

GREEN LAKE

SANITARY DISTRICT

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Green Team Events for 2014

Provided below is a list of Green Team Events for the 2014 Calendar year, the Green Team is a partnership comprised of multiple local organizations (i.e. Green Lake Sanitary District, Green Lake Association, Green Lake Conservancy and Green Lake Schools) and volunteers who donate their time and talents to enrich our local community through special events and environmentally friendly activities. The Green Team has been in existence and providing volunteer-based events since 2008. This year's events include:

Event Description	Date of Event
1. Moonlight Walk – Pools Hill	January 11th
2. Bonfire, Lunch and Sleigh Rides for volunteers	February 8th
3. Tap Into Sweetness: Maple Syrup Tour	March TBD
4. Earth Day Trail Work at Guskey-Miller Conservancy Property	April 19th
5. Bird Fest and Bird Tour	April 26th
6. Mitchells Glen Tour FULL (registration for Fall only)	May 10th
7. Buffalo Farm Tour	May 24th
8. AIS/Harvester/DNR Demonstration Event	May 26th
9. Powell Springs Tour	May 31st
10. AIS/Harvester/DNR Demonstration Event	June 21st
11. Kayak or Canoe Puchyan River	July 12th
12. Winnebago Trail Walk	August 16th
13. Hickory Syrup Tour	September 20th
14. Mitchell Glen Tour at Mitchell Glen	October 11th
15. Falconry Demonstration	October 25th
16. Fall Buckthorn Volunteer Work Events	Sept - Dec

Feel free to contact any of the four local organizations listed above for more specific times and other details. The Green Lake Association has been kind enough to offer assistance with registration information and more event details, their website can be accessed at www.greenlakeassociation.com

The members of the Green Team Partnership can be reached at the following numbers: the Green Lake Sanitary District (920-295-4488), the Green Lake Conservancy Foundation (920-294-3592), the Green Lake Association (920-294-6480) and Green Lake Schools (920-294-6411).❖

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Implementation of Lake Management Plan Begins

With the Approval of Big Green Lake's Management Plan (LMP) in February of 2013, the Lake Management Team is proceeding with the largest lake project undertaking in the history of the GLSD. Specifically in 2013, our LMP Team has procured over \$1,500,000 in funding which will be used to pay for the lake improvement activities outlined below. It's not enough to put together a great lake management plan if there isn't a way to fund the work needed to begin the process of correcting lake problems as well as implementing the strategies & solutions needed to protect and improve our lake. Again, as a reminder, the specifics of Big Green Lake's Management Plan for the foreseeable future (next 5 to 10 years) can be found by going to the following link:

<https://docs.google.com/file/d/0B5Q-000Y3148YVVKV5JcFVMVDA/edit?usp=sharing>

The Green Lake Sanitary District (GLSD) has written multiple lake grants in 2013, we have begun an aggressive start to implementing the strategies & solutions outlined in our Big Green Lake Management Plan. A brief outline of our major grant projects along with the intent of these projects is provided below:

Best Management Practices (BMPs) Key to Phosphorus Reduction in Big Green Lake

First and foremost, in excess of 1.1 million dollars has been allocated through State and Federal Grants to be used for the implementation of strategic BMPs located throughout Big Green Lake's Watershed in Green Lake County to specifically reduce nonpoint agricultural nutrient runoff from entering our lake. Over 50 BMPs have already been identified, and once installed,



This picture is an example of a BMP recently installed as part of a streambank restoration project along Roy Creek

these BMPs will eliminate over 2,000 pounds of Phosphorus (P) from running off Green Lake County Agricultural Lands into the tributaries and waters of Big Green Lake.

To take a step back and put these numbers into some type of perspective for the average person not involved in lake and watershed management, in an average rainfall year, Big Green Lake receives over 18,000 pounds of P from various sources; however, the largest contributor (80% of the total) is the P resulting from Agricultural Land Runoff. Therefore, the 50+ BMPs currently identified and being installed will reduce P loading to our lake by over 11%. To further describe the nutrient (Phosphorus) that causes the most problems for our lake, one pound of P can grow up to 500 pounds of aquatic plants. Or put another way, on an annual basis, the 18,000 pounds of P entering Big Green Lake is causing close to 10,000,000 pounds of aquatic plants to grow each year.

Even though the majority of BMP funding currently available was obtained through State Grants (GLSD) and Federal Grants (Natural Resources Conservation Services), the majority of the BMP process (land owner contact, BMP design and BMP installations) is performed by the Green Lake County Land Conservation Department. Our LMP Team goals are to continue to aggressively identify and install strategic BMPs every year moving forward and to systematically continue to reduce P loading to our lake through BMP runoff abatement.❖

Aquatic Invasive Species (AIS) In Big Green Lake

AIS continues to play a dominant role in Big Green Lake. Provided below is a summary article that was written by the GLA. I believe the article does a good job of summarizing a big portion of our lake partnership AIS efforts for the next 2 to 3 years.

