not unusual for logs to completely blanket the river during the logging season.

The 1866 rock crib dam survived until 1912 when a flood breached it. At that time, dams were converting many rivers into hydroelectric power generators, and so, too, was the fate of the Muskegon River. A new, 17-foot-high concrete dam was built over the failed rock crib dam in 1914 and it soon began generating power. It operated until 1955 when Consumers Power Company and its partners de-activated it. In 1966 Big Rapids officials deemed the dam unsafe and contracted to have it removed. Unfortunately the contractor hired to remove the Big Rapids Dam went bankrupt before finishing the project, leaving an ugly, five-foot-high foundation remnant in the Muskegon River.

Even worse, when the contractor

demolished the upper portion of the Big Rapids Dam, a massive amount of mostlysand sediment was released from behind the dam and deposited itself for miles downstream over the next several years. Much of the sand from the 1966 project is now settled in the bottom of Rogers Pond (The Rogers Dam's impoundment). Local lore has it that a gravel pit located upstream of the Big Rapids Dam washed sand from its mined gravel deposits into the Muskegon River. This sand eventually settled out into the impoundment behind the Big Rapids Dam, and much of it mobilized during the botched 1966 dam removal attempt. According to downstream riparians, the sediment from the 1966 dam removal effort filled every fishing hole between Big Rapids and Rogers Pond and created many new sandbars. The sandbars altered the river's flow regime and caused ice jams and subsequent flooding in the winters following 1966.

Since 1966, the dam remnant served Big Rapids as both a curiosity and a dangerous nuisance. Canoeists and tubers enjoy the Muskegon River. Most recreational users knew of the danger posed by the strong "hydraulic" currents near the dam remnant. Unfortunately, several incidents there alarmed city officials. Since 1991, there have been three drowning deaths within 700 feet of the dam remnant and at least one dramatic rescue. Frankly, the dam remnant was an unfortunate and dangerous vestige of former days on the Muskegon River and it was a detriment to capitalizing on the Muskegon River as an asset to the community. It was also an impediment to fish trying to swim past it.

#### **Project Background**

In 1994, city officials conceived the idea to remove the Big Rapids Dam's remnant. In July of that year, I met with City of Big Rapids officials and representatives of MDEQ and MDNR at the site of the dam remnant to propose using its impoundment as a stable source for the City's raw water intake.

Big Rapids' water intake at that time was located in the Muskegon River behind the city's water treatment plant. This is about 750 feet downstream of the dam remnant. For a variety of reasons, the Muskegon River's water level fluctuated so much there that City officials were concerned about its long-term reliability as a raw water source. The still pool just behind the dam remnant offered a stable, deep-water source. Both Prein&Newhof's

#### PROJECT TEAM

#### **Owner**

City of Big Rapids

#### **Engineer**

Prein&Newhof Grand Rapids, MI

#### **Prime & Marine Contractor**

The King Company Holland, MI

#### **Demolition Contractor**

Pitsch Companies Grand Rapids, MI

#### **Funding Partners**

Great Lakes Protection Fund \$755,000 MDEQ \$200,000 USGS \$119,000

U.S. Fish & Wildlife Foundation \$100,000 Great Lakes Fishery Trust \$350,000

#### **Regulatory Partners**

MDNR Fisheries Division
MDEQ Land &Water Management Division

engineers and Big Rapids officials wanted to relocate the raw water intake point there.

When we asked MDNR officials what they thought about our plans, MDNR Fisheries Division biologist Bill Gruhn offered, "Ordinarily, this would be a good strategy, but that dam's coming out."

Prein&Newhof's president Tom Newhof was on hand for the meeting and questioned what he perceived as a structural engineering analysis by a biologist. He asked Bill upon what information he made his "coming out" claim. Bill clarified his remarks by citing then-unpublished MDNR report<sup>2</sup> recommending that all nonfunctional dams on the Muskegon River system should be removed to improve both fish habitat and recreation. Persisting with his inimitable curiosity, Newhof quizzed Gruhn "That's noble Bill, but who is going to pay for that?" Without flinching, Gruhn responded that the MDNR would help the City of Big Rapids fund a dam removal project. Newhof and I looked at Big Rapids City Manager Steve Stilwell, who longed to remove the dam remnant as it was both an eyesore and a safety hazard. Stilwell decided, on the spot, to take Gruhn's offer of financial assistance.

Subsequently, others from the MDNR Fisheries Division, notably dam specialists Jim Truchan and Sharon Hanshue, adopted the project and helped shepherd it to reality. MDNR saw this dam removal project as a

chance to re-establish a high-gradient stream reach—a very rare occurrence for large Michigan Rivers. The historic "big rapids" were 1.9 miles long and dropped an average of 12 feet every mile, according to a 1914 engineering study. From MDNR's viewpoint, this dam's removal provides a chance to see dramatic improvements in the fish community and in fish habitat quality—especially in an urban area such as Big Rapids. An improved and diverse habitat also translates into increased benthic invertrebate production—more fish food!

#### Behind the Scenes Since 1994...

After the project's unexpected birth that July day in 1994, P&N worked with the City of Big Rapids to make the dam remnant removal project a reality. One of our team's first hurdles included a feasibility study to determine the cost and methods needed to accomplish a successful project.

Concurrently, Stilwell and I explained the project to local residents at a series of four public meetings and lobbied MDNR and other sources for project funding. We got an earful from residents at each public hearing. While residents offered many helpful and creative thoughts that made for a better project, one theme was repeated loud and clear: *Do not send us any more sand like you did in 1966!* 

Astute and successful city managers and civil engineers share a common trait—we pay attention to our "customers." Taking the dam remnant out was going to be relatively easy, but controlling the sediment behind it would take some additional study and imagination.

A friend once asked me what a civil engineer does. I responded by telling him we are the creators of the built environment and stewards of the natural environment. The American Society of Civil Engineers motto says *Civil Engineers Build the Quality of Life*. This project offered a fantastic opportunity to fulfill both missions.

First, we enlisted the help of the United States Geological Survey (USGS) office in Lansing. Scientists there studied our preliminary dam removal plans and the river bottom near the dam remnant. They determined that as much as 80,000 cubic yards of sand sediment could mobilize if the dam remnant was removed. If this amount of sediment were piled evenly across a football field, it would be almost 45 feet high!

It was my engineering team's challenge to develop a plan for managing that much sediment and keeping it from flowing downstream after contractors removed the dam remnant from the Muskegon River. Eventually, we settled on a three-step approach. First, a dredging contractor would launch a hydraulic dredge upstream of the dam remnant and vacuum two piles of organic sediment identified by the USGS study on the river bottom just above the dam

remnant. The "hole" created by dredging activity eventually would form a new river channel.

Next, a demolition contractor would work with a marine contractor to remove the dam in a way that limited the water level draw-down in the impoundment behind the dam remnant to a maximum of six inches a day. This way, many of the sediments, trapped on the river bottom behind the dam remnant, would not mobilize downstream as the river's surface level lowered. Instead, they would stay behind and form new islands or river banks. This would then present an opportunity to plant vegetation to reduce erosion of the newly exposed areas.

Finally, we elected to use the wide, low-energy area in the river between the dam and a point about 750 feet downstream as an in-river sediment trap. The contractor could easily clean sediment out of this collection area because a rock dam at the lower end raises the water level and slows down the river's velocity, allowing most sediments to settle to the river bottom. The rock dam also temporarily maintains the river level at the city's current water intake station until January 2001 when the City of Big Rapids' water system will convert its source water supply to deep wells.

Meanwhile in December 1999, Big Rapids City Manager Steve Stilwell and MDNR's Sharon Hanshue wrapped up a five-year-long quest to secure the financing needed to bring the project to fruition. They were successful in cultivating the necessary support at the state level while maintaining a strong local focus for this politically sensitive project. "Funding was without a doubt the weakest link in our plan when this project got underway" said Hanshue, MDNR Fisheries division's dam removal specialist. "We were fortunate that many supporting foundations saw dam removal projects as the 'next new thing' in environmental restoration—just as Big Rapids was completing the planning, design and permitting steps for this project. It was an amazing convergence of interests and needs."

All told, Big Rapids secured grants to fund 100% of the estimated \$1,524,000 cost of the project! We accepted construction bids on January 13, 2000 and the project was finally off the ground. (See the box included with this article for a complete listing of project funding sources, participants, and contractors.)

## Removing the Dam Remnant from the Muskegon River

It took several months to finalize contracts and conclude other pre-construction planning. The King Company of Holland, specialists in marine construction and dredging, was our general contractor. King hired Pitsch Companies of Grand Rapids to handle demolition activities.

