SUMMER 2019 - IN REVIEW

Another beautiful Green Lake summer has come and gone. Like many of you, we were very busy here at the Green Lake Sanitary District. The second consecutive cold, wet spring made our summer work season shorter. Our staff worked hard to complete a wide variety of projects including:

CONSERVANCY PRESCRIBED BURNS

The GLSD manages 15 Conservancy properties throughout the Big Green Lake watershed. We work to remove invasive species, promote natural habitat regeneration, and public accessibility. Part of these efforts include utilizing controlled burns to help control invasive species impacts. We rely heavily on volunteers for this work. Please contact the GLSD if you are interested in helping with our spring burn season.

CARP REMOVAL

The slow warm up of the lake greatly impacted the annual commercial carp harvest on the lake. Usually occurring in late April, the 2019 harvest did not occur until later in May. Even with the poor weather conditions, 86,500 lbs. of carp were removed from the lake and 2,500 lbs. were removed from the County K Marsh. The continued efforts of the GLSD and the GLA to reduce carp in the marsh is becoming apparent from both the reduced size and numbers of carp found there.

BEACH SAMPLING

Did you know that each week during the summer, the GLSD samples the lake water at every Green Lake public beach? The samples are shipped to the WI State Lab of Hygiene where the samples are tested for E. Coli bacteria. We share the results with various entities such as the Green Lake County Health Dept., GLA, WI DNR, City of Green Lake, and the Green Lake Chamber of Commerce.

SPRING CLEAN UP

The 2019 Spring Clean Up event was held during the week following Memorial Day. Many of our GLSD residents chose to take advantage of this event by bringing in those items Waste Management does not take during weekly curbside collection. Some of the items discarded during this event included old and broken furniture, bikes, tools, mattresses, grills, and yard waste. This is a service provided to our GLSD residents every spring. The 2020 Spring Clean Up information is listed later in this newsletter under the Waste Management section and is also available on our website, glakesd.com.

FISH REARING & STOCKING

The GLSD (with support from multiple partners) released 29,000 young lake trout into Green Lake in early April. The lake trout are received into our fish rearing facility each October as fingerlings. GLSD staff feeds and monitors the fish daily from October until they are ready for release each spring. Additionally, in partnership with members of the local fishing community, the GLSD works with DNR fisheries staff on additional stocking of other species such as rainbow trout.

AQWEED

Our aquatic plant harvesting program (known as Aqweed) was very busy this summer. The cool spring delayed aquatic plant growth in the main body of the lake, but some of our shallow, protected waters quickly grew up rapidly in early June. Beyer's Cove was a particularly 'weedy' area. The GLSD focused its harvesting efforts in these areas early on then transitioning to lake-wide harvesting. The GLSD follows a DNR approved Aquatic Plant Management Plan for the lake. Through this plan, the DNR regulates when and where the harvesters can operate. The basis of this plan is to promote native, beneficial (for fish habitat and water quality) aquatic plants while allowing the GLSD to harvest primarily the non-native, aggressive species generally seen in dense colonies.

Prescribed Burns at Norweigian Bay

Carp Removal from Big Green

Beach Sampling

Fish Rearing and Stocking

Green Lake
Sanitary District
N5295 Cty Rd TT
Princeton, WI 54968
(920) 295-4488

HOW CAN WE EACH HELP THE LAKE?

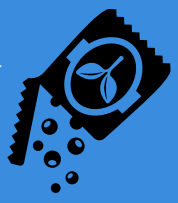
There are no quick or easy remedies for the control algae in a lake. Reducing the amount of nutrients that wash into our lake will eventually reduce the frequency and intensity of algae blooms, but it may take a long time and a lot of community involvement to effectively change the nutrient concentrations in a water body. Landowners and interested citizens can help minimize the problems associated with algal blooms by working together with GLSD and our partners in the watershed to reduce the amount of nutrients that reach Green Lake. You can help reduce nutrient concentrations by promoting the following practices in your community:

- Use lawn fertilizers only where truly needed and never use fertilizer containing phosphorus.
- Prevent yard debris (e.g., leaves, grass clippings, etc.) from washing into the lake or storm drains near the lake.
- Support local ordinances that require stringent erosion control measures for residential and commercial construction sites.
- Plant and maintain vegetative buffer strips along your shoreline. Native plants are much more effective at filtering runoff than the grass species typically found on residential lawns.
- Support the efforts by the GLSD and GLA to raise funds to establish best management practices (BMP's) on agricultural lands throughout the Green Lake watershed.

DID YOU KNOW?

1 lb of soil entering Green Lake will produce roughly 3 lbs of algae?

In April 2009, Governor Jim Doyle signed the Wisconsin Zero-Phosphorus Fertilizer Law to reduce phosphorus entering WI lakes and rivers. This law, which took effect April 1, 2010, restricts the use, sale and display of lawn and turf fertilizer which contains phosphorus or available phosphate. Please verify with your lawn service that they are not adding phosphorus to your yard.



