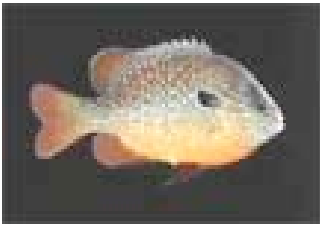


# Friends of the Mukwonago River



**Longear Sunfish**  
(*Lepomis megalotis*)

The Mukwonago River watershed is home to over 50 species of fish including the threatened Longear Sunfish (*Lepomis megalotis*), several species of rare freshwater mussels, an incredible diversity of wetlands, and some of the highest water quality in Southeastern Wisconsin. The mission of the Friends of the Mukwonago River is to protect the Mukwonago River and its associated watershed ecosystems by way of education, advocacy, and promotion of sound land use throughout the watershed.

## 2008 NEWSLETTER

***It has been a good year!** We didn't have any major development battles to fight (the one silver lining of a down economy). We had the biggest success of our 9-year existence (read more about the Rainbow Springs property deal below). We expanded our reach up Jericho Creek, the river's largest and very important tributary, by reaching out to the landowners and decision-makers there in new and effective ways, with a lot of volunteer help from some very committed new Friends.*



*We look forward to more good things in the year to come, and we hope you'll stick with us and continue to offer the wonderful financial, moral, and volunteer support we need to make this mission of protecting the Mukwonago River, for now and for always, a reality.*

*Happy holidays, thank you, and we'll talk to you again soon as more excitement awaits us around the next bend!*

*Nancy Gloe, President/Treasurer*  
(262) 782-8876  
E-mail: [ngloe1@wi.rr.com](mailto:ngloe1@wi.rr.com)

*Ezra Meyer, Vice President/Secretary*  
(608) 843-3972  
E-mail: [ezra\\_meyer@yahoo.com](mailto:ezra_meyer@yahoo.com)

## Rainbow Springs property becomes Mukwonago River Unit, Kettle Moraine State Forest

As you've heard by now, the Wisconsin DNR has purchased the 970-acre Rainbow Springs property using funding from the state's Knowles-Nelson Stewardship Fund. The purchase became official after the real estate closing in October.

The October 22 dedication was done by Governor Jim Doyle who was introduced by Waukesha County Executive Dan Vrakas.

Former owner Michael Feker and the Feker family were thanked for working with the state to make this happen.

Rainbow Springs is one of the last large, undeveloped, private parcels on the Mukwonago River. It is beautiful, full of fun things to do, and supports critically important plants, animals, and environmental services (recharging drinking water in the ground, for example) that benefit us all.

The DNR normally acquires properties within established project boundaries. Rainbow Springs was not within a project boundary. According to a briefing paper presented to the state Natural Resources Board, “Because of the property’s exceptionally valuable resources associated with its wetland and upland complex, a (40 acre) natural lake and ¾ mile of Mukwonago River corridor” it was proposed as an addition to the Kettle Moraine State Forest, to be called the Mukwonago River Unit.

Rainbow Springs, for example, contains a natural cranberry bog. This is a very rare plant community in the southern part of the state. The property has also been dubbed a regionally important groundwater recharge area.

During construction of the golf courses in the 1960s the natural ecosystem was heavily altered. The river currently runs through several corrugated metal culverts to accommodate golf cart roads. Part of the river was moved to the north of its original location to create the golf courses. The sellers will retain a lease on 240 acres and the two 18-hole golf courses for two years (through 2010).

According to the briefing document, “after the lease terminates, the golf course, which is largely in the floodplain of the Mukwonago River, will be removed, and the area will be restored to a natural condition over the course of several years.” The DNR has already begun planning for the restoration of a 25-acre wetland on the Walworth County side of the property. The wetland was ditched and drained during construction of the resort in the 1960s. DNR is also planning controlled burns to control invasive plant species on the land.

Such restoration will help to ensure the survival of 59 species of fish, 16 species of mussels and 60 species of animal and plant populations, many of which are endangered, threatened or of special concern.