In May 2000, the project to remove the dam's remnant from the Muskegon River began in earnest as Pitsch and King crews started their work. King's crews drove steel sheet piles upstream of the old dam's powerhouse foundation on the Muskegon River's west side. This diverted flow away from the area while Pitsch's machinery began the task of breaking up the dam's massive concrete foundation. It wasn't unusual to see exposed timbers left over from the original 1866 dam as Pitsch's equipment began to pick away at the old foundation.

Meanwhile, King's people dredged the piles of organic-laden sediment from just above the old dam. Their dredge pumped sediments and water to a nearby dewatering and disposal site owned by the City of Big Rapids. This operation worked quite nicely, except the dredge's cutter head would occasionally "hit" timbers left over from the Muskegon River's old logging days that were buried in the sediment.

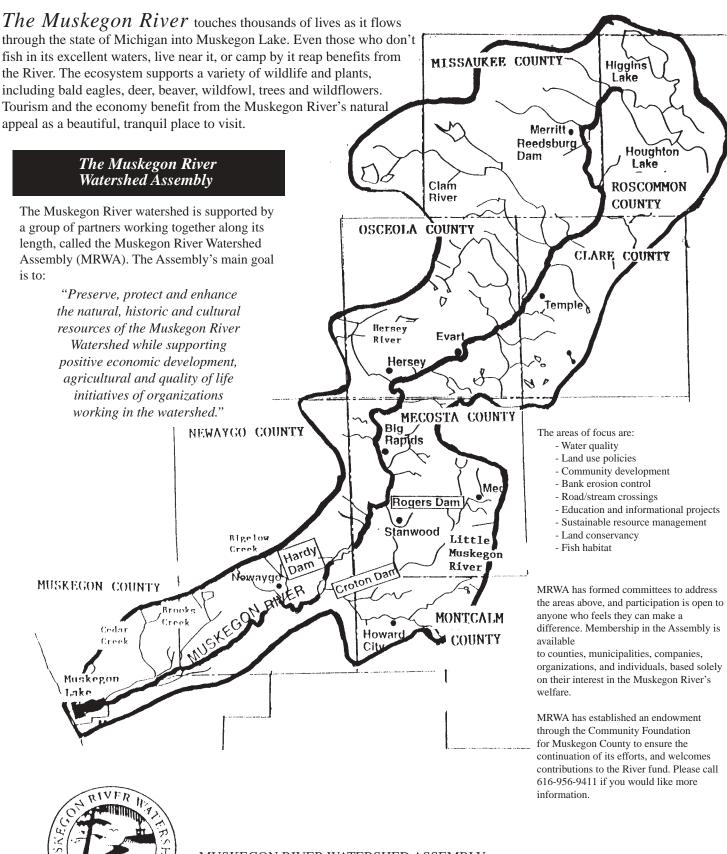
Pitsch's team demolished the west side of the dam and King finished their sediment dredging operation by mid-July 2000. Next, the contractors began the process of gradually lowering the water level in the impoundment behind the dam remnant. They did this by carefully driving down the steel sheet piles installed earlier to divert flow away from the dam's west-side foundation. This allowed the river to run over the lowered piles such that the river dropped an average of a couple inches a day over a two- to threeweek period. King's crew eventually modified this process by simply pulling piles entirely out of the river after they could not be driven any further. Each method successfully effected the controlled drawdown required by the project's MDEQ permit. This process lowered the river surface about four feet.

The King Company remained busy downstream building a temporary bridge over the Muskegon River and placing a crane equipped with a 'clam-shell' bucket over the in-river sediment trap. It removed sediment mobilized downstream by the draw-down. Another crew planted grass and cottonwood tree "shoots" in newly-exposed, formerly inundated areas upstream from the dam.

The east side of the dam served as both the pre- and post-1966 spillway. After completing the controlled draw-down, the spillway was "high and dry" and the river's full flow hugged the west bank for the first time. Demolishing the remaining portion of the dam was easy to visualize—the contractor simply placed his equipment on the west end of the former spillway and 'peeled' the dam back to the east shore.

It wasn't necessarily that easy, however. Once again, Pitsch's equipment pounded on the concrete structure until it gradually broke into pieces. Boulders, railroad rails, buggy

#### THE MUSKEGON RIVER AND ITS WATERSHED



#### MUSKEGON RIVER WATERSHED ASSEMBLY

c/o Timberland RC&D, 2025 East Beltline S.E., Suite 102, Grand Rapids, Michigan 49546 616-956-9411 Fax 616-956-9053 e-mail: timrcd@iserv.net



# Attorney Writes

By Clifford H. Bloom

Law, Weathers & Richardson, P.C. Bridgewater Place 333 Bridge Street, N.W., Suite 800 Grand Rapids, Michigan 49504-5360

ne of the perennial "hot" topics for riparians is how to determine property boundaries under inland lakes. Or put another way, where does your bottomlands end and your neighbor's begin? Long-time readers of the Riparian Magazine know from past articles and this column that riparians generally own a portion of the bottomlands adjacent to their property to the center of the lake. See <u>Hall</u> v <u>Wantz</u>, 336 Mich 112 (1953). Very rarely do boundary lines along the bottomlands of lakes (hereinafter referred to as "riparian lines") follow the angle of property lines on dry land. If a lake is more or less round, riparian lines generally radiate to the center of the lake in a pie-shaped fashion. Unfortunately, there are very few round lakes, and setting riparian lines for oblong or irregularly-shaped lakes is more difficult. In such situations, a "thread line" is normally designated along the rough center of the lake, with riparian lines radiating from shore to that line. Such thread lines can also have "fingers", depending on the shape of the

Why are setting riparian lines important? They are often necessary for deciding the placement of docks, shorestations and floating raft anchors on lake bottomlands. As lakes become more crowded and riparian values sky rocket, an increasing number of disputes arise around the state regarding the location of riparian lines.

Only courts can definitively determine and set riparian lines. If a surveyor or other expert purports to set, create or designate a riparian line, that constitutes only such expert's opinion – such opinions are not binding. In some cases, such opinions can sometimes be persuasive or carry a certain amount of nonbinding weight, but ultimately, only the courts can set binding riparian lines, often with input from the experts.

What happens if two adjoining riparian lot owners disagree on their common riparian line? Normally, they would hire one or more surveyors who specialize in setting riparian lines to determine the appropriate riparian line boundary between the two properties. If the adjoining neighbors agree on hiring one expert and they also agree to abide by his or her decision, that is usually the quickest, cheapest and simplest way of resolving the issue. Unfortunately, that rarely occurs. If the neighbors each hire an expert and the experts

agree, they can enter into a binding agreement as to the riparian line. In such case, they should consult with legal counsel to draft such agreement and any executed agreement should be recorded with the county register of deeds records. Such agreement would be binding only as to the adjoining property owners, and would not bind or affect other riparians on the lake involved. If neighbors cannot agree or fail to reach a settlement regarding their common riparian line, the only definitive way of resolving the matter is to institute a lawsuit in the local county circuit court. Be forewarned, however, that such lawsuits can be expensive, time-consuming and frustrating. Each party will normally have to hire their own expert riparian surveyor. Absent unusual circumstances, each party usually has to pay their own attorney fees, win, lose or draw. Accordingly, it is almost always best to settle these matters short of litigation, if possible.

Very few surveyors are well-versed in the area of setting or giving expert opinions about riparian lines. If you become involved in a riparian controversy and you need to hire an expert, you should make sure that the expert you desire to retain is truly an expert regarding riparian lines.

\* \* \*

For those readers who are tired of hearing me preach about the wonders of local municipal anti-funneling regulations (i.e. lake access regulations), you may want to skip the next section. For those of you who are willing to revisit the issue one more time, keep reading!

Despite all of the publicity about lake access problems, the advocacy of antifunneling regulations by ML&SA, the Riparian Magazine, myself and most planners and the constant worry by many riparians regarding funnel developments, it is amazing how few municipalities have anti-funneling regulations in place. Furthermore, the provisions of some existing municipal anti-funneling regulations are inadequate, poorly drafted and even downright confusing. For example, anti-funneling regulations which permit one new dwelling for every 20 or 30 feet of lake frontage are arguably worse than no regulations at all - they can actually promote funneling.

For those riparians who own property in municipalities without anti-funneling regulations, a high priority should be put on lobbying your local municipal officials to enact well-drafted anti-funneling regulations. I certainly realize that officials in some municipalities have no desire to enact these regulations, but some riparians in similar circumstances have been able to "wear down" such officials over time, or alternately, to elect new officials who are more pro-lake protection. For those riparians who own property in municipalities with anti-funneling regulations, you should periodically review the regulations to ensure that they are adequate.

