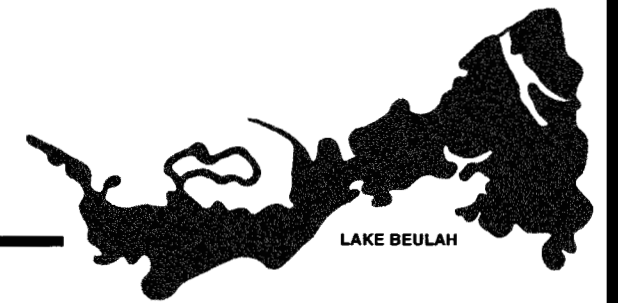




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Lake Views



VOL 12 NO 1

A PUBLICATION OF THE LAKE BEULAH PROTECTIVE & IMPROVEMENT ASSOCIATION

Spring 2004

From the President's Desk

“Change” is the one “constant” we can count on for sure in our lives. It’s when we fail to address and manage change effectively that bad things can happen to us and to the natural resources we often rely on.

Aquatic, invasive species left uncontrolled can degrade our water resources;

Failure to monitor and provide for routine and long term care of dams can impact lake users and downstream resources;

Failure to enhance and preserve a natural shoreline can adversely affect lake water quality;

Failure to adopt “Smart Growth Planning” as our local communities seek to expand their boundaries and host land developments can have serious ramifications on our natural resources;

When high capacity municipal wells are proposed, there needs to be careful consideration of the potential impacts to the waters of adjacent lakes like Lake Beulah including subsurface water sources feeding the lake, the groundwater aquifer in amounts affecting the lake and its sensitive environmental areas and the overall ecosystem, and nearby private wells. I saw where DNR has agreed to hold a “Contested Case Hearing” on their approval of the Village of East Troy’s proposed well #7 in response to an appeal by the Lake Beulah Management District. I also heard that the Legislature currently has proposals to strengthen the State statutes relating to proposed municipal high capacity wells.

Last, speaking of change, I noted the February 16th resignation of Clayton Montez, East Troy Town Chairman. On behalf of the LBPIA I want to thank Clayton for his years of dedicated service to our Town and wish him success in his new roles as a “side supervisor” filling a recent vacancy on the East Troy Town Board, as President of the Walworth County Unit of the Wisconsin Towns Association and as one of the Board of Directors for the Urban Towns Committee.

This issue of Lake Views contains several articles that discuss and address some of these issues of change. The Mukwonago River Watershed includes Lake Beulah and its subsurface waters, groundwater aquifers and surface waters. We also have articles on how we can enjoy our valued lake by getting out and paddling and on the youth Water Education Days at Camp Edwards your LBPIA is helping fund once again this year.

Mark your calendars for the LBPIA Spring Members meeting scheduled for Saturday May 15th at 9:00 A.M. at the East Troy Town Hall. Also if you have access to the internet, be sure to check out our updated web site at www.lakebeulah.org . It contains lots of great information on Lake Beulah history, photos, current events, links to other lake organizations and the organizational structure of your own LBPIA Association.

Paul Didier
Lake Beulah Protective & Improvement Association (LBPIA)

Beulah Fish Report

Jeihri Robinson

Well Spring is finally here, and the ice has melted (finally) and it’s time to break out the fishing rods, change the line on the reel, hit Walmart for the latest tackle and hit the waters. This should prove to be another fine year for fishing!

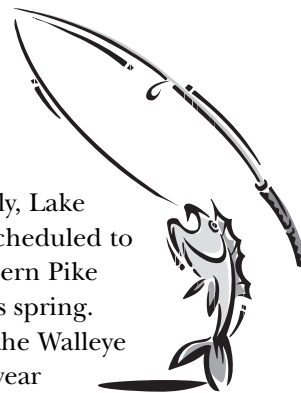
I had the opportunity to spend some time on the ice this year, and was able to catch a few fish (albeit small ones). Several of the fishermen (or fisher-people as I was corrected by a very nice woman in a snowmobile suit, hooded parka, iceman boots, scarf and heavy gloves) had some luck this year. Over the past few years I have been watching some of the new ice fishing tactics that have eluded me, but has been very effective for others out on the water.