*The state’s land acquisition “guidance” establishes priority criteria to be considered when acquiring lands: these include lands that protect rare and threatened natural resources, properties that present unique opportunities, land acquisition projects that protect water-based resources, parcels that have land sufficient to support a variety of natural resource-based outdoor recreation (including trails), and properties that are within 40 miles of Wisconsin’s 12 largest cities and protect scenic lands that meet department priorities. The Rainbow Springs property meets all six criteria.*

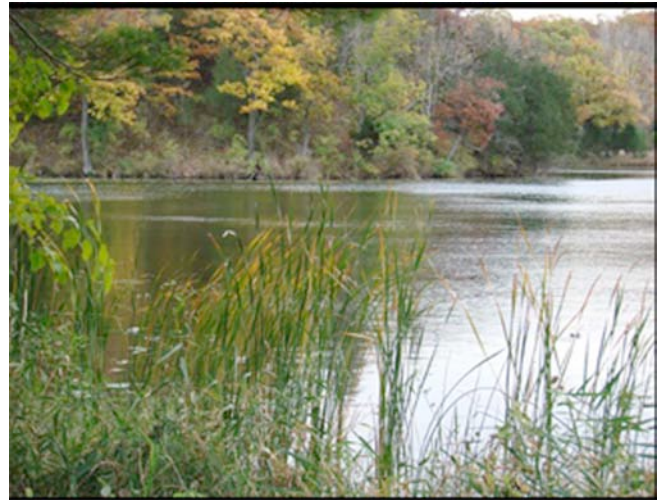


Photo by Jean Weedman

### **Rainbow Springs Lake on dedication day**

**Note: Rainbow Springs and Lulu Lake are natural kettle lakes. Kettle lakes are formed when a large piece of ice breaks away from the edge of a retreating glacier and becomes partially buried under sediment deposited by the glacier. After it melts, this fragment leaves a small depression in the landscape. A kettle pond or kettle lake is formed when water fills the kettle hole.**

A scenario like this one was the best possible outcome for this property with its opportunities for recreation, ecology, and the maintenance of environmental benefits that could have been compromised by development. We couldn’t be more excited about it!

### **Rainbow Springs, continued**

It reminds us why we exist as a Friends group and why people like you continue to support us year after year—because we CAN protect the Mukwonago River for its water quality, plant communities, and animal habitat to benefit ourselves and future generations who will love and enjoy it. Thank you for all of your support and hard work to make this a reality!

**Photo right: Friends President Nancy Gloe shows her appreciation at the dedication ceremony of the Rainbow Springs Unit.**



Photo by Jean Weedman

### **Jericho Creek landowner group organized**

February brought an exciting new focus on Jericho Creek, which provides about one third of the water flow of the Mukwonago River.

A group of landowners on the creek and other interested parties gathered to discuss issues related to the creek. The group organized under the auspices of the Friends of the Mukwonago River.

At the group's first meeting, Tom Slawski and Sara Teske of SEWRPC presented a progress report on the watershed study. In May, the group met again to learn about trout streams and restoration possibilities from Sue Beyler of the DNR, and Dan Asmus of Trout Unlimited.

Summer and fall showed the benefits of the new communication network as the group stayed in touch regarding the drainage from Country Bliss subdivision into Jericho Creek.

Busy schedules have delayed plans for the next meeting, but we hope to get together again this winter. Possible agenda items include the latest findings of the watershed study, results of the nutrient study, and learning more about invasive species along the creek.

We are also hoping to have a small work party in April to clean up the area just north of Hwy X. If you have other ideas, or can help set up a meeting, please call Jacki Lewis at 262-594-2903, or [JackiLewis@centurytel.net](mailto:JackiLewis@centurytel.net).



**Jericho Creek, at its best, has many turns and swift flowing water, which provide the perfect habitat for various fish, turtles dragonflies, etc. This section near Hwy LO is a resource for students at Eagleville School.**

Photo by Jean Weedman

## Village of Mukwonago's swimming hole gets a makeover

This summer the Village of Mukwonago and the Fox River Commission teamed up for a major shoreline stabilization project at the Village's Indianhead Park on the Mukwonago River. The park, commonly known as the Swimmin' Hole for the sandy beach and cool water that residents have enjoyed for generations, is located on the south side of the Mukwonago River between Highway ES and the Phantom Lake dam.