\* \* \*

Unregulated road ends at lakes remain a major concern for many riparians. Legislation enacted in the mid-1990s makes it virtually impossible to close, vacate or abandon road ends at lakes. In rare cases, such road ends can be extinguished for public uses if it can be shown that the road was never properly created (i.e. failure to accept the dedication).

Despite the fact that public road ends at lakes can rarely be extinguished, municipalities (cities, villages and townships) do have the authority to regulate road ends by local ordinance. Pursuant to a local ordinance, a municipality can prevent dockage, shorestations and permanent boat moorage, as well as regulate hours of use and other activities. Unfortunately, few municipalities have adopted such regulations and road ends at lakes tend to become "freefor-alls." A very good argument can be made that it is prudent and responsible for local municipalities to regulate these road ends for safety purposes and to minimize conflict. It is also easier to begin to regulate road ends at lakes where problems have not yet gotten out of hand. If a municipality waits until extensive uses of road ends create problems, it makes regulation much more difficult due to a whole constituency which has arisen and desires to keep using such road ends for private marinas. This has occurred at several areas around Higgins Lake and has made local municipal regulation exceedingly difficult politically.



#### OFFICERS AND BOARD MEMBERS OF MICHIGAN LAKE & STREAM ASSOCIATIONS

PRESIDENT — Richard Brown

13355 Lakeshore Dr., Fenton, MI 48430 Ph: 810-629-5964; Fax: 810-750-5964 E-mail: richardb7@prodigy.net

VICE PRESIDENT — Joe Landis

1642 Walnut Hts. Dr., East Lansing, MI 48823 Ph: 517-332-6004 (H); 616-266-5667 (Cottage)

SECRETARY — Shirley Westveer

17415 Thunder Bay, Howard City, MI 49329 Ph: 231-937-5280; E-mail: shirlw@pathwaynet.com

TREASURER/DIR. OF OPERATIONS — Pearl Bonnell

P.O. Box 303, Long Lake, MI 48743-0281 Ph: 517-257-3583; Fax: 517-257-2073 Email: Pbonnell@mlswa.org

REGIONAL VICE PRESIDENTS

Region 1 — Floyd Phillips 9535 Crestline Dr., Lakeland, MI 48143 Ph: 810-231-2368

Region 2 — Kathy Miller

6090 Dexter Lane, Manitou Beach, MI 49253 Ph: 517-547-6426; E-mail: kmiller@tc3net.com

Region 3 — Sondra (Sue) Vomish

52513 Twin Lakeshore Drive, Dowagiac, MI 49047 Ph: 616-782-3319

Region 4 — Jerry McCoy

7420 N. Crooked Lake Dr., Delton, MI 49046 Ph: 616-623-6312

Region 5 — Virginia Loselle

5571 E. Grand River, Howell, MI 48843 Ph: 517-548-2779; E-mail: losellev@state.mi.us

Region 6 — George Fetzer

 $17\bar{5}7$  Tannock Drive, Holly, MI 48442 Ph: 248-634-4353; E-mail: g6344353@tir.com

Region 7 — Dennis Zimmerman

716 E. Forest, P.O. Box 325, Lake George, MI 48633-0325 Ph: 517-588-9343

Region 8 — John Drake

7178 Aqua-Fria Court, Grand Rapids, MI 49546 Ph: 616-940-1972; E-mail: jkd@iserv.net

Region 9 — Rex Keister

4582 North Spider Lake Road, Traverse City, MI 49686 Ph: 231-947-2868

Region 10 — Leo Schuster

3021 Marion, Lewiston, MI 49756

Ph: 517-786-5145

Region 11 — Cecile Kortier (V.P.)

18200 Valerie Dr., Hillman, MI 49746

Ph: 517-742-3104

Region 15 — Arny Domanus

N4176 Kari-Brooke Lane, Watersmeet, MI 49969 Ph: 906-358-9912

# L&SA NEWS

MICHIGAN LAKE & STREAM ASSOCIATIONS, INC.

P.O. Box 249, 124<sup>1</sup>/<sub>2</sub> N. Main Street, Three Rivers, Michigan 49093 Phone: (616) 273-8200 Fax: (616) 273-2919 E-mail: info@mlswa.org dwinne@mlswa.org Web sites: www.mlswa.org. www.mi-water-cmp.org. Donald E.Winne, Executive Director

### COOPERATIVE LAKE MONITORING PROGRAM TO PILOT THREE NEW LAKE QUALITY MEASURES

By Niles R. Kevern, chair of the ML&SA Science Advisory Committee

The Michigan Lake and Stream Associations (ML&SA) has a long-standing Memorandum of Understanding (MOU) with the Michigan Department of Environmental Quality (MDEQ) to assist in the collection of samples and information that provide insight to the water quality and trophic status of the lakes of participating associations. This partnership is titled the Cooperative Lake Monitoring Program (CLMP) and presently targets four parameters; Secchi disk readings, spring and summer phosphorus concentrations, chlorophyll a concentrations, and depth profiles of dissolved oxygen. All of these parameters provide information linked to a lake's trophic status or, in other words, the lake's nutrient richness and resultant productivity.

ML&SA has worked with the Inland Lake and Wetland Section of MDEQ to develop three new parameters that provide even more information about a lake's status. These new parameters are 1) aquatic plant monitoring, 2) fish age and growth monitoring, and 3) rapid algal assessment monitoring. All of these new measures also are linked to a lake's nutrient status and productivity and are indicators of existing or potential problems that threaten or impair the quality of a lake. The sampling protocols and measurement techniques are being developed so participating lake associations and their volunteers will know exactly what needs to be done. ML&SA plans to pilot these new monitoring programs next year (2001). Provisions are being made to accommodate three lakes for the aquatic plant program, five lakes for the fish age and growth program and as many as 10 lakes for the rapid algal assessment program.

Details about these new programs and what they reveal about a lake will be given in the next RIPARIAN magazine. ML&SA plans to have training sessions for the participating associations at their annual Spring Conference.

## NEW ML&SA MEMBER ASSOCIATIONS

# DOWAGIAC RIVER WATERSHED PROJECT,

Berrien, Cass & Van Buren Counties Nancy Colclough, Project Coordinator

#### GOOSE LAKE POA.

Osceola County Chris Thurber, President

#### LAKE CONNAMARA POA.

Lake County Henry Mazade, President

#### LITTLE TRAVERSE LAKE ASSOCIATION.

Leelanau County

Dr. David Spathelf, President

#### NORTH LAKE ASSOCIATION.

Van Buren County Craig Yaple, President

#### NORTH CHAIN OF LAKES ASSOCIATION,

**Branch County** 

William Grenawalt, President

#### NORTH OXBOW LAKE ASSOCIATION,

Mason County Pamela Beal. President

#### PRATT LAKE ASSOCIATION,

Gladwin County Tom Cumming, President

#### ROUND LAKE NORTH SHORE

ASSOCIATION.

Charlevoix County William Jerome, President

#### SHADY LAKE ASSOCIATION,

Branch County James Pliett, President

#### TIE LAKE ASSOCIATION,

Alger County

George Swadick, President

#### **New Corporation Member:**

#### ADEPT AQUATIC WEED CONTROL,

Metmaora, MI

Gary Bower, President

# MDEQ DENIES WETLAND FILLING IN GUN LAKE

(Article by Jean Gallup which appeared in the Penasee Globe, September 11, 2000).

#### YANKEE SPRINGS TOWNSHIP

A request by John Lamb for a permit to place 23,205 cubic yards of fill material over 6.16 acres of regulated wetlands in the Sunrise Shores plat has been denied by the Michigan Department of Environmental Quality. Lamb, from Saugatuck, planned to develop a 23-lot residential subdivision and install two storm water outfalls to the nearby channel that leads to Gun Lake.

Luis Saldivia, district supervisor of the Land and Water Management Division, said the proposed project would have significant adverse impact on the natural resources of Gun Lake. Yankee Springs Township was notified of the decision in a Sept. 8 letter from Saldivia.

However, Saldivia said Lamb could develop a plan that would "lessen or eliminate the negative impacts of the project as proposed... as an alternative, we succest that you consider redesigning the residential subdivision around the existing upland on the property and avoid the wetland impact."

He said Lamb could appeal the denial within 60 days of the notice, and also can request an informal review "to determine if there is a project alternative that is acceptable to both parties."

Both sides of the proposal were aired at a July public hearing where the majority of township residents present spoke against the filling.