Winning Tactics: Using an ATV or snowmobile, they chase the fish below the ice to the shanty. This requires a very fast vehicle, as the fish below the ice move very fast (not unlike having the bass boat’s with the big engine to chase the fish in the spring and summer). It generally requires several attempts to herd the fish to the shanty, and from several directions. The next critical key I noticed was the small grill set up on the ice, the heat apparently attracts the fish to that location. And the final element is to walk outside the shanty repetitively to keep the fish near the hole. I can’t argue with these tactics, based on the smiles the folks around the shanty had, they must have been

catching a lot of fish.

Currently, Lake Beulah is scheduled to have Northern Pike stocked this spring. Hopefully the Walleye put in last year have thrived and grown and we look forward to seeing them in the near future. Thanks again to the Triangle Sportsmen’s Club for their generous donation to help in the stocking efforts. I hope to see everyone out on the water this year!

Tight lines,
Jeihri



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Lake Management District Report

By Dave Skotarzak, Chairman

Village of East Troy Well

The Village of East Troy has been issued the permit for the proposed municipal well on the Grafenauer/Thomas property. The management district has been granted a hearing with the DNR to appeal the issuing of this permit. A pre-hearing conference will be held on April 1, 2004 with the actual hearing to be scheduled at that time. The District continues to work with the Village on finding an alternate site for the well.

Lake Beulah Study

We have hired RSV Engineering to do a water budget study of Lake Beulah. A DNR grant has been

applied for which will cover approximately 50% of the cost of this project.

Highway J Dam

The Dam Failure analysis has been completed and a written report will be submitted to the DNR. The DNR then will be working directly with the owners of the dam and the district on developing further plans and needs for the dam.

Septic Ordinance

This is the third phase of our 3 year pumping cycle. By the end of this year all septs on the District should have been pumped on inspected.

Weed Harvesting

Pat Nelson again will head up the weed harvesting program. The areas that will be chemically treated will be identified and the property owners notified. This treatment is dependant on the weed growth which is weather related.

Again, the Management District needs your support and input. Our meetings are noticed in the East Troy Times so we hope to see all of you at these meetings.

WATER QUALITY

Ron Anders

Because of our 15,000+ lakes, normally Wisconsin residents think of "water quality" in terms of our rivers, lakes, stream and wetlands. These surface waters provide recreational, aesthetic and economic quality to our lives. Yet we tend to overlook our important underground resource for public and private use.

About 2/3 of Wisconsin's population uses more than 750,000 private wells as their source of drinking water. The quality (potability) of groundwater affects both our health and the value of our homes. For those with concerns about personal health or the selling or buying of a home, Wisconsin residents can get help regarding water contaminants, well codes for the installation or abandonment of private wells.

Contaminants. The DNR has local water quality specialists familiar with testing for bacteria, nitrates, lead, as well as pesticides, arsenic, radium and iron.

They can be reached by phone at (608) 266-0821, or online at <http://www.dnr.state.wi.us/org/water/dwg/regionstaff.htm>.

Well Codes. This pertains to the location, construction, installation and maintenance requirements for both drinking and none-drinking wells. The DNR code is in Wis. Adm. Code Chap. NR812 or on line at <http://www.legis.state.wi.us/rsb/code/nr/nr809.html>.

Well Abandonment is also in the Wis. Adm. Code – NR811.10 – and requires local communities to oversee compliance for removal of any unused, unsafe and non-code private wells. Contact your local officials for permits and ordinances to abandon any wells.

Enjoy and preserve our precious and beautiful waters!