Over many years the shoreline at Indianhead Park has become eroded, and the vegetation along the bank has been trampled. Also, a large chunk of concrete was dumped in the river along the park's shoreline.



Photos courtesy of Paul Shedivy

**Before** (south shoreline looking west)

Village of Mukwonago resident and commissioner Tom Jones worked with the village's Dept. of Public Works director Tom Brandemuhl on this project, which entailed removing the concrete embankment and placing seven fieldstone stabilization points on the bank. The reinforced areas will serve as access points to the river for foot traffic, especially fishermen.

Stream bank "bio-logs" and "erosion control blankets" were installed to temporarily stabilize the remainder of the bank. The existing beach was redefined with edging. Native trees and shrubs were planted for long-term stabilization along the non-beach portion of the shoreline.

The native vegetation, once established, will be beneficial to migrating songbirds. It should also discourage resident geese from congregating and leaving high phosphorus droppings. Fewer goose droppings will improve water quality and the aesthetics of the park. [Note: The Friends suggested this native vegetation barrier to the village several years ago.]

Note: The Fox River Commission, created by the Wisconsin Legislature in 1997, is comprised of commissioners appointed by Racine and Waukesha Counties, the City of Waukesha, the Villages of Big Bend,



**After** (same shoreline looking east)

Mukwonago, and Waterford and the Towns of Mukwonago, Vernon, Waterford and Waukesha. Staff from the DNR and Southeastern Wisconsin Regional Planning Commission (SEWRPC) serve as nonvoting representatives. The legislature gives the commission \$250,000 per year to fund water quality, navigational and recreational use improvements of the waters within the designated area.

Hats off to the Fox River Commission for funding this excellent project. Other nearby areas (not village owned) could benefit from a similar project. Working with these landowners and securing funding for these projects, will definitely go on the Friends' "to do" list.

## Education connection...

### Eagleville School educator and great Friend, Bruce Sturm, retires

In June, longtime Eagleville School environmental educator, Bruce Sturm, retired, in what we're sure was a great move for him but a loss for us, the river and the kids.

Over the years Bruce taught countless students the importance of being connected to nature...and the importance of not taking oneself too seriously.

For example, Bruce had a seemingly endless supply of silly shirts. He also had a big drum that he claimed could change the weather! The children quickly learned to love Bruce's light-hearted sense of humor; after that, there was no escaping his passion for the out-of-doors.

Bruce taught children how to explore their world--by canoe or snowshoes or a walk. A world of adventure and discovery awaited those who ventured outside. The impact of Bruce's tenure was evidenced by a retirement party packed with students, former students, parents, colleagues and well-wishers.

## Watershed happenings...

### Better Stormwater Management at Hwy E

There have always been flooding issues during heavy rains where the Mukwonago River crosses Hwy E in the Town of Eagle. These issues have become worse with the DNR's expansion of the Eagle Spring Lake boat launch two years ago.

Most of the runoff from the road and the boat launch flows to a drainage swale on private property, then it overflows directly into the Mukwonago River. After construction of the boat launch, Eagle Spring Lake Mgmt District (ESLMD) and the Nature Conservancy asked SEWRPC to look at ways that the DNR could improve stormwater management from the launch area. SEWRPC subsequently made recommendations in two letters to ESLMD during 2007 and 2008. DNR



Photo courtesy of John Steib

**Friends' President Nancy Gloe presented Bruce Sturm with our Longear Sunfish Award for excellence in education.**

Thanks for making such a huge difference, Bruce! The Mukwonago River watershed and world are better for it. One person can make a difference. Good luck in your new adventure(s)!

Bruce will be hard to replace, but Eagleville's natural resource thrust and the great people there (parents, teachers, and kids) will continue to do great things!

initially was unwilling to address the matter. They have since agreed to install the recommended improvements: modifying the "catch basin" to remove additional sediment and some oil and grease.

DNR has also asked the Town of Eagle to participate in a cooperative effort to address the larger stormwater concerns in the area. As of the date of this writing, town officials are looking at their options.