Saldivia said the proposed activity "would severely and negatively impact established biological communities which provide habitat for breeding, nesting, feeding and rearing of a wide variety of wildlife species." It would also lead to possible degradation or impairment of associated water resources, he said.

jgallup@penasee.com

# Feds Give State 30 Days To Fix Manure Pollution On Farms

Written by David Poulson, Kalamazoo Gazette Lansing Bureau, and published September 19, 2000

Rederal officials say Michigan does a poor job of regulating pollution from manure on large farms, and has given the state 30 days to explain how it will improve.

The U.S. Environmental Protection Agency on Monday sent state regulators a report claiming that Michigan's farm pollution controls fail to meet federal requirements. The agency said it will send more regulators to investigate Michigan farms while the state improves enforcement.

The report is the result of an EPA investigation launched when Michigan environmental groups complained to federal authorities last November about the state's farm pollution programs.

"They have confirmed our worst fears about Michigan programs," said Anne Wolwode, program director for Michigan's chapter of the Sierra Club. "While horrifying to realize how right we are, it is gratifying to see EPA begin the process of fixing it."

The conflict is one of several longstanding disagreements that Gov. John Engler's administration has had with the EPA.

"This is federal bureaucracy at its most ludicrous," said Ken Silfven, spokesman for Department of Environmental Quality director Russell Harding. "It would only create a massive paper shuffling program with no environmental benefit."

Harding could not be reached for comment; Silfven did not know how the agency will respond. And it is unclear just what will happen if the state misses the 30-day deadline.

The Sierra Club, Michigan Land Use Institute and the Michigan



Environmental Council have petitioned the EPA to take back from the state its delegation of all federal water pollution permitting authority.

"We will continue to have enhanced field presence until Michigan fixes the problems we've identified in the report," said EPA spokeswoman Phillippa Cannon. "The ultimate hammer could be withdrawal of the program."

EPA and the environmental groups say that for large livestock operations — Concentrated Animal Feeding Operations or CAFOs — the state should issue pollution permits just like it does for factories.

In Michigan, the state Department of Agriculture investigates farm complaints and works with farmers to improve practices. If violations continue, a case is turned over to the DEQ for inforcement.

The EPA said the system inhibits public participation, delays enforcement action up to five months and fails to meet state environmental laws. The agency insists that the state identify farms large enough to require permits, inspect them and determine if they comply. The agency found seven farms with documented pollution problems and without a permit.

Issuing farm permits would triple the DEQ's workload, Silfven said. Between 1987 and 1997 more than 1,200 farm complaints were handled by the agriculture department, said Scott Piggott, an expert with the Michigan Farm Bureau on what is known as Michigan's right-to-farm law. Of that amount, 411 were verified and

only a handful were referred to the DEQ. "A lot of environmental challenges met by MDA were solved," he said.

Critics say that the system requires a violation to occur before anything is done, and that permits would ensure that a farm was properly built to handle waste.

Environmentalists last year unsuccessfully fought in the Legislature for tougher state regulations. Farm advocates managed to include manure handling among the voluntary state guidelines that give farmers who comply some protection from nuisance lawsuits.

Since then the Sierra Club has given notice that it intends to sue five Michigan dairy farms over water pollution: River Ridge Farms, Coopersville; Bradford Farms, Sparta; Walnutdale Farms, Wayland; Bruinsma Farms, Freeport; and Michigana Farms, Scotts near Kalamazoo.

Last week, the EPA ordered Hartland Farms in Clayton to stop unauthorized discharges of waste, and to apply for a permit from the state.

The report notes that a DEQ investigation of the same complaints failed to identify discharges from manure handling areas.

Since the state does not issue permits for farms, it is unclear how the farm can comply. •

#### BETTER WATER QUALITY IN YOUR OWN BACKYARD

By Sarah Burnham

Communications Intern at MSU Kellogg Biological Station Land and Water Program

ave you ever tried to roll a 500-lb. boulder up hill? Howard Wandell MSU Extension inland lakes specialist, presented this scenario to convey how difficult it is to remove phosphorus from a lake.

Wandell was just one of the presenters at the Shoreline Landscaping to Protect Water Quality workshop, held Aug. 26 at Michigan State University's W. K. Kellogg Biological Station (KBS) in Hickory Corners, Mich. The workshop was sponsored by Michigan Lake and Stream Associations in partnership with Barry County MSU Extension, the Barry Conservation District and the KBS Land and Water Program.

"Just as it is difficult to roll a boulder up hill, it's nearly impossible to remove excess phosphorus," Wandell pointed out, "unless you have an extra \$20-30 million lying around. It is easier to avoid adding extra phosphorous to your waterfront than to remove it."

The purpose of the daylong program was to teach people how to reduce run-off from their lakefront properties. The fifteen participants ranged from homeowners to Extension agents who work with people owning waterfront properties.

The main message presenters hoped to convey was that individual actions matter.

Fifty percent of all U.S. lakes are located in Michigan, Wisconsin and Minnesota. This allows a large number of these states' residents' direct access to a waterfront. This is where problems begin.

Undeveloped waterfronts have a natural transition from waterfront to upland known as eco-regions. The types of plants found in these transitional eco-regions filter impurities and excess nutrients, such as phosphorus, from the water.

Phosphorus is the driving force behind green filamentous algae growth. This is the green, stringy algae that makes boating, swimming and other water activities miserable. Phosphorus is also one of the three main ingredients in fertilizer.

A natural waterfront will deter 50-60 percent of rainfall from reaching the ground, 5 percent lands in the lake and the remaining 35-45 percent is filtered before entering the watershed. In a developed lakeshore environment these are reversed resulting in only 5 percent of water being filtered.

In addition, replacing this ecosystem with turf reduces the root zone in the soil profile to three to six inches. Natural plants such as grasses, forbes, bushes and sedges root as far as 15 feet deep. Deeper roots stabilize soils against the forces of waves and ice that cause shoreline erosion.

Wandell laid the background for participants. Other speakers followed by leading the group outside to examine the lakefront at Gull Lake, where KBS is located.

"I like the idea of actually going outside and looking at what we are talking about," says Sue Vomish, MLSA member and workshop participant.

#### What can be done?

So with this base of information, how do lake residents protect their waterfronts?

Not everyone has the time or resources to restructure the landscape, but there are simple steps anyone can take to prevent phosphorus loading and eroding soil from entering the water.

Be careful using dish soap and fertilizer, which contain phosphorus. Avoid washing vehicles where run-off will go into the lake. Contain pet waste and check septic systems to make sure excess leaching is not entering the water.

Avoid adding additional impervious surface such as sidewalks and driveways. If you do, have a drainage plan to route run-off water away from the shore. Be aware that all natural debris, such as leaves and grass cuttings, contain phosphorus. When these are burned near the shore or allowed to decompose in the water, additional phosphorus is added.

According to Monica Rappaport of Barry County Conservation District, "All land is not created equal." The waterfront is the primary target zone. Rappaport demonstrated how to design the property, keeping in mind intended uses and then designing natural outdoor "rooms".

"Functional landscaping does not have to be unusable," she insists, "if the owner wants a beach, a private deck or a Bocceball court, we can design for that."

She suggests the biggest mistake homeowners make is planting turf to the shoreline.

Wandell also emphasized the importance of buffer zones to separate

turf from shorelines. Not only do areas of natural vegetation filter water, but



Sarah Burnham

they also provide areas for wildlife.

"I get calls all the time wondering why all the ducks, turtles and frogs are gone," Wandell says, "but when you're replacing natural settings with sea walls or rock riprap, where are the animals going to live and reproduce?"

Afternoon speakers Jim Bruce and Ian Diffenderfer, of Barry County Conservation District and Steve Bare, of the Natural Resource Conservation Service (NRCS) spoke about preparing, planting, stabilizing and maintaining plantings.

Bare pointed out that the force of water is extremely powerful, it can erode and move basically anything over time. Therefore, people need to be proactive. "Action needs to be taken before the bank falls into the water," he says.

Bruce says people need to consider all the factors prior to beginning planting, such as wind direction, existing vegetation and season. He suggests spring tree planting. All other plantings can be done successfully year around with the proper technique, such as mulching, watching seedlings for frost heaving and weeding out unwanted specimens.

Consideration must also be given to liability when altering the waterfront. Property owners should be aware that anything in the water is public access, so alterations made that stretch into the water must be safe. Prior to any alteration to shoreline areas, check with the DEQ and County for permit requirements.

The final consideration in any landscape process is choosing plants suitable for the area that will thrive and spread. Jewel Richards of Michigan Native Plant Producers Association suggested researching a variety of wetland plants for your specific area to find what is best for above and below the ordinary high water mark.

For further help with landscaping for water quality or any questions concerning riparian rights contact your local conservation district or Michigan Lake and Stream Associations at 616-273-8200.