Lake Views is published periodically by the Lake Beulah Protective & Improvement Association. Every effort has been made to provide correct and accurate information. There is, however, no guarantee as to the total accuracy of information included. The opinions expressed are not necessarily those of the LBPIA Board of Directors. Individuals who wish to submit articles, artwork, poetry, calendar items or photography may send contributions to Lake Views Editor, LBPIA, P.O. Box 153, East Troy, WI 53120. Articles in Lake Views may be reprinted or reproduced for further distribution, with acknowledgment to the Editor.

Area Chair Network

March 2004

Area Chairpersons are committed Lake Beulah residents who serve as the primary contacts for the Association. Should you have an interest or concern about anything regarding the Lake, please be sure to contact your area chair.

Lake Beulah Area	Chairperson(s)
Country Club Lane & Austin Road	Stan Alger (642-3476)
Beulah Heights Road.....	Gerald & Kelle Robinson (642-5989)
Oakwood Lane & It's A Little Road	Jean Holloway (642-5749)
Lake Road & Windy Way.....	Penny Clayton (642-3083)
Highway J & Millsite Road	Dave Skotarzak (363-7603)
Island Dr. & Golden Way	Ralph Gehrmann (363-3072)
Brynes Lane & Romadka Park Road	Roy Gerloff (642-5213)
Horseshoe Lane & East Shore Road (to Beulah Park)	Patrick & Joy Kline (363-8855)
Beulah Park Road	Dale Roble (642-5690)
East Shore Road & Thistle Lane	Mitzy Dorn (642-7499)
South Shore Dr. (to Humphrey Lane).....	Kathy Wamsky (642-7983)
South Shore Dr. & Humphrey Lane	Kathleen Taugher (642-3835)
Kings Parkway & Kings Lane.....	John & Bea Sonderegger (642-5716)
Pastime Lane & Grandview Dr.	Bill & Maya Murphy (642-5512)
Wilmers Grove Road, Wilmers Point Lane & Wilmers Landing	Brian Fons (642-9613) Mary Gull (642-3611)
Stringers Bridge Road, New Deal Ave. & West Bay Road.....	Michol Ford (642-5189)
Beach Road & Deerpath Road	Pat Prah (642-7686)

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Membership expansion – Ron Anders, Ruth Rappold, Marge Harvey*
Area Chair – Ann Alger*
Member Lists and/or Directory – Mike Norton

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Lake Views (news letter) – Paul Didier, Ron Anders
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Aquatic Plant Management - Judy Skotarzak*
Shoreline Management – (Audrey Green*–Walworth Co.)

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Interaction on Government & Property Development Issues - Dr. M. Fehrer, Paul Didier, John Sonderegger*, Burt Shavitz*
Legislative & regulatory liaison – the LBPIA Board
Public Safety & Security – Jeihri Robinson

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Vice President – Ruth Rappold
Treasurer – Dick Patterson
Secretary – Mike Norton

*Non-Board/Interested volunteer

What's so special about the Mukwonago River?

Fish diversity:

The Mukwonago River is home to **over 50 different species of fish**. For a stream of this size, over 20 species would be considered quite diverse. Only much larger systems like the Wisconsin and the Mississippi have comparable levels of fish diversity.

10 of the state's 11 species of Sunfish (including the threatened Longear Sunfish) live in the Mukwonago River. It is the only stream in Wisconsin where this occurs.

All three species of Killifish (or Topminnows) found in Wisconsin, including the endangered Starhead Topminnow, live in the Mukwonago River. This is the only stream in the state where this occurs.

The Mukwonago supports numerous species of Shiners and Darters, fish species that are not necessarily unique, but indicators of good water quality and habitat.

Freshwater mussel diversity:

The Mukwonago River contains **15 different species of freshwater mussels, including the endangered Rainbow Shell and the threatened Slippershell and Ellipse mussels.** Mussels are the most threatened family of animals in North America, due principally to water quality deterioration in most of the nation's freshwater bodies.

High quality, diverse wetlands:

The Mukwonago River watershed features a **diverse and extensive system of intact wetlands that help support its high water quality and species diversity.** These wetlands are one of the important reasons explaining why the Mukwonago River is known as one of the most biologically diverse and highest quality rivers in the state.