Thanks to Tom Day of ESLMD and Pat Morton of TNC for their persistence in getting these issues addressed.

## Nature Conservancy restores flow at headwaters of the Mukwonago River

Another major project within the watershed is the recent work done by The Nature Conservancy on their Crooked Creek Preserve. The removal of two man-made dams which were fifty years old was necessitated by safety concerns.

The failure of the dams would have released sediment into the Mukwonago River, threatening fish, mussels, and the environment for other species.



On the left side of the aerial image are the two bodies of water formed by the berms (straight lines). At the right is Lulu Lake.

The berms or dams, which were compromised by tree roots and muskrats holes, were originally put in to create a fish farm. These blocked the flow of water from the cool springs

which are part of the headwaters of the Mukwonago River. Those cool springs on The Nature Conservancy's Crooked Creek Preserve provide up to 70 percent of the water in the river. The springs had been blocked from their natural flow for years by the berms which created two impoundments or man-made ponds. As water sat in the ponds, it became warmer and negatively impacted areas downstream.

Experts have indicated that this improvement will allow freer movement of fish upstream and will, ultimately, lead to greater biological diversity within the system. It's hard to overstate how important this work is to the river, since it directly reconnects the cool trickling springs that originate the Mukwonago River. Restoring the wetlands using native seeds is another goal of the \$150,000 project.

The preserve is open to the public. For directions to visit this site, go to [www.nature.org/wisconsin](http://www.nature.org/wisconsin) and search for Crooked Creek Preserve.

## Watershed study updated -----

While all this was going on...Tom Slawski and Sara Teske of SEWRPC were collecting data on Jericho Creek for the watershed study that is due out at the end of 2009. Here is some of the information that they passed on to us.

Early indications are that Jericho Creek is far more diverse (28 species identified to date) and of higher quality than previous studies have shown. In particular, the SEWRPC fish surveys have discovered several species previously unknown in the creek. Two species, the Lake Chubsucker and the Least Darter, were found in the upper portion of the creek. Both are species of "special concern" in the state (the next up from "threatened") and they

are usually associated with clear, clean water. The Mottled Sculpin (not "listed" but known as a "trout indicator") was found, for the first time since 1980, in the middle reaches of the creek. Definitive evidence was found of the Longear Sunfish, a state "threatened species."

Adult Brook Trout were found throughout the length of this system; this is most significant for areas above Hwy NN where there are obstructions thought to discourage movement. There were also sightings that indicate the possibility of natural reproduction of Brook Trout in the creek. The more we learn about the Mukwonago River system the more we are impressed by its quality.

## Smart Growth planning...

Wisconsin law requires that local communities make key land use decisions in comprehensive “Smart Growth” planning and to make their decisions after January 1, 2010 according to those plans.



Good planning should preserve the natural environment and water quality as well as planning for and preserving all other

important things that make a good community: agricultural and cultural resources, utility and community facilities, land use, transportation, housing, economic development, intergovernmental cooperation, and implementation.

Historically, we’ve seen some good planning in the watershed and some perfectly bad decisions. One major strategy the Friends employs is to engage in and monitor these planning and decision-making processes to be sure that the river and watershed are considered.

Waukesha County and the Town of Mukwonago, for example, recently finished and adopted their plans. The town’s plan shows a commitment to natural resource protection and water quality preservation, and it integrates this protection with the various community functions mentioned above. We feel that this great plan should be a model for other communities in the watershed.

Here’s what we know, so far, about the other

planning processes in the watershed:

- Both the Town and the Village of Eagle are currently in the thick of the planning, which they are working through together. They will each come out with their own plan, but the hope is that they will be coordinated in ways that make sense given the unique roles played by the two connected communities. More information is available online: <http://www.eagle-wi.gov/smartgrowth>.

- The Village of Easy Troy has a draft plan out that is quite heavy on annexation from the Town of East Troy. Unfortunately no border agreement currently exists between the communities. The plan makes no mention of the source of water for this growth—a contentious issue in the East Troy area and throughout the watershed.

The Friends have long expressed concern over the potential for the Village of East Troy to continue drawing water from the Mukwonago River watershed, to the detriment of the river, its lakes, and all of its values.