Aquatic invasive species (AIS) are non-native organisms that, when introduced to an area, can out-compete native organisms, destroying the natural habitat and balance of the ecosystem. Once introduced to an area, AIS are nearly impossible to remove, but proper management and control strategies offer hope for the future.

The Green Lake Sanitary District (GLSD) recently contracted with Onterra, LLC, an aquatic management consulting firm, to develop a management strategy for the control of aquatic invasive plant species. The management strategy calls for the application of a chemical treatment to effectively diminish the population of Eurasian Water Milfoil (EWM) and Curly Leaf Pondweed (CLP), two invasive species of specific concern.

According to Charlie Marks, GLSD Administrator, "the purpose of administering chemical treatments is to not only diminish the population of AIS, but to minimize damage to native plants and organisms." The assessment conducted by Onterra determined the proper application protocol, including when and how specific chemicals should be applied, in order to improve the native and natural conditions of Green Lake.

The chemical applicants, which have been used to great effect in other lake systems, are 2,4-D and endothall, both herbicide treatments that work to regulate plant growth. According to the National Pesticide Information Center, these are "low risk herbicidal treatments," and have been used extensively in the treatment of AIS.

Earlier this spring, the Silver Creek Estuary received a chemical treatment to determine the efficacy of such applications. Onterra observed a drastic reduction in the presence of AIS when they surveyed the basin, demonstrating that the treatment presents a viable solution for effectively managing AIS population growth.

In addition to the Silver Creek Estuary, Onterra evaluated Beyer's Cove and the City Mill Pond as other potential basins for chemical treatment. The official report suggested chemical treatment for those specific sites for this upcoming spring, but recommended no need for chemical treatment for Silver Creek Estuary until 2015, due to the effectiveness of the prior treatment.

"Invasive species begin to surface earlier than native species, which is why early application is important," said Marks. "This will then allow us to focus our time and effort towards resolving other issues." Marks also said that the public will be informed about the time and location of the chemical treatments when they do occur.

Lake management strategies such as this have been conducted in other lakes throughout Wisconsin, such as Little Saint Germaine Lake in Vilas County, with great levels of success. Onterra was also responsible for the management planning in Little Saint Germaine, and reports conducted three years after initial treatment demonstrate increased diversity for native plant species, and sharp decreases in invasive populations. While the lake is not entirely eradicated of invasive species, the population has decreased to a level that can be effectively managed and negative impacts can be mitigated.

In July of 2013, the GLSD submitted an AIS Control Grant which will provide approximately \$200,000 over the next 2 years to allow our LMP Team to carry out the strategic AIS implementation strategies identified in our LMP. The reduction in these AIS plants will allow for a number of important events to occur: First, massive amounts of EWM and CLP will be eliminated from our lake and associated water bodies. Second, with the reduced

levels of EWM & CLP, more time can be spent harvesting nuisance aquatic plants on the main body of the lake. And thirdly, by reducing EWM & CLP through chemical treatments, we are reducing the phosphorus concentrations in our water bodies by virtue of not allowing these invasives to remain in our lake, die off, and then to release Phosphorus as a by-product of these plants decomposing on the lake bottom. An estimate of P reduction generated through this process (chemical treatment of EWM & CLP) is up to 1,000 pounds of P removed annually. ❖

GLSD Receives Wisconsin Waterways Grant to Purchase Second Aquatic Plant Harvester

During the Spring of 2013, the GLSD submitted a grant application to the Wisconsin Waterways Commission for the purchase of a second aquatic plant harvester to be used to harvest more aquatic plants on Big Green Lake. In August of 2013, the Wisconsin Waterways Commission awarded Big Green Lake and the GLSD a grant for just over \$62,000 to be used toward the purchase of Big Green Lake's second aquatic plant harvester.

Even though many property owners will be happy to see a second harvester on our lake, we also understand that some property owners would prefer to not have any harvesters cutting plants on our lake. It's important to clarify facts from fiction regarding our mechanical plant harvesting program, see below for a picture of the new harvester along with some "Facts" and "Myths".

Facts:

- Removed harvested and floating lake plants removes Phosphorus from the lake (the removed plants don't decompose and emit P into the lake), last year's plant removal totals equate to 500 pounds of P removed from the lake
- Over 95+ percent of all harvested plants are removed after cutting. In addition, the harvester also picks up thousands of pounds of floating plants "floaters" which have been uprooted by wind, boat props and a number of other natural and recreational activities
- We (GLSD) are only allowed to harvest 30 feet per riparian property - DNR regulations

Myths:

- Most of the floating plants in our lake were cut by the harvester and then, not picked up
- The harvester can cut to a depth of greater than 4 feet
- The harvester can operate in water with a depth of less than 2 feet
- When the harvester is being driven across the lake (areas of the lake with water depths of greater than 25 feet) it is actually harvesting plants



This is EWM and CLP, the two dominant AIS found in our lake

From the Administrator's Desk

I think it's important for me to take the time to recognize the team of people who have been so instrumental in getting our Lake Management Plan (LMP) approved in 2013. In addition to laying out a comprehensive roadmap for maintaining and protecting the most outstanding lake in Wisconsin, our LMP Team has also raised the money needed to jump-start our LMP. More specifically as stated earlier, our LMP Team has already raised over \$1,500,000+ in 2013 which will be used to begin funding the most important Strategies & Solutions as outlined in our Big Green Lake Management Plan (see hyperlink from article on first page of this newsletter).