Excellent overall ecosystem condition:

Due to its excellent water quality, minimal level of disturbance, and diverse habitat types (particularly the abundant spring-fed wetlands), **the river also supports a high diversity of waterfowl, reptiles, amphibians, insects, aquatic plants, and wetland types.** The Mukwonago, for example, supports one of the last and largest stands of wild rice in Southeastern Wisconsin.

High rates of groundwater recharge:

Due in large part to the glacial soils found throughout most of the watershed, and combined with the fact that the watershed is relatively undeveloped, **groundwater recharge rates in the watershed are significant.** Much of the life described above relies heavily on the consistent inflow of groundwater for its survival. The human communities in the watershed also rely on the groundwater aquifers supplied by this recharge. Today, those aquifers are being pumped excessively potentially threatening the future economic viability of the region – maintaining groundwater recharge wherever possible is more important than ever.

Other good things to know about the Mukwonago River:

Due to the factors listed above, **the Wisconsin Chapter of The Nature Conservancy has designated the Mukwonago River watershed one of its four "Last Great Places" in Wisconsin.**

Because of its high quality waters and wetlands, the Mukwonago River watershed has been selected as one of three focal sites globally to be reviewed by the international Nature Conservancy's Wetlands Network. This network is comprised of some of the most knowledgeable wetlands academics, scientists, and managers in the world.

The challenge of protecting the outstanding resources of the Mukwonago River in the face of development pressure and other potential threats is one that the watershed community is capable of meeting, provided that we put our minds to it and work collaboratively. Where development is to occur, practices exist for development design, stormwater management, and land and water conservation that will serve to help us meet these objectives. Where appropriate, public and private land preservation can play a key role in protecting the natural heritage of the Mukwonago River watershed for the enjoyment of current and future generations.

Most importantly, it is not too late! But we need your help...

Ezra Meyer

Co-Director of "Friends of the Mukwonago River"

LBPIA Spring Member's Meeting
Saturday, May 15th, 2004 beginning @ 9:00 AM
Town of East Troy Town Hall
N 9220 Stewart School Road, East Troy, WI

Members are encouraged to bring their ideas and concerns to the meeting for possible inclusion in the Association's 2004 Action Plan.

The Benefits of a Natural Lakeshore

As Spring approaches, many homeowners begin to think about "cleaning up" their shorelines. However, pulling "weeds" and grasses or removing shrubs and trees for a better view of the lake can have many negative impacts for the homeowner, the shoreline and the lake itself, and in some instances permits may be required.

A natural shoreline that includes a diverse mix of trees, shrubs and herbaceous ground covers provides several advantages. Some benefits that are very attractive to homeowners include discouraging Canada Geese, providing a privacy screen, and requiring less time and money for maintenance. Natural shorelines also provide homes to about 90% of all the living things that inhabit a lake. When humans clear the lakeshore of native vegetation, many of the animals that lived on the shoreline and in the shallows also leave. In fact, 80% of the plants and animals on the endangered species list live all or part of their life cycle in the near shore area.

The water quality of your lake can also be affected when the shoreline is cleared of native vegetation. A natural shoreline acts as a buffer between human activities and the lake. The dense root systems of native plants prevent erosion by binding soils. Above ground, a dense native buffer will slow down runoff water coming from far above the lake itself. The runoff can then filter into the ground slowly. This allows the contaminants, like phosphorus, to be filtered out. Less fertilizer and other contaminants going into the lake help to reduce algae blooms.

By protecting the water quality of the lake, homeowners are also

protecting their property values. A recent study at Bemidji State University (Minnesota) calculated the relationship between water clarity (how far down you can see into a lake) and property values. Results showed that when water clarity increased by 3 foot – a lake property's value could increase by as much as \$423 per foot of frontage. The study also demonstrated that a 3-foot decrease in water clarity could cut property values by \$594 per foot of frontage. While not all lakes would be prone to such dramatic changes, this study as well as similar studies definitely shows a significant relationship between water quality and property values.

