

Friends of Lake Kegonsa Society, Inc. P.O. Box 173 Stoughton, WI 53589-0173 December 2012

Annual Meeting Announcement

The FOLKS annual meeting will be held at the Stoughton Country Club, 3165 Shadyside Drive, Stoughton, WI 53589 on Saturday, January 19, 2013, at 4:00 pm. The meeting will be followed by a social with hors d'oeuvres and beverages.

Agenda

Call to order

Financial report

Summary of 2012 activities/projects

Introduction of 2012 Committee chairpersons

Membership drive

Election of board officers for 2013-14

Guest presentation by Don Heilman–President of Clean Lakes Alliance "Goals and Plans for Reducing Phosphorus in the Yahara Chain of Lakes"

Adjourn

Social

"Watch for your membership renewal information in the mail in early January"

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President's Message ~ Bob Arndt

At the February meeting, the new board of directors will develop a list of projects for the upcoming year. One or more of those most certainly will involve developing ways to clean up our lake by reducing phosphorus in Lake Kegonsa.

According to data presented in the <u>Yahara CLEAN Strategic Action Plan for Phosphorus Reduction</u>, the estimated average phosphorus load entering Lake Kegonsa from all sources is 37,720 lbs. Most of this comes from upstream and planned reductions upstream should reduce this load. Direct drainage into Lake Kegonsa is estimated to be 8,800 lbs annually. FOLKS will attempt to locate potential phosphorus runoff locations in addition to those already identified. We will then work with the Clean Lakes Alliance, townships and property owners to develop ways to reduce these direct sources of phosphorus in our lake. This will include finding ways to fund controls.

You can help by identifying locations around the lake where urban or agricultural runoff occurs, and bringing them to our attention. If you want to be more involved, you can volunteer to join one or more of the committees that will be working on these projects. To learn more about these efforts you can read the report about the Clean Lakes Alliance and phosphorus in this newsletter and attend the presentation at the FOLKS annual meeting on January 19.

If you have project ideas or would like to participate on a committee, please contact any of the board of directors listed at the end of this newsletter or on our website www.kegonsa.org.

GUESS THE DATE LAKE KEGONSA FREEZES!

- Enter the 1st annual contest to guess the date Lake Kegonsa freezes in 2012/2013.
- Win a gift \$50.00 certificate for dinner donated by Halverson's Restaurant.
- The date the lake freezes will be determined by Ardis and Doug Pfundheller, our resident historians who have been tracking and recording the date the lake freezes for 50 years! Their methodology is to drive around the lake to assure that the lake is frozen at all specified points on the lake. No challenges to their decision are allowed!
- Send the date that you think the lake will freeze to <u>cathiet@kegonsa.org</u>. All predictions must be received by December 21, 2012 the 1st day of winter or the day the lake freezes if sooner! The winner will be the first person who selects the correct date and is the first to submit his guess which will determined by the date and time the email is received so DON'T DELAY.
- To avoid any question of voter tampering, the Pfundhellers and the FOLKS Board members are not allowed to win.
- One Entry per member.

Clean Lakes Alliance

Members of the FOLKS Board attended a Clean Lakes Alliance breakfast along with about 1,000 other individuals representing organizations interested in improving the quality of the Yahara River chain of lakes. Here are a few questions and answers about the Clean Lakes Alliance.

Q. What is the mission of the Clean Lakes Alliance?

- A. The mission of the Clean Lakes Alliance is to continue to build a community of people, businesses, organizations and government agencies dedicated to continuously improving and protecting water quality in the Yahara watershed
- Q. What is the primary goal of the Strategic Action Plan?
 - A. The goal is to reduce the amount of Phosphorus that enters the Yahara River chain of lakes, Mendota, Monona, Waubesa and Kegonsa by 50%.
- Q. Why is reducing the amount of phosphorus important?
 - A. **Every pound of phosphorus that enters the lakes generates 500 pounds of algae**. Algae is the cause of beach closures, the lack of water quality and the smell of decay from our over-fertilized lakes.
- Q. What is the Yahara Clean Strategic action plan for reducing phosphorus?
 - A. The plan contains fourteen specific actions with clear achievable phosphorus reduction goals to clean our lakes. As mentioned above, the goal of the plan is to produce dramatic improvements in lake water quality by achieving a **50% reduction in the average annual phosphorus load from direct drainage** sources in the Yahara chain of lakes.
- Q. If this can be accomplished what would the end result be?
 - A. Once phosphorus load reduction goals are realized we will double the number of days when lakes are clear, our beaches are open, and we will significantly reduce the number of toxic algal blooms that limit recreational enjoyment of the lakes.
- Q. Where is the majority of the phosphorus coming from?
 - A. Overall, 71% of the phosphorus load reduction must come from rural actions. Fortunately, many farmers and livestock owners are already hard at work to reduce phosphorus enriched runoff. Farmers will intensify their efforts to improve cropping, tillage and in-field practices and managing manure and nutrients to meet the goals in the plan. Farm producers have organized as Yahara Pride Farms to support their colleagues in phosphorus reduction efforts.