Provided below are the organizations and key people who have contributed and who are continuing to contribute to our LMP Team Partnership:

- Green Lake Association (Stephanie Prellwitz)
- Green Lake County Land Conservation (Paul Gunderson & Derek Kavanaugh)
- Fond du Lac County Land Conservation (Lynn Mathias & Paul Tollard)

- Green Lake Sanitary District
- Green Lake Conservancy (Tom Eddy)
- City of Green Lake (Glen McCarty)
- City of Ripon (Travis Drake)
- United States Geological Survey (Dale Robertson)
- Wisconsin Department of Natural Resources (Ted Johnson & Dave Bartz)
- Natural Resources Conservation Service (Caleb Zahn)
- Environmental Consultant (Mark Sasing)

As outlined above, what's important for people to understand is that our lake receives too many nutrients which are responsible for our unwanted excessive plant growth and the primary culprit is Phosphorus. Our primary goal over the next 3 to 5 years is to reduce the Phosphorus loading to our lake by a percentage rate between 25% and 50%. In numerical terms that translates into an amount equal to a reduction in Phosphorus of 4,500 pounds to 9,000 pounds.

We will accomplish the goals & objectives laid out in our LMP and we will protect and improve Big Green Lake for current and future generations to continue to use and enjoy.

FYI...for your information

Green Lake Fishing News – Once again, 2013 proved to be a great year for all types of fishing on Big Green Lake. Our quota of over 25,000 Lake Trout have been delivered to our Fish Rearing Facility and are being raised per our usual process for release into our lake in the Spring of 2014.

None of the Lake Trout stocking would be possible without the continued support of the Big Green Lake Fishing Partnership. It is very important to recognize all of the Partners who support the Big Green Lake Fish Rearing Facility. Besides the GLSD, our partners include: **City of Green Lake, Green Lake Association, Green Lake County, Fishing Guide Mike Norton, Citizen Volunteer Steve Siders, Walleyes For Tomorrow and the Wisconsin DNR.**

RSVP Available Again in 2014 – RSVP and grant funding will once again be offered in 2014. Please keep in mind that RSVP funds are available on a first-come, first-serve basis so don't wait too long if you are considering a project. Shoreland restoration is a very important component of our newly adopted Lake Management Plan.

In addition to using ZERO PHOSPHORUS fertilizer to help your lake, please refrain from burning and/or blowing leaves into your lake.

Garbage Reminder – Garbage is picked up on Monday mornings, except for the Holiday weekends. This Summer: In **May**, garbage will be picked up on the **Tuesday (5/27/2013)** the day after Memorial Day. In **July and August**, garbage will be picked up on **ALL Mondays**. In **September**, garbage will be picked up on **Tuesday (9/2/2013)** the day after the Labor Day Holiday. If possible put your trash out on the morning of pickup by **6am**. If you have to leave before that, spray the inside of your garbage bags with an ammonia/water mixture to discourage animals from creating a "garbage mess". Recycling for property owners signed up is the first Monday of the month, except if a Holiday weekend, then see Tuesday dates above.

The sewer collection system and wastewater treatment plant are owned by everyone in the GLSD. Our efforts to maintain this infrastructure benefits all users and translates into LOWER MAINTENANCE COSTS. For example, bathroom wipes/toilets are becoming increasingly more popular; however, these items are also responsible for causing sewer backups.

Name, Address, Marital Status Changes

As an ongoing reminder, please notify our office of changes in your property status (i.e. owner, address, etc). Mail and E-Mail is our most effective way to keep in touch with you and keep our records accurate. Emails should be sent to pauulettej@glakesd.com and Mail should be sent to P.O. Box 417, Green Lake, WI 54941.

Sewer Related Work

If you are involved in or planning a building project in a sewer area, please contact the GLSD Office (920) 295-4488 for permit and inspection related information. Please remember that new homes as well as newly created lots in sewer areas are assessed for sewer, please call our office at (920) 295-4488 if you have questions.

The GLSD completely cleans, televises and repairs breaks on its entire sewer collection system on a rotating schedule over a 7 to 10 year cycle. During the Winter of 2013-2014, all of Area 3 (i.e. Lakeshore Drive, the Terrace, etc) will be cleaned, televised and examined for possible problems.