Homeowners that wish to share in the many benefits of a lakeshore buffer can restore shorelines that have been previously cleared of native vegetation. Depending on the site conditions, this might be as easy as allowing the area to regenerate naturally by not mowing. Of course some homeowners may wish to accelerate the restoration process by removing exotics and planting native species. Restoration of the shoreline can be accomplished in phases to spread out the cost and labor involved if desired. And, with the large number of native plants available, it is easy for homeowners to choose plants that appeal to their needs and tastes. For additional information or technical assistance please contact Audrey Greene, Lake Specialist, Walworth County Land Use and Resource Management – Conservation Division at (262) 741- 3460 or agree@co.walworth.wi.us.

Paddle Prattle

by Scott Miller, M.D.



As the water on the lake starts to soften after the long winter, many of us turn our attention to the upcoming boating season. Wherever your interests lie, there is a very enjoyable aspect of boating that you might be overlooking. This is the first in a series of articles in which I hope to pique your interest in the various paddle sports that Lake Beulah has to offer. I'll start off by describing the boat options available to you and then in future articles go into some of the interesting routes and spots that I have discovered while paddling around the lake over the last few years. As a means of introduction, my interest in paddle sports goes back a few decades to when I first learned to canoe on some of northern Wisconsin's rivers. More recently, I've taken up kayaking and absolutely love it.

From my tours around the lake, it seems that a lot of us have either canoes or kayaks that see occasional service. If you don't already have one, you might be wondering which type of boat is best for you. To answer this you have to consider exactly how you envision yourself using the boat. The choice between a canoe and kayak depends upon how you plan to use your boat and what your personal preferences are.

When I first started thinking about getting a kayak, I had visions of an unstable boat that I would get trapped in as soon as it flipped over. This turned out to be far from the truth. Kayaks are inherently very stable because they have a low center of gravity. This is because the seat is located on the floor of the boat and you end up sitting at or below the water level. They also offer the comfort of a seat with a backrest. Many kayaks have generous openings in the deck, which allow easy entrance and exit. This is especially important in the unlikely event of a roll over! Another significant advantage is that the boat's center of gravity is located in its middle. Coupling this with the kayak's small profile makes for very easy to paddling in any direction without worrying about the wind turning the boat. On a relatively open lake like Beulah this can be quite a blessing. Lastly, the kayak uses a paddle with blades on each end. I feel that this is one of the biggest advantages that a kayak has to offer. If you think about the steps used in paddling a canoe, the basic stroke involves putting the

(continued on page 5)

Groundwater Flow Model for the Mukwonago River Watershed

Department of Geology & Geophysics UW Madison

Wetlands of the Mukwonago River watershed have been the target of conservation efforts for almost two decades. Recent suburban development has spawned a rapidly expanding commuter population and increasing demands for public water supplies, with several new high capacity wells proposed within the last year. There is a critical need to evaluate potential effects of increased pumping and reduced recharge in order to protect the springs and wetlands of this watershed. The proposed project addresses the “emerging issue” of groundwater withdrawals and connections to surface waters. The overall objective of the proposed project is to improve understanding of hydrogeologic controls on groundwater discharge to springs and wetlands in the watershed in order to allow assessment of current and potential future impacts of groundwater withdrawals and suburban development. The primary product of the research will be a numerical model of groundwater flow.

Initiatives in the Mukwonago Water Shed

The proposed project is designed to contribute directly to on-going initiatives by TNC (The Nature Conservancy) to assess and monitor the hydrologic and ecologic integrity of the water shed as well as to develop conservation strategies and partnerships with local land owners, lake management districts, state agencies, municipal and county planners and others. This project will be coordinated with TNC in order to provide timely availability of results to the many interested parties in the water shed.