Water drawn from the watershed is then sent to the sewage treatment facility along Honey Creek south of town where the water will leave the Mukwonago River watershed. Once in Honey Creek, that water begins a long journey to the sea in the Gulf of Mexico, via the Fox, the Illinois, and the Mississippi Rivers.

- We have received no word yet on the Village of Mukwonago’s, North Prairie’s or the Town of Troy’s Smart Growth plans.

---

### SEWRPC experts present to the Towns of Eagle and North Prairie

Our partners on the Phantom Lakes and Eagle Spring Lake have both received DNR river protection grants for a watershed study. The Southeastern Wisconsin Regional Planning Commission (SEWRPC) was hired to do the study. Data collection began in earnest this

past spring and the final report is due out at the end of 2009. This process has already provided us with a wealth of good information on the watershed, especially on the major Mukwonago River tributary, Jericho Creek.

For example, we had serious concerns about an industrial development proposed for a property along (south of) Hwy 59 west of North Prairie in the Town of Eagle. This proposed development would be in the headwaters area of Jericho Creek. It is particularly important to protect the headwaters of a stream since what happens there impacts the entire system.

This past March we asked SEWRPC's Tom Slawski to do a presentation to the Eagle Town Board about protective buffer distances from the creek for a development such as this. He provided some useful information that we supported and that the county and town factored into their decision-making.

Also at our request, in June, Slawski did a presentation for the North Prairie Village Board about problems associated with the village's stormwater runoff into Jericho Creek at its headwaters.

We hope to continue working with the village and the landowners of the properties in the Jericho Creek headwaters area to improve the quality of the creek where it matters most.

We are very pleased with the good information that SEWRPC has been helping us bring to the local officials. The officials, to their credit, seem to be listening!

## Aftermath of the June 2008 floods...

June's record-breaking floods caused serious problems for people, property, and Mother Nature--some temporary, some lasting. Other problems were narrowly missed, such as the potential failure of the Phantom Lake dam (story below).

Although we cannot control the weather, there are things we can do to minimize the harm that flooding will do to our belongings and the natural resources.

In the Mukwonago River watershed, we tend to have floodplain areas and wetlands, whose job it is to take the brunt of

flooding so other areas won't have to. Many are in good shape, still natural, and not modified or developed.

Protecting key pieces of land from being developed, or from being impacted by development, is key to protecting us from future flood damage. Keeping the populations of fish, wildlife, plants, and trees that make up the Mukwonago River watershed ecosystem strong and healthy also helps ensure that they'll remain strong even if a catastrophic event like a flood (fire or tornado, etc.) should occur.

### The Phantom Lake dam -----

During the June flooding, water began seeping around the sides of the old Phantom Lake dam. A failure would have devastated one of the most diverse fish spawning ground in the state.

It could have also wiped out mussel beds in the lower Mukwonago River which contain several species of threatened and endangered mussels. There was also the possibility that the downstream railroad bridge and the State Highway 83 bridge might have been washed

out. Fortunately, the dam held. There are many lessons to be learned from what happened in June, and we hope we will all not soon forget.



What does the future hold for the Phantom

Lake dam? According to the Phantom Lake Management District's website:

**The dam inspection report is in the process of being written and will be available for viewing at the end of July. Replacement of the rock rip rap, on the South side of the dam, with clay soil is necessary. The structure of the dam at present is good and repairs should be able to be made during normal water levels. The Village of Mukwonago will have to create a Temporary Emergency Spillway and complete a study of a Dam Failure Analysis that will include an Emergency Action Plan.**

**Country Bliss subdivision update-----**

One result of the spring floods was that large areas of Country Bliss subdivision in the Town of Mukwonago were flooded, including roads and a number of homes. As a temporary measure, for several weeks in July, the standing water was pumped to Jericho Creek, which is about a mile away.

It was a concern to the Friends since Jericho Creek, a high quality coldwater trout stream, is a major feeder into the Mukwonago River. Tom Slawski of SEWRPC was kind enough to monitor water temperatures during the temporary pumping. The pumping removed most of the trapped surface water from the subdivision and allowed the flooded roads to re-emerge, but several homeowners continued to have flooded basements because the water table remained high.