#### LOONS NEED HELP

By Joanne Williams and Bob Bowlus, Michigan Loon Preservation Association. From the JPWarbler, a publication of Michigan Audubon Society, July/August 2000.

### Personal watercraft threaten loons on Michigan lakes

he loons need your help. New pressures are being placed on loons and their nesting and chick-rearing activities. The problem stems from personal watercraft (PWC), the new toys for the lakes.

#### **Background**

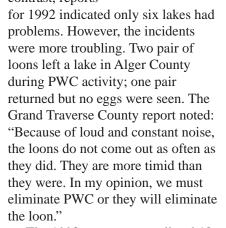
Many of our lakes are patrolled by Loon Rangers, a volunteer group of lake residents who spend their time, and sometimes their own money, to help protect loons and loon habitat. They make nesting rafts and place them next to buoys to alert boaters that there are loons nesting in the area. Rangers also prepare an activity report at the end of the summer. The report lists new loon arrivals, notes when they fledged, and includes the date upon which they left the lake for winter migration. Rangers also report threats to the loon. Aside from natural predators, these threats now include PWC.

In 1986, there was only one report in Michigan of a problem with PWC. The Loon Ranger commented that there was heavy use of boats and PWC. This occurred in the lower half of the state. There were no other reported incidents until 1989. Rangers from two lakes then reported that PWCs could be a problem.

In 1990, two lakes again reported that PWC were a threat to loons, and the problem escalated. Rangers commented that the loons were able to tolerate boats and skiers, but were disturbed by PWC. A Loon Ranger from a lake in Otsego County reported that, "After 22 years of successful loon nesting, PWC arrived on the lake. In July, two young men on PWC literally terrorized the loons out of existence. After several hours of (continuous) harassment of the adults and babies, the skiers finally drove the adult loons from the lake. The recently hatched chicks sought shelter in the marsh; they were never seen again."

#### Increasing pressures

The problem accelerated in 1991 as the rangers from fifteen lakes reported problems. By contrast, reports



The 1993 ranger reports listed 18 lakes; in 1994, there were 22; in 1995, 33 lakes; in 1996, 32 incidents. The report for 1999 indicated there were 33 incidents.

Rangers from 37 lakes reported problems in 1997. The rangers listed their concerns about perceived threats to loons and loon habitat from PWC and boats. Of these, 15 were PWC alone, six of boats alone, and eleven of both PWC and boats on the lake. Two reports described watercraft entering the nesting area. On one lake, PWC entered the nesting bay. Another incident was PWC and boats entering the information buoy area (These buoys warn to avoid the area because loons are nesting nearby). Other problems noted were: lake too small for PWC; running 5-abreast through narrow channel where nest site was located; nests swamped and abandoned because of excessive PWC activity; wave action from PWC threatened nest; and nest threatened by wake from boats running too close. There were 3 incidents of loons hit by boats. Four loons were hit, three of them were killed. They were:

- 1. A boat hit and killed one loon chick.
- 2. One adult loon killed by speedboat.
- 3. Speeding boaters ran over loon with chicks on back; one chick was killed.

#### You can help

How can I help, you ask? Call the Michigan Department of Natural Resources (MDNR) to report any problems of loon harrassment. This is the Report all Poaching (RAP) 24-hours a day phone number, 1-800-292-7800. The report is entered into the MDNR computer and assigned to a Conservation Officer to investigate. When they ask for your name and how they can reach you, please give it to them. After they investigate the problem, they will personally give you a follow-up report on what they found and what action they have taken to correct it.

The Michigan Loon Preservation Association Board of Directors encourages the formation of lake associations. That is the only way that people can have legal recourse to make recommendations for what activities they want on their lakes, and to be able to approach their township to be heard.

#### References

Williams, Joanne C. *Jet-skis on Michigan Loon-Populated Lakes: A report;* Michigan Loonwatch, 1997. ed. Bob Bowlus.
Comfort, Peg, *A Story of Successful Loon Protection;* Report to the Michigan Loon Preservation Association/Michigan Loonwatch Board of Directors, ed. Bob Bowlus.

# PERMISSION REQUIRED TO HUNT FOWL OVER BOTTOMLAND

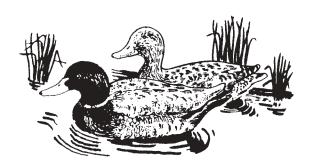
The Michigan Supreme Court in the case of HALL v ALFORD (114 Mich 165 (1897) decreed that "Hunting fowl from an anchored boat in a navigable stream is an actionable trespass because hunting fowl is not incidental to the public right of navigation."

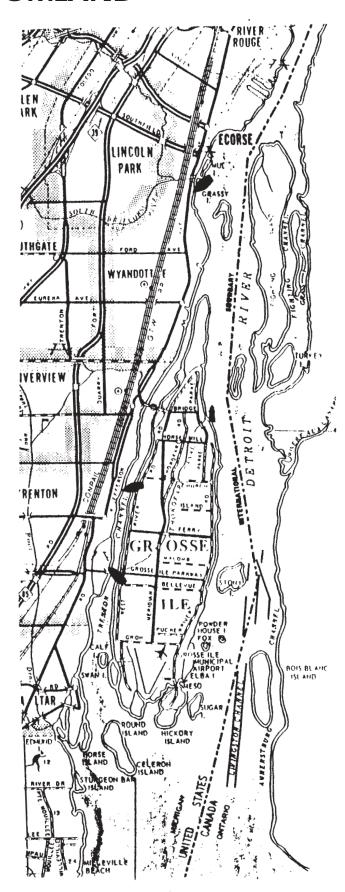
#### The facts of this case were:

"Plaintiff is a riparian owner who brings a trespass action for nominal damages against defendants. Plaintiff owns Horse Island in the Detroit River. (See map to the right.) Defendants were duck hunters and approached the island's shore in about ten to twelve inches of water. In certain seasons, this spot was actually dry and can best be described as marshlands. The marshlands surround the island and have a slight current. Plaintiff, under state law, owns the submerged land to mid-stream, subject to the rights of other riparians and paramount rights of navigation.

#### The Court Held:

The Court concludes that even though the defendants reached this location by boat, it could not be considered navigable. Marshlands adjacent to an island located in a navigable stream which are periodically dry or covered by shallow waters are not navigable. The Court approves of the case of STERLING v JACKSON, 69 Mich 488, which grants the riparian owner the exclusive right to hunt and sport upon his own soil, subject to the rights of navigation. But here, there is no navigable area and the trespass action is upheld. Had the trespass area been navigable, however, it would have been possible to maintain a trespass action. Hunting fowl from an anchored boat in a navigable stream is an actionable trespass because hunting fowl is not incidental to the public right of navigation."





## **DEQ DECISION IRKS ANTRIM OFFICIALS**

By Keith Matheny, Record-Eagle staff writer, November 29, 1999

BELLAIRE — In 1991, Vonebar and Janet Veit filled some wetlands to build a driveway on their new property on Intermediate Lake — without a proper permit from the state. State officials told them at least twice to remove the driveway and restore the wetlands, but the couple did not act.

The Veits' most recent appeal to fill even more wetlands on the property — this time to construct a house, garage and more — was approved by the Department of Environmental Quality. And the approval included a waiver of all previous orders to fix the earlier violations.

The DEQ's apparent change of heart has outraged Antrim County planning commissioners, who sent a letter opposing the permit approval to DEQ Director Russell Harding, Gov. John Engler and other state officials. County soil erosion control officer Efram Rosalez has issued a stop-work order and the commission may sue the DEQ.

Planning commissioner Jim Ferguson said granting a permit to property owners who have flagrantly violated previous orders is inexplicable. "This is setting one terrible, terrible precedent for the future in trying to protect our wetlands," he said. The commission believes the permit violates environmental statutes, including the Wetland Protection Act.

Janet Veit said from her home in Davison Wednesday that she and her husband don't understand why they are at the center of a controversy. "We are just regular Americans," she said. "What about my Constitutional rights? (With) ownership of property, you have rights."

Antrim Conservation District executive director Janet Person said the stop-work order was issued because no soil erosion permit was obtained as needed for earth change work done within 500 feet of a lake or stream.

The Veits, through their local real estate agent, Steve Voice of Boyne City, are supplying additional information to facilitate the erosion permit. Veit said the initial flap over the driveway was caused by a clerical error. The local

county soil erosion office was not supposed to issue a permit to fill wetlands for the driveway without then-Department of Natural Resources approval. The county, however, issued the permit without that approval, and the couple assumed state permission had been granted, she said. The landowners did not simply ignore state appeals to correct the wetland filling in over subsequent years, Veit asserted. "We were constantly working, trying to come up with solutions," she said. "If anyone says nothing was ever done, that's not true."