WHAT'S THE DEAL WITH…

THE ALGAE MATS ON THE LAKE BED AND FLOATING ALONG SHORE?

If you have spent time on Green Lake in recent years, you've seen green algae mats on the bottom of the lake. These mats, while not harmful to us, are a concern in terms of lake health. The following information is provided by our DNR Lake Coordinator, Ted Johnson. "Filamentous algae are colonies of microscopic plants that grow together in long threads or chains. Sometimes called "pond scum," filamentous algae tends to grow on the lake bottom but oftentimes will become detached and form mats floating on the surface. Filamentous algae, to varying degrees, are present in all water bodies and produce oxygen along with providing food and habitat for aquatic organisms. Most species of filamentous algae do not produce toxins that could harm humans.

Given the right conditions, mats of filamentous algae can become numerous enough to reach nuisance levels and limit recreational opportunities. The cause of these large algal accumulations is an overabundance of nutrients, particularly phosphorus and nitrogen, in the water. These nutrients can come from many sources including: agricultural runoff, shoreline development/practices, internal loading, and zebra mussels.

Studies have shown that zebra mussels can impact lake ecosystems by changing the cycling and distribution of nutrients including phosphorus and nitrogen. Specifically, nutrient levels can increase in nearshore areas where zebra mussel densities are highest. These increased nutrient levels are caused by defecated organic material and the death and decomposition of the zebra mussels themselves. Increased nutrient levels have a secondary effect of providing surplus nutrients for algal production."

The GLSD is aware that this is a growing concern in the lake. We have seen nuisance algae mats/masses floating in large clusters in various locations (determined by wind direction) around the lake. While our aquatic plant harvesters are not designed to collect these floating algae mats, the GLSD is researching possible equipment modifications to be more effective in removing them.

BLUE-GREEN ALGAE?

New in 2019, the GLSD, in partnership with the GLA, began testing Big Green Lake for blue-green algae. As you may know, blue-green algae is a serious concern on lakes around WI. Little Green Lake has had repeated beach closures due to the toxic blooms. In addition to this periodic testing, the GLSD also sampled 2 other areas of concern on the lake. We are happy to report that all samples taken this year showed natural levels of blue-green algae consistent with a healthy aquatic environment. We will continue these water tests in the future.

The following information has been provided by Gina LaLiberte, the blue-green algae coordinator for the WI DNR, "Blue-green algae are a natural part of every lake and river in Wisconsin in at least low

UPDATE ON GLSD'S WASTE MANAGEMENT SERVICES

We are nearly an entire year into our new Waste Management(WM) contract. While there have been a few hiccups in the change to single cart service, we feel our 1,400+ customers have handled the new system well. We want to make you aware of a recent change to our WM contract. We received many comments that the 18-gallon recycling bin is not large enough to hold all the recycling materials from a household for an entire month. Due to this feedback and the GLSD's desire to promote recycling, WM and the GLSD have amended our solid waste contract to now provide a 64-gallon cart to replace the 18 gallon bin.

The cost for the new cart is only $6.00 per month per cart. As with the previous bins, the new recycling cart will be picked up the first Monday of each month. You may request additional recycling carts at a cost of an additional $6.00 per cart per month. If you are not currently a recycling customer with WM, you must call WM at (888)960-0008 to sign up for this service. Be sure to let them know you are within

the Green Lake Sanitary District so you are charged correctly. WM invoices on a quarterly basis.

Please remember if you have bulky items that cannot fit into your WM cart, you can bring them to the GLSD's Annual Spring Cleanup. Tentative dates for the event are Sat., May 23, 2020 and Tues., May 26th-Sat., May 30, 2020. More information on Spring Cleanup will be provided in our spring newsletter in early May 2020.

levels. Observe and assess conditions for yourself before swimming. High levels of blue-green algae are riskiest and are noticeable as green or otherwise discolored water, or floating scums.

It's always a good idea to avoid swallowing any untreated surface water because it can contain blue-green algae, bacteria, viruses, or parasites that can make people and animals sick. Choose locations with the clearest possible water for small children and dogs to swim in, since they are more likely to accidentally ingest lake water. Dogs are susceptible to water intoxication from swallowing too much water while swimming and heat stroke; these illnesses share some symptoms with blue-green algae toxin poisoning. Give your dog frequent breaks from playing in water, supply flat objects for retrieval to minimize water ingestion, and provide access to shade on your outdoor adventures."

SWIMMER'S ITCH?

For those of you that spent time swimming in the lake during late June and early July, you might have experienced the impacts from the swimmer's itch outbreak that occurred. While swimmer's itch is not uncommon in Green Lake, over a hundred reports were provided to the GLA during the 3 to 4 week period beginning in late June. The GLSD received daily calls regarding the issue. Swimmer's itch is common in lakes throughout the Midwest. It usually presents with a few red, itchy welts on the torso. The outbreak this year was much worse. Many cases, especially in children, showed 30+ welts all over the body. The DNR was consulted to verify that, though bothersome, it was not considered a health risk to be in the lake during that time.