As the town explored long-term solutions, a permanent stormwater sewer into Jericho Creek was seriously considered as well as a new tax district for funding.

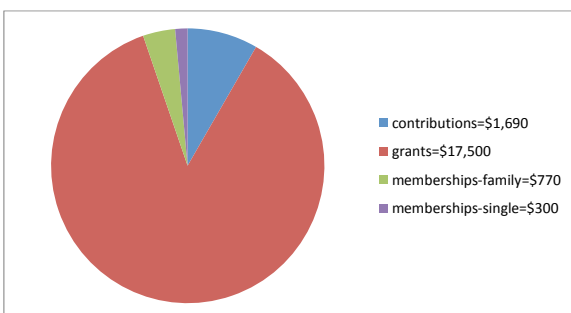
On several occasions, comments were submitted by the Friends organization and by individual members of the Friends, attempting to find ways to provide relief for the flooded homeowners without causing damage to Jericho Creek from contaminants, temperature increases, and/or significant changes to the flow volume.

After a sizable investigation and lengthy public comment period, the town officials determined that ongoing drainage of the subdivision is beyond the scope of the town's responsibilities.

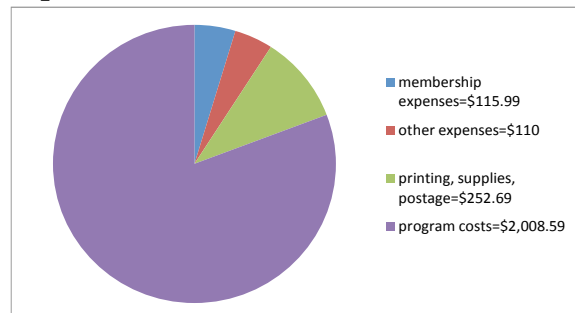
**Friends of the Mukwonago River financials...**

Below is our financial statement for 2008. Contact our President/Treasurer, Nancy Gloe, if you would like additional information. We are recognized by the IRS as a 501c3 tax-exempt charitable organization.

**Income**



**Expenses**



Note: Grants were received from the DNR River Protection Fund and the Patrick and Anna M. Cudahy Fund.

**PLEASE JOIN OR RENEW YOUR MEMBERSHIP  
WITH  
THE FRIENDS OF THE MUKWONAGO RIVER**

We would really appreciate it if you would join or renew your membership with the Friends of the Mukwonago River! The river continues to face threats from proposed and pending developments throughout the watershed. Still too few understand the singular importance of this river and watershed, unique for their incredible diversity and unparalleled quality.

As we work to provide a voice for the river in the planning and decision-making processes surrounding these projects, from time to time we need to hire experts to help us make the case for win-win solutions that will allow sensible development to occur while protecting the Mukwonago River. We also aim to increase the capacity of the Friends, its members, and its volunteers to make strides toward our watershed protection and restoration goals. Your membership contribution for the coming year will help us to have the financial ability to be able to continue and expand our important work.

Please join now at the level that's appropriate for you. Just fill out the form below and mail it and a check to:

Friends of the Mukwonago River,  
P.O. Box 21,  
Eagle, WI 53119

-----  
**Circle one:** Friend (**\$25**) Defender (**\$35**) Guardian (**\$50**) Steward (**\$100**) Sustainer (**>\$100**) \$\_\_\_\_\_

Note: Memberships of \$25 or more receive a copy of our "Glacial Refuge (**now on DVD!**)" video

Memberships of \$35 or more receive a Friends shirt (indicate S, M, L, XL)

Memberships of \$50 or more receive a video and a Friends black embroidered sweatshirt  
(indicate S, M, L, XL)

I do not need a gift at this time.

*Bequests and gifts of stock or other monetary instruments are also accepted.*

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City, State, Zip Code:** \_\_\_\_\_

**Phone # (optional):** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

Please indicate here if you'd prefer an email newsletter in the future (and provide email above).

**Thank you!**

---

**Friends of the Mukwonago River**  
**P.O. Box 21**  
**Eagle, WI 53119**