Ferguson said the Veits seemed well aware that the property they purchased in 1991 was nondevelopable wetland. Sale documents note a purchase price of \$8,000 and indicate the land did not percolate as needed for a septic system. Developable property with 100 feet of Intermediate Lake frontage, as the Veits' property has, sold for \$60,000 to \$70,000 at the time, Ferguson said. The Veits later were granted relief on their property tax assessment by Kearney Township officials, based on the fact that their parcel was non-buildable wetland, Ferguson added. "That indicates basically that they recognized they were in a fragile area that could not be built upon, other than maybe putting a dock or boat in there," Ferguson said.

Veit said she and her husband knew the property could not be built on when they bought it, but said they were hopeful a sewer system would be built and solve their septic problems. They later purchased an easement for a septic pump-back system from a nearby property owner.

The DEQ permit allows the Veits to construct a 988-square-foot home, a 672-square-foot unattached garage, a 192-square-foot elevated deck and a 122-foot elevated walkway. The permit also allows a large driveway turn-around, burying of overhead utility lines, a 45-foot culvert and a septic affluent line that runs to the off-

site drain field. The septic line would run beneath a stream on the property for 500 feet.

The Three Lakes Association and local residents Lynn Fisher and Steve Kostyshyn complained to the DEQ. "To grant the permit would make a mockery of the Wetland Protection Act and the role of the DEQ in enforcing it," Fisher and Kostyshyn wrote.

DEQ spokesman Ken Silfven said he did not see the Veit permit as "a typical case," and said people shouldn't worry about its future implications. "From a more philosophical stand-point, this is America, and people have a right to enjoy their property in accordance with the law," he said. Silfven said the Wetland Protection Act does not prohibit development in wetlands but mandates that landowners must first obtain approvals.

Ferguson said the planning commission is working with Antrim County prosecutor Charles Koop on possible legal recourse against the DEQ and the Veits. He said appeals to the state have failed. "(State Sen. George) McManus, I think, really turned his back on this whole thing," he said. "I'm really disappointed with George McManus. (State Rep. Ken) Bradstreet has come forward and given us a few suggestions, but hasn't really stepped into this issue. We have heard nothing back from Harding or Engler."

McManus spokesman Gary Henderson said McManus forwarded county concerns to the DEQ. "The bottom line is, George McManus is a legislator, and he does not run the DEQ," Henderson said. "We do not micromanage everything the DEQ does in terms of their permitting process, nor would anyone want us to."

The situation has been solved in the best way possible and upset neighbors and others should now move on, Janet Veit said. "We don't want to screw up anyone else's lives," she said. "We just want to enjoy the rights that everybody else up there enjoys right now, and that's just the peace and serenity to be able to use and enjoy our property."

### Information From Lake Associations Around The State...

#### Baldwin Lake Association Cass County Don Henke, President BOATING REGULATION ORDI-NANCE/NEW FOR 2000

Ordinance 18/Article 1 in Porter Township states that "as the shore lines of lakes become further developed, the cumulative impact of boat usage from each respective property must be regulated in order to preserve and protect the right of riparian owners as well as the Township as a whole."

In keeping with that, the township adopted new laws concerning the number of watercraft a property owner can have.

Ordinance 18/Article IV

Sec. 4.1 Not more than two (2) watercraft shall be launched and/or docked adjacent to each separate frontage.

Sec. 4.2 If the continuous length of a separate frontage is greater than 100 feet, two additional watercraft may be launched/docked for each 100 feet of continuous frontage in excess of the initial 100 feet.

Watercraft means any water vehicle having a motor or engine of more than fifteen (15) horsepower. Violations of this regulation shall be punished by imprisonment of not more than 90 days or by fine of not more than \$500, or both.

#### LAKE LEVELS — Mike Miller

We have all heard news releases as of late, about the low water levels in area lakes. rivers, and streams. In particular, how much lower the Great Lakes are in comparison to normal water levels. With the recent precipitation, Baldwin Lake appears to be near normal. In southern Michigan, normal annual precipitation is approximately 30". Some areas in our region are still reporting deficits. It is important to not only look at what has happened in the past 12 months, but also the past 2 or 3 years, since groundwater aquifer levels directly affect lake water levels. (More water is absorbed and held, in reduced precipitation periods.) The last 3 winters have been the warmest on record. In fact, in the past 20 years, 65-70% of the winters were warmer than the historical average. In the last 3 years our lake has had very short periods of ice coverage. The ice is like putting a lid on a jar...it minimizes evaporation. When a lake is allowed to evaporate days longer than normal, a huge amount of moisture is released. Combine this with less than normal

precipitation...I think you get the picture. Another interesting fact is that 70% of all precipitation evaporates. What is left is absorbed by vegetation. Excess goes into the ground to replenish our water table. Only 30% goes into our watersheds. Being 10-20% under normal precipitation levels affects our water table levels. I would guess that throughout this area, our water tables have dropped. Are they at dangerous levels?...I don't know. One "normal" year will certainly help, however, it will take 2-3 consecutive years to replenish the ground water supplies diminished in the last 2-3 years. Let's hope for an extended period of normal precipitation so everything can return to, well,...normal.

# Barron Lake Association Cass County Larry Schadler, President PRESIDENT WRITES LETTER TO DEO DIRECTOR HARDING

August 25, 2000 — To Mr. Russell J. Harding, Director, Department of Environmental Quality, POBox 30273, Lansing, MI 48909.

Subject: Water Level of Barron Lake, Howard Township, Cass County.

Dear Mr. Harding:

At recent meetings of the Barron Lake Association, there have been questions and discussions about the low water level of our lake. I'm writing at the request of various association members.

In the Spring of 1998, our lake level was at least three feet higher than it is now. During June 2000, when it rained frequently, the level went up a few inches. Now, with little rain in July and August, the level has gone down almost to the low of this Spring.

In searching for a cause and a remedy there have been various questions and suggestions.

- 1. A sewer around the lake was installed in 1994, with sewage treatment by the City of Niles. Would the diversion of water with the sewage be the cause?
- 2. Farms within about three miles are irrigated with sprinkler systems. Are they reducing the lake level?
- 3. Do springs that bring water to the lake get plugged up, to reduce the flow to our lake?

In general, are there factors that reduce the water level which we should watch, to find the reason(s) for our low water level? What causes can we find?

Also, are there things that we or the DEQ can do to raise the level?

Very truly yours, Larry Schadler, President

#### Bear Lake POA Manistee County Jerry Mathieu, President WEEDS, WEEDS, WEEDS...

We are already hearing that the weed problem is bad this year, and what are "we" going to do about it? The quick answer is "nothing." Like lake levels, this is just one of Mother Nature's natural cycles. There are a number of reasons why the weeds are bad: lower lake levels, shorter, warm winter and thin ice, all contribute. Also, nutrients in the lake. Weeds grow bigger and better with any kind of fertilizer. Everyone is aware of the phosphorus ban for lakeside fertilizer (I hope) but even the "safe" kind should not be over-applied, or applied within 30 feet of the lakeshore. Turf lawns should not run right to the edge of the water, and ideally there should be a vegetation buffer to keep run-off to a minimum when it rains. Lake dwellers should have their soil tested so that they know precisely what their lawn needs, how much it needs, and how often. Soil test kits are available at the MSU Extension office on Eight Mile Rd. Get one and be sure about fertilizer. Malfunctioning septic tanks can cause nutrients to enter the lake and might also cause weed growth.

#### **COLIFORM TESTING**

Although Pleasanton and Bear Lake Townships are providing for two general lake tests per year, including coliform, that really isn't an adequate amount for a lake that gets the use that Bear Lake does. Beaches particularly should be tested weekly during the swimming season. Coliform testing is really a "cookbook" procedure, easy enough for a lay person to do with a modest amount of equipment. The most expensive piece of equipment would be an incubator in which to grow the coliform in petrie dishes. This might be a perfect project for a high school class or group. Or anyone with access to an incubator in a school chemistry lab. Anybody have any suggestions?

#### Birch Lake Yacht Club Cass County Bob King, Commodore

# ZEBRA MUSSEL MONITORING & REPORTING PROGRAM

- 1. Lakeside friends and neighbors are reporting presence of mussels on their bricks to their Group Leader.
- 2. The Group Leaders will give their report form to Gertie Temple.
- 3. Results will be sent to Michigan Lake & Stream Associations. MLSA is working with the Sea Grant people, a cooperative program of Michigan State University and University of Michigan the "Mussel Brick" concept.