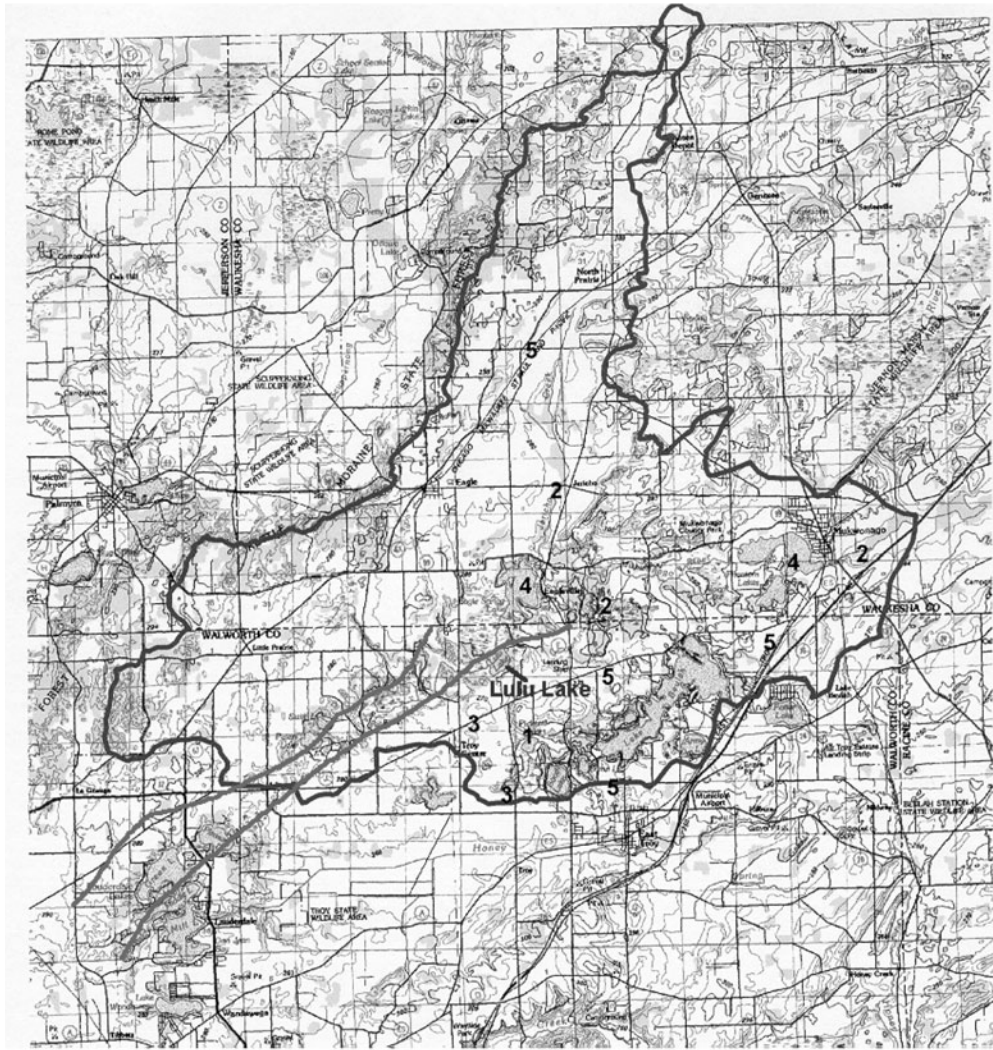


Figure 1 – The Mukwonago River watershed is outlined in blue. The approximate location of the northwest side of the buried Troy Valley near Lulu Lake is outlined in red (after bedrock contours in Borman, 1976).

Water Education Day at Camp Edwards

Tracy Moore, Environmental Education Director

Once again, Camp Edwards YMCA will be hosting Water Education Day. This year we are able to expand it from 150 to 250 students with a generous donation from the Lake Beulah Association. The dates this year are April 19-20 and May 3. We are rotating the students through 5 classes, which include: Pond Mucking, Ground Water Simulation, Water Quality, Marsh Exploration, and Reptiles and Amphibians. The importance of water and water sheds are the key points of the day. Last year was a huge success and we know that this year will be just as good.