ALL THE DUCKWEED?

Driving by the Sunnyside wetland, it is difficult to miss the dense, green plant material floating on top of the water. Many people are surprised to find out the green blanket is not algae. It is an overabundance of a tiny plant called duckweed.

Duckweed (Lemna spp.) is commonly found on quiet waters, wetlands and bays. Duckweed reproduces very quickly to cover large areas. While there is a statewide decline in duckweed habitat, we have it in abundance here in several wetland areas. It flows out of Sunnyside and is moved about the lake depending on the wind direction. In large amounts, it is bothersome to shoreline residents as it collects on shore and decomposes. Similar to the floating filamentous algae mats, our aquatic plant harvesters are not able to efficiently remove duckweed. We are researching equipment options to assist with this task.

RECYCLING CENTERS

In addition to the curb-side trash collection/ recycling service for our residents, be aware that recycling can be dropped off to your local township as well. The list below outlines the services provided to residents of each township within the Green Lake Sanitary District boundaries.

TOWN OF BROOKLYN
N6285 Berlin Rd, Green Lake

Accepts garbage, recycling, and yard waste.

HOURS (NOV – APR)
Sat.: 7:30–11:30 am
Mon.: 7:30–10:30 am

HOURS (MAY – OCT)
Sat.: 7:30 am –1:30 pm
Mon.: 7:30 –11:30 am

TOWN OF GREEN LAKE
N2298 Cty Road A
(920) 398-2405
townofgreenlake.com

Accepts recycling and yard waste.

HOURS
Sat.: 8:00 am – 2:00 pm

TOWN OF PRINCETON
County Trunk D
(920) 295-4057
cityofprincetonwi.com

Accepts recycling only.

HOURS
1st and 3rd Saturday of each month from 8:00 am – 12:00 pm

TOWN OF MARQUETTE
306 Lyons St., Markesan
(920) 229-6360

Accepts recycling only.

Recycling receptacle available for township residents that can be accessed 24 hours per day.

GLSD COMMISSIONERS

Jerry Specht | *President*
Ken Bates | *Treasurer*
Boni Jensen | *Secretary*

GLSD STAFF

Lisa Reas
Administrator

Paulette Janssen
Admin. Asst.

Stuart Marks
Plant Operator

Dallas Lewallen
Plant Operator

OFFICE HOURS

7am–3pm, Mon–Fri

For sewer emergencies after hours, please contact Dallas Lewallen at (608) 345-7484 or Stuart Marks at (920) 369-8199.

NEW GLSD E-BLASTS

The GLSD is collecting the e-mail addresses of our customers in order to reach you more efficiently on important GLSD issues such as updates on garbage collection, beach advisories, etc. We can provide you the GLSD newsletters digitally as well. Please contact Paulette Janssen, our administrative assistant at (920) 295-4488 or paulettej@glakesd.com to verify your preferred email address. Please provide your e-mail address(es), GLSD property address, and current phone number as well. Please note that as a municipality, the GLSD cannot provide our customers'/residents' contact information to a third party.

N5295 CTY RD TT
PRINCETON, WI 54968

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WE NEED YOUR OPINION…

The Green Lake Sanitary District, along with our partners, the Green Lake Association, Green Lake County Land Conservation, and Golden Sands RC&D have been brainstorming ways to reduce the threat of aquatic invasive species (AIS) to Green Lakes waters. We feel a good first step is to find out the opinions of our lake users regarding AIS issues as well as what tools they feel would be beneficial at our boat landings. Golden Sands has put together a short survey to get feedback from lake users. Please take part in our survey at: www.glakesd.com/programs/aquatic-invasive-species-ais/

STOP AQUATIC HITCHHIKERS!™
Be A Good Steward.
Clean. Drain. Dry.
StopAquaticHitchhikers.org

CONSERVANCY SPOTLIGHT—NORWEGIAN BAY WETLANDS

The Norwegian Bay Conservancy property is located 5 miles west of the City of Green Lake within the boundaries of the Town of Brooklyn. The 20+ acre property boasts 600 feet of frontage on Norwegian Bay of Big Green Lake. A dirt trail begins at the Trailhead on Bay Road and extends north into the heart of the property where a boardwalk begins and curves east through the wetland to the lakeshore.

The property was purchased for $110,000 in 1998 through a mix of DNR grant funding as well as major contributions from the Green Lake Conservancy and the Green Lake Sanitary District. The property has existed in a very natural state until 2015 when the Green Lake Sanitary District and Green Team began in earnest to remove the buckthorn from the site. The property is a mixture of woods, shrub-carr and beautiful sedge meadow. Unique to the property is a small wetland pond (>1 acre) near the western lot line as well as a small ephemeral pond to the west of the trailhead. The platform at the lake edge provides seating and a stunning view of Norwegian Bay.