Zebra Mussel reports from the discovery of colonies found in the beaches on rocks, clams, boats, etc. are not a part of the official Zebra Mussel Watch Program. **Sample Report:** Denny Weesner, Group Leader

"I am sorry to report that Zebra Mussels are here and reproducing on the south side. A few babies were discovered on our bricks and several adult mussels were clinging to rocks and clam shells. I would suggest getting rid of as many dead clam shells as you can. Besides being a danger to cutting your feet, they are a home for the baby Zebra Mussels. Julie Weaver is checking the Mill Pond to see if they have filtered through the creek bed. If we find any, we know that this is the first year for them, because there was no water in the creek last summer. Lets all work hard to keep our beaches free of these "critters." After all...We are bigger than they are!!"

#### Derby Lake Cottage Owners Association, Montcalm County Woody Ely, President

At our Labor Day Pancake Breakfast last Labor Day Weekend at the Chapin's Garage, 93 Lakeside Dr., we all enjoyed a great breakfast, renewed old acquaintances, and met new friends and neighbors. We also had a number of members willingly sign up for various events and projects:

- 1. Lots of people signed up for and attended the Sidney Twp. Brd. Meeting on September 13th. This related to a Noise Ordinance and a "key-holing" or Anti-funneling Ordinance. (We're pleased to report that both are forthcoming). These concerns are being addressed by the Township's new Planning Commission as they develop a Master Plan for Sidney Township.
- 2. 4 members signed up as being willing to help in cleaning out the leaves that plug up the outlet at N.E. corner of lake in the spring.

- 3. 9 members signed as being willing to assist in refurbishing our directory board and replace shrubs and/or flowers at corner of Lakeside Dr. and Derby Rd.
- 4. 19 members signed as being interested in investigating the possibility of public sewers for Derby Lake.

#### Dodge Lake-Front POA Clare County Dorothy Saucier, President GOOSE NEWS

On Friday, June 23, 2000 with the help of many people on Dodge Lake, we had a very successful Goose Round-up. Sixty One (61) geese were removed and transported to a DNR designated area east of Gladwin. When we arrived the DNR were waiting. They then tagged every goose after recording approximate age and sex of the birds. We were then able to release them into a nice large wetland area.

All of this was done by trained and certified goose handlers Darlene and Hank Coleman, and Joe and Dorothy Saucier. This was the first time doing this on our own. The DNR said we did a great job and the geese were all in good shape.

A great big thank you to Ed and Judy Stein for helping transport the geese, Jack Prossor for letting us use his garage to store the cages, John Marlow for storing all the poles for the pens, and Hank and Darlene for the use of their yard and the coffee and donuts. We would also like to thank all of you who helped round them up or came to watch. We think the guys did a fantastic job building the cages.

#### Gull Lake Quality Organization Kalamazoo & Barry Counties Pete Hawk, President

#### **LAW ENFORCEMENT:**

Fred Buckley reported that GLQO purchased a radar gun this summer. The noise monitor has proven effective as all ticketed boaters pleaded guilty. Six boating accidents and four incidents involving personal watercraft were reported. The speed limit is 40mph and the noise limit is 90dba.

#### **FISHERIES:**

- Bass and bluegill were great! Perch fishing stinks.
- The DNR planted several thousand brown and rainbow trout. The abundant Northern Pike are smiling, according to fishermen who find the pikes' stomachs full of these small, not so smart, trout!
- The DNR placed smelt eggs in Prairieville Creek this spring. They will

try one more year and take a hard look for adult smelt during the summer of 2002.

# LAWN FERTILIZER-HELP THE LAKE AND YOUR LAWN

Randy Johnson reported the sales have been very good. Richland Home Center has been good enough to help store and sell the phosphorous free fertilizer. All proceeds go to GLQO. Please be sure to thank the Marshals at the Home Center for their cooperation and help. They have certainly hugged our lake!

#### Lakes Preservation League Lenawee County Arlen Miller, President WORKING TO PRESERVE THE

**EXISTING WETLANDS** 

As a preservation league we are committed to preserving the existing wetlands in the lakes area. We do not condone the filling in of wetlands by any individual, business, organization, etc. If you are aware of this taking place, don't hesitate to call the DEQ Land and Water Management Division (517-780-7916).

#### TOWNSHIP NEWS-HYDRANTS TO BE INSTALLED BY AFD

The Addison Fire Department plans to place approximately 42 dry hydrants around the two lakes so that every property owner would be within 1000 feet of a hydrant (hopefully, as a result your insurance will be less). At present, two dry hydrants are in service, one at Artesian Wells and the other at the new Devils Lake condominiums. The total cost of this long-term project is estimated at \$70,000. More details will be available later.

#### Long Lake Association Gogebic County Jim Forbes, President

Marty and I had another productive "zoning meeting" with George Peterson today. Marty and I reviewed some of the changes received from the township attorney, and discussed some of the suggestions we would implement to the code. George, Marty and I plan to meet with the attorney after the attorney has time to digest this new information. We will keep you informed on our progress. We appreciate Marty's help in this matter. His knowledge of the zoning and past experience is a great asset to LLPOA.

Marty, Bill Minoque and I attended a very informative and interesting ML&SA seminar on September 9, 2000 at Hagerman Lake in Iron River. Eric Bacon from the Lansing office MDEQ was one of the presenters and spoke about exotic weeds and

in particular Eurasian Milfoil. As mentioned at our LLPOA meeting Eurasian Milfoil has been found on Clearwater Lake. It is a very prolific weed that will quickly dominate a lake. It will grow in water up to 15 feet deep and forms a canopy on top of the water killing many native weeds. A small piece of the weed will seed a lake. Growing about 3 inches a day, it spreads rapidly impeding boat traffic and swimming.

# Lake Margrethe Association Crawford County Chuck Spencer:

sign of this pest in The Lake.

Chuck has been testing for the notorious Zebra Mussel. By using building bricks filled with holes, the mussel will attach itself to a convenient 'apartment' and take up literal residence. To date, using a dozen spots and a dozen bricks, there is yet no

Lakes downstate are experiencing a terrible infestation, but a recent news release states that "boat launches have become the front line of defense" in the Zebra Mussel war. The DNR warns boat owners to clean their boats, and it is especially important for fishermen to clean their equipment and not to reuse bait or empty live bait into The Lake.

Some boat owners have discovered that the diaper cream— Desitin—works as a barrier between the skins of their boats and the attaching capabilities of the mussel. What's the line about Creativity being the Mother of Invention? Wish I'd said that!!

# Osterhout Lake People's Organization, Allegan County Charles Pugh, President

#### **SALAMANDERS & FROGS**

— by Mariellen Kucala

The marbled salamander is present in only three counties in Michigan. They are Allegan, Berrien, and Van Buren. The most common colors for the marbled salamander are black with blue spots, and black with white spots. Marbled salamanders eggs look like silver balls, so if you ever see a salamander near "silver balls," those are eggs. If you want a salamander, look under leaves and you might find one. Here are some tips for keeping salamanders as pets:

- Have a waterproof container.
- Have a filter to keep the cage clean (do not fill container).
- Have some rocks for the salamander to climb on.
- · Do not use chlorine water.
- Feed the salamander boiled lettuce or spinach leaves, crickets, and worms.

Did you know? We have mud puppies in our lake. I've never seen one because they

are nocturnal. If you ever see a mud puppy, please call me at 434-6906, and ask for Mariellen.

#### Pentwater Lake Association Oceana County Robert Shrauger, President PENTWATER RIVER WATER-SHED

The Pentwater River watershed study is continuing. I started in May as the new watershed manager after working in the area for some time as an Americorps member for the Michigan Groundwater Stewardship Program.

Monitoring for invertebrates (mussels, crayfish, snails, etc.) was once again done in the watershed on 20 sites. Thirteen of these sites are on the south branch of the river and 7 on the north branch. I would like to thank all the volunteers who monitored for invertebrates this spring. It was nice to step into the job and have that kind of support.

This monitoring is crucial to determining the quality of the Pentwater River, which I'm glad to say scored well. The river looks to be in good condition with many beneficial insects. The more insects that are found the better. Some common ones found this spring were mayflies, scuds, dragonflies, aquatic worms, caddis flies, and stoneflies.

We are still waiting for requests for proposals to come out so that we can apply for Clean Michigan Initiative funds to implement a program to reduce bank erosion and other pollution sources. Big Sandy Bend, which is less than a mile upstream from Pentwater Lake, is an example of a location that might be receiving attention for bank erosion.

The watershed committee is holding a design contest to develop a logo for the Pentwater River watershed. This is an important aspect of creating an education program, and we hope to have a great turnout with many designs. The contest is open to all ages and the deadline is Friday, July 21, 2000. For more information on the logo contest or becoming a volunteer contact Seth Hopkins, Watershed Manager, at the Conservation District 231-861-4967, ext. 3 or E-mail shopkins@mi.nrcs.usda.gov.