Thanks to the support of the Lake Association for helping us at Camp Edwards bring this program to the local students of the East Troy and Mukwonago area. This year along with the public schools, several pro-chial schools are joining in on the fun. We also were able to buy more equipment, which aids us in providing better quality programs. This year we were able to purchase a microscope, magnifying glasses, outdoor viewing scopes for pond study, and several waterproof pond study guides. It is through education that we make the biggest differences. Thank you for helping us make a difference.

LAKE BEULAH PROTECTIVE & IMPROVEMENT ASSOCIATION

2004 ACTION PLAN

- Continue to inform & educate the membership on land and lake use laws and regulations and support the Town, County and State in their enforcement with emphasis on lake weeds, shore lands management and landscaping.
Note: We implement a twice annual news letter and maintain a regularly updated Web Site www.lakebeulah.org as two primary initiatives coupled with other educational outreaches with local schools, Camps and lake property owners to accomplish this goal.
- Continue working with the Wisconsin DNR, our members, volunteers and other experts to monitor and improve the overall health of Lake Beulah's fish, wildlife and aquatic ecosystem (including the “Mute Swan” issue reportedly occurring on Wisconsin lakes). In the wake of Glen Kreinbrink's retirement as our long revered Lake monitoring expert, the Association needs to ensure that the annual water quality sampling and reporting is continued in accordance with State guidelines and accepted state of the art practices.
- Continue support of the efforts that will result in the Lake Beulah Management District assuming responsibility for the regular monitoring, maintenance, and long term care of the County Highway “J” dam.
- Monitor and provide input representing the views and interests of the Association regarding proposed developments on the Grafenauer & Thomas Property as well as any other developments that may affect the Lake and its surrounding environs including but not limited to the proposed Village well on that property.
- Continue to monitor & review boating laws & boating safety issues.

Paddle Prattle (continued from page 3)

paddle into the water, drawing it back and then bringing it out of the water and advancing it ahead for another stroke. In contrast, the kayak paddle stroke involves putting one blade into the water, drawing it back and then immediately dropping the other blade into the water for a second stroke. Not only do the blades spend more time in the water (making paddling more efficient) but the paddle is automatically used on alternating sides. This helps the boat travel in a straight line without the need for correcting strokes, as is the case with a canoe. Lastly, most of us have seen video of kayakers doing Eskimo rolls where they effortlessly roll the boat completely over and paddle off as if nothing every happened. The good news is that you don't have to know how to do this to enjoy kayaking. This kind of rolling is important to white water and river kayakers who will more likely end up rolling their boats because of changing river conditions and is not needed on flat water like Lake Beulah.

Canoes are another option for those of you considering getting started in paddle sports. Not only are they richly steeped in Wisconsin tradition but they are just plain fun to use! One of the canoe's biggest advantages is its large carrying capacity. Not only can two go out and enjoy the lake together but you can fit kids, pets and just about anything else you can think of inside. Canoes

come in a large variety of sizes and styles. They also are made out of a wide variety of materials. These range from traditional wood canoes to rugged aluminum ones. More recently, various plastic composites have hit the market that combine durability with natural buoyancy and quiet operation. Lastly there are the high-end Kevlar boats that offer extreme lightweight ease of handling. When choosing a canoe for use on the lake I recommend purchasing from a dealer who will allow you to take the boat for a “test ride.” There is a huge difference in the stability, ease of paddling and straightness of tracking between various canoe designs. There isn't enough room in this article to go into the details, but suffice it to say that some canoes are designed for use on rivers, some on flat water and others are a compromise between the two. The white water canoes tend to turn more easily and are generally shorter in length, while flat-water boats tend to track straighter and are a little longer. This increased length usually results in a faster boat.

I apologize for not talking about solo canoes, tandem kayaks or sit-on tops but time and space preclude this. If you have any favorite paddling spots on the lake, I'd love to hear from you! You can reach me online at: emill_wi@hotmail.com.