Building more community manure digesters is one important action to help farmers manage manure so that less phosphorus reaches area lakes and streams.

The Yahara CLEAN Strategic Action Plan calls for a reduction of 32,800 lbs. of phosphorus diverted per year from rural actions. Remember, each lb. of phosphorus equals 500 lbs. of algae. (Continued on Page 4)

Clean Lakes Alliance (Continued from Page 3)

- Q. What about urban areas?
 - A. Overall 28% of the phosphorus load reduction must come from urban actions. It will be challenging to meet the phosphorus reduction goals in urban areas since so much of the land is developed and there is little opportunity to clear storm water of phosphorus before it reaches the lakes. To meet the challenge urban residents and municipalities will be called upon to improve leaf management and control construction erosion, stabilize urban waterway banks and reduce the amount of total suspended solids from runoff in municipal storm water.
 - A. The Yahara CLEAN Strategic Action Plan calls for a reduction of 13,400 lbs. of phosphorus diverted per year from rural actions.
- Q What is the estimated cost?
 - A. The estimated net cost to implement all the Yahara CLEAN actions is \$78.6 million dollars, after a deduction of \$49.5 million in private business investment in community digesters. The remaining funds will be raised through a combination of public and private sources.
- Q. How much will this initiative reduce the phosphorus loads?
 - A. Through the combination of urban and rural actions we will reduce phosphorus loads into Lake Mendota by 53%, Lake Monona by 26%, Lake Waubesa by 50% and Lake Kegonsa by 56%. Phosphorus reductions in the lake Mendota watershed will provide additional benefits to the rest of the lakes since phosphorus from Mendota flows to each of the downstream lakes via the Yahara river.

The FOLKS Board is impressed with the strong partnership between businesses, government organizations, community organizations and farm organizations all working together to reduce phosphorus load into our lakes. There is every reason to believe that through the efforts of all the people involved this goal can be accomplished and we will be enjoying a cleaner Lake Kegonsa in the years ahead.

Would you like more information about this important initative?

Don Heilman, the President of Clean Lakes Alliance, will be making a presentation at the FOLKS Annual meeting, which is at 4:00pm on <u>Saturday 1/19/2013</u> at the Stoughton Country Club. You will find it interesting.

FOLKS Board of Directors



Membership News

First a special thank you for the commitment and support of the Friends of Lake Kegonsa Society. Your membership enables FOLKS to continue Lake Kegonsa initiatives.

It will soon be time to renew your commitment but before finalizing the 2013 objectives, input from FOLKS members during the January 19, 2012 Membership meeting being held at the Country Club at 4:00 PM.

The Society has seen a slight decline in overall membership in the last few years. As a result, the Board has decided to utilize first class mail in the membership drive this year.

The Board would also like to invite any interested members to attend Board meetings held on the second Wednesday of each month. As any community organization, FOLKS is always in need of members who are interested in helping meet the annual and long term objectives. An example would be assisting in gather data on lake levels or submitting articles for the Newsletter.

If you would like to become a volunteer, have suggestions for FOLKS, or would like to attend a meeting, please visit our website (<u>http://www.kegonsa.org</u>) and contact a Board Member. Questions about membership can be addressed by Gloria Kay at <u>Gloria@Kegonsa.org</u> or Peter Foy at <u>PeterF@Kegonsa.org</u>.

As you think about how you might become more involved, a review FOLKS' primary objectives may be helpful. The primary objectives are;

- To protect, maintain, and enhance environmental and recreational values at Lake Kegonsa and its surroundings,
- To organize and conduct activities intended to maintain or improve the ecology, water quality, fishing, and recreational use of Lake Kegonsa,
- To obtain and provide information to its members on lake owner concerns and recreational users of the lake.
- To provide important lake information to all of our members and lake home owners. Members and non-members are encouraged to visit the website at: <u>http://www.kegonsa.org.</u>

Your membership enabled FOLKS to accomplish so much this year. To list a few:

- We purchased and installed lighted buoys in the river and on Lake Kegonsa for enhanced safety.
- We contributed to fish stocking, monitored lake levels and weed control to enhance recreational values.
- We had open communication and supportive efforts with like-minded organizations such as the Clean Lake Alliance, the Department of Natural Resources, Dane County and others.

There is a busy agenda for 2013.

- We have scheduled a membership informational Social for January 19, 2013 to be held at Stoughton Country Club.
- We plan additional fish stocking on Lake Kegonsa.
- We plan to work with the Clean Lake Alliance on runoff and impacts of aquatic plants.
- We will publish four newsletters, plus numerous Lake Alert notices, as important news come up. Thank you for your contribution and your continued support of FOLKS.

Phosphorus and the Great Circle Tour

Too much of a good thing almost always leads to problems. This is especially true when it comes to nutrients and lakes. Lakes need some nutrients, such as nitrogen and phosphorus, or they would be as bare as water-filled bathtubs. Nutrients are necessary for algae and plants, which in turn fuel the entire lake food web from tiny zooplankton to feisty crayfish, and from fish fry to trophy muskies. But with too many nutrients, and especially too much phosphorus, the algae multiply so fast that the lake's tiny herbivores, the zooplankton, cannot keep up and the lake turns a not-so-tempting green. Where do the algae get the phosphorus that allows them to multiply so dramatically? Most people know that lots of phosphorus comes from outside the lake every year. But in many lakes, much of the phosphorus stimulating algal growth is recycled from within the lake.