# Platte Lake Improvement Assn. Benzie County

The Court Master, Dr. Winston Lung, has been replaced by Dr. Raymond Canale. Under the Settlement Agreement, the Court Master's duties have been redefined and the title changed to Implementation Coordinator. We are really pleased that Dr. Canale was accepted by the DNR to act in this capacity. Dr. Canale has been our Chief Technical Witness in this case since we began preparing for legal action in 1986.

I must say that with the appointment of Dr. Canale and the change in mindset of the DNR that has led up to the March 10, 2000 Settlement Agreement, I am really excited by what has been accomplished to date and I am very optimistic for the future. We will be working with the DNR in a collaborative as opposed to an adversarial relationship for the next ten to eleven years. All the effort spent in posturing to support a Court agenda is now being channeled into real value added effort to solve the problems required to support lake restoration and hatchery redesign.

Presently, Platte Lake is experiencing poor water clarity as opposed to last year. Our secchi depth on July 9, 2000 was 5.5 ft as compared 19 ft on July 4, 1999. We are experiencing heavy marl precipitation and will try to explain why with a minimum of hand waving at the Annual Meeting. The lack of rain and extremely low river flow rate appear to be heavily implicated. Increased rainfall hopefully will quickly clear the lake up, as phosphorus levels are 3-4 microgram per liter.

#### Three Lakes Association Antrim, Grand Traverse & Kalkaska Counties Jack Norris, President THANKS ARE DUE THE DNR

TLA has had several complaints that public accesses are being taken over and monopolized by private families and individuals. We look into these matters and refer them to the appropriate authorities – with varying degrees of success. Sometimes not much happens because the alerted official doesn't want to "make waves," or occasionally may not be familiar with the law on a particular point.

That is not the current DNR attitude. Recently a violation of the rules governing the use of a DNR access was pointed out to the Law Enforcement Division, and local DNR Officer Jim Gorno made a prompt response. A private family had been monopolizing the bottomland at a DNR access, anchoring their boats indefinitely on the public's bottomland, and limiting or impairing others' use of the facility — a facility that belongs to all of the public.

Gorno politely explained the law to the violators and said that after allowing them a reasonable time to make other arrangements he would follow up, and that if they chose not to obey the law, then he would

regrettably have to confiscate the improperly moored personal property. Bravo!

#### THREE LAKES BY-LAWS

The By-Laws of our Association, last amended in 1994, are currently under review by a TLA ad-hoc committee. The changes they recommend will be presented to the Board of Directors for further input in the near future. The following step will be to take the revised By-Laws to the full 3Lakes Membership. It is the members of TLA who will ultimately determine any changes by their own vote. Look for more on this in the near future.

#### TWIN Lakes POA Montmorency County Raietta Ott, President DOES YOUR PROPERTY CONTAIN WETLANDS?

Wetlands are those special places in the landscape with shallow water, or where water is visible only part of the year. Many times, wetlands have lush vegetation and abundant wildlife. They are those places that draw your eye when you drive by them in a car or a boat. Wetland areas may cause you to pause when out for a walk to listen to frogs, or to investigate an unusual plant.

There are many types of wetlands in Michigan and some are more easily recognized than others. A cattail marsh may come to mind, and while this is one kind of wetland, there are other types that play an equally important role in Michigan's ecological landscape. Here are a few clues on how to recognize the different types of wetlands:

Marsh – contains cattails, waterlily, pickerelweed, arrowhead, rushes, and underwater plants such as pondweed, wild celery, milfoil and coontail. Duckweed which looks like floating green circles and many kinds of algae can also be found in a marsh. Ducks, geese, rails, herons and songbirds use marshes during the spring and summer, and ring-necked pheasants use the dense vegetation for winter cover.

Scrub-Scrub – contain dense growth and shallow water, are important songbird feeding and nesting areas. The dense vegetation allows small birds to hide from larger birds. They are important as breeding areas for amphibians due to the presence of standing water in the spring and absence of fish predators. Pussy willow, red-osier dogwood and elderberry are typical shrubs. Alder thickets are also considered scrub-scrub and are dominated by speckled alder, a tall shrub also called tag alder. Marsh marigold, with bright yellow flowers, as well as sensitive fern and American black currant grow in alder thickets and provide food and cover for wildlife, including ruffed grouse and American woodcock.

Please be aware that if your property possess any type of wetlands (others are

Bogs, Fens, Forested Wetland) before you begin any type of activity you are required by law (State statute Part 303 of the Natural Resources and Environmental Protection Act PA451 of 1994) to obtain a permit from the DEO.

#### Wampler Lake POA Lenawee & Jackson Counties Emery Jonas, President HIGH WATER

Because of the abnormal rainfall experienced this summer our lake water level has remained higher than normal. We were not overly affected by the early Spring rains because our five water basins that feed our lake were quite dry because of the light snowfall this past winter. After our water basins became saturated and the excessive rains continued to fall, we received the rainfall much faster than the water exited under M124 leaving the lake. All inland lakes in our area experienced excessive water heights which should fall rapidly if we have some hot, windy and sunny days. •

#### THE DEQ DOES THE RIGHT THING FOR MC CARTHY LAKE IN KENT COUNTY, MICHIGAN

McCarthy Lake is a small lake (about 25-35 acres) located in Grattan Township, Kent County, Michigan. Overall, McCarthy Lake is substantially undeveloped and is fairly pristine. At the present time, there are approximately a half dozen houses on the lake, but several large tracts of farmland surround the lake which have the potential for future intensive development. A significant amount of the lake frontage is somewhat "mucky" and has some wetlands associated with it.

The owners of two adjoining parcels on the lake have proposed to dig a channel into and along their lakefront. This would have permitted them to install dockage along the firmer bottom of a freshly-dug canal. It would also permit them to walk directly from solid yard onto their dock to access moored boats. One of the property owners claimed the canal was necessary based on his handicapped status. The lot owners also asserted that the canal would not have negative impacts upon the ecosystem of McCarthy Lake, and would actually improve wildlife habitat.

When the lot owners first applied for permits under the Michigan Inland Lakes and Streams Act and the Michigan Wetlands Act to create the canal, a hearing was requested by interested parties. When the hearing was held before local officials of the Michigan Department of Environmental Quality ("DEQ"), approximately 40 people showed up during a workday. The overwhelming majority of persons present at the hearing spoke out strongly against permitting the creation of a

new canal. Many of the speakers at the hearing stated that they had no problem with permitting the lot owners to install environmentally-friendly boardwalks and floating or comparable docks at the waterfront, but that they should not be allowed to create a canal. The lot owners rejected this proposal. Local DEQ officials ultimately denied the canal request and held that a dock at the end of a boardwalk was a prudent and feasible alternative.

The lot owners filed an appeal to an administrative law judge. Grattan Township also filed documents in support of the DEQ's denial of the canal proposal. After extensive legal proceedings before him, Administrative Law Judge Richard A. Patterson ultimately upheld the initial decision of DEQ staff to deny the canal and held that a boardwalk-dock system was a prudent and feasible alternative.

At this time, it is not clear whether or not the lot owners will attempt to further appeal within the DEQ or whether they will take court action. Given the amount of criticism which the DEQ often receives regarding environmental matters, this is one case where many riparians believe that the DEQ did its job. In particular, DEQ staff who initially decided this case did a thorough and thoughtful job in protecting the environment.

If you desire to review a copy of the decision of the administrative law judge in this case (DEQ File No. 97-09-0682), please contact Don Winne at (616) 273-8200. ◆

(Continued from page 9)

#### Restoring the big rapids...

axles, timbers, dirt, and large chunks of concrete and twisted metal were among the many surprises hauled away for disposal. By the end of September 2000, the dam was out of the river!

#### What now?

Even though the river flows freely over the formerly dammed area, the project will not be officially complete until the end of summer in 2001. The contractor still needs to shape both river banks in the demolition area, establish vegetation on newly-exposed areas, clean out the secondary sediment trap, tear out the remains of an old railroad trestle exposed by receding water levels, and remove the artificial rock dam creating the secondary sediment trap.

Meanwhile, USGS and MDNR scientists will continue to study the effects of this project on water quality, fish populations and benthic organisms within the dam remnant's former influence area.

Then, the Muskegon River will drop almost nine feet in elevation in less than a mile, which will certainly restore the big rapids in Big Rapids. I like to think Chief Seattle would be proud of the City of Big Rapids and its efforts to come "full-circle" by helping to restore the Muskegon River to its natural grandeur.