When phosphorus enters a lake from outside it is called external loading, and it is easy to see and understand the sources. The phosphorus may come from a readily identifiable source, called a point source, such as a pipe from an upstream wastewater treatment plant. It may come from less conspicuous, or nonpoint sources, such as runoff from fertilized lawns or as leachate from ineffective septic systems. Both point and non-point sources of phosphorus increase the total amount of phosphorus in the lake. But then what happens to it?

Upon entering a lake, phosphorus may be immediately taken up by algae or bacteria and become part of the food chain. Or, if the water is well oxygenated, it may form an insoluble compound with iron and sink to the bottom. It may also attach to organic particles, again sinking to the bottom. Even if algae take up the phosphorus, it will eventually fall to the bottom of the lake as part of a dead algal cell, in excreted fecal material, or as part of a dead critter higher in the food chain. Whatever the vehicle, most of the phosphorus that comes into the lake, eventually ends up in the sediments on the bottom of the lake. If the phosphorus stayed at the bottom, and we could control the external loading, we could more successfully control runaway algal growth. But, it doesn't stay put and that leads to trouble.

Because of this rain of phosphorus-rich organic debris, the concentration of phosphorus in the bottom sediments is much higher than that of the overlying water. Typically with differing concentrations, there tends to be diffusion or movement from the place with the high concentration to the low. However, in the case of phosphorus, diffusion of nutrients from the sediments to the water (also known as internal loading) is a very complicated process controlled by a great number of physical, chemical, and biologic factors. When conditions are right, phosphorus will be released from the sediments, re-suspended in the water column and ready to rejoin the world of the living.

Oxygen is one of those chemical factors critical to the release of phosphorus. Bacteria in the sediments are always busy decomposing dead organic stuff accumulating at the lake bottom. Decomposition consumes oxygen and the bottom of the lake may become anoxic, meaning there is no dissolved oxygen in the water. (This can also lead to winter and summer fish kills but that is a story for another day). Under these anoxic conditions, phosphorus is no longer bound to iron and is released as free phosphate (the most biologically valuable form of phosphorus). Slowly, usable phosphorus diffuses from the bottom and up into the water column. Some phosphorus will be rapidly re-suspended when the lake "turns over" in spring and fall. This "internally loaded" phosphorus will be taken up rapidly by algae, which is why we often see algae blooms during these times.

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Phosphorus and the Great Circle Tour (Continued from Page 6)

Aquatic plants are also important in getting phosphorus into the water column, albeit in a round-about way. Aquatic plants get most of their nutrients from the sediments and, in a sense, "mine" the sediments for phosphorus. These plants eventually die, are decomposed by bacteria, and then some of the phosphorus that had been locked in the sediment is released to the water column. Other lake bottom organisms, such as carp and small insect larvae, often stir up oxygen-poor, phosphorus-rich sediments near the sediment-water interface, also leading to more phosphorus circulation. Cutting off the external load of phosphorus from point and non-point sources may not lead to an immediate decrease in algal levels. There will always be some phosphorus internal loading, at least seasonally. However, the lake's phosphorus "memory" will slowly fade if the phosphorus inputs decline. If the external load is diminished, a lake over-endowed with nutrients may eventually see a return to a more natural phosphorus cycling regime.

By Susan Knight UW-Center for Limnology, Trout Lake Station

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FOLKS monthly board meetings are held on the second Wednesday of each month and the public are welcome to attend. Next Meeting January 9, 2013, 5:30 - 7:00 PM.

Halverson's Supper Club, 1965 Barber Drive, Stoughton, WI 53589

Send news of interest to FOLKS to: P.O. Box 173 Stoughton, WI 53589 or DaveL@kegonsa.org

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Please Support Your Lake Association - Renew Your FOLKS Membership.

This year's dues remain \$20.00 for households and \$30.00 for businesses.

If you have any questions regarding membership, please contact Gloria Kay at <u>gloria@Kegonsa.org</u> or Peter Foy at PeterF@kegonsa.org

FOLKS Lost and Found

Contact Cathie Taylor at <u>CathieT@kegonsa.org</u> to list lost and found items on the FOLKS website.

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Return Service Requested

FOLKS Business Members

Coldwell Banker Success Realtor	873-7731
Crown Point Resort	873-7833
Hammer It Construction	hammeritconstruction@gmail.com
Jim's Tree Service	838-8188
Kegonsa Cove	838-6494
Quam's Motor Sports	873-3366
Springer's	205-9300
The UPS Store	877-2679
Web-Net	alan@web-net.us
Brown's Boats and Bait	873-6770
The Utschig Group of Chiropractic Clinics	274-2266

For More About FOLKS, Visit Our Website at WWW.Kegonsa.org